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# The ecology of dispersal in early *Homo* species

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## Introduction

Dispersal is one of the most fascinating processes in human evolutionary history. This complex process is directly connected to ecological, climatic, and environmental changes affecting animal communities and humans as its indivisible part. By itself species are responding to the changes differently, and their survival depends on the strategy species choose, expressed in the niche breadth and its demography. Inspired by the fact that humans are and always have been part of the nature, I propose a paleontropological and ecological integrated scenario and aim at understanding the environmental/ecosystem dynamics of *Homo* species dispersal out of Africa into Eurasia. The dispersal of humans was spurred by both intrinsic population factors (demography) and by climatic/environmental conditioning(biogeographic barriers, unsuitable climates). Yet, within any given community competitive relationships and species interaction in general affect species liability to survive the change. Species over evolutionary times, either adapts to the change, disperse into favourable territories where the environmental conditions are suitable as their former habitats, or worse become extinct. It is currently believed that the presence of humans didn't have profound effects on the herbivore populations until very recently (Pushkina and Raia, 2008). This may be well true because dense herbivore populations are not controlled by predation. Conversely, humans had a strong influence on the distribution of carnivores, either by interference of competitive exclusion (Pushkina and Raia, 2008). Around 2 million years ago, when *Homo* first arose, the relationship between humans and carnivores begun to change, slowly at the beginning but much faster later, humans changed their strategy to earn food, from occasional scavenging towards full predatory activity (Hladik and Pasquet, 2002). The initial stasis but eventually the exponential increase in morphology, and the quality and technology of tool implements seems to borne this out. This process passed through strong environmental/climatic changes and faunal turnovers, and intermingles with major migrations and speciation events. On such changes humans were reacting in several ways, either by demographical or cultural shifts displayed by niche breadth and environmental preferences deviations.

My main goal is to examine human dispersals ecology from a paleogeographical perspective, to evaluate the effects of competitive relationships (influence of humans on carnivores and *vice versa*), and the influence of environmental (climatic) changes on their populations and distributions.

Modern evolutionary sciences about human evolution and dispersal are plenty of controversies. Evidence of early Pleistocene hominid dispersal outside Africa is scant and still object of debate. Before discoveries of earliest Eurasian Pleistocene sites, most of the early evidences appeared to support a relatively late initial dispersal after around 1 Ma, suggesting

Acheulean technological innovation as decisive aspect. Thanks to discoveries of Dmanisi (Lordkipanidze et al. 2013) and Chinese (Zhu, 2008) sites today it is suggested that the first dispersal happened around 1.9 Ma. If that evidence is correct, such an early dispersal may be better envisioned as driven more strongly by biological and ecological factors (Shipman at al. 1989; Anton et al. 2002) than by technological breakthroughs (Gabunia at al. 2002). Now there is general agreement that *Homo erectus* evolved in Africa, and then spread to Eurasia (Templeton, 2002). First dispersals of this species were accompanied by well-known climatic-environmental (faunal) changes (deMenocal, 2004; Norton and Braun, 2010; O'Regan, 2011). Although paleoanthropologists generally agree that modern humans evolved from *Homo erectus*, they disagree in their interpretations of the evolutionary mechanisms that controlled the human lineage evolutionary process. Two decades ago these interpretations were based on limited information and often emphasized on unique fossil discoveries, missing the support of natural sciences, but the growing body of multidistiplinary research gave a possibility to produce several evolutionary models, explaining the origins of modern *Homo sapiens*. Following two main opposing models such are “Recent African Origin” and “Multiregional Evolution” appeared other two models “Hybridization and Replacement model” and “Assimilation Model” (Strienger, 2002). In contrast of Multiregionalism (Fryer 1993), which denies existence of any particular region as a cradle of human origins (Thorne and Wolpoff, 1992), more balanced "Recent African Origin", which is slightly different from so called "splitter" views (Tattersal and Schwartz, 2008), proposes that a second wave of human dispersal out of Africa happened around 1 Ma, the new human species known as *Homo heidelbergensis* gave rise to *Homo neanderthalensis* in Eurasia, and *Homo sapiens* in Africa (Stringer, 2002; Rightmire, 2008), this event also was accompanied by major climatic-environmental turnovers. Finally, modern humans originated in Africa crowned dispersal about 100 Ka from where they spread around the world and replaced aboriginal archaic human populations in other areas of Eurasia by little hybridization with these groups. Ultimate genetic studies during the past ten years were very successful for genetic sciences; amazing discoveries were made in modern human origin studies. Extracted hominine DNA sequences demonstrated and proved fossil record-based presumptions (Trinkaus 2007; Smith, 2011) about genetic flow and admixture between Neanderthals and modern humans (Green et al., 2010; Trinkaus, 2005; Rak, 1998;). That information is reflected in "Hybridization and Replacement" model as a variant of the recent African origin model. It is based on the same fundament, but uses more of hybridization between the migrating population and the indigenous pre-modern populations (Bräuer et al., 2004) in turn "Assimilation Model" with multiregional approach recognizes African origin of modern humans (Smith, 1992), but refuses population dispersal, as a major factor in the origins of modern humans, emphasized the importance of gene flow resulting phenotypic change (Aiello, 1993).

After processing information the methodological structure of the research was constructed,

the aim is fourfold: Hypothesis creation, definition of variables, database formation, and statistical analysis. First I proposed several basic hypotheses associated with dispersal of Pleistocene humans and its accompanying environmental-climatic changes. The hypotheses were divided in time and the space, and in terms of ecology gradually described the steps of human lineage evolutionary history. As a following step in research were involved several fauna-related ecological variables as are: climatic variables reconstructed by taxon-free (Damuth, 1992) ecomophological variables (herbivores teeth crown characters: Hypsodonty, Loph) (Liu et al. 2013; Eronen, 2010), presence/absence of faunal entities and incorporated them with geographical and time-related variables. I formed database encompassing whole this information using online accessible databases, which were controlled trough the scientific literature and then we opted several statistical and geostatistical analysis as are: simple and multivariate Generalized linear models (GLM), bootstrap resampling, principal component analysis (PCA), geostatistical interpolation method of Kriging, Least-cost path and rout calculation and species distribution modeling (SDM), via R (Cran) software. Finally, I will interpret these long-term characteristics for each dispersal event, estimate the effect of humans on the fauna through time and *vice versa*, and identify corridors of human dispersal, and their coincidence with moments of climatic change.

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# Chapter 1

## A man on the move. The biogeography of *Homo erectus* dispersal out of Africa[1]

[1] The contents of this chapter have been submitted for publication to *Journal of Human Evolution* as a manuscript co-authored by N. Tsikaridze, L. Rook, D. Lordkipanidze, P. Raia, and F. Carotenuto

**Abstract**

The dispersal of *Homo erectus* out of Africa at (at least) 1.9 million years ago is one of the most important, crucial and yet controversial events in human evolution. Current opinions about this episode expose the contrast between those who see *H. erectus* as a highly social, cooperative species seeking out for new ecological opportunities to exploit, and those who prefer a passive, climate driven explanation for such dispersal. We characterized the ecological context of *H. erectus* colonization of Eurasia and found that it followed almost passively the large herbivore fauna, while avoiding areas densely populated by large carnivores by selecting for high-elevation sites. While our results are not in contrast with high hunting activities in H. erectus, they clearly point to predator avoidance as the main factor conditioning the long-term movements of this species over Eurasia. This strong pattern begun to fade as *Homo erectus* entered Europe, possibly as a consequence of the decreasing presence of carnivores there, and the later acquirement of Acheulian technology. The dispersal route we produced for *Homo erectus* suggests that this species remained preferentially associated with low latitude, yet high elevation sites throughout its colonization history.

**Introduction**

Most scholars agree that the first dispersal of humans "out of Africa" was initiated by both intrinsic population factors and climatic/environmental conditioning (such as changing climates and the opening of geographical corridors (Shackleton et al., 1984; Tchernov 1992; Arribas and Palmquist, 1999; Flemming et al., 2003; Petraglia, 2003; Derricourt 2006; Lahr, 2010; Abbate and Sagri, 2012; Rolland 2013). The environment these early humans lived in must have affected their lives to some large extent. Yet, it appears reasonable that later technological advancements could have relaxed humans from whatever strong environmental influence (Potts, 1994; Arribas and Palmqvist, 1999 Arcadi, 2006).

*Homo erectus* was the first hominine species to venture out of Africa, and to disperse over Eurasia. There is a general consensus that it evolved in Africa. Its morphological diversity demonstrates variation between regional groups of a single evolving lineage, generally referred to

as *H. erectus/ergaster* (Lordkipanidze et al., 2013). It is also evident that *Homo erectus* was fully bipedal (Lordkipanidze et al., 2007, 2013). Consequently, it does not come as a surprise that this species was able to migrate over long distances. This is in turn consistent with its increased carnivory over earlier ominids (Shipman and Walker, 1989) since carnivory is expected to increase locomotor demands by four-five times over herbivory (Ponzer et. al., 2010). On the behavioural side, intragroup cooperation in early *Homo* may have had decisive consequences on the dispersal process through demographic expansion and better environmental tolerance (Hamilton et al., 2009).

There is plenty of competing theories about human migrations, most of them met with controversy. Proposed, alternative routes for the dispersal of *Homo erectus* are mostly concerned with passages and land bridges connecting Africa to Eurasia (Lambeck et al., 2002). Before discoveries in Georgia and China, early archaeological evidence supported a relatively late age for the first migration outside Africa at some 1 Ma. This bolstered the idea that the Acheulean technological innovation may have contributed (Turner, 1992). However, today a wealth of available data suggests that the first dispersal took place no later than about 1.8 Ma. This casts doubt on the importance of Acheulean technology as the breakthrough factor (Gabunia at al., 2002) and calls for ecological factors in (Shipman and Walker, 1989; Leonard et al., 2000). About 2 million years ago, when *Homo erectus* appeared, the relationship between hominids and carnivores also began to change, slowly at the beginning, but much faster in later times (Turner 1999, Pushkina and Raia, 2008). Humans changed their strategy to feed on meat, from occasional scavenging towards true predation (Croitor and Brugal., 2010; Farraro et al., 2013). This process passed through strong environmental/climatic changes and faunal turnovers, and intermingled with major migrations of those elements of the Paleartic large mammal fauna humans were probably interested upon in terms of resource provisioning. During the Late Pliocene to the Late Pleistocene, the Cenozoic global trend of climatic cooling and aridification of the Northern hemisphere intensified. At some 1.7 Ma, the Late Pliocene semi-evergreen forests were replaced by deciduous woodlands and savannah grasslands in East Africa (Norton C.J. & Braun D.R., 2010).

Despite the profound interest in hominine dispersal out of Africa, ecological approaches to the investigation of the factors driving it are still scarce. Several important works were nonetheless dedicated to the subject mater over the last decade. Most attempts are based on the so called "cellular automata model" (Tilman and Kareiva, 1997) (which is commonly used in spatial ecology research) and its derivations specifically focussing on humans (Mithen and Reed, 2002; Nikitas and Nikita 2005; Hughes et al. 2006). This approach seeks to determine occupancy probabilities over mapped grid cells during simulated population movements from one cell to another according to a number of ecological factors and their spatial variation.

We inspired to these models to develop a fossil occurrences-based approach. Our aim was understanding the ecological dynamics of the first hominine species dispersal out of Africa into Eurasia, the so called "out of Africa 1" event and what were the most likely routes this ancestor of ours went through. We asked whether *Homo* did follow the herbivore fauna, if it was sensitive to large carnivore presence as often suggested (O'Regan et al. 2011), whether it chose a particular range of altitudes to select for energy-conserving paths, and how and if these three factors (the presence of herbivores, of carnivores, and altitude) did interact in shaping *H. erectus* dispersal routes. Eventually, we provided a new estimation of the geographical path that *H. erectus* took, which is conditioned on the importance of the above factors to its presence in a particular place and at a particular time in the past.

**Materials and Methods**

We prepared a dataset of 3932 Pleistocene mammalian fossil localities, following published literature, developing and fulfilling information from known web-based, accessible databases, which are the Paleodb (www.fossilworks.org), the NOW database (http://www.helsinki.fi/science/now/), and the databases provided in Raia et al. (2009) and Carotenuto et al. (2010). For each locality, we recorded the geographical coordinates, the faunal lists and any available age information. Furthermore, to avoid some errors inherited from the databases, we controlled all sites one by one via the specific literature. Because of scientific

technological and research development in time and space, information is changing and it needs always re-examination, so that to form a confident database, for each site we extracted and summarized stratigraphic, archaeological, paleoanthropological, paleontological and chronological information from several sources and anthropology scientific textbooks (Table A.1). Only archaeological localities dated before 0.9 Mya were included in the database as they concern *Homo erectus*. We emphasize here that we avoided associating specific cultures with a specific hominine species, as this could be misleading (Bar-Yosif and Belfer-Cohen, 2001). Instead, we chose to define a site as *Homo erectus* bearing, based on the time interval intervening from its first appearance at around 2 Mya, till the third wave of out of African dispersal (Bar-Yosif and Belfer-Cohen, 2001) dated at some 1-0.8 Ma, which is most probably relative to *Homo heidelbergensis* (Stringer, 2002). Hence, our data collection was restricted to the time interval in between 2 and 0.9 Ma. This length of time was divided into two consecutive dispersal waves: from Africa toward Asia from about 1.9 to 1.4 MA; and from South-East Europe to Central and Western Europe from 1.4 to 0.9 MA. Incidentally, the colonization of Europe did not start before 1.4 Mya, thus coinciding with the extension of Acheulian culture versus SW Asia. Thus, the two portions of the database are temporally, geographically and archaeologically separated.

**The ecological scenario**

We were interested to see if and how the presence of large mammals affected the dispersal of *Homo* under the "Out of Africa 1" scenario. This influence may regard active hunting of a particular species, active pursuit of specific predators to either live off the scratches of their kills (scavenging), shared habitat preferences, or even the avoidance of competition from particular carnivores (mutual avoidance among competitors; cfr. Heithaus, 2001). Of course, examining these relationships one by one is unfeasible for both complexity and lack of data. Instead, we selected a group of large "herbivores" of potential interest to humans based on their size (meaning they were large enough to be a feasible source of meat), and known (from the fossil record) interaction with humans (either because there are reported cut marks on their bones or they are common in anthropological fossil sites, Table A.2). In the same vein, we selected "carnivores" based on their size (e.g. *Felis* was considered a priori of no potential impact on human ecology

and was therefore excluded, *Panthera* was conversely included, Table A.2). The body size of the genera included range from 7 to some 255 kg for carnivores, and from 17 to 9000 kg for herbivores (body size estimates in Raia et al., 2012).

We selected "herbivores" and "carnivores" occurring in all the fossil localities in the Paleartic and Afrotropical regions. Then, we drew, for the two groups separately, a probability map of their occurrences. In details, for each group, we scored as 1 those fossil localities where we recorded the occurrence of at least one genus per group and 0 otherwise. This way, we produced two binary matrices of occurrences. A value of 1 or 0 gives information about the presence or absence of a group in a specific fossil locality, but provides no information on unsampled territories. We used a spatial interpolation method to reconstruct the probability of occurrence in unsampled geographic locations. This methodology provides a map of the chance (probability) for *H. erectus* to meet these particular groups of taxa. The method we used for spatial interpolation was the Indicator Kriging. In general, Kriging interpolation (Matheron, 1963) uses a weighted average of neighboring samples to estimate the "unknown" value at a given unsampled location. Weights were optimized by fitting an empirical semi-variogram, which provides information on the spatial autocorrelation of the data. Indicator Kriging allows knowing the probability that a variable exceeds a specific value in a specific geographic position. Using as entry data the binary matrix of occurrences and considering the scores1and 0 as the corresponding probability values of finding a carnivore (or a herbivore either), we computed the probability to have a value of 1, which refers to a real occurrence. Thus, we were able to draw maps of the probability to meet a carnivore or an herbivore, separately, during the defined temporal intervals.

We performed Indicator Kriging by using the "automap" R package (CRAN) environment. We fitted the empirical semi-variograms by using the "gstat" library (Pebesma and Wesseling, 1998), which estimates model parameters via Generalized Least Squares (GLS) and choses the best fitting model by Reduced Maximum Likelihood Estimation (REML, Kitanidis, 1983; Christensen, 1993). The outputs of these procedures are, for each temporal interval, two raster maps whose cells are scored according to a continuous variable spanning from 0 to 1 (indicating the probability to meet one of the two selected taxa groups) along with latitude and longitude

values to identify their geographical position. In these outputs, a cell including a fossil locality, where we have a documented occurrence of either a herbivore or carnivore, can have a probability value less than 1 because, as explained above, the value at each point location is reconstructed by taking into account the values of the neighboring localities optimized by fitting the empirical semi-variogram. On the contrary, a locality where we have no evidences of either herbivores or carnivores either is retrieved from the record can still be scored higher than zero. This feature of spatial interpolation helps interpreting the biological meaning of fossil identity spatial distribution, which is on itself an estimation of the population density of a mammal living in a specific territory.

**The geographic (abiotic) scenario**

To draw the dispersal routes of *H. erectus* we started by computing the altitudinal map of Africa and Eurasia during the temporal range of our fossil localities (from about 1.9 to 0.9 Mya). We used the actual (worldclim.org) and the Pliocene altitudinal (Linda et al., 2009) maps at 2° x 2° degrees cell resolution to compute a mean elevation model of these regions, by considering a constant process of orogeny. In this grid map, as regards lands, land bridges and shallow-sea portions, we assigned numeric values indicating the meters above or below the sea level to the corresponding cells, whereas deep seas portion cells were considered as not useful for any *Homo* dispersal routes. Furthermore, we updated the computed maps by correcting for the coastline variation and the presence of land bridges. Indeed, in literature, four main getaway land bridges do appear consistently: Gibraltar strait, BaB El-Mandab strait, the Messinian strait and the Sinai land connection. Today, there is no clear evidence supporting none but the Sinai passage, which always was connecting continents since Miocene (Lahr, 2010). For this reason, we limited possible passage for *Homo* to the Sinai connection. During Pleistocene glaciations, sea lowstands exposed the Sunda Shelf thereby connecting south East Asia to the Indonesian archipelago islands (Hall, 2009). This allowed dispersal towards Java, where *Homo erectus* remains dated 1.57 Ma (Kaifu, 2010) were found. We arbitrarily corrected cells of the Sunda Shelf without a numeric value by assigning them the smallest neighbouring cell value.

**The ecological and environmental correlates to *H. erectus* distribution**

To explore the ecological and environmental scenarios of *H. erectus* dispersal, we supposed, and thence tested, four specific and competing hypotheses: I) that humans actively seek regions of high herbivore occurrence probability, II) that humans preferred densely inhabited carnivores territories (due to a scavenger like behavior), III) that humans actively avoided areas high in carnivore occurrence probability (to avoid competition or predation), and IV) that humans privileged specific (i.e. non random) altitudes. To this aim, we used the drawn maps of herbivores and carnivores presence probability and the map of mean altitude. As explained above in the "ecological scenario section", each map was made of a grid whose cells were given a (computed) probability value (from 0 to 1) for herbivores and carnivores maps, and the mean altitude. To verify the hypotheses, we performed a set of bootstrap resampling tests on these variables separately. Each bootstrap resampling consists of the following steps. First, we superimposed all the *H. erectus* fossil localities to each of the grid maps and computed the mean of the values (herbivores and carnivores occurrence probability and mean altitude) sampled in these localities (real mean). Secondly, we superimposed all the fossil localities in our record to the same map and sampled the corresponding same values. From this latter sample we drew a random subset of values with the same number of fossil localities including evidences of *H. erectus* and computed the mean (simulated mean of herbivores and carnivores occurrence probability and mean altitude). For each grid map, and for both the considered temporal intervals, we repeated this procedure 999 times, thus generating a simulated random distribution of mean values of the selected variables. Then, to test the hypotheses described above, we measured the frequency of the real mean to occur in the random distribution of the simulated means. In details, if we hypothesized that *H. erectus* "preferred" high values of a specific variable, we tested if the corresponding real mean had a probability to occur in the random distribution of simulated means higher than chance (i.e. a probability higher than 95%).

Besides this, we tested the influence of herbivores and carnivores on *H. erectus* localities altitudinal distribution by performing, separately, several GLM regressions between altitude

values sampled by *H. erectus* and the corresponding herbivores and carnivores probability of occurrence, and then by testing the same relationship with the two groups of mammals acting in interaction for each temporal interval.

**The least cost routes computation of *H. erectus* dispersal**

A least-cost path is the minimum cost track that a species can walk through for minimizing energy consumption, after specifying a particular function for energy preservation. To compute the least cost paths of *H. erectus* out of Africa we first needed to simplify *H. erectus* historical patterns of geographical distribution by only considering the most important steps in colonizing new territories. Indeed, by taking into account the whole fossil record of a species, we can incur in a misinterpretation of the results because a species can continue to dwell a region even if it further expanded throughout new territories, thus masking the real temporal sequence of dispersal events. To overcome this problem, we superimposed a grid with a cell resolution of about 500 $km^2$ wide to the total geographical extent of *H. erectus* fossil localities and sampled only the oldest locality for each cell.

All these localities had different geographic coordinates but, sometimes, the same estimated age, thus preventing a single hypothesis for *H. erectus* dispersal. To cope with this problem, we first sorted the localities in a chronological order and then considered, when dealing with localities with the same estimated age, the order of all localities providing the minimum cumulative straight-line path distance. For the very special case when two or more localities with the same estimated age have a within distance larger than the distance to the chronologically closest one, we considered this latter as a node (source) of dispersal where *H. erectus* departed towards different directions. The selected ordination of localities was then considered for the computation of the least-cost route of dispersal from Africa towards Eurasia.

The calculation of the least cost routes implies the computation of a conductance map, which is a grid map whose cells are given an index of conductance (i.e. permeability), indicating how much favorable the walk through was. The index of conductance is a function of the variables chosen (herbivores, carnivores or altitude maps) to draw the route.

To compute the conductance index (CI) we used the empirical frequency distribution of *H. erectus* localities occurring in 0.1 wide discrete probability value intervals, as regards herbivores and carnivores maps, and in discrete ranges of altitudes (200 meters wide intervals). The simple function we used is summarized by the following:

$$CI_{(x,y)} = f(He_{i,z})$$

where $CI_{(x,y)}$ is the Conductance Index computed for the cell with coordinates x and y, and $f(He_{i,z})$ is the frequency of *H. erectus* (He) localities in the interval "i" including the value of the variable "z" of the considered cell.

Once the conductance map was built, we used the Dijkstra's algorithm (Dijkstra 1959) for least cost route path, originally conceived to solve connection problems in graph theory. This algorithm minimizes the cost for moving from a starting node (in our case a grid cell) to an ending one by iteratively looking for the nodes (cells) combination with the minimum cumulative cost (1/conductance). For each of the two route paths (i.e. towards Eastern Asia and Central and Western Europe), we computed a mean conductance map by using all the maps that verified our ecological and geographical hypotheses, as explained above.

**Results**

The ecological and environmental correlates to *H. erectus* distribution

For the temporal interval from 1.9 to 1.4 Ma, the bootstrap resampling of herbivores' map indicate that localities with evidences of *H. erectus* sampled a probability to meet herbivores not higher than expected by chance (mean sampled value of herbivores' probability of occurrence = 0.965, C.I. 95% = 0.983, $p = 1$). As regards carnivores, for the same temporal interval, we found localities of *H. erectus* sampling lower values than expected by chance, thus conforming to our hypothesis of a disjunction between *H. erectus* and carnivores' occurrences (mean sampled value of carnivores' probability of occurrence = 0.188, C.I. 5% = 0.33, $p = 0.001$). In addition, our results show that *H. erectus* localities sampled higher altitudes than predicted by chance with a marginally significant probability value (C.I. 0.95% = 913 meters, mean sampled altitude = 887.76 meters, $p = 0.075$).

During the temporal interval from 1.4 to 0.9 Ma, neither herbivores nor carnivores occurrence probability maps were statistically associated to human occurrences (herbivores: mean sampled value of occurrence probability = 0.933,C.I. 95% = 0.966, $p$ = 0.663; carnivores: mean sampled value of occurrence probability = 0.394, C.I. 5% = 0.266, $p$ = 0.917). Bootstrap resampling confirmed *H. erectus* localities occur at higher than expected altitude values (mean sampled altitude = 932.47 meters, C.I. 0.95% = 930.483 meters, p = 0.047).

As regards the exploration the ecological factors behind the elevational distribution of *H. erectus* localities, for the older temporal interval, the regression between altitude and herbivores' occurrence probability is positive and significant (Figure 1a; GLM: slope = 2.502, $p$<< 0.01, AIC = 48.82), whereas relationship between altitude and carnivores is negative and significant (Figure 1b; GLM: slope =-0.554, $p$ = 0.007, AIC = 61.99). The multiple regression between altitude herbivores and carnivores in interaction is negative but not significant (GLM: slope =-0.399, $p$ = 0.1, AIC = 66.81). During the younger temporal interval (from 1.4 to 0.9 Ma) the relationship between altitude and herbivores occurrence probability values is positive but not significant (GLM: slope =0.063, $p$ = 0.948, AIC = 71.22), whereas with carnivores is negative and significant (Figure 1c; GLM: slope = -0.932, $p$ = 0.040, AIC = 66.74). The multiple model with herbivores and carnivores in interaction is negative and significant (GLM: slope = -1.176, $p$ = 0.020, AIC = 65.49).

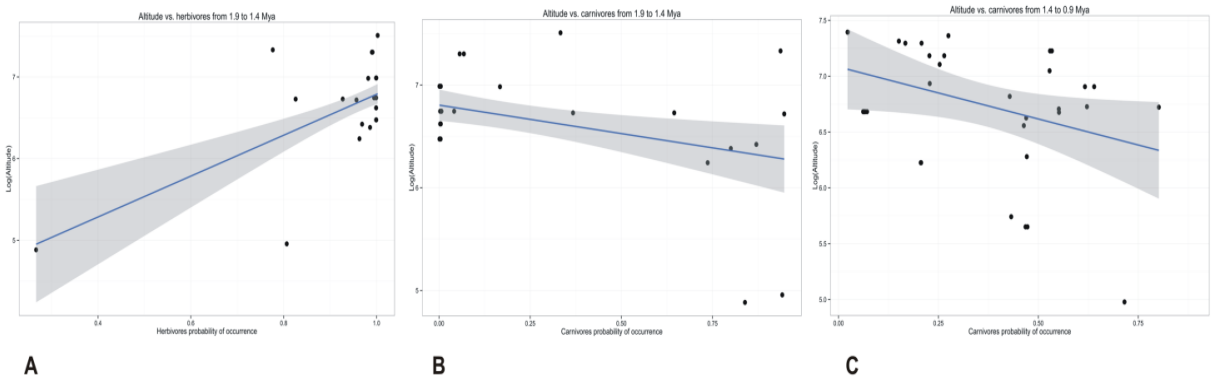
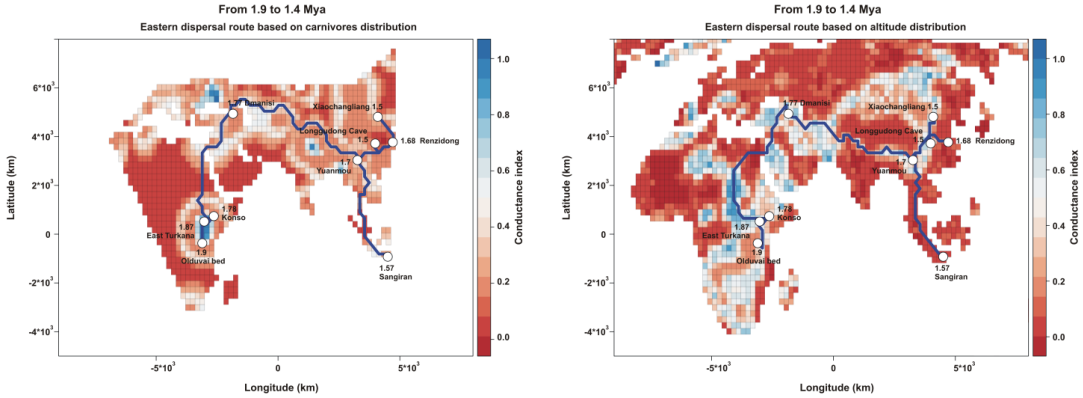



Figure 1.1 - Plot of the relationship in *Homo*-populated localities between altitude and (a) herbivores probability of occurrence, (b) carnivores probability of occurrence during the oldest temporal interval (from 1.9 to 1.4 Ma). For the second temporal interval (from1.4 and 0.9 Ma) the plot in (c) reports the relationship between altitude and carnivores probability of occurrence in *Homo*-populated localities.

The least cost routes computation

We produced the conductance matrices according to the results of the bootstrap resampling. That is, we used the carnivore' probability of occurrence and altitude maps for the oldest temporal interval and altitude alone for the youngest one.

Figure 1.2 shows the least cost route map for the dispersal of *H. erectus* throughout East Eurasia (the oldest temporal interval) built with the complex model that takes into account the combination of the carnivore probability distribution and the map of the reconstructed altitude




(alternative routes considering carnivores and altitude separately are shown in Figure 1.1). According to the complex model, *H. erectus* moved throughout Africa starting from Tanzania (Olduvai bed, 1.9 Ma) and then going toward Kenia (East Turkana, 1.87 Ma), Ethiopia (Konso, 1.78 Ma), South Sudan, Sudan and Egypt. The way to Eurasia was the Sinai passage, reaching Georgia (Dmanisi) at 1.77 Ma and passing by several territories (Jordan, Saudi Arabia, Iraq, Syria and Turkey). The reconstructed route connecting Georgia to the nearest fossil locality in the Eastern Eurasia (Yuanmou, 1.7 Ma) touches the territories of today Iran, Afghanistan and Pakistan, and while moving to the south of Himalayas, reaches the Yonnan Province, walking through today India, Nepal, Butan and Burma. Yuanmou fossil locality in our route reconstruction was a source for dispersal towards Indonesia (Sangiaran on the island of Java, 1.57 Ma) downward, and Eastern China to the east. The Chinese locality of Renzidong (1.68 Ma) was the source of dispersal towards inner (Longgudong Cave, 1.5 Ma) and Northern territories (Xiaochangliang, 1.5 Mya). The cumulative distance walked through by *H. erectus* in the reconstructed scenario was of more than 25,410 km.

Figure 1.2 - To the left, least-cost route estimation for *H. erectus* dispersal over Eastern Eurasia during the 1.9 to 1.4 Ma interval . To the right, least-cost route estimation over Europe during the 1.4 to 0.9 Ma interval.

For the temporal interval from 1.4 to 0.9 Ma our model considered only the reconstructed elevation map. The drawn route (Figure 1.3) for *H. erectus* arrival to Central and Western Europe started from Ubeidiya (1.4 Ma) in the territories of Israel, that in our reconstruction was a centre of dispersal. According to our model, *H. erectus* followed a path for dispersal that carried on throughout the territories of Turkey, arriving to Central Europe (Vallonet, France) some1.3 Ma and then dispersing northward to France (La Belle Roche, 0.91), westward to Spain (Barranco Leon, 1.3), and in the end to Italy (Pirro Nord, 1.16). For this route path, the computed cumulative distance walked through was of about 11,932 km.

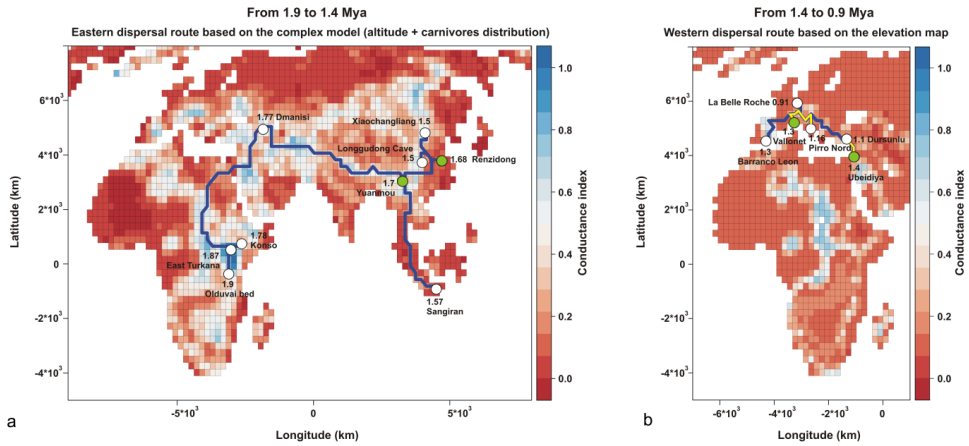



Figure 1.3 – Maps of the paths for Homo erectus dispersal during the oldest temporal interval reconstructed by using separately the carnivores' distribution (on the left) and the altitude (on the right) as conductance matrices.

**Discussion**

During the late Pliocene, around 3 Mya, aridity increased globally (Shackleton et al., 1984; deMenocal, 1995; Bobe and Behrensmeyer, 2002). Soon after 2.5 Ma, at the onset of Quaternary, 41 ka glacial cycles caused so called "Late Pliocene climate crush" (Bartoli et al., 2005) accompanied by (still) low precipitation and increased seasonality (deMenocal, 2004; Mosbrugger et al., 2005). In East Africa, closed mesic woodlands were changing by progressive opening of grasslands (Potts, 2013), expanding versus South East Eurasia (Vrba, 1985; Dennell, 2010; Cerling et al., 2011). *H. erectus* dispersal must be contextualized under this climatic scenario. The mammalian fauna was greatly responsive to these changes. Large mammal communities experienced intense faunal turnover and dispersal (Arribas and Palmqvist, 1999;

Behrensmeyer et al., 1997; Raia et al. 2005). *H. erectus* was approximately 160 cm (Collard, 2002) tall, weighed some 55 kg (McHenry, 2005) and was a fully bipedal species. Although it had a mosaic morphology including both archaic and modern traits, its long hind limbs were optimally designed for decreased energy cost during locomotion (Ruff, 2008; 2006; Ponzer et. al., 2010). This suggests that the morphology of *H. erectus* could be at least viewed as adapted to long run movement (dispersal) under changing climatic conditions (Ponzer et. al., 2010).

According to our results, pertaining to the first temporal interval (from ~1.9 to ~1.4 Ma) there was no special connection between hominid spatial distribution and herbivorous species. But there is a significant disjunction between *H. erectus* and large carnivores. Furthermore, our data highlight that the elevational distribution of *H. erectus* sites is positively correlated with the probability to encounter herbivores (Figure 1a) and negatively with carnivores (Figure 1b). This suggests that humans' choice of their settlements can be in part explained by the ecological relationships with these species.

Some authors argue that human dispersal may have been conditioned by the structure of the large carnivore guild (Turner, 1992; Arribas and Palmqvist, 1999;). There are models that envision early humans as "obligatory marginal scavengers" (Shipman, 1986; Binford, 1988; Blumenschine, 1995; Brantingham, 1998; Treves and Palmqvist, 2007) unable to coordinate food processing, mainly concentrated on a vegetables diet, whereas others considered these humans as hunters or confrontational scavengers (Isaac, 1984), strongly oriented versus meat supply. Several works tend to synthesize this two contrasting models, suggesting on the one hand occasional hunting by humans, and, on the other, aggressive scavenging (Brantingham, 1998; Stiner, 2002; Domingez-Rodrigo and Pickering, 2003; Farraro et al., 2013;). Whatever the case, a tight association between humans and both herbivores and carnivores seem to be the natural outcome of such an emphasis on meat provisioning. Rather than taking advantage of large carnivore kills, our data suggest that humans either avoided them, or just moved passively together with other large herbivore species.

It's worth noticing that the co-occurrence of large carnivores and *Homo* is not uncommon in our data, and particularly evident in sites such as Youanmu (Zhu et al., 2008), Gongwangling (Norton

et al., 2010), Dmanisi (Vekua and Lordkipandize, 2008), and Ubeidya (Bar-Yosef and Tchernov, 1972). Yet, our data seem to be more consistent with the so called "predator protection" hypothesis (Hart and Sussman, 2009), considering group life as a basic protective strategy unit against predators, making it possible to detect and avoid predators or to increase the ability to chase (Treves and Naughton-Treves, 1999) or to defend profitable resources (Palmqvist et al., 1996). From this perspective, our results suggest that *H. erectus* settled far away from high-density carnivore areas. Many authors (Rahbek, 1995; Brown and Lomolino, 1998) found that diversity decreases with altitude. Our data thence suggest that *H. erectus* preferred moderate-high lands (900-1000 m) where carnivores tend to be scarce.

The younger interval is marked with human entrance into Europe, coinciding with the appearance of Acheulian culture in the Near East region (at Ubeidya, Bar-Yosef, 1994). Unlike the older time interval, humans' geographical distribution is not associated with herbivores and carnivores anymore, yet they still preferred moderate-high altitudes. There is still significant evidence that *H. erectus* chose high lands to minimize the ecological interactions with carnivores (Figure 1c). Some authors argued that early Pleistocene large carnivorous predators were main actors in carcass production, consequently driving scavenging dependant humans to sporadic dispersal over Europe (Turner,1992; Palmqvist et al., 1996; Martinez- Navarro & Palmqvist, 1996; Arribas and Palmqvist, 1999; Palombo, 2010). At some 1.4 Ma, when humans arrived at Europe, this situation changed somewhat. Since the end of the Villafranchian, large carnivores started to rarefy in Europe (Croitor and Brugal, 2010). In this period, humans become more flexible to different environments and their omnivorous, versatile diet enriched, more and more by meat supply, expressed in manifest hunting since the middle Pleistocene (Croitor and Brugal, 2010). Probably, a flexible semi-scavenger and semi-hunter *H.erectus* may have taken advantage by this new situation as soon as predation pressure languished and then inhabited Europe sporadically until the full occupation of the continent with the arrival of *Homo heidelbergensis* (Rightmire, 2001).

To depict least-cost path of *H. erectus* we used significant ecological and geographical interactions as specific variables to define the energy consumption function. According to our temporal intervals, we conducted two sets of maps: for the earlier interval (1.9-1.4 Ma) towards

Asia, we mapped one least-cost path by integrating carnivore occurrence probability and altitudinal maps in the energy consumption functions (Figure 1.2a) and, then, two separate paths for each variable to see how the two variables affect the pats separately (Figure A.1). A fourth map (Figure 1.2b), computed by using only the altitude in the energy consumption function, depicts the most likely path taken by *H. erectus* during second interval (1.4-0.9 Ma).

Despite alternative existing pathways are lively defended in the literature, we conditioned the early Pleistocene *H. erectus* dispersal out of Africa through the Sinai land-bridge. Whereas most researchers agree on this scenario, others favour a north African corridor, via Gibraltar strait (Arribas and Palmquist, 1999; Flemming et al., 2003; Abbate and Sagri, 2012) or even an East African horn passage via Bab el-Mandab strait and into the Arabian Peninsula (Lahr, 2010; Abbate and Sagri, 2012). However, many counter-arguments point against these theories. Critically, there is no available evidence that would prove the water crossing ability of humans before the late Pleistocene, despite the periodic lowering of the water level in the Red Sea (Tchernov 1992; Straus, 2001; Petraglia, 2003; Derricourt 2006; Rolland 2013). Eventually, most paleontological and palaeoceanographic information is not supportive of any animal migration via Gibraltar and Bab el-Mandab during the early Pleistocene (Mithen & Reed, 2002; Fernandes et al. 2006; O'Regan et al., 2006; Lahr 2010; O'Regan et al., 2011). We additionally ignored the hypothetical corridor connecting Sicily to North Africa, because of this idea was rejected on solid grounds by Villa (2001).

According to our data, *H.erectus* followed the so colled "Savannahstan" (Dennell, 2010): a grassland biome that spread around South West Asia and east Africa at some 1.8 Ma (Hughes et al., 2008; Lahr, 2010; Abbate and Sagri, 2012). The first documented arrival in Eurasia of early humans is in Dmanisi. The paleoenvironment at this site is reported as mixed woodland, dry and relatively warm (Gabunia et al., 2001). Our map (Figure 1.2) depicts *H. erectus* moving to the Caucasus via the Levantine corridor, possibly together with additional African immigrant (Belmaker, 2010). The uplift of the Himalayan plateau may have constrained the direction of dispersal passage southwards, versus South-east (Java) and east (China) Asia. The extensive floodplains of the Early Pleistocene ancestors of the Indus, Ganges, and their major outfalls

should have been attractive areas for *H. erectus*, as shelter from the large predators and resources rich Area, but difficult to colonize successfully just because of the landscape changes during monsoonal rains (Bar-Yosef and Belfer-Cohen, 2001).

Our results further suggest several possible routes of diffusion of *H. erectus* around palearctic-oriental biogeographc boundary in South-East Asia (Norton et al, 2010). The terminus of dispersal for *H. erectus* in South East Asia was Java island, dated as 1.6 Ma. Plio-Pleistocene boundary tectonics accompanied by increased volcanic activity formed emergent Sunda and Sahul Shelves, including the Indonesian Archipelago islands. Glaciation, deglaciation and the accompanying sea level fluctuations greatly affected land mass configurations in Southeast Asia. During the Pleistocene the Sunda and Sahul shelves were episodically largely exposed forming huge land connections between Asian mainland and the islands of Sumatra, Java and Kalimantan creating the so-called Sundaland (Voris, 2000). This corridor served as a land bridge and migration route for *H. erectus* and other vertebrate fauna from the Asia mainland to Java (Zaim, 2005). Again, in this older time interval, the movement of *H. erectus* seems to coincide with those of many other large mammals.

For the second interval, our data suggest that humans accessed southern Europe through the Bosphorus land bridge (Ryan et al., 2003; Muttoni et al., 2010), exposed during the Pleistocene, probably by the so-called Cassian sea level fall (Arribas and Palmqvist, 1999). Sites such as Fuentenueva-3 and Barranco Leon in southern Spain areterminus of arrival trough Eastern Europe and the Po Valley of northern Italy (Scott et al., 2007). In the reconstructed map (Figure 3) we show two different centers of dispersal (Ubeidya, 1.4 Ma, and Vallonet, 1.3 Ma) confirming Levant and Central Europe territories were stable settlements of *H. erectus*. In particular, the Levantine Rift Valley had a tropical biota that was very similar to those of the African savanna where hominines lived (Por, 2004), thus acting as an attractive pole for propagules.

Ages of European sites testify that humans there arrived later after colonizing South East Asia. The climatic harshening of Central Europe during Pleistocene possibly scourged any adventurer or, at least, made it difficult to establish long-lasting settlements, due to the derived increase of the dispersal's cost over these territories. Humans probably entered Europe from settlements in

the Levant and after the diffusion of Acheulean technology, that possibly allowed them to undertake high costly explorations of new territories by better exploiting animal resources (Martínez-Navarro, 2010).

## Conclusions

Human dispersal was a very complex process, as we showed there are many different factors affecting it. Environmental changes may have caused morphological adaptation and provided fertile basis for further development. For sure, *H. erectus* was an omnivorous opportunist creature (Croitor and Brugal, 2010; Hladik and Pasquet, 2002) able to widen its own occupied niche thanks to complex social organization and technological advancements (Brantingham 1998). According to Ungar (2006). By around 2.5 Mya the inclusion of meat in hominin diet (Hladik and Pasquet, 2002; Psouni et al., 2012) followed by geographic range expansion (Shipman and Walker, 1989; Ponzer et al., 2010) and protective anti-predator strategies (Aiello and Wheeler, 1995; Treves, 2000; Bramble and Lieberman, 2004; Pontzer, 2012; Smith et al., 2012) should have had paramount influence on the social, reproductive and morphological systems in this species (Psouni et al., 2012; Smith et al., 2012). Small, relatively primitive and cooperative groups of *H. erectus* comprising approximately 20 individuals (Treves and Palmqvis, 2007), could have tended towards migration even by sheer intragroup competition (Nikitas and Nikita, 2005), whereas in larger groups the home range decreases because of the cooperative foraging resource supply benefits (Hamilton et al., 2009; Smith et al., 2012). While these beneficial outcomes of sociality and technology on dispersal were probably a factor in human dispersal out of Africa, our data point clearly at carnivore avoidance as an important element, whose influence only became to relax by the middle Pleistocene, when humans finally became able to colonize Europe (Rook and Martınez-Navarro, 2010).

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# Chapter 2

# The Bioclimatic patterns of Pleistocene Human adaptations[2]

[2] The contents of this chapter have been submitted for publication to *Journal of Human Evolution* as a manuscript co-authored by Carotenuto F., Tsikaridze N., Rook L., Lordkipanidze D., Eronen J., Raia P.

**Introduction**

Species are confronted with the variability of the environment they live in. Whether or not they conform to that variability will determine, among other things, their ability to settle in that environment. This form of tolerance shapes the current distribution of species on Earth, and how it varied over time (Gaston and Blackburn, 2000). The temporal dimension is where the ability of species to either adapt or not to changing environmental conditions is manifested. In the wake of change, species can adapt, go extinct, or track the conditions they are best suited to: an evolutionary and geographical pattern known as habitat tracking (Eldredge at al., 2005; Raia et al. 2012). As a consequence, besides extinction the outcome of environmental change is either a change (Bradshaw 1965) in the phenotype in the same geographical space, or preserved phenotype in a different geographical space. Investigating upon this in the fossil record (that is in the termporal dimension) requires recognizing the phenotypic identity of a species, characterizing its environmental tolerance, and tracking its occurrence in space over consecutive time periods. All of these three fundamental aspects require careful examination, a good fossil record, and potent environmental proxies. When it comes to humans, all of these tasks are hard work.

The first and perhaps most controversial issue is the identity of fossil humans. In paleoanthropology, the great appeal of the subject matter, the paucity of remains and their ever-disputed taxonomic affiliation prompted several, not rarely fierce controversies about how humans evolved, and when and how they moved from their cradle in Africa to the rest of the world. As for taxonomy, at least two fundamental views arose during the last quarter of the XX century. On the one hand, the gradualist model, rooted into Mayr's species concept (1950) offers the idea of lumping human fossils in polytypic species, recognizing extensive diapason of morphological variation of the species as an essential prerequisite for species definition. This approach gave birth to the so-called multiregional model of human evolution, developed by Wolpoff and colleagues (Wolpoff et al. 1994,Wolpoff, 1999). Under this model, no speciation event is usually recognized in between *H. erectus* and *H. sapiens.* The opponents (Tattersal and Schwartz, 2008), of the lumper model support the concept of replacement of species one by one, not even denying the possibility of hybridization among them (Stringer 2002). These scientists

prefer to split human fossils in several species. On our part, we hold on a mostly intermediate position echoing the view of G. Philip Rightmire (1998) and colleagues (Stringer and Andrews, 1988). Hence, we recognize four main speciation and three dispersal events in human history since 2 Ma. According to this view, around 2 Ma the first fully-bipedal (Ponzer et. al., 2010) technologically well equipped species (Barsky, 2009), *Homo erectus*, arose in Africa. This species quickly spread all over the Asia, and later entered Europe (Muttoni et al., 2010; Arribas and Palmqvist, 2002). At around 1 Ma in Africa *H. erectus* gave rise to a new, geographically widespread species *H. heidelbergensis* (Rightmire 2008). During the Late Pleistocene the African *Homo heidelbergensis* splitted twice into two daughter species. First, possibly via "accretion" (Hublin 1998) *H. neanderthalensis* appeared in Europe, and then as a result of a more sudden change in Africa *H. sapiens* finally appeared (White et al., 2003; Rightmire, 2004). This latter species eventually had to replace all other *Homo* types by the end of the Pleistocene (Henke and Hardt 2006)**.** All this events are in accordance with archaeological information (Bar-Yosef and Belfer-Cohen, 2001). Whether or not there was genetic admixture between mid-late and late Pleistocene *Homo* species is still debated and beyond the scope of the present study (Rightmire 2001). Urged by the necessity of defining with clarity the species we dealt with, we now declare our objectives here. We wanted to characterize the evolution of climatic niches in *H. erectus* and *H. heidelbergensis*. Despite they were not armed with its technological wealth, these are the only truly cosmopolitan primate species, and the only humans able to disperse from Africa to the rest of the Old World. It is tempting, and not new in the paleoanthropological literature, to view these great dispersals as products of these *Homo*'s technological advancements (Gabunia at al., 2002; Lycett, 2009). Yet, it is well-known that these events passed through a number of harsh climatic changes. The early Pleistocene saw the consequences of the so-called ‘‘late Pliocene climate crush’’ (Bartoli et al., 2005), that is the establishment of 41 ka glacial cycles, followed by the decrease of precipitation and the increase of annual seasonality between around 2.5-1.8 Mya ago, synchronously with the appearance of *H. erectus*, (deMenocal, 2004; Mosbrugger et al., 2005). At the end of the early Pleistocene, *H. heidelbergensis* spread and apparance took place during a strong climatic deterioration, caused by the onset of the high-amplitude 100 ka glacial cycles at

ca. 1.0 Ma ago (deMenocal, 2004), and in coincidence with the Cassian sea level fall (1.2–0.9 Ma) (Arribas and Palmqvist, 1999). As a whole, the Quaternary climate was colder and drier in the Palearctic region (Gamble, 1986).

Here we incorporate environmental and paleoanthropological information from an ecological perspective to understand bioclimatic patterns of Pleistocene hominine dispersal and adaptation. In spite of the small number of fossil localities populated by humans, we reconstructed and compared niche breadths of *H. erectus* and *H. heidelbergensis*. In the present context, we used the term niche breadth as a measure of species versatility in terms of climatic variables reconstructed at the fossil sites they occurred at (Van Valen 1965; MacArthur, 1968; Roughgarden, 1972; Bearshop et al. 2004). To define climatic tolerance (hence niche breadths) we relied on estimates of temperature, precipitation, and seasonality, as mathematically derived by the accompanying herbivore fauna (Liu et al. 2012). We asked whether the dispersing *H. erectus* and *H. heidelbergensis* were different from their African ancestors in terms of climatic preferences and tolerance. Our prediction is that if technology played a role in the ecology of these species, or at least for the most derived *H. heidelbergensis*, these species populations' in Africa should be more conservative (less tolerant) than in Eurasia, and that *H. heidebergensis* was more tolerant than *H. erectus* given its more advanced technological equipment.

**Materials and methods**

To detect Pleistocene climate-hominine relationship and measure climatic variability in fossil *Homo* we built two different data sets including the occurrences of *Homo erectus* and *Homo heidelbergensis* representing a time span of about 2 Ma (from ~ 2 Mya to ~ 0.3 Mya). We compiled these databases by mostly taking information from Encyclopedia of Human Evolution edited by Bernard Wood (2011). Further, for each site, separately, we included updated information by borrowing data from scientific publications and online databases: https://www.nespos.org, http://fossilized.org, http://antropogenez.ru, http://web.uniba.it and http://www.helsinki.fi/science/now/.

To define *Homo* species types we followed the so called "Recent African Origin Model" (RAOM) (Stringer and Andrews, 1988; Stringer 2002; Rightmire 2008) based on a balanced recognition of the species, which is intermediate between two extremely contrasting "Lumper" (Wolpoff 1994) and "Splitter" models (Tattersall, 1986; Tattersall and Schwartz, 2003, 2008).

The datasets we compiled mostly consists of paleonthropological sites with geographical coordinates, age estimations and herbivorous mammals faunal lists. For *H. erectus* alone we used archeological sites before 1 Mya, as according to the actual paleoanthropological knowledge, there were no other hominine species other than *H. erectus* (Appendix Table 3). After about 1 Mya, according to the by Rightmire (2004), a speciation event happened in Africa giving rise to *H. heidelbergensis* from *H. erectus*. It's worth noticing that the taxonomic status of *H. heidelbergensis* is still a matter of debate, because of the conditions and uncertainty of preserved anatomical features, in spite of several pervasive works accumulating more and more diagnostic characteristics (Hublin, 1996; Arsuaga et al 1997; Hublin, 1998; Dean et al., 1998; Mounier et al. 2009; Bermúdez de Castro et al. 2011; Tattersall 2011). From the perspective of the RAOM and according to the literature based on theoretical and morphological information produced by most paleoanthropologists, if we recognize temporal and geographical variation, it seems that most early Pleistocene hominine fossils between 0.8 Mya and 0.2 Mya, with high probability were representatives of *H. heidelbergensis*. We included all possible widely accepted *H. heidelbergensis* fossils we found in literature in our data (Groves and Lahr, 1994; Rightmire, 1998; Rightmire, 2001; Stringer, 2002; Rightmire, 2008; Mounier et al. 2009; Stringer 2012) (Appendix Table 3).

**The climatic envelope of hominine species**

To reconstruct the bioclimatic variables and measure climatic niche breadth in *H. erectus* and *H. heidelbergensis* we used estimates based on herbivorous fossil mammal ecometrics. To estimate past environmental variables, we used two methods developed with present-day data to infer precipitation variables based on dental traits of large herbivorous mammal communities (Eronen et al., 2010 a,b; Liu et al., 2012).

The dental morphology of mammals is highly informative as to their functional demands (for a review see Janis and Fortelius 1988). All mammals process their food before swallowing, and teeth are important for reducing food particle size so that it can be rapidly digested. This is an important issue for an endothermic animal with a high metabolic rate. Therefore mastication is especially important for herbivorous mammals that need to process large quantities of fibrous food material. Thus, the diversity of dental morphologies of herbivorous mammals within a faunal community reflects both the diets of the individual herbivorous species and the environment in which they are living.

One of the best-understood ecometrics is the molar crown height of herbivorous large mammals, or hypsodonty. The hypsodont crown is an adaptation to high rates of tooth wear (Janis and Fortelius 1988). Different diets vary in the amount of wear they produce: species that eat abrasive or tough foods, or foods of poor nutritive quality, usually have high-crowned teeth. When hypsodonty is averaged across species in mammalian large herbivores, there is a strong geographical correlation with precipitation. Additionally, as molars adapt for shredding tough, fibrous food, the cusps acquire higher relief and merge to form ridges, or "lophs", and the premolars may become "molarized" (i.e. assuming the shape of the molars to a greater or lesser extent). These teeth have thin enamel, and function optimally when some of the enamel has been worn away from the crests of the ridges to produce a doubled set of cutting blades (two blades of enamel with an intervening lake of dentine).

Eronen et al. (2010) method uses mammalian molar crown height data with regression tree analysis on the distribution of large herbivorous mammals at the community level to estimate mean annual precipitation (MAP), and yearly driest quarter (DQP) and wettest quarter precipitation (WQP) values. Liu et al. (2012) method uses longitudinal loph count and hypsodonty to estimate precipitation (MAP) and mean annual temperature (MAT) variables.

These methods have fairly high standard errors (Eronen et al., 2010 MAP R2 0.66, SD: 388 mm; driest quarter R2 0.49, SD: 66 mm; wettest quarter R2 0.66, SD: 172 mm; Liu et al., 2012 MAT R2 0.69, SD: 7.530 C; MAP R2 0.63, SD: 412 mm) but they can be used together to estimate large scale changes or differences in environmental regimes.

Because of these high standard errors, and as precipitation variables (MAP, DQP and WQP) are strictly correlated to each other, in order to increase the independence between estimates we used MAP as estimated by the method of Liu et al. (2012) and the DQP and WQP as computed by the method of Eronen et al. (2010 a, b) ( Appendix Table 4).

We drew African and Eurasian maps of the climatic variables by performing spatial interpolation of their values. In details, we used Ordinary Kriging (Matheron, 1963) to interpolate reconstructed variables in known localities and to predict their values at any other point locations where we had no information. For each species, we produced four grid maps (wettest quarter, driest quarter, mean annual temperature, mean annual precipitation maps) where we reconstructed climatic variables in equal area cells of 250 $Km^2$ wide (Figures 2.1 to 2.8). Ordinary Kriging was performed by using the package "intamap" in the R (CRAN) software.

**Measuring the breadth of Hominines' climatic niches.**

After creating the climatic maps during the considered time intervals for both Africa and Eurasia continents, we superimposed the *H. erectus* and *H. heidelbergensis* localities to the related maps to extract the climatic variables related to these species. In order to reconstruct the climatic scenarios of the two *Homo* species and to test for their consistencies, we first computed the mean values of these variables for *H. erectus* and *H. heidelbergensis* in Africa and Eurasia, separately. The second step consisted in testing if the two species actively preferred specific ranges of these climatic variabes. To this aim, we superimposed all the large mammals the fossil localities ranging in the same temporal interval of the two species in considered continents. Then, we extracted from these localities a new random set of climatic variables by considering a sample of the same size of the hominines occurrences in the two continent. As we tested if the two species selected a mean value of each climatic variable higher or lower than expected by chance, we iteratively repeated this bootstrap for 999 times in order to compute confidence intervals at 5% and 95%.

In addition to the deviance from randomness of each variable selected by Hominines, we measured the degree of the general climatic niche breadth by calculating the multivariate variance

of all the raw environmental variables. The multivariate variance is computed as the sum of the diagonal elements of covariance matrix of climatic variables (Zelditch et al., 2012). We computed four covariance matrices: two for *H. erectus* and two for *H. heidelbergensis* (two of which for the African fossil records and the other two for the Eurasian). As explained above, when considering each variables separately, we tested if the measured climatic niche breadth of the two hominine species were either wider or thinner than expected by chance. We tested for the statistical significance of these niche breadths by bootstrap resampling 999 multivariate matrices of the reconstructed climatic variables within the whole record of large mammals' fossil localities (i.e. whether or not were *Homo* remains present in the fossil sites), in the temporal interval and continent specific to each hominine species.

We measured the climatic niche variances of *H. erectus* and *H. heidelbergensis* in Africa and Eurasia, by using the package "geomorph" R (CRAN) statistical software.

**Results**

The bootstrap resampling of the climatic variables considered separately showed that in Africa *H. erectus* did prefer drier yet more seasonal conditions than expected by chance (Appendix Table 5). The mean precipitation for the driest quarter of the year is 24.99 mm of rain (simulated mean = 24.28 mm of rain, $p = 0.040$, CI 95% = 24.92 mm of rain). The same occurs with mean annual precipitation (mean value = 404.88 mm of rain, simulated mean = 486.06 mm, $p = 0.007$, CI 5% = 429.20 mm). As regards the mean annual temperature, we found *H. erectus* preferring relatively cooler territories than expected by chance (mean value = 21.08 °C, simulated mean = 22.32 °C, $p = 0.01$, CI 5% = 21.39 °C). In Eurasia, our data suggest that *H. erectus* preferentially lived in seasonal yet warmer than expected environments (Appendix Table 5).

As regards, *H. heidelbergensis*, in Africa this species does not show any significant preference for any of the variables considered. The same applies to Eurasian *heidelbergensis* (Appendix Table 5).

Overall, we found that *H. erectus* in Africa showed a narrower climatic tolerance than expected by chance (measured multivariate variance = 20401, simulated mean multivariate

variance = 52735, $p$ = 0.009, CI 5% = 28350). We found similar results when considering the same species out of Africa (measured multivariate variance = 66093, simulated mean multivariate variance = 118084, $p$ = 0.048, CI 5% = 67914). In Africa, for *H. heidelbergensis* we found no significant evidences to describe the climatic preferences of this species (Appendix Table 5), whereas in Eurasia we found that it had a climatic niche breadth narrower than expected by chance (measured multivariate variance = 46807, simulated mean multivariate variance = 117604, p = 0.055, CI 5% = 46313).

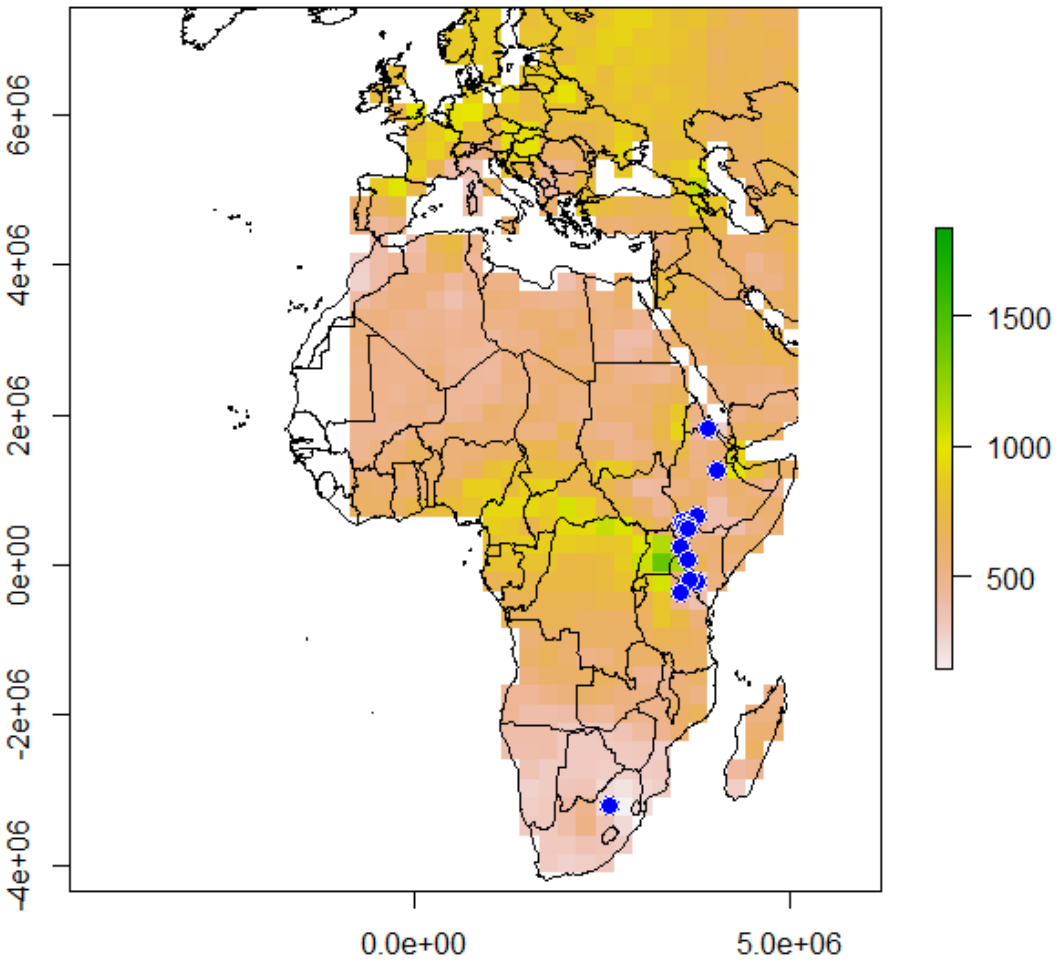


Figure 2.1 - Mean annual precipitation for *H. erectus* in Africa

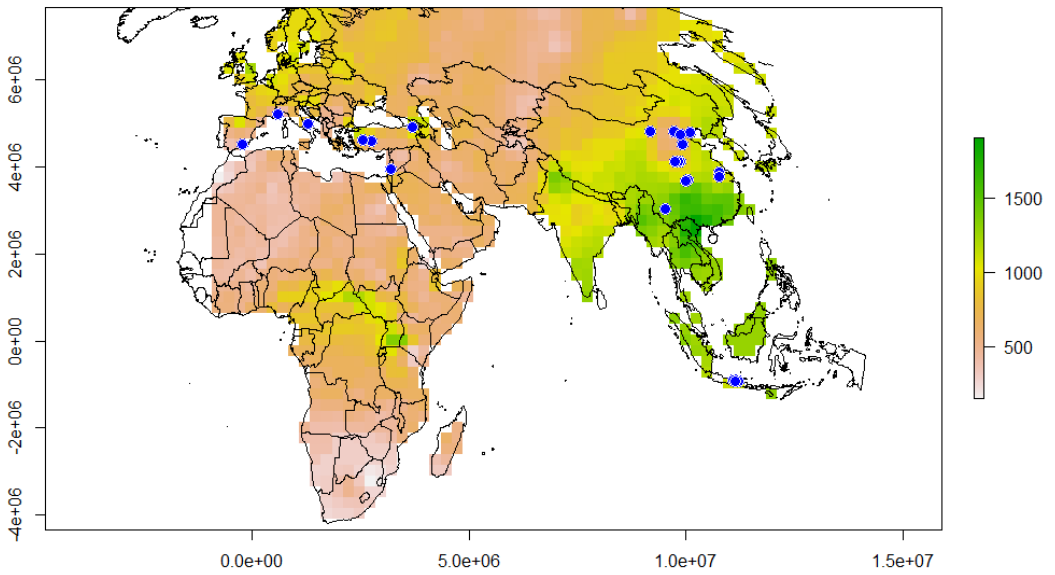


Figure 2.2. - Mean annual precipitation for *H. erectus* in Eurasia

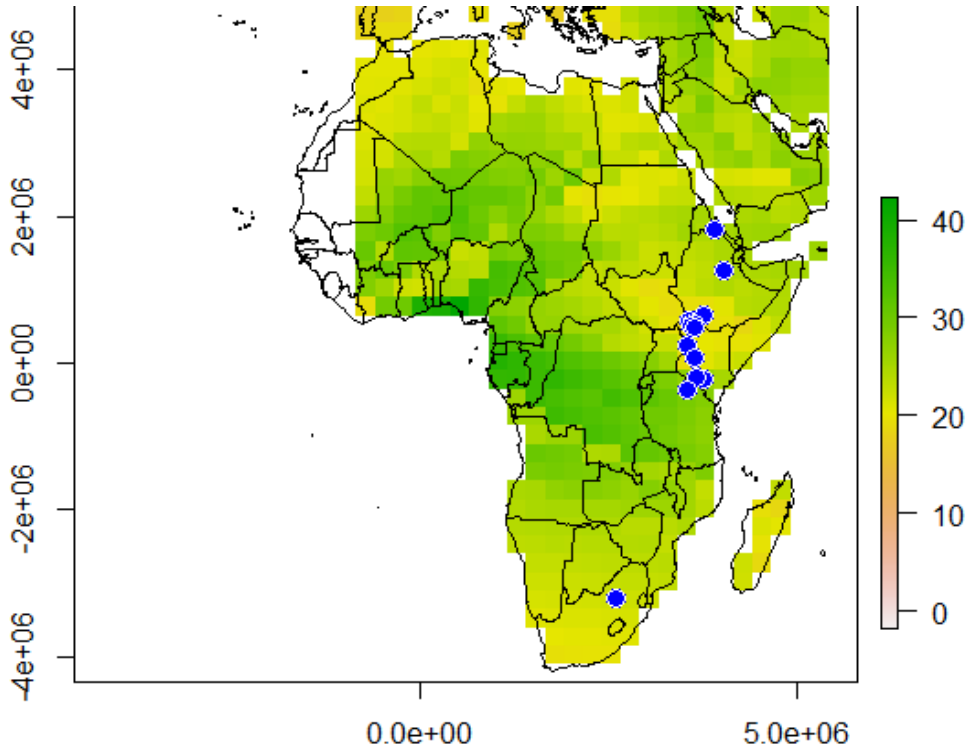


Figure 2.3 - Mean annual temperature for H. erectus in Africa

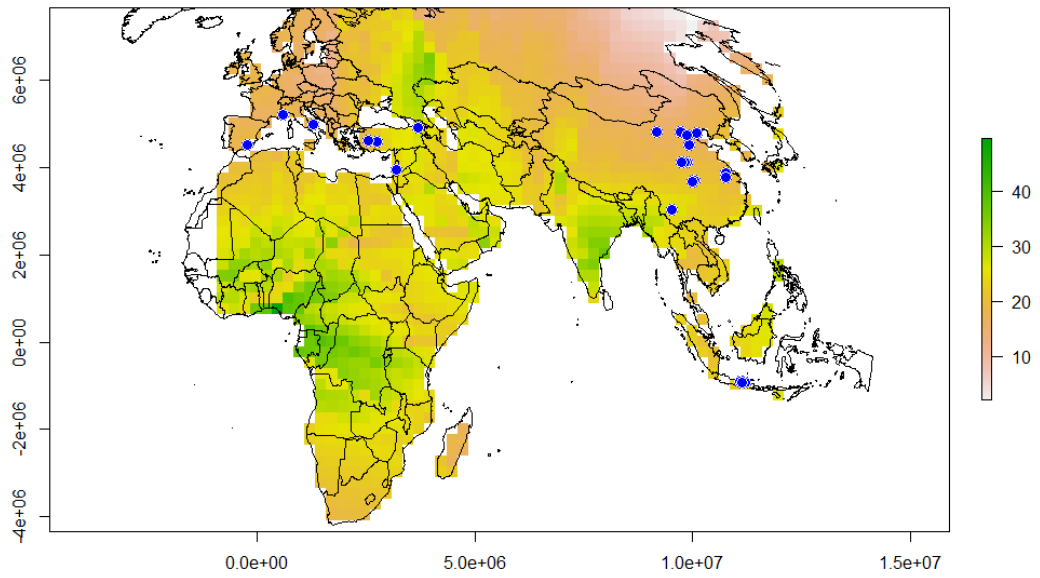


Figure 2.4 - Mean annual temperature for *H. erectus* in Eurasia

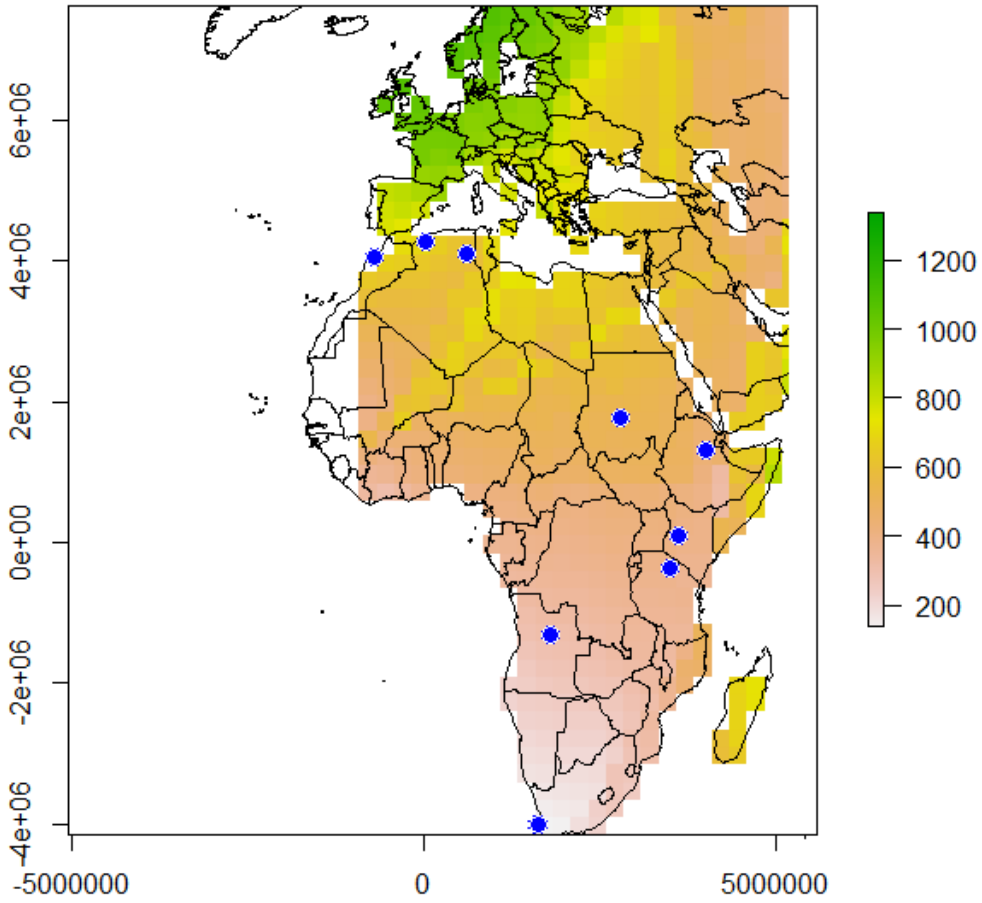


Figure 2.5 - Mean annual precipitation for *H. heidelbergensis* in Africa

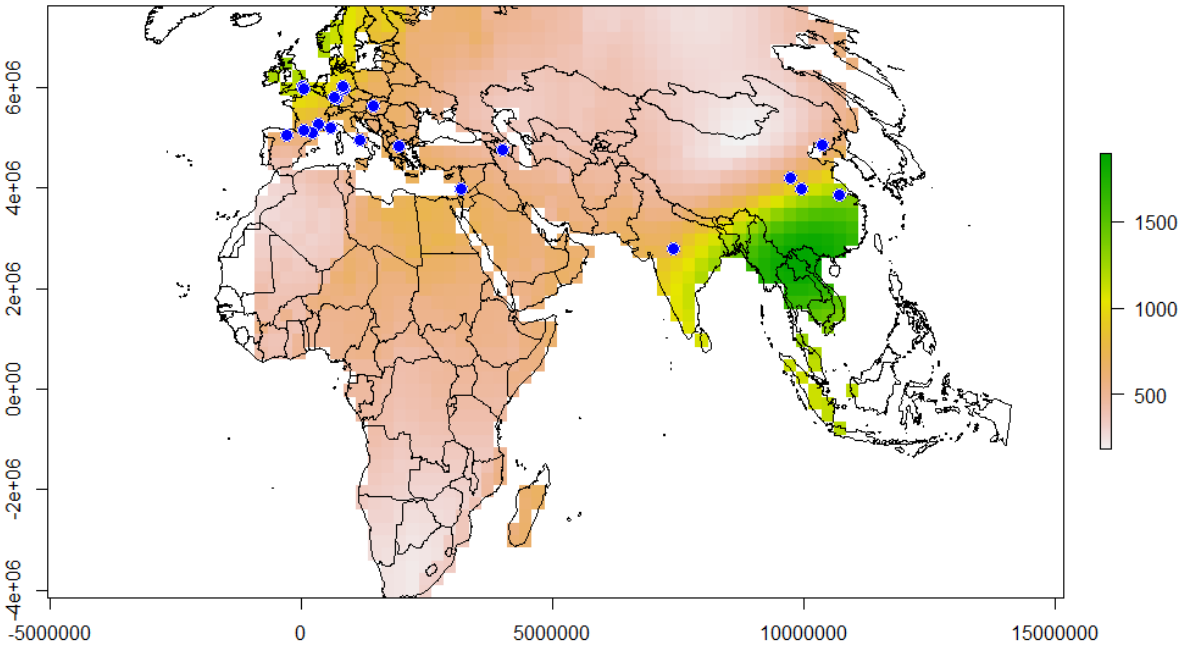


Figure 2.6 - Mean annual precipitation for *H. heidelbergensis* in Eurasia

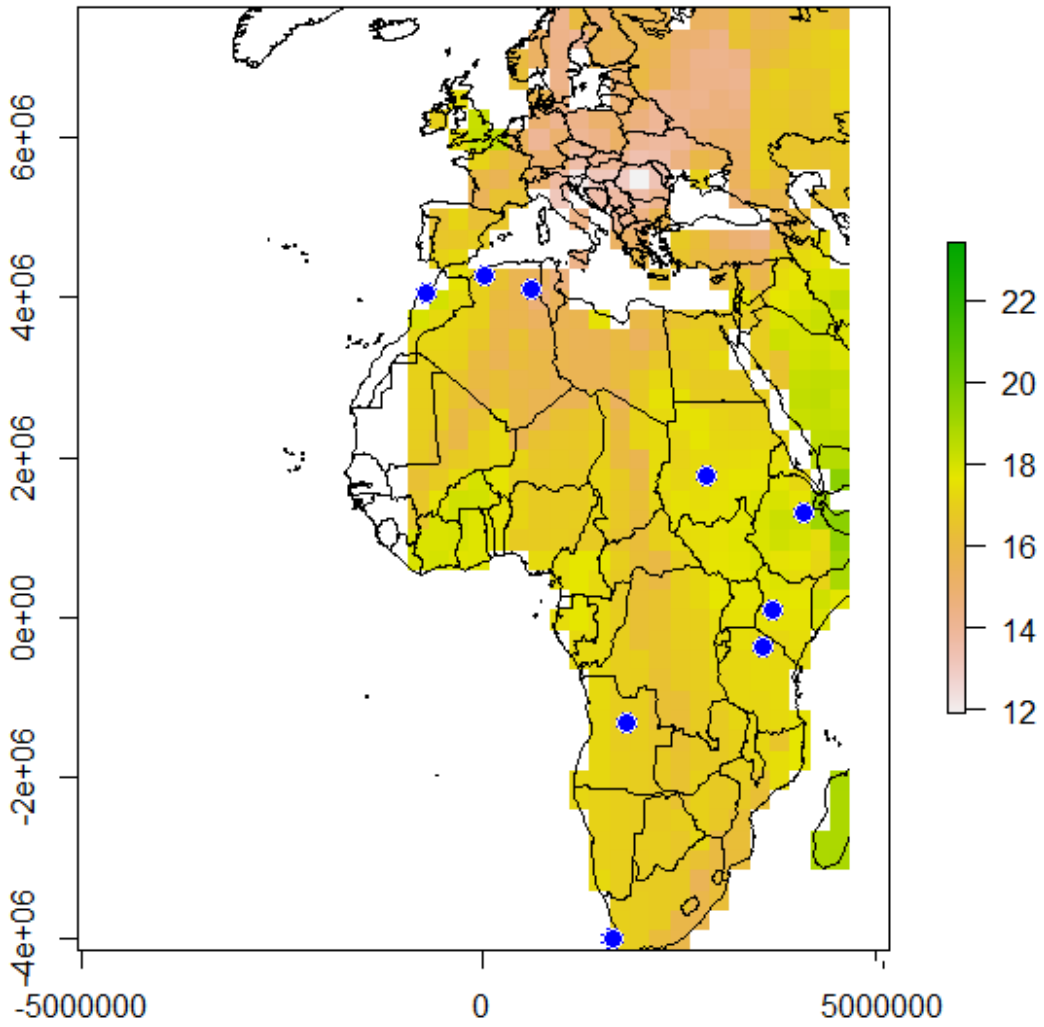


Figure 2.7 - Mean annual temperature for *H. heidelbergensis* in Africa

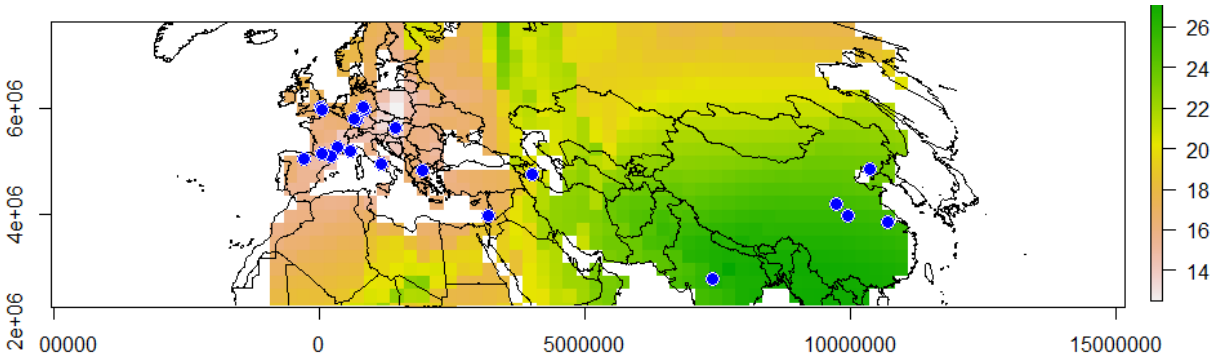


Figure 2.8 - Mean annual temperature for H. heidelbergensis in Eurasia

**Discussion**

Climate and its spatial heterogeneity influences species distribution at the global scale, affecting organisms' physiological and behavioral states. For characterizing the niche breadth in fossil *H. erectus* and *H. heidelbergensis* we used temperature and precipitation because they are the most informative environmental indicators (Bonebrake and Mastrandrea, 2010). Environmental heterogeneity influences species tolerance and their niche breadth. The more tolerant a species is the larger will be its range (Gaston and Blackburn, 2000) as it can encompass a wider gradient of climatic variables. This means that tolerance (i.e. the climatic niche breadth) directly affects the probability to disperse over large stretches of continents. Still, according to Rapoport's rule, the species ranges increases with latitude, because species in the temperate regions face far higher climatic heterogeneity than species in the tropics (the climatic variability hypothesis, Stevens 1989). As a matter of fact, since seasonality decreases towards the equator, tropical species tend to be more specialized and have narrower niche breadth in terms of temperature (Bonebrake and Mastrandrea 2010). Early *Homo* were tropical species, they all originated in Africa, hence, from a strictly biological point of view, their chances to fare well in cold, seasonal environments that are common in Eurasia would be thin. Yet, Pleistocene humans adaptive characteristics, such as their dietary versatility and technological development, made them special (Carrier, 1984; Foley and Elton, 1998; Arcadi, 2006; Ungar, 2006) and could possibly have widened their ability to live in a more heterogeneous environment (Potts, 1994; Arcadi, 2006). As such, we could not easily anticipate how wide the climatic tolerance of *Homo* dispersing over Eurasia would be, but nonetheless knew that *H. heidelbergensis* was culturally speaking more developed than its ancestor was, and could therefore be more performing in colonizing new environments. Consequently, if technology matters, the niche breadth of this species should be wider than for *H. erectus*. As a matter of fact, we found supportive evidence for this. While of the two species only *H. heidelbergensis* was not stenotypic in Africa, both species were in Eurasia, meaning that they suffered the hurdles of living in a different environment from their ancestry.

Our procedure for estimating such a niche is admittedly very conservative and it is worth noticing that the two hominine species' climatic tolerance were compared, in Eurasia, to a degree of climatic variability that was wider than that found in the African continent, as explained above. Consequently, the stenotypy we found could be a byproduct of the larger environmental heterogeneity we have in the temperate regions of the Northern Hemisphere. Indeed, although we found that *H. erectus* had a narrow range of preferred climatic conditions in both continents, the inspection of individual variables bolsters the idea that this species made use of the wider degree of climatic contest when dispersing over Eurasia. For instance, the mean values of the precipitation variables (MAP and DQP) sampled by Eurasian *H. erectus* show that this hominine species lived in territories with a higher precipitation than in Africa (Appendix Table 5). Temperatures seem to be selected as well. *H. erectus* localities significantly sampled relatively warmer regions than by chance when dwelling into the Eurasian territories, while they are very much alike what they sampled in Africa, despite the two continents obviously differ in terms of mean temperatures.

These significant deviations from the expected do not pertain to *H. heidelbergensis*. Indeed, if we consider separately the climatic variables in Africa, this species seems to cover a wide range of climatic conditions there. In addition, when considering the multivariate variance, *H. heidelbergensis* can be considered as an "euritypic" species, as it showed a climatic tolerance that is statistically not distinguishable from the total amount of the African climate variation in the pertinent time interval. The interpretation of the climatic preferences of this species is a bit more challenging in the Eurasian continent. There, *H. heidelbegensis* fossil localities show lower than expected climatic variability, thus responding as a "stenotypic" species. Yet, even with this proportionally limited climatic tolerance, we found no significant preference of this species for particular values of individual climatic variables, thus implying that *H. heidelbergensis* experienced in Eurasia a range of climatic scenarios that exceeded its physiological flexibility, but was nonetheless able to cope with them. The comparison between African and Eurasian localities showed that *H. heidelbergensis* moved from a drier and colder environment to a pretty

wetter and slightly warmer one, thus suggesting that, alike *H. erectus*, this species was conservative only in terms of environmental temperature (Appendix Table 5).

The two species we analyzed showed that the passage from Africa to Eurasia was characterized by a change in the environments they preferred, which is more pronounced for *H. erectus*. What is remarkable is that both species widened their range of climatic tolerance in Eurasia (as compared to Africa) even if acting as "stenotypic" overall, as they both stayed on the margins of the climatic opportunities considering the heterogeneity these regions offered.

Out of Africa both species found increased seasonality. Our data suggest they were confined to warmer and wetter (read "tropical-like") lands in Africa, a biome they did not encounter in Eurasia. Although it is difficult to understand whether the change of their favorable climate in Eurasia could be ascribed to either the heterogeneity of the territories or to the more pronounced effects of the Pleistocene climatic oscillations, in general, they showed an enhanced climatic tolerance (Appendix Table 4, 5). The fact that out of Africa we found *H. heidelbergensis* not selecting for discrete climatic variable values, suggests that the Heidelberg man was more tolerant overall than *H. erectus*. Whether or not this depends on technology is an open question that we cannot answer to here, but deem very much worthy investigating. Hublin (2009) showed that technology might have helped *H. neanderthalensis* in dwelling very inhospitable cold environments but this explanation could be applicable to *H. heidelbergensis* as well. Indeed, despite Acheulian culture is more developed and more complex than Oldowan (McBrearty and Brooks 2000; Carbonel and Sala, 2009), there is no coincidence of morphological with technological shifts from one techno-complex to another. As, it seems that, during Early and early Middle Pleistocene, technological development was not still sufficiently efficient to play decisive role of buffer between humans and environment alone. Demography and social organization should have interplayed in this process more hardly than expected. If we recognize that *H. heidelbergensis* derived from *H. erectus*, the culture loses its domination, because Acheulian culture developed long before apparance of *H. heielbergensis* (Semaw et al., 2009). Thereby, it seemsthat at the beginning *H. heidelbergensis* was still suffering with some sort of phylogenetic niche conservatism, but the cultural heredity was developed by Heidelberg man during its

existence (Villa, 2009), crowned by invention of Mode 3 prepared core technology (James and Petraglia, 2007). It is more plausible that this species was able to dramatically enlarge its geographical range by adding new behaviors, new social structures, and energetically less costly constructed demographical matrix (Chazar, 2009; Villa, 2009).

This increased performance in new habitat colonization is the predicted outcome of the variability selection hypothesis (Potts, 1998). According to this, a variable climate induces an inconstancy in the selection pressure, thus favoring generalist's traits, like adaptive flexibility in behavior..

As the two hominine species we considered appeared during consecutive moments of Pleistocene climatic deterioration, it is not surprising if they responded differently to the environmental inputs they received. *H. erectus* appeared during the Early Pleistocene and outsurvived the climatic harshening of Early-Middle Pleistocene. Early remains of *H. heidelbergensis* are dated ~ 0.8 Mya, when the glacial cycles passed to 0.1 Ma long, further increasing the temperature ranges between glaciations and interglacials. As a consequence, *H. heidelbergensis* evolved under a more changing and unpredictable environment than that *H. erectus* faced, and this could have favored the evolution of its increased plasticity in adapting to new conditions.

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# Chapter 3

## Towards an ecological context of Neanderthal demise[3]

[3] This final chapter represents the background to a third manuscript that still is in preparation. Albeit not yet completed, I present here the contents of the introduction to the topic of the ecological scenario of the relationships between *Homo neanderthalensis* and the *Homo sapiens* population of the so called AMH ("Anatomically Modern Humans").

Why do species go extinct? Many natural factor contribute to this process, those are catastrophic disasters and loss of genetic variation (Raup, 1994). Nowadays human activities enhances these factors, but before humans arose with civilization, the factors affecting species survival were obedient to ecological rules. In precedent works we proposed ecological scenarios for *Homo* species dispersal and adaptations in Pleistocene. We described some ecological properties of *Homo erectus* and *Homo heidelbergensis* species as parts of animal communities, but for the following research we focused on a new step in human evolution: when *Homo sapiens* replaced all other human species. Here comes the question why other contemporaneous species to *H. sapiens* went extinct. At this time our research encompasses the relationship between Neanderthals and Modern humans in western Eurasia. We did not include other possible species form eastern Eurasia because the image of evolutionary process seems to be unclear and ongoing debates are still in progress.

During the last decades several evolutionary model arose explaining the origins of *Homo sapiens* and *Homo neanderthalensis*, following the course of their relationship. From two contrasting models as are “recent African origin” (Rightmire, 2001, Tattersal and Schwartz, 2008) and “Multiregional evolution” (Wolpoff, 1999; Wolpoff et al., 2000), developments in genetics provoked a birth of other models, respectively the “Hybridization and replacement model” (Bräuer et al., 2004; Bräuer, 2007) and “Assimilation model” (Trinkaus and Smith, 1985). These models are more focused on the phenomenon of genetic flow between "archaic" and modern humans than earlier models, but they differ in recognizing dispersal as one of the main forces driving human evolution: the latter one in contrast of "Hybridization" refuses replacement and dispersal as main evolutionary driving force in *H. sapiens* evolution. Recently-determined Neanderthal nuclear genome shed light on Neanderthal DNA sequences (Green at al., 2006) sharing with humans common ancestors about 800 Ka (mtDNA 500,000. Green at al., 2008) and the split of Neanderthal and modern human sheared ancestors has been thrown back at around 270 – 440 Ka. The nuclear genome DNA sequences also showed that Neanderthals share more genetic characters with modern Eurasian populations than with sub-Saharan Africans, indicating that gene flow from Neanderthals into the ancestors of non-Africans occurred to an extent of 1–4% (Trinkaus 2007; Smith, 2011). In our opinion the recent African origin model (RAOM) is more balanced, proposed by Rightmire and colleagues (Stringer and Andrews, 1988; Rightmire, 2001) though it does not denies the possibility of genetic flow, it states that originally the widespread African species *H. heidelbergensis* has given rise on the one hand to *H. neanderthalensis* (Hublin, 1996, 1998; Dean et al., 1998, Rightmire; 2008) via processes of geographical isolation of Europe through ice sheets, genetic drift, and intense selection or a process called "accretion" (Hublin 1998; Koenigswald 2003) terminated at around 175 Ka (OIS 6) (Tattersall 2011;Vandermeersch and Garralda 2011). On the other hand around 200 Ka (MIS 6, Riss Glaciation) *H. sapiens*, who originated in Africa somewhere around the Ethiopia (Omo-

Kibish and Herto. White et al., 2003; McDougall et al., 2008) appeared and then occupied all other continents (Henke and Hardt, 2006).

Before the arrival of *H. sapiens* archaeologists recognize heterogeneous later middle Paleolithic culture with its regionally techno-chronological complexes, associated with *H. neanderthalensis* (Soressi 2002; Jöris 2004). First Neanderthals met modern humans in the Levantine region around 80-130 Ka, where with high probability genetic exchange had place between these two forms of hominines (Rak, 1998; Trinkaus, 2005; Green et al., 2010). Yet in any case morphological and habitat disctincivness suggests limited characters of this first interaction (Franciscus and Holliday, 2013). The first dispersal out of Africa was possibly caused by the combination of local dryer conditions in eastern Africa and more attractive conditions in North Africa and the Levant coincided with global warm and wet period of MIS 5 (Scholz et al., 2007; Smith and Ahern, 2013). It seems that this initial migration was temporal and sporadic (Hublin, 1998), consequently Neanderthal immigrants replaced warm climate-adapted modern humans (Tchernov, 1998) between MIS 5 and MIS 4, either by competitive exclusion (Shea, 2003) caused by technological inability (Klein, 2002) or by environmental substitution (Franciscus and Holliday, 2013). Humans later returned at around 50 Ka with more developed culture and oppressed Neanderthals from the region finally (Shea, 2003). After the final substantial occupation of south west Asia in space and time contemporarily were developing Neanderthal associated (Banks et al., 2013) to so called transitional cultures in Europe between the MP to the UP 40.0–30.0 ka BP (Bar-Yosef 2006; Jöris et al. 2006; Ahern et al., 2013) and Aurignacian from Ahmarian and Emiran technologies in Levantine region dated back 45– 47 Ka (Mellars, 2004; Hublin 2014). The first UP technocomplex associated to humans in Europe was Aurignacian (Jöris et al., 2006) which arrives there from Levantin region (Otte, 1994; Finlayson, 2004) around 43–42.5 Ka cal BP. (Higham et al., 2011; Douka et al., 2012). This complex is divided in "proto-Aurignacian" developed in Southern Mediterranean Europe (Bon, 2002; Hublin, 2014) and the Aurignacian in northern and central part of Europe, meeting each other later over specific geographical areas such as Southern and Central France (Zilhão, 2007; Hublin, 2014) where the modern human populations overlapped with Neanderthals. The arrival of this cultures where more or less coincided with climatic changes probably associated with niche expansion, as an adaptive response to the climate change (d'Errico et al., 2003; Banks et al., 2013). It is still questioned whether *H. sapiens* played a role in Neanderthal extinction or not, some scholars rejects *H. sapiens* as an extinction factor (Stewart, 2004; Davies, 2001), others recognize replacement but put forward climatic conditions as main actors (Leroyer and Leroi-Gourhan, 1983; Djindjian, 1993; Gioia, 1990; Mellars, 1998). There are, however, more arguments supporting competitive exclusion hypothesis refusing the fact of significant overlap between Neanderthals and Sapiens (Tattersall, 1995; Stewart, 2004; Banks et al., 2008). Here on the scene appears more solid cultural set of techno-complexes enhancing survival chance of human populations and driving the

course of human evolution differently from other living beings, it can shift ecological niche, because culture as a buffer (Richerson et al., 2009; Banks et al., 2013) allows for rapid response and adaptations against climatic-environmental change (Finlayson, 2004; Riede, 2009). Still, it's known that cultural inadaptability to environmental change could affect negatively demography followed by cultural decadence (Henrich, 2004) and narrowing ecological niche (Banks et al., 2013; Nettle, 1998; Collard and Foley, 2002) or extinction.

Latest researches on eco-cultural niche (Banks et al., 2013) showed up the superiority of competitive exclusion of Neanderthals by modern humans after niche overlap, but essentially it has been shown that humans were broadening their niche breadth and climate change have had its particular effect on this process. For climatic reconstruction Banks et al. (2013) performed atmospheric general circulation model (AGCM) analysis using sea surface temperatures and sea-ice extent variables, so we will strengthen this and previous works by new additional information and introduce climatic and environmental reconstructing of ecomorphological and faunal variables. In addition we will perform predictive species distribution modeling (SDM) (Hijmans and Elith, 2014), the so-called climate envelope modeling or Niche-Modeling, for better presentation and imagination of eco-cultural relationship and niche breath deviation responses on climate change in late Pleistocene hominines in Europe.

Finally, we focus our research on the late Pleistocene human response to the climate change in temporal and spatial scales, via reconstructed environmental preference in course of management of niche breadth and overlap, while bioclimatic adaptations in this process determine the performance of niche characteristics.

The data collecting process was complex and long, similar to previous works, several type of data were gathered from *Homo sapiens* and *Homo neanderthalensis* associated sites covering the time span between 200 Ka and 30 Ka. The material includes information about site: coordinates, fauna, archaeological culture and ecomorphological variables received from herbivore tooth crown parameters (hypsodonty, loph number, Jernvall, 1995). Most information was collected from the Encyclopedia of Human Evolution edited by Bernard Wood (2011). Separately for each site we extracted data from scientific publications and online databases:

- The Paleodb - (http://www.paleodb.org/)
- The NOW database - (http://www.helsinki.fi/science/now/)
- The Pangaea database - (http://www.pangea.de./)
- The NESPOS database - (https://www.nespos.org)
- Henry Gilbert database(2012) - (http://fossilized.org)
- Anthropology database - (http://antropogenez.ru)

We reconstructed climatic preferences of Neanderthals and modern humans performing Liu et al. (2013) method, based on high correlation patterns of selected ecomorphological variables with both diet and habitat (Fortelius, 2003), thus explaining 73 % of the global variation in terrestrial

net primary productivity (Liu et al. 2013). From the crown we extracted the measures of Hypsodonty and lophs (Fortelius, 2003; Jernvall et al., 2000; Liu et al., 2013) according to the following scheme: brachydont=1, mesodont=2, hypsodont or hypselodont=3 (Jernvall, 1995) and number of the only longitudinal lophs number.

*This part ot the research is still in progress and I am expecting that the results will create fertile grounde to demonstrate ecological patterns of human arrival in Near East and Europe and extinction of Neanderthals.*

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# Conclusive remarks

The study to the human dispersals from an ecological and geographical/physiographical perspective gave me lot of experience and information about how may humans were responding to the climate and environmental changes, and how they were influenced interconnecting with other large mammals, being part of the same faunal guild. Together with my tutors we passed trough the whole human dispersal epopees, trying to answers on the many related questions, and find out the way to ordinate events in order to provide a further contribute to fill up the puzzle of human evolution.

According to the selected research hypotheses for this doctoral thesis, I developed several scenarios using some statistical techniques to describe ecological patterns of dispersal considering humans as indivisible part of nature.

It was quite clear that this research needed, at first, strong theoretical background and a bold data support.

In order to frame my research into the evolutionary history of humans, I first established the scenarios by establishing empirical and theoretical datas. Thus, I compiled a database integrating archeological, paleoanthropological and paleontological data with taxon-free climate estimator, eco-morphological measures, as well as with geographical information.

The results encompass enough information to made the ecological picture of Pleistocene Hominines dispersal, I hope, clearer than before. Humans began enlarging their distributional range during past 2 Ma: they developed their strategies to earn food and become more versatile in diet, with new steps of social organization and demographical structure. To deconstruct in better details this process as a whole, I selected particular events describable by our data and empirically divided the last 2 Ma in four time interval: 1.9-1.4 Ma (first dispersal of *H. erectus* out of Afrca); 1.4-0.9 Ma (the dispersal of *H. erectus* through Europe); 1.9- 0.220Ma (time period including appearance and development of two species *H. erectus* and *H. heidelbergensis*); Finally the time span between 300,000y and 27,000y, covering appearance, parallel evolution and overlap of two species *H. neanderthalensis* and *H. sapiens* and their environmental context.

For each of the four intervals we made particular analysis using software R(cran) and its packages.

In conclusion I here briefly characterize each of these time interval by the reconstructed ecological properties accompanying dispersal events. The first dispersal, which happened around 1.9 Ma ago, started in East Africa and Humans went out of Africa via the Sinai land bridge (we excluded all other possible land connections between Eurasia and Africa being unsupported by most of the evidences); this dispersal was not part of general trend of few species leaving Africa during Plio-Pleistocene, but it was basically peculiar to *H. erectus*. Our analysis explained as well as that humans were probably avoiding carnivores as their main competitors, shading light on human life mode of aggressive scavenger and passive hunter. After entering Eurasia through Caucasus around 1.8 Ma, early humans took an eastwards direction to south east Asia trhough a path stretched by Himalaya mountain range,

This first interval missed occupation of Europe . It is in the second selected time span, when humans become familiar with carnivores and their technological development shifted toward progress, that they entered Europe filling deliberated omnivorous or pack hunter niche of Europe during early middle Pleistocene, via Bosporus temporary appeared land bridge following peninsular refugia until the Spain and northern France. Humans were selecting mid elevations, probably conditioned by carnivore avoidance strategy based on negative relationship between carnivore/elevation and diversity increase phenomenon in mid elevation gradient. Measured climatic niche breadth of *H. erectus* demonstrated that *H. erectus* was stenotypic savannah dweller species, probably dispersing out of Africa via so called Savannahstan environmental continuity; it seems that its daughter species *H. heidelbergensis* borrowed from its ancestors cultural heritage and developed it, enlarging its niche breadth and tolerance but still it was suffering by little niche phylogenetic conservatism.

Finally the analysis of Neanderthal-AMH interaction, still in progress anyway, is supporting us to suppose that it will be possible to delineate an environmental pattern explanatory model for Neanderthal disappearance and arrival of modern humans in western Europe. Today most data suggest that humans confined Neanderthals in refugiuum areas (southern Iberian peninsula and Caucasus) where finally they become extinct leaving its genetic heredity in modern humans via interbreeding.

This research demonstrated that ecological approach to human evolutionary studies is still relatively unexplored and there is crucial needs for more and more research to reconstruct early humans mode of life, their dispersal patters and other evolutionary processes.

I really hope that my research may represent a contribute for developing new research perspectives under a point of view considering the indivisibility of early humans from their natural context.

# Appendix

**Appendix: Table 1 - Fossil record of *Homo erectus* including both the localities with bones remains and archeological evidences.**

| Locality name | Latitude | Longitude | Age | Type of remains |
|---|---|---|---|---|
| Barranco Leon (Orce) | 37.70 | -2.44 | 1.30 | human bones |
| Buia-Dandiero | 14.83 | 39.85 | 1.00 | human bones |
| Chemoigut fm. | 0.65 | 36.20 | 1.30 | archaeological |
| Chenjiawo S6 | 34.20 | 109.35 | 0.68 | human bones |
| Dmanisi | 41.30 | 44.15 | 1.77 | human bones |
| Donggutuo | 40.20 | 108.10 | 1.10 | archaeological |
| Dursunlu | 38.28 | 31.91 | 1.00 | archaeological |
| East Turkana - Area 1 - KBS - KNM-ER 42700 | 4.31 | 36.28 | 1.87 | human bones |
| East Turkana - Area 102 | 3.94 | 36.25 | 1.29 | human bones |
| East Turkana - Area 102 | 3.84 | 36.04 | 1.60 | human bones |
| East Turkana - Area 102 Okote | 3.94 | 36.25 | 1.29 | human bones |
| East Turkana - Area 103 - KBS | 3.90 | 36.24 | 1.87 | human bones |
| East Turkana - Area 104 | 3.87 | 111.35 | 1.60 | human bones |
| East Turkana - Area 104 - KBS | 3.98 | 36.32 | 1.87 | human bones |
| East Turkana - Area 11 Chari | 4.29 | 36.29 | 1.30 | archaeological |
| East Turkana - Area 123 | 3.87 | 36.37 | 1.90 | human bones |
| East Turkana - Area 123 - Upper Burgi | 3.87 | 36.37 | 1.90 | human bones |
| East Turkana - Area 127 - KBS | 3.95 | 36.42 | 1.87 | archaeological |
| East Turkana - Area 130 - Upper Burgi | 4.18 | 36.42 | 1.90 | archaeological |
| East Turkana - Area 131 | 4.16 | 35.79 | 1.90 | human bones |
| East Turkana - Area 15 - Upper Burgi | 4.24 | 36.37 | 1.90 | archaeological |
| East Turkana - Area 1A - Okote | 4.32 | 36.27 | 1.56 | archaeological |
| East Turkana - Area 2 Chari | 4.31 | 36.22 | 1.57 | archaeological |
| East Turkana - Area 3 - Okote | 4.31 | 36.27 | 1.56 | human bones |
| East Turkana - Area 4 Chari | 4.30 | 36.23 | 1.56 | archaeological |
| East Turkana - Area 6 - Okote | 4.28 | 36.24 | 1.56 | archaeological |
| East Turkana - Area 6A - Okote | 4.29 | 36.23 | 1.56 | archaeological |
| East Turkana - Area 8 - Okote | 4.27 | 36.29 | 1.56 | human bones |
| East Turkana - Area 8A Okote | 4.26 | 36.28 | 1.29 | archaeological |
| East Turkana - Area 8B Okote | 4.24 | 36.28 | 1.29 | archaeological |
| El-Kherba | 1.91 | 35.38 | 1.20 | archaeological |
| Fuente Nueva 3 | 37.74 | -2.55 | 1.35 | archaeological |
| Gongwangling(lantian) | 34.10 | 110.70 | 1.15 | archaeological |
| Huludong | 32.00 | 119.00 | 0.60 | archaeological |
| Kedung Brubus | -7.41 | 111.66 | 0.88 | human bones |
| Kocabas | 38.44 | 29.65 | 1.10 | human bones |
| Konso Interval 2 | 5.25 | 37.50 | 1.78 | human bones |
| Konso interval 4 | 5.25 | 37.50 | 1.43 | human bones |
| Konso Interval 5 | 5.25 | 37.50 | 1.33 | human bones |
| Konson Iterval 6 | 5.25 | 37.50 | 0.87 | archaeological |
| La Belle-Roche | 50.51 | 5.50 | 0.91 | archaeological |
| Lainyamok | -1.75 | 37.50 | 0.70 | human bones |

| | | | | |
|---|---|---|---|---|
| Longgudong Cave 11 | 30.65 | 110.07 | 1.47 | archaeological |
| Longgudong Cave 2 | 30.65 | 110.07 | 1.47 | archaeological |
| Longgupo | 30.36 | 109.08 | 1.60 | archaeological |
| Longyadong Cave | 34.08 | 110.13 | 0.40 | human bones |
| Majunguo | 40.10 | 119.00 | 1.50 | archaeological |
| Middle Awash (Bouri formation; Dakanihylo member) | 10.22 | 40.48 | 1.00 | human bones |
| Middle Awash (Bouri formation; Dakanihylo member) | 10.22 | 40.48 | 1.00 | human bones |
| Olduvai I Bed | -2.95 | 35.26 | 1.70 | human bones |
| Olduvai II Bed | -2.95 | 35.26 | 1.00 | human bones |
| Olduvai III Bed | -2.95 | 35.26 | 0.78 | human bones |
| Olorgesailie member 1 | -1.57 | 36.44 | 1.20 | archaeological |
| Olorgesailie member 6/7 | -1.58 | 36.43 | 0.90 | human bones |
| Perning/Mojokerto | -7.46 | 112.43 | 1.47 | human bones |
| Pirro nord | 41.78 | 15.45 | 1.30 | archaeological |
| Renzidong (renzi cave) | 31.09 | 118.10 | 1.68 | archaeological |
| Sambungmacan | -7.38 | 111.08 | 0.88 | human bones |
| Sangiran | -7.48 | 111.55 | 1.60 | human bones |
| Swartkrans member 1 | -26.17 | 27.72 | 1.68 | human bones |
| Swartkrans member 2 | -26.17 | 27.72 | 1.30 | human bones |
| Trinil | -7.37 | 111.35 | 0.60 | human bones |
| Ubeidiya | 32.68 | 35.57 | 1.40 | human bones |
| Vallonnet Cave bed 3 'faunal level', Roquebrune-Cap-Martin, Alpes Maritimes | 43.79 | 7.37 | 1.30 | archaeological |
| West Turkana - Kalochoro I | 4.16 | 35.79 | 1.39 | human bones |
| West Turkana - Kalochoro II | 4.18 | 35.78 | 1.39 | human bones |
| West Turkana - Loruth Kaado III | 4.67 | 35.75 | 1.39 | human bones |
| West Turkana - Nachukui I | 4.21 | 35.78 | 1.00 | human bones |
| West Turkana - Nariokotome III (NK3) HS | 4.27 | 35.82 | 1.68 | human bones |
| West Turkana - Natoo | 4.25 | 35.79 | 1.57 | human bones |
| Xiaochangliang | 40.20 | 114.65 | 1.36 | archaeological |
| Xihoudou | 37.70 | 114.33 | 1.27 | archaeological |
| Yuanmou | 24.87 | 100.94 | 1.70 | human bones |
| Zhoukoudian member 1 layer 3 | 39.68 | 115.93 | 0.40 | human bones |
| Zhoukoudian member 2 layer 9/8 | 39.68 | 115.93 | 0.78 | human bones |
| Zhoukoudian member 3 layer 11 | 39.68 | 115.93 | 0.80 | human bones |

**Appendix: Table 2 – List of carnivores and herbivores genera used in the analyses**

**Carnivores**: *Acinonyx, Ailuropoda, Canis, Chasmaporthetes, Crocuta, Cuon, Cynotherium, Homotherium, Hyaena, Hyaenictis, Leptailurus, Lycaon, Lynx, Machairodus, Megantereon, Metailurus, Neofelis, Nyctereutes, Pachycrocuta, Panthera, Pliocrocuta, Proteles, Puma, Sivapanthera, Ursus, Vulpes.*

**Herbivores**: *Aepyceros, Anancus, Ancylotherium, Antilospira, Axis, Bison, Boocercus, Boopsis, Bos, Bubalus, Capreolus, Capricornis, Ceratotherium, Cervalces, Cervavitus, Cervocerus, Cervus, Coelodonta, Connochaetes, Croizetoceros, Dama, Damaliscus, Damalops, Dicerorhinus, Diceros, Dicoryphochoerus, Dihoplus, Dmanisibos, Dorcabune, Elaphurus, Elephas, Eobison, Equus, Eucladoceros, Eurygnathohippus, Gallogoral, Gazella, Gazellospira, Giraffa, Gomphotherium, Gorgon, Hemibos, Hemitragus, Hexaprotodon, Hipparion, Hippopotamus, Hydropotes, Kobus, Kolpochoerus, Leptobos, Loxodonta, Mammuthus, Megaloceros, Megalotragus, Megalovis, Merycopotamus, Metridiochoerus, Mitilanotherium, Muntiacus, Nestoritherium, Notochoerus, Numidocapra, Ovibos, Ovis, Palaeoloxodon, Paracamelus, Paramynodon, Parastrepsiceros, Parmularius, Pelorovis, Pliocervus, Pliotragus, Potamochoerus, Praemegaceros, Proboscidipparion, Procamptoceras, Proleptobos, Prostrepsiceros, Protoryx, Rabaticeras, Rhinoceros, Rusa, Sinomastodon, Sinomegaceros, Sivatherium, Spirocerus, Stegodon, Stephanorhinus, Sus, Syncerus, Tapirus, Taurotragus, Tragelaphus, Tragospira.*

## Appendix: Table 3 - Large herbivoes localities including archeological and paleoanthropological sites of *H. erectus/ H. heidelbergensis.*

| lat | long | age | cat | loc | new_spec | homo |
|---|---|---|---|---|---|---|
| **70.43** | **143.95** | **0.0300** | **herb** | Berelekh_rhino | Coelodonta_antiquitatis | NA |
| **71.81** | **129.35** | **0.0300** | **herb** | Holocene_shore,_Bykovskij_p,_L | Bison_priscus | NA |
| **71.81** | **129.35** | **0.0300** | **herb** | Holocene_shore,_Bykovskij_p,_L | Mammuthus_primigenius | NA |
| **45.05** | **1.50** | **0.0300** | **herb** | Jaurens | Bison_schoetensacki | NA |
| **45.05** | **1.50** | **0.0300** | **herb** | Jaurens | Bison_priscus | NA |
| **45.05** | **1.50** | **0.0300** | **herb** | Jaurens | Bos_primigenius | NA |
| **45.05** | **1.50** | **0.0300** | **herb** | Jaurens | Capreolus_capreolus | NA |
| **45.05** | **1.50** | **0.0300** | **herb** | Jaurens | Cervus_elaphus | NA |
| **45.05** | **1.50** | **0.0300** | **herb** | Jaurens | Rangifer_tarandus | NA |
| **48.27** | **27.28** | **0.0300** | **herb** | Korman_IV | Coelodonta_antiquitatis | NA |
| **48.27** | **27.28** | **0.0300** | **herb** | Korman_IV | Mammuthus_primigenius | NA |
| **48.27** | **27.28** | **0.0300** | **herb** | Korman_IV | Rangifer_tarandus | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Alces_alces | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Bison_priscus | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Cervus_elaphus | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Coelodonta_antiquitatis | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Equus_hemionus | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Mammuthus_primigenius | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Megaloceros_giganteus | NA |
| **54.35** | **86.21** | **0.0300** | **herb** | Kuznetskaja_kotlovina_I._VI | Rangifer_tarandus | NA |
| **73.30** | **97.00** | **0.0300** | **herb** | Logata_r,_Tajmyr | Bison_priscus | NA |
| **73.30** | **97.00** | **0.0300** | **herb** | Logata_r,_Tajmyr | Mammuthus_primigenius | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Bos_primigenius | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Cervus_elaphus | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Coelodonta_antiquitatis | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Mammuthus_primigenius | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Ovis_ammon | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Ovis_nivicola | NA |
| **54.02** | **105.80** | **0.0300** | **herb** | Makarovo_III | Rangifer_tarandus | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Capra_sibirica | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Cervus_elaphus | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Coelodonta_antiquitatis | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Mammuthus_primigenius | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Ovis_ammon | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Rangifer_tarandus | NA |
| **54.42** | **89.45** | **0.0300** | **herb** | Malaja_Syja_I._3 | Saiga_tatarica | NA |
| **54.58** | **86.37** | **0.0300** | **herb** | Mokhovo_II | Coelodonta_antiquitatis | NA |
| **52.50** | **4.50** | **0.0300** | **herb** | North_Sea_combined | Coelodonta_antiquitatis | NA |
| **52.50** | **4.50** | **0.0300** | **herb** | North_Sea_combined | Mammuthus_primigenius | NA |
| **52.50** | **4.50** | **0.0300** | **herb** | North_Sea_combined | Rangifer_tarandus | NA |
| **43.53** | **20.36** | **0.0300** | **herb** | Smolucka_Pecina | Capra_ibex | NA |
| **43.53** | **20.36** | **0.0300** | **herb** | Smolucka_Pecina | Rupicapra_rupicapra | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Alces_alces | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Bison_priscus | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Capreolus_capreolus | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Cervus_elaphus | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Coelodonta_antiquitatis | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Equus_hemionus | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Mammuthus_primigenius | NA |
| **51.17** | **83.02** | **0.0300** | **herb** | Strashnaja_cave_3a-b | Ovis_ammon | NA |
| **46.28** | **16.03** | **0.0300** | **herb** | Velica_Pecina_st._h-k | Alces_alces | NA |
| **46.28** | **16.03** | **0.0300** | **herb** | Velica_Pecina_st._h-k | Bison_priscus | NA |
| **46.28** | **16.03** | **0.0300** | **herb** | Velica_Pecina_st._h-k | Capra_ibex | NA |
| **46.28** | **16.03** | **0.0300** | **herb** | Velica_Pecina_st._h-k | Megaloceros_giganteus | NA |
| **46.28** | **16.03** | **0.0300** | **herb** | Velica_Pecina_st._h-k | Rangifer_tarandus | NA |
| **46.28** | **16.03** | **0.0300** | **herb** | Velica_Pecina_st._h-k | Sus_scrofa | NA |
| **38.90** | **-9.22** | **0.0301** | **herb** | Pego_do_Diabo | Capra_pyrenaica | NA |
| **38.90** | **-9.22** | **0.0301** | **herb** | Pego_do_Diabo | Cervus_elaphus | NA |
| **38.90** | **-9.22** | **0.0301** | **herb** | Pego_do_Diabo | Equus_ferus | NA |
| **38.90** | **-9.22** | **0.0301** | **herb** | Pego_do_Diabo | Rupicapra_rupicapra | NA |
| **43.95** | **4.54** | **0.0301** | **herb** | La_Salpetriere_[Remoulins] | Capra_ibex | NA |
| **43.95** | **4.54** | **0.0301** | **herb** | La_Salpetriere_[Remoulins] | Cervus_elaphus | NA |
| **43.95** | **4.54** | **0.0301** | **herb** | La_Salpetriere_[Remoulins] | Rangifer_tarandus | NA |
| **43.95** | **4.54** | **0.0301** | **herb** | La_Salpetriere_[Remoulins] | Stephanorhinus_hemitoechus | NA |
| **60.24** | **60.03** | **0.0301** | **herb** | Cheremukhovo_2,_3 | Bison_priscus | NA |
| **60.24** | **60.03** | **0.0301** | **herb** | Cheremukhovo_2,_3 | Coelodonta_antiquitatis | NA |
| **60.24** | **60.03** | **0.0301** | **herb** | Cheremukhovo_2,_3 | Equus_ferus | NA |

| | | | | | | |
|---|---|---|---|---|---|---|
| **60.24** | **60.03** | **0.0301** | **herb** | Cheremukhovo_2,_3 | Ovibos_pallantis | NA |
| **60.24** | **60.03** | **0.0301** | **herb** | Cheremukhovo_2,_3 | Rangifer_tarandus | NA |
| **50.46** | **-3.50** | **0.0302** | **herb** | Kent's_Cavern | Alces_alces | NA |
| **50.46** | **-3.50** | **0.0302** | **herb** | Kent's_Cavern | Cervus_elaphus | NA |
| **50.46** | **-3.50** | **0.0302** | **herb** | Kent's_Cavern | Coelodonta_antiquitatis | NA |
| **50.46** | **-3.50** | **0.0302** | **herb** | Kent's_Cavern | Megaloceros_giganteus | NA |
| **50.46** | **-3.50** | **0.0302** | **herb** | Kent's_Cavern | Rangifer_tarandus | NA |
| **53.27** | **-1.19** | **0.0302** | **herb** | Robin_Hood's_Cave | Coelodonta_antiquitatis | NA |
| **53.27** | **-1.19** | **0.0302** | **herb** | Robin_Hood's_Cave | Equus_ferus | NA |
| **53.27** | **-1.19** | **0.0302** | **herb** | Robin_Hood's_Cave | Rangifer_tarandus | NA |
| **39.30** | **-9.19** | **0.0307** | **herb** | Columbeira | Bos_primigenius | NA |
| **39.30** | **-9.19** | **0.0307** | **herb** | Columbeira | Capra_pyrenaica | NA |
| **39.30** | **-9.19** | **0.0307** | **herb** | Columbeira | Capreolus_capreolus | NA |
| **39.30** | **-9.19** | **0.0307** | **herb** | Columbeira | Cervus_elaphus | NA |
| **39.30** | **-9.19** | **0.0307** | **herb** | Columbeira | Equus_ferus | NA |
| **39.30** | **-9.19** | **0.0307** | **herb** | Columbeira | Stephanorhinus_hemitoechus | NA |
| **48.13** | **21.39** | **0.0307** | **herb** | Bodrogkeresztur_[Henye_Hill] | Alces_alces | NA |
| **48.13** | **21.39** | **0.0307** | **herb** | Bodrogkeresztur_[Henye_Hill] | Bison_priscus | NA |
| **48.13** | **21.39** | **0.0307** | **herb** | Bodrogkeresztur_[Henye_Hill] | Mammuthus_primigenius | NA |
| **43.11** | **-0.16** | **0.0308** | **herb** | Grotte_de_Courau_(Grotte_Saucet)_[St-Pe-de-Bigorre] | Capra_ibex | NA |
| **43.11** | **-0.16** | **0.0308** | **herb** | Grotte_de_Courau_(Grotte_Saucet)_[St-Pe-de-Bigorre] | Capreolus_capreolus | NA |
| **43.11** | **-0.16** | **0.0308** | **herb** | Grotte_de_Courau_(Grotte_Saucet)_[St-Pe-de-Bigorre] | Cervus_elaphus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Capra_ibex | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Capreolus_capreolus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Cervus_elaphus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Equus_hydruntinus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Equus_ferus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Megaloceros_giganteus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Rangifer_tarandus | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Rupicapra_rupicapra | NA |
| **44.96** | **0.94** | **0.0308** | **herb** | La_FerrassieI1 | Sus_scrofa | NA |
| **42.94** | **25.42** | **0.0309** | **herb** | Bacho_Kiro6a/ | Capra_ibex | NA |
| **42.94** | **25.42** | **0.0309** | **herb** | Bacho_Kiro6a/ | Cervus_elaphus | NA |
| **42.94** | **25.42** | **0.0309** | **herb** | Bacho_Kiro6a/ | Equus_hydruntinus | NA |
| **42.94** | **25.42** | **0.0309** | **herb** | Bacho_Kiro6a/ | Equus_ferus | NA |
| **42.94** | **25.42** | **0.0309** | **herb** | Bacho_Kiro6a/ | Megaloceros_giganteus | NA |
| **48.84** | **16.73** | **0.0309** | **herb** | Milovice_I | Equus_ferus | NA |
| **48.84** | **16.73** | **0.0309** | **herb** | Milovice_I | Mammuthus_primigenius | NA |
| **48.84** | **16.73** | **0.0309** | **herb** | Milovice_I | Rangifer_tarandus | NA |
| **45.07** | **1.52** | **0.0311** | **herb** | Jaurens_[Nespouls] | Coelodonta_antiquitatis | NA |
| **45.07** | **1.52** | **0.0311** | **herb** | Jaurens_[Nespouls] | Equus_ferus | NA |
| **45.07** | **1.52** | **0.0311** | **herb** | Jaurens_[Nespouls] | Mammuthus_primigenius | NA |
| **45.07** | **1.52** | **0.0311** | **herb** | Jaurens_[Nespouls] | Sus_scrofa | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Capra_ibex | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Capreolus_capreolus | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Cervus_elaphus | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Equus_ferus | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Mammuthus_primigenius | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Rangifer_tarandus | NA |
| **44.77** | **1.33** | **0.0313** | **herb** | Roc_de_Combe1c | Rupicapra_rupicapra | NA |
| **46.68** | **7.44** | **0.0313** | **herb** | Schnurenloch | Capra_ibex | NA |
| **46.68** | **7.44** | **0.0313** | **herb** | Schnurenloch | Cervus_elaphus | NA |
| **46.68** | **7.44** | **0.0313** | **herb** | Schnurenloch | Ovibos_moschatus | NA |
| **46.68** | **7.44** | **0.0313** | **herb** | Schnurenloch | Rupicapra_rupicapra | NA |
| **36.95** | **-4.13** | **0.0313** | **herb** | Zafarraya_Cave | Bos_primigenius | NA |
| **36.95** | **-4.13** | **0.0313** | **herb** | Zafarraya_Cave | Capra_ibex | NA |
| **36.95** | **-4.13** | **0.0313** | **herb** | Zafarraya_Cave | Capreolus_capreolus | NA |
| **36.95** | **-4.13** | **0.0313** | **herb** | Zafarraya_Cave | Cervus_elaphus | NA |
| **36.95** | **-4.13** | **0.0313** | **herb** | Zafarraya_Cave | Equus_ferus | NA |
| **36.95** | **-4.13** | **0.0313** | **herb** | Zafarraya_Cave | Sus_scrofa | NA |
| **50.59** | **5.72** | **0.0313** | **herb** | Trou_Walou | Capreolus_capreolus | NA |
| **50.59** | **5.72** | **0.0313** | **herb** | Trou_Walou | Cervus_elaphus | NA |
| **50.59** | **5.72** | **0.0313** | **herb** | Trou_Walou | Coelodonta_antiquitatis | NA |
| **50.59** | **5.72** | **0.0313** | **herb** | Trou_Walou | Equus_ferus | NA |
| **50.59** | **5.72** | **0.0313** | **herb** | Trou_Walou | Mammuthus_primigenius | NA |
| **50.59** | **5.72** | **0.0313** | **herb** | Trou_Walou | Rangifer_tarandus | NA |
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Bison_priscus | NA |
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Cervus_elaphus | NA |
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Equus_ferus | NA |
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Mammuthus_primigenius | NA |
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Megaloceros_giganteus | NA |
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Rangifer_tarandus | NA |

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|---|---|---|---|---|---|---|
| **46.48** | **5.48** | **0.0314** | **herb** | Gr._de_La_Baume_[Gigny_sur_Suran] | Rupicapra_rupicapra | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Bison_priscus | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Bos_primigenius | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Capra_ibex | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Equus_ferus | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Mammuthus_primigenius | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Megaloceros_giganteus | NA |
| **44.39** | **4.42** | **0.0317** | **herb** | Grotte_Chauvet | Rangifer_tarandus | NA |
| **51.55** | **-4.24** | **0.0317** | **herb** | Paviland_Cave_[Goat's_Hole] | Bos_primigenius | NA |
| **51.55** | **-4.24** | **0.0317** | **herb** | Paviland_Cave_[Goat's_Hole] | Coelodonta_antiquitatis | NA |
| **51.55** | **-4.24** | **0.0317** | **herb** | Paviland_Cave_[Goat's_Hole] | Mammuthus_primigenius | NA |
| **51.55** | **-4.24** | **0.0317** | **herb** | Paviland_Cave_[Goat's_Hole] | Megaloceros_giganteus | NA |
| **51.55** | **-4.24** | **0.0317** | **herb** | Paviland_Cave_[Goat's_Hole] | Rangifer_tarandus | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Alces_alces | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Bison_priscus | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Cervus_elaphus | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Coelodonta_antiquitatis | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Equus_ferus | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Mammuthus_primigenius | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Megaloceros_giganteus | NA |
| **48.28** | **15.58** | **0.0320** | **herb** | Gross_Weikersdorf_C | Rangifer_tarandus | NA |
| **48.56** | **10.20** | **0.0321** | **herb** | Vogelherd_Cave | Cervus_elaphus | NA |
| **48.56** | **10.20** | **0.0321** | **herb** | Vogelherd_Cave | Coelodonta_antiquitatis | NA |
| **48.56** | **10.20** | **0.0321** | **herb** | Vogelherd_Cave | Mammuthus_primigenius | NA |
| **48.56** | **10.20** | **0.0321** | **herb** | Vogelherd_Cave | Megaloceros_giganteus | NA |
| **48.56** | **10.20** | **0.0321** | **herb** | Vogelherd_Cave | Rangifer_tarandus | NA |
| **48.56** | **10.20** | **0.0321** | **herb** | Vogelherd_Cave | Rupicapra_rupicapra | NA |
| **48.32** | **15.40** | **0.0322** | **herb** | Willendorf_II | Capra_ibex | NA |
| **48.32** | **15.40** | **0.0322** | **herb** | Willendorf_II | Cervus_elaphus | NA |
| **48.32** | **15.40** | **0.0322** | **herb** | Willendorf_II | Equus_ferus | NA |
| **48.32** | **15.40** | **0.0322** | **herb** | Willendorf_II | Mammuthus_primigenius | NA |
| **48.32** | **15.40** | **0.0322** | **herb** | Willendorf_II | Rangifer_tarandus | NA |
| **46.18** | **15.89** | **0.0325** | **herb** | Krapina | Capreolus_capreolus | NA |
| **46.18** | **15.89** | **0.0325** | **herb** | Krapina | Cervus_elaphus | NA |
| **46.18** | **15.89** | **0.0325** | **herb** | Krapina | Megaloceros_giganteus | NA |
| **46.18** | **15.89** | **0.0325** | **herb** | Krapina | Stephanorhinus_kirchbergensis | NA |
| **46.18** | **15.89** | **0.0325** | **herb** | Krapina | Sus_scrofa | NA |
| **52.00** | **5.00** | **0.0325** | **herb** | Raalte | Capreolus_capreolus | NA |
| **52.00** | **5.00** | **0.0325** | **herb** | Raalte | Dama_dama | NA |
| **52.00** | **5.00** | **0.0325** | **herb** | Raalte | Elephas_antiquus | NA |
| **52.00** | **5.00** | **0.0325** | **herb** | Raalte | Ovibos_moschatus | NA |
| **52.00** | **5.00** | **0.0325** | **herb** | Raalte | Rangifer_tarandus | NA |
| **50.42** | **5.29** | **0.0326** | **herb** | Trou_Al'Wesse | Coelodonta_antiquitatis | NA |
| **50.42** | **5.29** | **0.0326** | **herb** | Trou_Al'Wesse | Equus_ferus | NA |
| **50.42** | **5.29** | **0.0326** | **herb** | Trou_Al'Wesse | Mammuthus_primigenius | NA |
| **50.42** | **5.29** | **0.0326** | **herb** | Trou_Al'Wesse | Rangifer_tarandus | NA |
| **45.50** | **0.30** | **0.0327** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]1 | Equus_ferus | NA |
| **45.50** | **0.30** | **0.0327** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]1 | Mammuthus_primigenius | NA |
| **45.50** | **0.30** | **0.0327** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]1 | Rangifer_tarandus | NA |
| **38.49** | **-8.97** | **0.0329** | **herb** | Figueira_Brava_Cave | Bos_primigenius | NA |
| **38.49** | **-8.97** | **0.0329** | **herb** | Figueira_Brava_Cave | Capra_pyrenaica | NA |
| **38.49** | **-8.97** | **0.0329** | **herb** | Figueira_Brava_Cave | Cervus_elaphus | NA |
| **38.49** | **-8.97** | **0.0329** | **herb** | Figueira_Brava_Cave | Elephas_antiquus | NA |
| **38.49** | **-8.97** | **0.0329** | **herb** | Figueira_Brava_Cave | Equus_ferus | NA |
| **38.49** | **-8.97** | **0.0329** | **herb** | Figueira_Brava_Cave | Stephanorhinus_hemitoechus | NA |
| **45.06** | **3.87** | **0.0329** | **herb** | Les_Rivaux,_Loc._1_[Espaly-St-Marcel] | Cervus_elaphus | NA |
| **45.06** | **3.87** | **0.0329** | **herb** | Les_Rivaux,_Loc._1_[Espaly-St-Marcel] | Rangifer_tarandus | NA |
| **47.70** | **0.85** | **0.0330** | **herb** | Les_Cottes_[St._Pierre_de_Maille]E3 | Capra_ibex | NA |
| **47.70** | **0.85** | **0.0330** | **herb** | Les_Cottes_[St._Pierre_de_Maille]E3 | Cervus_elaphus | NA |
| **47.70** | **0.85** | **0.0330** | **herb** | Les_Cottes_[St._Pierre_de_Maille]E3 | Equus_ferus | NA |
| **47.70** | **0.85** | **0.0330** | **herb** | Les_Cottes_[St._Pierre_de_Maille]E3 | Rangifer_tarandus | NA |
| **44.29** | **20.59** | **0.0338** | **herb** | Risovaca | Bos_primigenius | NA |
| **44.29** | **20.59** | **0.0338** | **herb** | Risovaca | Cervus_elaphus | NA |
| **44.29** | **20.59** | **0.0338** | **herb** | Risovaca | Equus_hydruntinus | NA |
| **44.29** | **20.59** | **0.0338** | **herb** | Risovaca | Equus_ferus | NA |
| **44.29** | **20.59** | **0.0338** | **herb** | Risovaca | Mammuthus_primigenius | NA |
| **44.29** | **20.59** | **0.0338** | **herb** | Risovaca | Sus_scrofa | NA |
| **45.00** | **1.47** | **0.0338** | **herb** | Sirejol_[Gignac] | Bison_priscus | NA |
| **45.00** | **1.47** | **0.0338** | **herb** | Sirejol_[Gignac] | Cervus_elaphus | NA |
| **45.00** | **1.47** | **0.0338** | **herb** | Sirejol_[Gignac] | Equus_ferus | NA |
| **45.00** | **1.47** | **0.0338** | **herb** | Sirejol_[Gignac] | Rangifer_tarandus | NA |

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|---|---|---|---|---|---|---|
| **47.60** | **3.77** | **0.0338** | **herb** | Grotte_du_Renne,_Arcy-sur-Cure | Cervus_elaphus | NA |
| **47.60** | **3.77** | **0.0338** | **herb** | Grotte_du_Renne,_Arcy-sur-Cure | Equus_ferus | NA |
| **47.60** | **3.77** | **0.0338** | **herb** | Grotte_du_Renne,_Arcy-sur-Cure | Mammuthus_primigenius | NA |
| **47.60** | **3.77** | **0.0338** | **herb** | Grotte_du_Renne,_Arcy-sur-Cure | Rangifer_tarandus | NA |
| **47.60** | **3.77** | **0.0338** | **herb** | Grotte_du_Renne,_Arcy-sur-Cure | Rupicapra_rupicapra | NA |
| **46.29** | **16.04** | **0.0339** | **herb** | Velica_Pecina_j | Megaloceros_giganteus | NA |
| **45.57** | **10.90** | **0.0343** | **herb** | Abri_FumaneD3b | Bison_priscus | NA |
| **45.57** | **10.90** | **0.0343** | **herb** | Abri_FumaneD3b | Capra_ibex | NA |
| **45.57** | **10.90** | **0.0343** | **herb** | Abri_FumaneD3b | Capreolus_capreolus | NA |
| **45.57** | **10.90** | **0.0343** | **herb** | Abri_FumaneD3b | Cervus_elaphus | NA |
| **45.57** | **10.90** | **0.0343** | **herb** | Abri_FumaneD3b | Megaloceros_giganteus | NA |
| **45.57** | **10.90** | **0.0343** | **herb** | Abri_FumaneD3b | Rupicapra_rupicapra | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Bison_priscus | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Cervus_elaphus | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Coelodonta_antiquitatis | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Equus_ferus | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Mammuthus_primigenius | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Ovibos_pallantis | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Rangifer_tarandus | NA |
| **60.42** | **60.22** | **0.0343** | **herb** | Shaitanskaya,_1_(stratum_3)_ | Saiga_tatarica | NA |
| **48.55** | **10.17** | **0.0344** | **herb** | Hohlenstein-Stadel_[IV] | Coelodonta_antiquitatis | NA |
| **48.55** | **10.17** | **0.0344** | **herb** | Hohlenstein-Stadel_[IV] | Mammuthus_primigenius | NA |
| **48.55** | **10.17** | **0.0344** | **herb** | Hohlenstein-Stadel_[IV] | Rangifer_tarandus | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Bos_primigenius | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Capreolus_capreolus | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Cervus_elaphus | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Equus_hydruntinus | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Equus_ferus | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Mammuthus_primigenius | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Rangifer_tarandus | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Rupicapra_rupicapra | NA |
| **44.93** | **1.00** | **0.0345** | **herb** | Abri_Pataud7 | Sus_scrofa | NA |
| **44.77** | **1.33** | **0.0345** | **herb** | Roc_de_Combe4 | Capra_ibex | NA |
| **44.77** | **1.33** | **0.0345** | **herb** | Roc_de_Combe4 | Capreolus_capreolus | NA |
| **44.77** | **1.33** | **0.0345** | **herb** | Roc_de_Combe4 | Cervus_elaphus | NA |
| **44.77** | **1.33** | **0.0345** | **herb** | Roc_de_Combe4 | Equus_ferus | NA |
| **44.77** | **1.33** | **0.0345** | **herb** | Roc_de_Combe4 | Rangifer_tarandus | NA |
| **44.77** | **1.33** | **0.0345** | **herb** | Roc_de_Combe4 | Rupicapra_rupicapra | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Bison_priscus | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Capra_ibex | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Capreolus_capreolus | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Cervus_elaphus | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Dama_dama | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Rupicapra_rupicapra | NA |
| **40.50** | **15.24** | **0.0345** | **herb** | Castelcivitagic | Sus_scrofa | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Capreolus_capreolus | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Cervus_elaphus | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Coelodonta_antiquitatis | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Equus_ferus | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Mammuthus_primigenius | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Rangifer_tarandus | NA |
| **45.75** | **-0.51** | **0.0347** | **herb** | Roche_a_Pierrot_[St.-Cesaire] | Sus_scrofa | NA |
| **45.57** | **10.90** | **0.0349** | **herb** | Abri_Fumane | Bison_priscus | NA |
| **45.57** | **10.90** | **0.0349** | **herb** | Abri_Fumane | Capra_ibex | NA |
| **45.57** | **10.90** | **0.0349** | **herb** | Abri_Fumane | Capreolus_capreolus | NA |
| **45.57** | **10.90** | **0.0349** | **herb** | Abri_Fumane | Cervus_elaphus | NA |
| **45.57** | **10.90** | **0.0349** | **herb** | Abri_Fumane | Megaloceros_giganteus | NA |
| **45.57** | **10.90** | **0.0349** | **herb** | Abri_Fumane | Rupicapra_rupicapra | NA |
| **47.70** | **0.85** | **0.0350** | **herb** | Les_Cottes_[St._Pierre_de_Maille]1 | Equus_ferus | NA |
| **47.70** | **0.85** | **0.0350** | **herb** | Les_Cottes_[St._Pierre_de_Maille]1 | Mammuthus_primigenius | NA |
| **47.70** | **0.85** | **0.0350** | **herb** | Les_Cottes_[St._Pierre_de_Maille]1 | Rangifer_tarandus | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Bison_priscus | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Capra_ibex | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Cervus_elaphus | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Coelodonta_antiquitatis | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Mammuthus_primigenius | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Megaloceros_giganteus | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Rangifer_tarandus | NA |
| **48.12** | **20.63** | **0.0351** | **herb** | Szeleta_Cave | Rupicapra_rupicapra | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Bison_priscus | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Bos_primigenius | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Capra_ibex | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Coelodonta_antiquitatis | NA |

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|---|---|---|---|---|---|---|
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Mammuthus_primigenius | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Rangifer_tarandus | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Rupicapra_rupicapra | NA |
| **49.39** | **16.72** | **0.0354** | **herb** | Pod_Hradem_Cave | Sus_scrofa | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Alces_alces | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Capra_ibex | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Cervus_elaphus | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Coelodonta_antiquitatis | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Equus_hydruntinus | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Equus_ferus | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Mammuthus_primigenius | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Megaloceros_giganteus | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Rangifer_tarandus | NA |
| **43.34** | **2.88** | **0.0359** | **herb** | Gr._Tournal_(or_Grande_Grotte_de_Bize)_[Bize-Minervois] | Rupicapra_rupicapra | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Cervus_elaphus | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Coelodonta_antiquitatis | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Equus_hydruntinus | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Equus_ferus | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Mammuthus_primigenius | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Megaloceros_giganteus | NA |
| **47.63** | **18.35** | **0.0359** | **herb** | Tata | Sus_scrofa | NA |
| **42.27** | **2.61** | **0.0360** | **herb** | Ermitons_Cave | Capra_pyrenaica | NA |
| **42.27** | **2.61** | **0.0360** | **herb** | Ermitons_Cave | Rupicapra_rupicapra | NA |
| **42.27** | **2.61** | **0.0360** | **herb** | Ermitons_Cave | Stephanorhinus_hemitoechus | NA |
| **50.70** | **6.80** | **0.0362** | **herb** | Lommersum | Mammuthus_primigenius | NA |
| **50.70** | **6.80** | **0.0362** | **herb** | Lommersum | Rangifer_tarandus | NA |
| **48.40** | **9.77** | **0.0362** | **herb** | Das_Geissenklosterle | Capra_ibex | NA |
| **48.40** | **9.77** | **0.0362** | **herb** | Das_Geissenklosterle | Coelodonta_antiquitatis | NA |
| **48.40** | **9.77** | **0.0362** | **herb** | Das_Geissenklosterle | Mammuthus_primigenius | NA |
| **48.40** | **9.77** | **0.0362** | **herb** | Das_Geissenklosterle | Megaloceros_giganteus | NA |
| **48.40** | **9.77** | **0.0362** | **herb** | Das_Geissenklosterle | Rangifer_tarandus | NA |
| **48.40** | **9.77** | **0.0362** | **herb** | Das_Geissenklosterle | Rupicapra_rupicapra | NA |
| **50.21** | **4.97** | **0.0362** | **herb** | Trou_MagriteM2 | Capra_ibex | NA |
| **50.21** | **4.97** | **0.0362** | **herb** | Trou_MagriteM2 | Coelodonta_antiquitatis | NA |
| **50.21** | **4.97** | **0.0362** | **herb** | Trou_MagriteM2 | Equus_ferus | NA |
| **50.21** | **4.97** | **0.0362** | **herb** | Trou_MagriteM2 | Mammuthus_primigenius | NA |
| **50.21** | **4.97** | **0.0362** | **herb** | Trou_MagriteM2 | Rangifer_tarandus | NA |
| **50.21** | **4.97** | **0.0362** | **herb** | Trou_MagriteM2 | Sus_scrofa | NA |
| **42.94** | **25.42** | **0.0362** | **herb** | Bacho_Kiro11a | Capra_ibex | NA |
| **42.94** | **25.42** | **0.0362** | **herb** | Bacho_Kiro11a | Cervus_elaphus | NA |
| **42.94** | **25.42** | **0.0362** | **herb** | Bacho_Kiro11a | Equus_hydruntinus | NA |
| **42.94** | **25.42** | **0.0362** | **herb** | Bacho_Kiro11a | Equus_ferus | NA |
| **42.94** | **25.42** | **0.0362** | **herb** | Bacho_Kiro11a | Stephanorhinus_hemitoechus | NA |
| **51.29** | **-2.88** | **0.0362** | **herb** | Picken's_Hole,_Layer_3 | Bos_primigenius | NA |
| **51.29** | **-2.88** | **0.0362** | **herb** | Picken's_Hole,_Layer_3 | Cervus_elaphus | NA |
| **51.29** | **-2.88** | **0.0362** | **herb** | Picken's_Hole,_Layer_3 | Coelodonta_antiquitatis | NA |
| **51.29** | **-2.88** | **0.0362** | **herb** | Picken's_Hole,_Layer_3 | Equus_ferus | NA |
| **51.29** | **-2.88** | **0.0362** | **herb** | Picken's_Hole,_Layer_3 | Mammuthus_primigenius | NA |
| **51.29** | **-2.88** | **0.0362** | **herb** | Picken's_Hole,_Layer_3 | Rangifer_tarandus | NA |
| **42.16** | **-2.75** | **0.0363** | **herb** | Mollet_Cave | Capra_pyrenaica | NA |
| **42.16** | **-2.75** | **0.0363** | **herb** | Mollet_Cave | Cervus_elaphus | NA |
| **42.16** | **-2.75** | **0.0363** | **herb** | Mollet_Cave | Equus_ferus | NA |
| **42.16** | **-2.75** | **0.0363** | **herb** | Mollet_Cave | Rupicapra_rupicapra | NA |
| **44.88** | **1.26** | **0.0364** | **herb** | Abri_Caminade_[Caneda]D21 | Cervus_elaphus | NA |
| **44.88** | **1.26** | **0.0364** | **herb** | Abri_Caminade_[Caneda]D21 | Equus_hydruntinus | NA |
| **44.88** | **1.26** | **0.0364** | **herb** | Abri_Caminade_[Caneda]D21 | Equus_ferus | NA |
| **44.88** | **1.26** | **0.0364** | **herb** | Abri_Caminade_[Caneda]D21 | Rangifer_tarandus | NA |
| **44.88** | **1.26** | **0.0364** | **herb** | Abri_Caminade_[Caneda]D21 | Sus_scrofa | NA |
| **43.93** | **4.33** | **0.0364** | **herb** | Esquicho-Grapaou | Bos_primigenius | NA |
| **43.93** | **4.33** | **0.0364** | **herb** | Esquicho-Grapaou | Capra_ibex | NA |
| **43.93** | **4.33** | **0.0364** | **herb** | Esquicho-Grapaou | Cervus_elaphus | NA |

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|---|---|---|---|---|---|---|
| **43.93** | **4.33** | **0.0364** | **herb** | Esquicho-Grapaou | Equus_ferus | NA |
| **43.93** | **4.33** | **0.0364** | **herb** | Esquicho-Grapaou | Rangifer_tarandus | NA |
| **45.57** | **10.90** | **0.0365** | **herb** | Abri_FumaneA2 | Capra_ibex | NA |
| **45.57** | **10.90** | **0.0365** | **herb** | Abri_FumaneA2 | Capreolus_capreolus | NA |
| **45.57** | **10.90** | **0.0365** | **herb** | Abri_FumaneA2 | Megaloceros_giganteus | NA |
| **45.57** | **10.90** | **0.0365** | **herb** | Abri_FumaneA2 | Rupicapra_rupicapra | NA |
| **45.50** | **0.30** | **0.0365** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]3 | Bison_priscus | NA |
| **45.50** | **0.30** | **0.0365** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]3 | Bos_primigenius | NA |
| **45.50** | **0.30** | **0.0365** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]3 | Equus_ferus | NA |
| **45.50** | **0.30** | **0.0365** | **herb** | La_Quina_Y-Z_[Villebois_la_Valette]3 | Rangifer_tarandus | NA |
| **43.48** | **-7.31** | **0.0367** | **herb** | Valina | Capreolus_capreolus | NA |
| **43.48** | **-7.31** | **0.0367** | **herb** | Valina | Cervus_elaphus | NA |
| **43.48** | **-7.31** | **0.0367** | **herb** | Valina | Equus_ferus | NA |
| **43.48** | **-7.31** | **0.0367** | **herb** | Valina | Stephanorhinus_kirchbergensis | NA |
| **43.48** | **-7.31** | **0.0367** | **herb** | Valina | Sus_scrofa | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Bison_priscus | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Bos_primigenius | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Cervus_elaphus | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Coelodonta_antiquitatis | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Equus_hydruntinus | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Equus_ferus | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Mammuthus_primigenius | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Megaloceros_giganteus | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Rangifer_tarandus | NA |
| **44.79** | **-0.27** | **0.0370** | **herb** | Camiac[-et-St-Denis] | Sus_scrofa | NA |
| **48.41** | **15.59** | **0.0374** | **herb** | Krems-Hundssteig | Capra_ibex | NA |
| **48.41** | **15.59** | **0.0374** | **herb** | Krems-Hundssteig | Cervus_elaphus | NA |
| **48.41** | **15.59** | **0.0374** | **herb** | Krems-Hundssteig | Coelodonta_antiquitatis | NA |
| **48.41** | **15.59** | **0.0374** | **herb** | Krems-Hundssteig | Mammuthus_primigenius | NA |
| **48.41** | **15.59** | **0.0374** | **herb** | Krems-Hundssteig | Rangifer_tarandus | NA |
| **48.41** | **15.59** | **0.0374** | **herb** | Krems-Hundssteig | Rupicapra_rupicapra | NA |
| **45.01** | **1.10** | **0.0377** | **herb** | A._Castanet_[Sergeac] | Capra_ibex | NA |
| **45.01** | **1.10** | **0.0377** | **herb** | A._Castanet_[Sergeac] | Capreolus_capreolus | NA |
| **45.01** | **1.10** | **0.0377** | **herb** | A._Castanet_[Sergeac] | Cervus_elaphus | NA |
| **45.01** | **1.10** | **0.0377** | **herb** | A._Castanet_[Sergeac] | Equus_ferus | NA |
| **45.01** | **1.10** | **0.0377** | **herb** | A._Castanet_[Sergeac] | Rangifer_tarandus | NA |
| **45.01** | **1.10** | **0.0377** | **herb** | A._Castanet_[Sergeac] | Sus_scrofa | NA |
| **44.88** | **1.26** | **0.0379** | **herb** | Abri_Caminade_[Caneda]F | Cervus_elaphus | NA |
| **44.88** | **1.26** | **0.0379** | **herb** | Abri_Caminade_[Caneda]F | Equus_ferus | NA |
| **44.88** | **1.26** | **0.0379** | **herb** | Abri_Caminade_[Caneda]F | Rangifer_tarandus | NA |
| **44.88** | **1.26** | **0.0379** | **herb** | Abri_Caminade_[Caneda]F | Rupicapra_rupicapra | NA |
| **42.85** | **2.06** | **0.0379** | **herb** | Caune_de_Belvis_[Belvis] | Capra_ibex | NA |
| **42.85** | **2.06** | **0.0379** | **herb** | Caune_de_Belvis_[Belvis] | Capreolus_capreolus | NA |
| **42.85** | **2.06** | **0.0379** | **herb** | Caune_de_Belvis_[Belvis] | Cervus_elaphus | NA |
| **42.85** | **2.06** | **0.0379** | **herb** | Caune_de_Belvis_[Belvis] | Rangifer_tarandus | NA |
| **42.85** | **2.06** | **0.0379** | **herb** | Caune_de_Belvis_[Belvis] | Rupicapra_rupicapra | NA |
| **43.53** | **20.37** | **0.0380** | **herb** | Smolucka_Pecina | Cervus_elaphus | NA |
| **48.55** | **17.93** | **0.0384** | **herb** | Certova_Pec_(Radosina) | Bison_priscus | NA |
| **48.55** | **17.93** | **0.0384** | **herb** | Certova_Pec_(Radosina) | Bos_primigenius | NA |
| **48.55** | **17.93** | **0.0384** | **herb** | Certova_Pec_(Radosina) | Capreolus_capreolus | NA |
| **48.55** | **17.93** | **0.0384** | **herb** | Certova_Pec_(Radosina) | Cervus_elaphus | NA |
| **48.55** | **17.93** | **0.0384** | **herb** | Certova_Pec_(Radosina) | Equus_ferus | NA |
| **48.55** | **17.93** | **0.0384** | **herb** | Certova_Pec_(Radosina) | Rangifer_tarandus | NA |
| **43.37** | **-1.20** | **0.0389** | **herb** | Isturitz_[Isturits] | Cervus_elaphus | NA |
| **43.37** | **-1.20** | **0.0389** | **herb** | Isturitz_[Isturits] | Coelodonta_antiquitatis | NA |
| **43.37** | **-1.20** | **0.0389** | **herb** | Isturitz_[Isturits] | Equus_ferus | NA |
| **43.37** | **-1.20** | **0.0389** | **herb** | Isturitz_[Isturits] | Rangifer_tarandus | NA |
| **43.37** | **-1.20** | **0.0389** | **herb** | Isturitz_[Isturits] | Rupicapra_rupicapra | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Bison_priscus | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Cervus_elaphus | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Equus_hydruntinus | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Equus_ferus | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Mammuthus_primigenius | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Megaloceros_giganteus | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Saiga_tatarica | NA |
| **45.00** | **37.80** | **0.0390** | **herb** | Ilskaja_1&2 | Sus_scrofa | NA |
| **48.40** | **9.77** | **0.0391** | **herb** | Das_GeissenklosterleIII | Capra_ibex | NA |
| **48.40** | **9.77** | **0.0391** | **herb** | Das_GeissenklosterleIII | Coelodonta_antiquitatis | NA |
| **48.40** | **9.77** | **0.0391** | **herb** | Das_GeissenklosterleIII | Mammuthus_primigenius | NA |
| **48.40** | **9.77** | **0.0391** | **herb** | Das_GeissenklosterleIII | Rangifer_tarandus | NA |
| **48.40** | **9.77** | **0.0391** | **herb** | Das_GeissenklosterleIII | Rupicapra_rupicapra | NA |
| **48.40** | **9.77** | **0.0391** | **herb** | Das_GeissenklosterleIII | Saiga_tatarica | NA |

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|---|---|---|---|---|---|---|
| **44.00** | **4.00** | **0.0400** | **herb** | Baume_NÃ©ron | Bison_priscus | NA |
| **44.00** | **4.00** | **0.0400** | **herb** | Baume_NÃ©ron | Cervus_elaphus | NA |
| **44.00** | **4.00** | **0.0400** | **herb** | Baume_NÃ©ron | Coelodonta_antiquitatis | NA |
| **44.00** | **4.00** | **0.0400** | **herb** | Baume_NÃ©ron | Mammuthus_primigenius | NA |
| **44.00** | **4.00** | **0.0400** | **herb** | Baume_NÃ©ron | Rangifer_tarandus | NA |
| **73.36** | **141.33** | **0.0400** | **herb** | Bolshoj_Lyakhovskij_isl,_1TC | Bison_priscus | NA |
| **73.36** | **141.33** | **0.0400** | **herb** | Bolshoj_Lyakhovskij_isl,_1TC | Mammuthus_primigenius | NA |
| **73.36** | **141.33** | **0.0400** | **herb** | Bolshoj_Lyakhovskij_isl,_1TC | Ovibos_pallantis | NA |
| **41.77** | **15.65** | **0.0400** | **herb** | Ingarano_c | Dama_dama | NA |
| **73.60** | **101.13** | **0.0400** | **herb** | Kupchiktach_L,_Tajmyr | Mammuthus_primigenius | NA |
| **73.60** | **101.13** | **0.0400** | **herb** | Kupchiktach_L,_Tajmyr | Rangifer_tarandus | NA |
| **71.79** | **129.40** | **0.0400** | **herb** | Lena_delta,_Bykovskij,MKh_main | Bison_priscus | NA |
| **71.79** | **129.40** | **0.0400** | **herb** | Lena_delta,_Bykovskij,MKh_main | Mammuthus_primigenius | NA |
| **71.79** | **129.40** | **0.0400** | **herb** | Lena_delta,_Bykovskij,MKh_main | Rangifer_tarandus | NA |
| **63.70** | **125.00** | **0.0400** | **herb** | Lena_lower_course,_Sangary_r. | Mammuthus_primigenius | NA |
| **51.67** | **84.33** | **0.0400** | **herb** | Okladnikov_cave | Capra_sibirica | NA |
| **51.67** | **84.33** | **0.0400** | **herb** | Okladnikov_cave | Capreolus_capreolus | NA |
| **54.10** | **30.00** | **0.0400** | **herb** | Pashino | Coelodonta_antiquitatis | NA |
| **54.10** | **30.00** | **0.0400** | **herb** | Pashino | Mammuthus_primigenius | NA |
| **54.10** | **30.00** | **0.0400** | **herb** | Pashino | Rangifer_tarandus | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei__st._III-VI,_X | Capra_ibex | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei__st._III-VI,_X | Cervus_elaphus | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei__st._III-VI,_X | Megaloceros_giganteus | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei__st._III-VI,_X | Stephanorhinus_kirchbergensis | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei__st._III-VI,_X | Sus_scrofa | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei_st._I-II,VII-V | Capra_ibex | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei_st._I-II,VII-V | Capreolus_capreolus | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei_st._I-II,VII-V | Cervus_elaphus | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei_st._I-II,VII-V | Megaloceros_giganteus | NA |
| **45.13** | **23.02** | **0.0400** | **herb** | Pestera_Cioarei_st._I-II,VII-V | Sus_scrofa | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Alces_alces | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Bison_priscus | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Capra_sibirica | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Capreolus_capreolus | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Cervus_elaphus | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Coelodonta_antiquitatis | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Equus_hemionus | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Mammuthus_primigenius | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Ovis_ammon | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Poephagus_baikalensis | NA |
| **54.45** | **89.47** | **0.0400** | **herb** | Proskurjakov_cave | Saiga_tatarica | NA |
| **45.00** | **34.00** | **0.0400** | **herb** | Zaskal'naya_V-VI | Mammuthus_primigenius | NA |
| **45.00** | **34.00** | **0.0400** | **herb** | Zaskal'naya_V-VI | Rangifer_tarandus | NA |
| **45.00** | **34.00** | **0.0400** | **herb** | Zaskal'naya_V-VI | Saiga_tatarica | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Bison_priscus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Bos_primigenius | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Capreolus_capreolus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Cervus_elaphus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Elephas_antiquus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Equus_hydruntinus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Equus_ferus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Stephanorhinus_etruscus | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Stephanorhinus_kirchbergensis | NA |
| **48.59** | **7.63** | **0.0401** | **herb** | Achenheim | Sus_scrofa | NA |
| **47.72** | **18.66** | **0.0406** | **herb** | Tokod | Bison_priscus | NA |
| **47.72** | **18.66** | **0.0406** | **herb** | Tokod | Capra_ibex | NA |
| **47.72** | **18.66** | **0.0406** | **herb** | Tokod | Cervus_elaphus | NA |
| **47.72** | **18.66** | **0.0406** | **herb** | Tokod | Mammuthus_primigenius | NA |
| **47.72** | **18.66** | **0.0406** | **herb** | Tokod | Rangifer_tarandus | NA |
| **47.72** | **18.66** | **0.0406** | **herb** | Tokod | Rupicapra_rupicapra | NA |
| **45.42** | **11.49** | **0.0408** | **herb** | Gr._di_Paina | Alces_alces | NA |
| **45.42** | **11.49** | **0.0408** | **herb** | Gr._di_Paina | Capra_ibex | NA |
| **45.42** | **11.49** | **0.0408** | **herb** | Gr._di_Paina | Capreolus_capreolus | NA |
| **45.42** | **11.49** | **0.0408** | **herb** | Gr._di_Paina | Cervus_elaphus | NA |
| **45.42** | **11.49** | **0.0408** | **herb** | Gr._di_Paina | Sus_scrofa | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Bison_priscus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Bos_primigenius | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Capra_ibex | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Capreolus_capreolus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Cervus_elaphus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Coelodonta_antiquitatis | NA |

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|---|---|---|---|---|---|---|
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Equus_hydruntinus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Equus_ferus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Mammuthus_primigenius | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Megaloceros_giganteus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Rangifer_tarandus | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Rupicapra_rupicapra | NA |
| **50.49** | **5.05** | **0.0416** | **herb** | Sclayn_Cave | Sus_scrofa | NA |
| **52.22** | **-8.58** | **0.0416** | **herb** | Castlepook_Cave | Mammuthus_primigenius | NA |
| **52.22** | **-8.58** | **0.0416** | **herb** | Castlepook_Cave | Megaloceros_giganteus | NA |
| **52.22** | **-8.58** | **0.0416** | **herb** | Castlepook_Cave | Rangifer_tarandus | NA |
| **44.81** | **1.22** | **0.0419** | **herb** | Combe_Grenal_[Domme,_Dordogne]1 | Bison_priscus | NA |
| **44.81** | **1.22** | **0.0419** | **herb** | Combe_Grenal_[Domme,_Dordogne]1 | Bos_primigenius | NA |
| **44.81** | **1.22** | **0.0419** | **herb** | Combe_Grenal_[Domme,_Dordogne]1 | Cervus_elaphus | NA |
| **44.81** | **1.22** | **0.0419** | **herb** | Combe_Grenal_[Domme,_Dordogne]1 | Equus_ferus | NA |
| **44.81** | **1.22** | **0.0419** | **herb** | Combe_Grenal_[Domme,_Dordogne]1 | Rangifer_tarandus | NA |
| **44.81** | **1.22** | **0.0419** | **herb** | Combe_Grenal_[Domme,_Dordogne]1 | Rupicapra_rupicapra | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Bison_priscus | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Cervus_elaphus | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Coelodonta_antiquitatis | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Equus_ferus | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Mammuthus_primigenius | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Megaloceros_giganteus | NA |
| **51.76** | **-4.50** | **0.0420** | **herb** | Coygan_Cave | Rangifer_tarandus | NA |
| **45.47** | **11.57** | **0.0422** | **herb** | Gr._del_Broion | Bos_primigenius | NA |
| **45.47** | **11.57** | **0.0422** | **herb** | Gr._del_Broion | Cervus_elaphus | NA |
| **45.47** | **11.57** | **0.0422** | **herb** | Gr._del_Broion | Rupicapra_rupicapra | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Bos_primigenius | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Capreolus_capreolus | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Cervus_elaphus | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Elephas_antiquus | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Equus_ferus | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Rupicapra_rupicapra | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Stephanorhinus_kirchbergensis | NA |
| **43.28** | **-3.95** | **0.0429** | **herb** | Castillo18C | Sus_scrofa | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Bison_priscus | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Bos_primigenius | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Capra_ibex | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Capreolus_capreolus | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Cervus_elaphus | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Equus_hydruntinus | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Equus_ferus | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Rangifer_tarandus | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Rupicapra_rupicapra | NA |
| **42.16** | **-2.75** | **0.0430** | **herb** | Reclau_Viver | Sus_scrofa | NA |
| **51.32** | **-2.87** | **0.0432** | **herb** | Banwell_Bone_Cave | Bison_priscus | NA |
| **51.32** | **-2.87** | **0.0432** | **herb** | Banwell_Bone_Cave | Rangifer_tarandus | NA |
| **51.32** | **-3.02** | **0.0437** | **herb** | Brean_Down | Bison_priscus | NA |
| **51.32** | **-3.02** | **0.0437** | **herb** | Brean_Down | Equus_ferus | NA |
| **51.32** | **-3.02** | **0.0437** | **herb** | Brean_Down | Mammuthus_primigenius | NA |
| **51.32** | **-3.02** | **0.0437** | **herb** | Brean_Down | Megaloceros_giganteus | NA |
| **51.32** | **-3.02** | **0.0437** | **herb** | Brean_Down | Rangifer_tarandus | NA |
| **42.78** | **18.50** | **0.0437** | **herb** | Crvena_Stijena | Bison_priscus | NA |
| **42.78** | **18.50** | **0.0437** | **herb** | Crvena_Stijena | Capra_ibex | NA |
| **42.78** | **18.50** | **0.0437** | **herb** | Crvena_Stijena | Cervus_elaphus | NA |
| **42.78** | **18.50** | **0.0437** | **herb** | Crvena_Stijena | Rupicapra_rupicapra | NA |
| **42.78** | **18.50** | **0.0437** | **herb** | Crvena_Stijena | Sus_scrofa | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Capra_ibex | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Coelodonta_antiquitatis | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Equus_ferus | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Mammuthus_primigenius | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Rangifer_tarandus | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Rupicapra_rupicapra | NA |
| **50.21** | **4.97** | **0.0438** | **herb** | Trou_MagriteM3 | Sus_scrofa | NA |
| **42.50** | **43.50** | **0.0442** | **herb** | Kudaro_1,_l.3 | Capreolus_capreolus | NA |
| **42.50** | **43.50** | **0.0442** | **herb** | Kudaro_1,_l.3 | Cervus_elaphus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Bison_priscus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Bos_primigenius | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Capra_ibex | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Capreolus_capreolus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Cervus_elaphus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Coelodonta_antiquitatis | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Dama_dama | NA |

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|---|---|---|---|---|---|---|
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Equus_ferus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Mammuthus_primigenius | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Megaloceros_giganteus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Rangifer_tarandus | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Rupicapra_rupicapra | NA |
| **44.89** | **4.84** | **0.0449** | **herb** | Gr._Neron_[Soyons] | Sus_scrofa | NA |
| **52.30** | **13.33** | **0.0450** | **herb** | Niederweningen | Bison_priscus | NA |
| **52.30** | **13.33** | **0.0450** | **herb** | Niederweningen | Coelodonta_antiquitatis | NA |
| **52.30** | **13.33** | **0.0450** | **herb** | Niederweningen | Equus_ferus | NA |
| **52.30** | **13.33** | **0.0450** | **herb** | Niederweningen | Mammuthus_primigenius | NA |
| **41.54** | **-1.68** | **0.0454** | **herb** | Abric_Romani | Bos_primigenius | NA |
| **41.54** | **-1.68** | **0.0454** | **herb** | Abric_Romani | Capra_ibex | NA |
| **41.54** | **-1.68** | **0.0454** | **herb** | Abric_Romani | Cervus_elaphus | NA |
| **41.54** | **-1.68** | **0.0454** | **herb** | Abric_Romani | Equus_ferus | NA |
| **41.54** | **-1.68** | **0.0454** | **herb** | Abric_Romani | Rupicapra_rupicapra | NA |
| **41.54** | **-1.68** | **0.0454** | **herb** | Abric_Romani | Sus_scrofa | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Bison_priscus | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Capreolus_capreolus | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Cervus_elaphus | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Equus_hydruntinus | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Equus_ferus | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Gazella_subgutturosa | NA |
| **40.50** | **44.51** | **0.0478** | **herb** | Erevanskaja_cave | Sus_scrofa | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Capra_ibex | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Capreolus_capreolus | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Cervus_elaphus | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Megaloceros_giganteus | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Rangifer_tarandus | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Stephanorhinus_kirchbergensis | NA |
| **45.13** | **23.02** | **0.0484** | **herb** | Pestera_Cioarei | Sus_scrofa | NA |
| **51.28** | **-2.77** | **0.0486** | **herb** | Soldier's_Hole | Bison_priscus | NA |
| **51.28** | **-2.77** | **0.0486** | **herb** | Soldier's_Hole | Cervus_elaphus | NA |
| **51.28** | **-2.77** | **0.0486** | **herb** | Soldier's_Hole | Equus_ferus | NA |
| **51.28** | **-2.77** | **0.0486** | **herb** | Soldier's_Hole | Mammuthus_primigenius | NA |
| **51.28** | **-2.77** | **0.0486** | **herb** | Soldier's_Hole | Megaloceros_giganteus | NA |
| **51.28** | **-2.77** | **0.0486** | **herb** | Soldier's_Hole | Rangifer_tarandus | NA |
| **71.78** | **129.38** | **0.0500** | **herb** | Lena_delta,_MKh,_shore&bar_ear | Bison_priscus | NA |
| **71.78** | **129.38** | **0.0500** | **herb** | Lena_delta,_MKh,_shore&bar_ear | Mammuthus_primigenius | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Bison_priscus | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Bos_primigenius | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Capra_ibex | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Cervus_elaphus | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Coelodonta_antiquitatis | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Equus_hydruntinus | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Mammuthus_primigenius | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Megaloceros_giganteus | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Rangifer_tarandus | NA |
| **47.97** | **20.47** | **0.0500** | **herb** | Subalyuk1 | Rupicapra_rupicapra | NA |
| **51.00** | **11.33** | **0.0500** | **herb** | Taubach-Weimar_Ehringsdorf_7 | Coelodonta_antiquitatis | NA |
| **51.00** | **11.33** | **0.0500** | **herb** | Taubach-Weimar_Ehringsdorf_7 | Mammuthus_primigenius | NA |
| **51.00** | **11.33** | **0.0500** | **herb** | Taubach-Weimar_Ehringsdorf_7 | Rangifer_tarandus | NA |
| **52.17** | **10.32** | **0.0510** | **herb** | Salzgitter | Coelodonta_antiquitatis | NA |
| **52.17** | **10.32** | **0.0510** | **herb** | Salzgitter | Equus_ferus | NA |
| **52.17** | **10.32** | **0.0510** | **herb** | Salzgitter | Mammuthus_primigenius | NA |
| **52.17** | **10.32** | **0.0510** | **herb** | Salzgitter | Rangifer_tarandus | NA |
| **59.85** | **57.57** | **0.0514** | **herb** | Kamen'_Pisany_ | Alces_alces | NA |
| **59.85** | **57.57** | **0.0514** | **herb** | Kamen'_Pisany_ | Rangifer_tarandus | NA |
| **60.80** | **56.00** | **0.0514** | **herb** | Ushminskaya_cave_(stratum_1-2)_ | Alces_alces | NA |
| **60.80** | **56.00** | **0.0514** | **herb** | Ushminskaya_cave_(stratum_1-2)_ | Rangifer_tarandus | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Alces_alces | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Bison_priscus | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Cervus_elaphus | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Coelodonta_antiquitatis | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Equus_ferus | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Mammuthus_primigenius | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Rangifer_tarandus | NA |
| **59.35** | **60.00** | **0.0514** | **herb** | Zhiliche_Sokola,_2_ | Saiga_tatarica | NA |
| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Capra_ibex | NA |
| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Coelodonta_antiquitatis | NA |
| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Equus_hydruntinus | NA |
| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Mammuthus_primigenius | NA |
| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Rangifer_tarandus | NA |

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| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Rupicapra_rupicapra | NA |
| **47.39** | **18.89** | **0.0514** | **herb** | Erd | Sus_scrofa | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Bison_priscus | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Capra_ibex | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Cervus_elaphus | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Coelodonta_antiquitatis | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Equus_ferus | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Mammuthus_primigenius | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Ovibos_moschatus | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Rangifer_tarandus | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Rupicapra_rupicapra | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Saiga_tatarica | NA |
| **45.00** | **1.73** | **0.0515** | **herb** | La_Chapelle-aux-Saints | Sus_scrofa | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Bison_priscus | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Bos_primigenius | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Coelodonta_antiquitatis | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Equus_ferus | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Mammuthus_primigenius | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Megaloceros_giganteus | NA |
| **53.26** | **-1.20** | **0.0516** | **herb** | Pin_Hole_Cave | Rangifer_tarandus | NA |
| **51.84** | **-2.66** | **0.0516** | **herb** | King_Arthur's_Cave | Bos_primigenius | NA |
| **51.84** | **-2.66** | **0.0516** | **herb** | King_Arthur's_Cave | Mammuthus_primigenius | NA |
| **51.84** | **-2.66** | **0.0516** | **herb** | King_Arthur's_Cave | Megaloceros_giganteus | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Alces_alces | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Bison_priscus | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Capra_ibex | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Cervus_elaphus | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Mammuthus_primigenius | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Rangifer_tarandus | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Rupicapra_rupicapra | NA |
| **48.07** | **20.41** | **0.0520** | **herb** | Istallosko_cave | Sus_scrofa | NA |
| **48.93** | **11.83** | **0.0520** | **herb** | Große_Schulerloch_E-F | Coelodonta_antiquitatis | NA |
| **48.93** | **11.83** | **0.0520** | **herb** | Große_Schulerloch_E-F | Mammuthus_primigenius | NA |
| **48.93** | **11.83** | **0.0520** | **herb** | Große_Schulerloch_E-F | Rangifer_tarandus | NA |
| **48.41** | **9.80** | **0.0520** | **herb** | Rusenschloss | Capra_ibex | NA |
| **48.41** | **9.80** | **0.0520** | **herb** | Rusenschloss | Coelodonta_antiquitatis | NA |
| **48.41** | **9.80** | **0.0520** | **herb** | Rusenschloss | Mammuthus_primigenius | NA |
| **48.41** | **9.80** | **0.0520** | **herb** | Rusenschloss | Rangifer_tarandus | NA |
| **49.60** | **41.90** | **0.0527** | **herb** | Lebiazhenskoe | Bison_priscus | NA |
| **49.60** | **41.90** | **0.0527** | **herb** | Lebiazhenskoe | Coelodonta_antiquitatis | NA |
| **49.60** | **41.90** | **0.0527** | **herb** | Lebiazhenskoe | Equus_hydruntinus | NA |
| **49.60** | **41.90** | **0.0527** | **herb** | Lebiazhenskoe | Mammuthus_primigenius | NA |
| **49.60** | **41.90** | **0.0527** | **herb** | Lebiazhenskoe | Megaloceros_giganteus | NA |
| **49.60** | **41.90** | **0.0527** | **herb** | Lebiazhenskoe | Rangifer_tarandus | NA |
| **48.40** | **9.77** | **0.0527** | **herb** | Das_GeissenklosterleIV | Capra_ibex | NA |
| **48.40** | **9.77** | **0.0527** | **herb** | Das_GeissenklosterleIV | Coelodonta_antiquitatis | NA |
| **48.40** | **9.77** | **0.0527** | **herb** | Das_GeissenklosterleIV | Megaloceros_giganteus | NA |
| **48.40** | **9.77** | **0.0527** | **herb** | Das_GeissenklosterleIV | Rangifer_tarandus | NA |
| **48.40** | **9.77** | **0.0527** | **herb** | Das_GeissenklosterleIV | Rupicapra_rupicapra | NA |
| **44.84** | **1.56** | **0.0529** | **herb** | Abri_de_Combe-Cullier | Capra_ibex | NA |
| **44.84** | **1.56** | **0.0529** | **herb** | Abri_de_Combe-Cullier | Equus_ferus | NA |
| **44.84** | **1.56** | **0.0529** | **herb** | Abri_de_Combe-Cullier | Rangifer_tarandus | NA |
| **44.84** | **1.56** | **0.0529** | **herb** | Abri_de_Combe-Cullier | Rupicapra_rupicapra | NA |
| **44.84** | **1.56** | **0.0529** | **herb** | Abri_de_Combe-Cullier | Saiga_tatarica | NA |
| **61.83** | **58.60** | **0.0535** | **herb** | Uninskaya_ | Alces_alces | NA |
| **61.83** | **58.60** | **0.0535** | **herb** | Uninskaya_ | Rangifer_tarandus | NA |
| **45.06** | **1.17** | **0.0540** | **herb** | Regourdou_[Montignac] | Capreolus_capreolus | NA |
| **45.06** | **1.17** | **0.0540** | **herb** | Regourdou_[Montignac] | Cervus_elaphus | NA |
| **45.06** | **1.17** | **0.0540** | **herb** | Regourdou_[Montignac] | Rangifer_tarandus | NA |
| **45.06** | **1.17** | **0.0540** | **herb** | Regourdou_[Montignac] | Sus_scrofa | NA |
| **49.41** | **16.75** | **0.0541** | **herb** | Kulna_Cave7a | Alces_alces | NA |
| **49.41** | **16.75** | **0.0541** | **herb** | Kulna_Cave7a | Coelodonta_antiquitatis | NA |
| **49.41** | **16.75** | **0.0541** | **herb** | Kulna_Cave7a | Equus_hydruntinus | NA |
| **49.41** | **16.75** | **0.0541** | **herb** | Kulna_Cave7a | Mammuthus_primigenius | NA |
| **49.41** | **16.75** | **0.0541** | **herb** | Kulna_Cave7a | Rangifer_tarandus | NA |
| **49.41** | **16.75** | **0.0541** | **herb** | Kulna_Cave7a | Saiga_tatarica | NA |
| **41.23** | **13.10** | **0.0542** | **herb** | Gr._Guattari | Bos_primigenius | NA |
| **41.23** | **13.10** | **0.0542** | **herb** | Gr._Guattari | Elephas_antiquus | NA |
| **41.23** | **13.10** | **0.0542** | **herb** | Gr._Guattari | Equus_ferus | NA |
| **41.23** | **13.10** | **0.0542** | **herb** | Gr._Guattari | Sus_scrofa | NA |
| **52.31** | **-2.10** | **0.0542** | **herb** | Upton_Warren_gravels | Bison_priscus | NA |
| **52.31** | **-2.10** | **0.0542** | **herb** | Upton_Warren_gravels | Coelodonta_antiquitatis | NA |
| **52.31** | **-2.10** | **0.0542** | **herb** | Upton_Warren_gravels | Equus_ferus | NA |

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|---|---|---|---|---|---|---|
| **52.31** | **-2.10** | **0.0542** | **herb** | Upton_Warren_gravels | Mammuthus_primigenius | NA |
| **52.31** | **-2.10** | **0.0542** | **herb** | Upton_Warren_gravels | Rangifer_tarandus | NA |
| **43.92** | **12.65** | **0.0544** | **herb** | Torrente_Conca_(Morciano_di_Romagna) | Bison_priscus | NA |
| **43.92** | **12.65** | **0.0544** | **herb** | Torrente_Conca_(Morciano_di_Romagna) | Equus_ferus | NA |
| **43.92** | **12.65** | **0.0544** | **herb** | Torrente_Conca_(Morciano_di_Romagna) | Mammuthus_primigenius | NA |
| **43.92** | **12.65** | **0.0544** | **herb** | Torrente_Conca_(Morciano_di_Romagna) | Stephanorhinus_hemitoechus | NA |
| **42.02** | **-0.40** | **0.0547** | **herb** | Los_Moros_I_[Gabasa] | Bos_primigenius | NA |
| **42.02** | **-0.40** | **0.0547** | **herb** | Los_Moros_I_[Gabasa] | Capra_ibex | NA |
| **42.02** | **-0.40** | **0.0547** | **herb** | Los_Moros_I_[Gabasa] | Capreolus_capreolus | NA |
| **42.02** | **-0.40** | **0.0547** | **herb** | Los_Moros_I_[Gabasa] | Cervus_elaphus | NA |
| **42.02** | **-0.40** | **0.0547** | **herb** | Los_Moros_I_[Gabasa] | Equus_ferus | NA |
| **42.02** | **-0.40** | **0.0547** | **herb** | Los_Moros_I_[Gabasa] | Rupicapra_rupicapra | NA |
| **61.27** | **60.50** | **0.0548** | **herb** | Burmantovo1,_2_ | Alces_alces | NA |
| **61.27** | **60.50** | **0.0548** | **herb** | Burmantovo1,_2_ | Rangifer_tarandus | NA |
| **60.24** | **60.03** | **0.0548** | **herb** | Cheremukhovo_1_(1-4) | Alces_alces | NA |
| **60.24** | **60.03** | **0.0548** | **herb** | Cheremukhovo_1_(1-4) | Rangifer_tarandus | NA |
| **47.50** | **28.50** | **0.0550** | **herb** | Climauti_II_i | Bison_priscus | NA |
| **47.50** | **28.50** | **0.0550** | **herb** | Climauti_II_i | Mammuthus_primigenius | NA |
| **47.50** | **28.50** | **0.0550** | **herb** | Climauti_II_i | Rangifer_tarandus | NA |
| **50.62** | **11.40** | **0.0550** | **herb** | Teufelsbrücke_2-3a | Equus_ferus | NA |
| **50.62** | **11.40** | **0.0550** | **herb** | Teufelsbrücke_2-3a | Rangifer_tarandus | NA |
| **50.62** | **11.40** | **0.0550** | **herb** | Teufelsbrücke_2-3a | Saiga_tatarica | NA |
| **46.91** | **22.54** | **0.0550** | **herb** | Valea_Sesii | Capra_ibex | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Bos_primigenius | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Capra_ibex | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Coelodonta_antiquitatis | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Dama_dama | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Equus_hydruntinus | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Megaloceros_giganteus | NA |
| **50.43** | **5.00** | **0.0552** | **herb** | Grotte_Scladina5 | Sus_scrofa | NA |
| **61.80** | **58.21** | **0.0553** | **herb** | Kaninskaya_cave | Alces_alces | NA |
| **61.80** | **58.21** | **0.0553** | **herb** | Kaninskaya_cave | Rangifer_tarandus | NA |
| **44.88** | **4.84** | **0.0554** | **herb** | Baume_Moula-Guercy_V-VII_~_Soyons_(Ardeche) | Rangifer_tarandus | NA |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Coelodonta_antiquitatis | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Dama_clactoniana | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Equus_hydruntinus | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Equus_ferus | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Hippopotamus_amphibius | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Mammuthus_primigenius | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Megaloceros_giganteus | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Stephanorhinus_hemitoechus | heide |
| **51.43** | **0.28** | **0.0556** | **herb** | Swanscombe | Stephanorhinus_kirchbergensis | heide |
| **53.64** | **-0.21** | **0.0557** | **herb** | Stellmoor | Alces_alces | NA |
| **53.64** | **-0.21** | **0.0557** | **herb** | Stellmoor | Sus_scrofa | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Bison_priscus | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Capra_ibex | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Cervus_elaphus | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Coelodonta_antiquitatis | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Equus_ferus | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Rangifer_tarandus | NA |
| **45.00** | **1.07** | **0.0558** | **herb** | Le_Moustier | Sus_scrofa | NA |
| **48.41** | **9.77** | **0.0558** | **herb** | Brillenhohle7 | Capra_ibex | NA |
| **48.41** | **9.77** | **0.0558** | **herb** | Brillenhohle7 | Equus_ferus | NA |
| **48.41** | **9.77** | **0.0558** | **herb** | Brillenhohle7 | Mammuthus_primigenius | NA |
| **48.41** | **9.77** | **0.0558** | **herb** | Brillenhohle7 | Rangifer_tarandus | NA |
| **48.41** | **9.77** | **0.0558** | **herb** | Brillenhohle7 | Rupicapra_rupicapra | NA |
| **48.41** | **9.77** | **0.0558** | **herb** | Brillenhohle7 | Saiga_tatarica | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Alces_alces | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Bison_priscus | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Coelodonta_antiquitatis | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Equus_ferus | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Mammuthus_primigenius | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Rangifer_tarandus | NA |
| **59.23** | **62.00** | **0.0558** | **herb** | Usolcevskaya_cave_ | Saiga_tatarica | NA |
| **50.62** | **11.40** | **0.0560** | **herb** | Teufelsbrücke_3 | Capreolus_capreolus | NA |
| **50.62** | **11.40** | **0.0560** | **herb** | Teufelsbrücke_3 | Equus_ferus | NA |
| **50.62** | **11.40** | **0.0560** | **herb** | Teufelsbrücke_3 | Mammuthus_primigenius | NA |
| **50.62** | **11.40** | **0.0560** | **herb** | Teufelsbrücke_3 | Rangifer_tarandus | NA |
| **50.62** | **11.40** | **0.0560** | **herb** | Teufelsbrücke_3 | Saiga_tatarica | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Bison_priscus | NA |

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| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Capreolus_capreolus | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Cervus_elaphus | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Coelodonta_antiquitatis | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Equus_hydruntinus | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Equus_ferus | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Mammuthus_primigenius | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Megaloceros_giganteus | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Rangifer_tarandus | NA |
| **44.67** | **33.85** | **0.0560** | **herb** | Staroselje | Saiga_tatarica | NA |
| **52.57** | **0.48** | **0.0562** | **herb** | Wretton | Bison_priscus | NA |
| **52.57** | **0.48** | **0.0562** | **herb** | Wretton | Coelodonta_antiquitatis | NA |
| **52.57** | **0.48** | **0.0562** | **herb** | Wretton | Equus_ferus | NA |
| **52.57** | **0.48** | **0.0562** | **herb** | Wretton | Mammuthus_primigenius | NA |
| **52.57** | **0.48** | **0.0562** | **herb** | Wretton | Rangifer_tarandus | NA |
| **41.23** | **13.05** | **0.0563** | **herb** | Gr._Breuil | Bos_primigenius | NA |
| **41.23** | **13.05** | **0.0563** | **herb** | Gr._Breuil | Capra_ibex | NA |
| **41.23** | **13.05** | **0.0563** | **herb** | Gr._Breuil | Capreolus_capreolus | NA |
| **44.59** | **22.26** | **0.0563** | **herb** | Pestera_Climente | Capra_ibex | NA |
| **44.59** | **22.26** | **0.0563** | **herb** | Pestera_Climente | Rupicapra_rupicapra | NA |
| **45.37** | **13.67** | **0.0563** | **herb** | Romualdo_Cave | Capra_ibex | NA |
| **45.34** | **0.61** | **0.0564** | **herb** | Fonseigner_[Bourdeilles] | Bison_priscus | NA |
| **45.34** | **0.61** | **0.0564** | **herb** | Fonseigner_[Bourdeilles] | Equus_ferus | NA |
| **45.34** | **0.61** | **0.0564** | **herb** | Fonseigner_[Bourdeilles] | Mammuthus_primigenius | NA |
| **45.34** | **0.61** | **0.0564** | **herb** | Fonseigner_[Bourdeilles] | Rangifer_tarandus | NA |
| **39.66** | **-7.64** | **0.0565** | **herb** | Foz_do_Enxarrique | Capra_ibex | NA |
| **39.66** | **-7.64** | **0.0565** | **herb** | Foz_do_Enxarrique | Coelodonta_antiquitatis | NA |
| **39.66** | **-7.64** | **0.0565** | **herb** | Foz_do_Enxarrique | Equus_ferus | NA |
| **39.66** | **-7.64** | **0.0565** | **herb** | Foz_do_Enxarrique | Hemitragus_albus | NA |
| **39.66** | **-7.64** | **0.0565** | **herb** | Foz_do_Enxarrique | Rangifer_tarandus | NA |
| **51.46** | **-0.03** | **0.0565** | **herb** | Willments_gravels | Coelodonta_antiquitatis | NA |
| **51.46** | **-0.03** | **0.0565** | **herb** | Willments_gravels | Equus_ferus | NA |
| **51.46** | **-0.03** | **0.0565** | **herb** | Willments_gravels | Mammuthus_primigenius | NA |
| **51.46** | **-0.03** | **0.0565** | **herb** | Willments_gravels | Megaloceros_giganteus | NA |
| **50.62** | **11.40** | **0.0567** | **herb** | Teufelsbrücke_2-3b | Equus_ferus | NA |
| **50.62** | **11.40** | **0.0567** | **herb** | Teufelsbrücke_2-3b | Rangifer_tarandus | NA |
| **50.62** | **11.40** | **0.0567** | **herb** | Teufelsbrücke_2-3b | Saiga_tatarica | NA |
| **47.70** | **8.63** | **0.0569** | **herb** | Schweizerbild_5 | Bison_priscus | NA |
| **47.70** | **8.63** | **0.0569** | **herb** | Schweizerbild_5 | Coelodonta_antiquitatis | NA |
| **47.70** | **8.63** | **0.0569** | **herb** | Schweizerbild_5 | Equus_ferus | NA |
| **47.70** | **8.63** | **0.0569** | **herb** | Schweizerbild_5 | Rangifer_tarandus | NA |
| **43.94** | **3.90** | **0.0572** | **herb** | La_Roquette_II_[Conquerac] | Bos_primigenius | NA |
| **43.94** | **3.90** | **0.0572** | **herb** | La_Roquette_II_[Conquerac] | Cervus_elaphus | NA |
| **43.94** | **3.90** | **0.0572** | **herb** | La_Roquette_II_[Conquerac] | Equus_ferus | NA |
| **49.27** | **16.67** | **0.0574** | **herb** | Ztiny_cave | Cervus_elaphus | NA |
| **49.27** | **16.67** | **0.0574** | **herb** | Ztiny_cave | Coelodonta_antiquitatis | NA |
| **49.27** | **16.67** | **0.0574** | **herb** | Ztiny_cave | Rangifer_tarandus | NA |
| **50.87** | **20.57** | **0.0574** | **herb** | Raj_cave_6 | Coelodonta_antiquitatis | NA |
| **50.87** | **20.57** | **0.0574** | **herb** | Raj_cave_6 | Equus_ferus | NA |
| **50.87** | **20.57** | **0.0574** | **herb** | Raj_cave_6 | Mammuthus_primigenius | NA |
| **50.87** | **20.57** | **0.0574** | **herb** | Raj_cave_6 | Rangifer_tarandus | NA |
| **44.97** | **1.02** | **0.0577** | **herb** | Abri_de_la_Madeleine | Capra_ibex | NA |
| **44.97** | **1.02** | **0.0577** | **herb** | Abri_de_la_Madeleine | Capreolus_capreolus | NA |
| **44.97** | **1.02** | **0.0577** | **herb** | Abri_de_la_Madeleine | Equus_ferus | NA |
| **44.97** | **1.02** | **0.0577** | **herb** | Abri_de_la_Madeleine | Rangifer_tarandus | NA |
| **44.97** | **1.02** | **0.0577** | **herb** | Abri_de_la_Madeleine | Rupicapra_rupicapra | NA |
| **47.75** | **19.05** | **0.0577** | **herb** | Remete_cave | Bison_priscus | NA |
| **47.75** | **19.05** | **0.0577** | **herb** | Remete_cave | Cervus_elaphus | NA |
| **47.75** | **19.05** | **0.0577** | **herb** | Remete_cave | Coelodonta_antiquitatis | NA |
| **47.75** | **19.05** | **0.0577** | **herb** | Remete_cave | Rangifer_tarandus | NA |
| **47.75** | **19.05** | **0.0577** | **herb** | Remete_cave | Rupicapra_rupicapra | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Bison_priscus | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Bos_primigenius | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Capra_ibex | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Coelodonta_antiquitatis | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Dama_dama | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Equus_hydruntinus | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Megaloceros_giganteus | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Rangifer_tarandus | NA |
| **50.43** | **5.00** | **0.0578** | **herb** | Grotte_Scladina4A | Sus_scrofa | NA |
| **48.41** | **9.77** | **0.0582** | **herb** | Brillenhohle8 | Equus_ferus | NA |
| **48.41** | **9.77** | **0.0582** | **herb** | Brillenhohle8 | Rangifer_tarandus | NA |
| **45.00** | **39.00** | **0.0582** | **herb** | Mezmaiskaya_Cave_2 | Bison_priscus | NA |
| **45.00** | **39.00** | **0.0582** | **herb** | Mezmaiskaya_Cave_2 | Capra_caucasica | NA |

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|---|---|---|---|---|---|---|
| **45.00** | **39.00** | **0.0582** | **herb** | Mezmaiskaya_Cave_2 | Saiga_tatarica | NA |
| **45.00** | **39.00** | **0.0582** | **herb** | Mezmaiskaya_Cave_2 | Sus_scrofa | NA |
| **48.82** | **10.45** | **0.0583** | **herb** | Große_Ofnethöhle_V | Bison_priscus | NA |
| **48.82** | **10.45** | **0.0583** | **herb** | Große_Ofnethöhle_V | Coelodonta_antiquitatis | NA |
| **48.82** | **10.45** | **0.0583** | **herb** | Große_Ofnethöhle_V | Equus_ferus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Alces_alces | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Bison_priscus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Cervus_elaphus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Coelodonta_antiquitatis | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Dama_dama | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Equus_hemionus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Mammuthus_primigenius | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Megaloceros_giganteus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Ovibos_moschatus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Rangifer_tarandus | NA |
| **47.50** | **8.37** | **0.0583** | **herb** | Niederleme | Stephanorhinus_kirchbergensis | NA |
| **45.09** | **5.43** | **0.0584** | **herb** | Gr._de_Preletang_[Presles] | Bison_priscus | NA |
| **45.09** | **5.43** | **0.0584** | **herb** | Gr._de_Preletang_[Presles] | Capra_ibex | NA |
| **45.09** | **5.43** | **0.0584** | **herb** | Gr._de_Preletang_[Presles] | Cervus_elaphus | NA |
| **50.50** | **5.03** | **0.0584** | **herb** | Princesse_Pauline | Capra_ibex | NA |
| **50.50** | **5.03** | **0.0584** | **herb** | Princesse_Pauline | Cervus_elaphus | NA |
| **50.50** | **5.03** | **0.0584** | **herb** | Princesse_Pauline | Coelodonta_antiquitatis | NA |
| **50.50** | **5.03** | **0.0584** | **herb** | Princesse_Pauline | Equus_ferus | NA |
| **50.50** | **5.03** | **0.0584** | **herb** | Princesse_Pauline | Mammuthus_primigenius | NA |
| **50.50** | **5.03** | **0.0584** | **herb** | Princesse_Pauline | Rangifer_tarandus | NA |
| **44.42** | **28.52** | **0.0586** | **herb** | Pestera_la_Adam16 | Cervus_elaphus | NA |
| **44.42** | **28.52** | **0.0586** | **herb** | Pestera_la_Adam16 | Coelodonta_antiquitatis | NA |
| **44.42** | **28.52** | **0.0586** | **herb** | Pestera_la_Adam16 | Equus_ferus | NA |
| **44.42** | **28.52** | **0.0586** | **herb** | Pestera_la_Adam16 | Mammuthus_primigenius | NA |
| **44.42** | **28.52** | **0.0586** | **herb** | Pestera_la_Adam16 | Rangifer_tarandus | NA |
| **44.42** | **28.52** | **0.0586** | **herb** | Pestera_la_Adam16 | Saiga_tatarica | NA |
| **51.04** | **4.10** | **0.0587** | **herb** | Dendermonde | Cervus_elaphus | NA |
| **51.04** | **4.10** | **0.0587** | **herb** | Dendermonde | Coelodonta_antiquitatis | NA |
| **51.04** | **4.10** | **0.0587** | **herb** | Dendermonde | Mammuthus_primigenius | NA |
| **51.04** | **4.10** | **0.0587** | **herb** | Dendermonde | Megaloceros_giganteus | NA |
| **51.04** | **4.10** | **0.0587** | **herb** | Dendermonde | Rangifer_tarandus | NA |
| **48.77** | **11.05** | **0.0587** | **herb** | Mauern_Weinberghoehlen_F | Capra_ibex | NA |
| **48.77** | **11.05** | **0.0587** | **herb** | Mauern_Weinberghoehlen_F | Cervus_elaphus | NA |
| **48.77** | **11.05** | **0.0587** | **herb** | Mauern_Weinberghoehlen_F | Coelodonta_antiquitatis | NA |
| **48.77** | **11.05** | **0.0587** | **herb** | Mauern_Weinberghoehlen_F | Mammuthus_primigenius | NA |
| **48.77** | **11.05** | **0.0587** | **herb** | Mauern_Weinberghoehlen_F | Megaloceros_giganteus | NA |
| **48.77** | **11.05** | **0.0587** | **herb** | Mauern_Weinberghoehlen_F | Rangifer_tarandus | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Bos_primigenius | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Cervus_elaphus | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Coelodonta_antiquitatis | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Equus_ferus | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Mammuthus_primigenius | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Megaloceros_giganteus | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Ovis_ammon | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Rangifer_tarandus | NA |
| **44.42** | **28.52** | **0.0587** | **herb** | Pestera_la_Adam26 | Saiga_tatarica | NA |
| **42.86** | **1.59** | **0.0588** | **herb** | Abri_du_Flageolet_II | Capra_ibex | NA |
| **42.86** | **1.59** | **0.0588** | **herb** | Abri_du_Flageolet_II | Cervus_elaphus | NA |
| **42.86** | **1.59** | **0.0588** | **herb** | Abri_du_Flageolet_II | Equus_ferus | NA |
| **42.86** | **1.59** | **0.0588** | **herb** | Abri_du_Flageolet_II | Rangifer_tarandus | NA |
| **42.86** | **1.59** | **0.0588** | **herb** | Abri_du_Flageolet_II | Rupicapra_rupicapra | NA |
| **42.86** | **1.59** | **0.0588** | **herb** | Abri_du_Flageolet_II | Saiga_tatarica | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Bison_priscus | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Capreolus_capreolus | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Cervus_elaphus | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Coelodonta_antiquitatis | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Equus_hydruntinus | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Mammuthus_primigenius | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Megaloceros_giganteus | NA |
| **47.72** | **18.72** | **0.0588** | **herb** | Dorog | Rangifer_tarandus | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Alces_alces | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Bison_priscus | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Bos_primigenius | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Cervus_elaphus | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Coelodonta_antiquitatis | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Dama_dama | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Elephas_antiquus | NA |

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|---|---|---|---|---|---|---|
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Mammuthus_primigenius | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Megaloceros_giganteus | NA |
| **51.09** | **4.07** | **0.0590** | **herb** | Maasvlakte_2 | Rangifer_tarandus | NA |
| **41.22** | **13.51** | **0.0591** | **herb** | Gr._di_Sant'Agostino | Bos_primigenius | NA |
| **41.22** | **13.51** | **0.0591** | **herb** | Gr._di_Sant'Agostino | Capra_ibex | NA |
| **41.22** | **13.51** | **0.0591** | **herb** | Gr._di_Sant'Agostino | Capreolus_capreolus | NA |
| **41.22** | **13.51** | **0.0591** | **herb** | Gr._di_Sant'Agostino | Sus_scrofa | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Capra_ibex | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Cervus_elaphus | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Coelodonta_antiquitatis | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Equus_ferus | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Mammuthus_primigenius | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Megaloceros_giganteus | NA |
| **48.82** | **10.45** | **0.0591** | **herb** | Große_Ofnethöhle_IV | Rangifer_tarandus | NA |
| **45.73** | **13.67** | **0.0592** | **herb** | Grotta_Pocala | Bos_primigenius | NA |
| **45.73** | **13.67** | **0.0592** | **herb** | Grotta_Pocala | Capra_ibex | NA |
| **45.73** | **13.67** | **0.0592** | **herb** | Grotta_Pocala | Capreolus_capreolus | NA |
| **45.73** | **13.67** | **0.0592** | **herb** | Grotta_Pocala | Equus_hydruntinus | NA |
| **45.73** | **13.67** | **0.0592** | **herb** | Grotta_Pocala | Equus_ferus | NA |
| **45.73** | **13.67** | **0.0592** | **herb** | Grotta_Pocala | Megaloceros_giganteus | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Capra_ibex | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Capreolus_capreolus | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Cervus_elaphus | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Equus_hydruntinus | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Equus_ferus | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Rangifer_tarandus | NA |
| **44.84** | **1.08** | **0.0594** | **herb** | Abri_du_Flageolet_I | Rupicapra_rupicapra | NA |
| **45.63** | **0.15** | **0.0594** | **herb** | Artenac_6 | Capreolus_capreolus | NA |
| **45.63** | **0.15** | **0.0594** | **herb** | Artenac_6 | Equus_hydruntinus | NA |
| **45.63** | **0.15** | **0.0594** | **herb** | Artenac_6 | Equus_ferus | NA |
| **45.63** | **0.15** | **0.0594** | **herb** | Artenac_6 | Rangifer_tarandus | NA |
| **50.23** | **6.65** | **0.0594** | **herb** | Buchenloch | Cervus_elaphus | NA |
| **50.23** | **6.65** | **0.0594** | **herb** | Buchenloch | Coelodonta_antiquitatis | NA |
| **50.23** | **6.65** | **0.0594** | **herb** | Buchenloch | Equus_ferus | NA |
| **50.23** | **6.65** | **0.0594** | **herb** | Buchenloch | Mammuthus_primigenius | NA |
| **50.23** | **6.65** | **0.0594** | **herb** | Buchenloch | Rangifer_tarandus | NA |
| **43.40** | **-4.10** | **0.0594** | **herb** | Cueva_de_Altamira__Sol | Capreolus_capreolus | NA |
| **43.40** | **-4.10** | **0.0594** | **herb** | Cueva_de_Altamira__Sol | Cervus_elaphus | NA |
| **43.40** | **-4.10** | **0.0594** | **herb** | Cueva_de_Altamira__Sol | Mammuthus_primigenius | NA |
| **43.40** | **-4.10** | **0.0594** | **herb** | Cueva_de_Altamira__Sol | Rangifer_tarandus | NA |
| **43.19** | **12.44** | **0.0594** | **herb** | Monte_Cucco | Capra_ibex | NA |
| **43.19** | **12.44** | **0.0594** | **herb** | Monte_Cucco | Cervus_elaphus | NA |
| **43.19** | **12.44** | **0.0594** | **herb** | Monte_Cucco | Dama_dama | NA |
| **43.19** | **12.44** | **0.0594** | **herb** | Monte_Cucco | Equus_ferus | NA |
| **43.19** | **12.44** | **0.0594** | **herb** | Monte_Cucco | Rupicapra_rupicapra | NA |
| **50.96** | **4.72** | **0.0594** | **herb** | Rotselaar | Bison_priscus | NA |
| **50.96** | **4.72** | **0.0594** | **herb** | Rotselaar | Cervus_elaphus | NA |
| **50.96** | **4.72** | **0.0594** | **herb** | Rotselaar | Coelodonta_antiquitatis | NA |
| **50.96** | **4.72** | **0.0594** | **herb** | Rotselaar | Mammuthus_primigenius | NA |
| **50.96** | **4.72** | **0.0594** | **herb** | Rotselaar | Megaloceros_giganteus | NA |
| **50.96** | **4.72** | **0.0594** | **herb** | Rotselaar | Rangifer_tarandus | NA |
| **45.07** | **5.25** | **0.0594** | **herb** | Grotte_du_Tai_C'' | Capra_ibex | NA |
| **45.07** | **5.25** | **0.0594** | **herb** | Grotte_du_Tai_C'' | Cervus_elaphus | NA |
| **45.07** | **5.25** | **0.0594** | **herb** | Grotte_du_Tai_C'' | Rangifer_tarandus | NA |
| **45.07** | **5.25** | **0.0594** | **herb** | Grotte_du_Tai_C'' | Rupicapra_rupicapra | NA |
| **51.28** | **2.75** | **0.0595** | **herb** | Gough's_cave | Bos_primigenius | NA |
| **51.28** | **2.75** | **0.0595** | **herb** | Gough's_cave | Cervus_elaphus | NA |
| **51.28** | **2.75** | **0.0595** | **herb** | Gough's_cave | Equus_ferus | NA |
| **51.28** | **2.75** | **0.0595** | **herb** | Gough's_cave | Rangifer_tarandus | NA |
| **51.28** | **2.75** | **0.0595** | **herb** | Gough's_cave | Saiga_tatarica | NA |
| **51.29** | **-2.88** | **0.0595** | **herb** | Picken's_Hole,_Layer_5 | Bos_primigenius | NA |
| **51.29** | **-2.88** | **0.0595** | **herb** | Picken's_Hole,_Layer_5 | Cervus_elaphus | NA |
| **51.29** | **-2.88** | **0.0595** | **herb** | Picken's_Hole,_Layer_5 | Rangifer_tarandus | NA |
| **44.60** | **1.87** | **0.0595** | **herb** | Saint_Eulaile | Capra_ibex | NA |
| **44.60** | **1.87** | **0.0595** | **herb** | Saint_Eulaile | Cervus_elaphus | NA |
| **44.60** | **1.87** | **0.0595** | **herb** | Saint_Eulaile | Equus_ferus | NA |
| **44.60** | **1.87** | **0.0595** | **herb** | Saint_Eulaile | Rangifer_tarandus | NA |
| **44.60** | **1.87** | **0.0595** | **herb** | Saint_Eulaile | Rupicapra_rupicapra | NA |
| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Capra_ibex | NA |
| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Cervus_elaphus | NA |
| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Coelodonta_antiquitatis | NA |
| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Equus_ferus | NA |
| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Mammuthus_primigenius | NA |

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| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Megaloceros_giganteus | NA |
| **48.93** | **11.83** | **0.0596** | **herb** | Große_Schulerloch_C | Rangifer_tarandus | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Bos_primigenius | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Cervus_elaphus | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Coelodonta_antiquitatis | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Equus_ferus | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Mammuthus_primigenius | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Megaloceros_giganteus | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Rangifer_tarandus | NA |
| **48.55** | **10.15** | **0.0598** | **herb** | Bocksteinschmiede_h/Höhle=IIIb | Rupicapra_rupicapra | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Bos_primigenius | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Capreolus_capreolus | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Cervus_elaphus | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Dama_dama | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Equus_ferus | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Hemitragus_cedrensis | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Megaloceros_giganteus | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Rangifer_tarandus | NA |
| **41.05** | **22.87** | **0.0598** | **herb** | Kilkis_(Central_Macedonia) | Stephanorhinus_hemitoechus | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Cervus_elaphus | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Coelodonta_antiquitatis | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Equus_ferus | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Mammuthus_primigenius | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Megaloceros_giganteus | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Rangifer_tarandus | NA |
| **48.37** | **9.72** | **0.0598** | **herb** | Kogelstein | Rupicapra_rupicapra | NA |
| **48.55** | **10.15** | **0.0599** | **herb** | Bocksteinschmiede_g=IV | Cervus_elaphus | NA |
| **48.55** | **10.15** | **0.0599** | **herb** | Bocksteinschmiede_g=IV | Coelodonta_antiquitatis | NA |
| **48.55** | **10.15** | **0.0599** | **herb** | Bocksteinschmiede_g=IV | Equus_ferus | NA |
| **48.55** | **10.15** | **0.0599** | **herb** | Bocksteinschmiede_g=IV | Mammuthus_primigenius | NA |
| **48.55** | **10.15** | **0.0599** | **herb** | Bocksteinschmiede_g=IV | Rangifer_tarandus | NA |
| **48.58** | **9.16** | **0.0599** | **herb** | Steinheim_upper_level | Bison_priscus | NA |
| **48.58** | **9.16** | **0.0599** | **herb** | Steinheim_upper_level | Cervus_elaphus | NA |
| **48.58** | **9.16** | **0.0599** | **herb** | Steinheim_upper_level | Coelodonta_antiquitatis | NA |
| **48.58** | **9.16** | **0.0599** | **herb** | Steinheim_upper_level | Equus_ferus | NA |
| **48.58** | **9.16** | **0.0599** | **herb** | Steinheim_upper_level | Mammuthus_primigenius | NA |
| **48.58** | **9.16** | **0.0599** | **herb** | Steinheim_upper_level | Megaloceros_giganteus | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Bison_priscus | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Cervus_elaphus | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Coelodonta_antiquitatis | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Elephas_antiquus | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Hippopotamus_amphibius | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Mammuthus_primigenius | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Megaloceros_giganteus | NA |
| **51.48** | **0.05** | **0.0599** | **herb** | Waterhall_farm_(Hertford) | Stephanorhinus_hemitoechus | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Capra_caucasica | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Cervus_elaphus | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Equus_ferus | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Megaloceros_giganteus | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Rupicapra_rupicapra | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Saiga_tatarica | NA |
| **44.20** | **40.85** | **0.0600** | **herb** | Barakaevskaya_stoyanka | Sus_scrofa | NA |
| **49.40** | **16.66** | **0.0600** | **herb** | Barova_cave | Capra_ibex | NA |
| **55.97** | **92.82** | **0.0600** | **herb** | Bolshaja_Oreshnaja_cave | Coelodonta_antiquitatis | NA |
| **44.90** | **40.00** | **0.0600** | **herb** | Dakhovskaja_cave | Bison_priscus | NA |
| **44.90** | **40.00** | **0.0600** | **herb** | Dakhovskaja_cave | Capra_caucasica | NA |
| **44.90** | **40.00** | **0.0600** | **herb** | Dakhovskaja_cave | Cervus_elaphus | NA |
| **44.90** | **40.00** | **0.0600** | **herb** | Dakhovskaja_cave | Mammuthus_primigenius | NA |
| **44.90** | **40.00** | **0.0600** | **herb** | Dakhovskaja_cave | Megaloceros_giganteus | NA |
| **44.90** | **40.00** | **0.0600** | **herb** | Dakhovskaja_cave | Saiga_tatarica | NA |
| **55.97** | **92.81** | **0.0600** | **herb** | Devjatka_cave_early | Capra_sibirica | NA |
| **55.97** | **92.81** | **0.0600** | **herb** | Devjatka_cave_early | Coelodonta_antiquitatis | NA |
| **47.28** | **16.60** | **0.0600** | **herb** | Genesapati | Procapreolus_loczyi | NA |
| **50.43** | **5.01** | **0.0600** | **herb** | Goyet_Cave_st.4_ | Capra_ibex | NA |
| **50.43** | **5.01** | **0.0600** | **herb** | Goyet_Cave_st.4_ | Cervus_elaphus | NA |
| **50.43** | **5.01** | **0.0600** | **herb** | Goyet_Cave_st.4_ | Ovibos_moschatus | NA |
| **50.43** | **5.01** | **0.0600** | **herb** | Goyet_Cave_st.4_ | Rangifer_tarandus | NA |
| **50.43** | **5.01** | **0.0600** | **herb** | Goyet_Cave_st.4_ | Rupicapra_rupicapra | NA |
| **47.20** | **22.37** | **0.0600** | **herb** | Igrita_cave | Rangifer_tarandus | NA |
| **54.00** | **105.00** | **0.0600** | **herb** | Makarovo_IV | Rangifer_tarandus | NA |
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Capreolus_capreolus | NA |

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|---|---|---|---|---|---|---|
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Cervus_elaphus | NA |
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Coelodonta_antiquitatis | NA |
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Equus_hydruntinus | NA |
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Equus_ferus | NA |
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Rangifer_tarandus | NA |
| **45.25** | **33.87** | **0.0600** | **herb** | Mamat-Koba | Saiga_tatarica | NA |
| **48.40** | **9.76** | **0.0600** | **herb** | Sirgenstein_cave | Bison_priscus | NA |
| **48.40** | **9.76** | **0.0600** | **herb** | Sirgenstein_cave | Cervus_elaphus | NA |
| **48.40** | **9.76** | **0.0600** | **herb** | Sirgenstein_cave | Ovis_ammon | NA |
| **51.17** | **83.02** | **0.0600** | **herb** | Strashnaja_cave_l.3 | Bison_priscus | NA |
| **51.17** | **83.02** | **0.0600** | **herb** | Strashnaja_cave_l.3 | Cervus_elaphus | NA |
| **51.17** | **83.02** | **0.0600** | **herb** | Strashnaja_cave_l.3 | Coelodonta_antiquitatis | NA |
| **51.17** | **83.02** | **0.0600** | **herb** | Strashnaja_cave_l.3 | Ovis_ammon | NA |
| **51.17** | **83.02** | **0.0600** | **herb** | Strashnaja_cave_l.3 | Saiga_tatarica | NA |
| **48.40** | **44.30** | **0.0600** | **herb** | Sukhaja_Mechetka_l.4 | Bison_priscus | NA |
| **48.40** | **44.30** | **0.0600** | **herb** | Sukhaja_Mechetka_l.4 | Cervus_elaphus | NA |
| **48.40** | **44.30** | **0.0600** | **herb** | Sukhaja_Mechetka_l.4 | Equus_ferus | NA |
| **48.40** | **44.30** | **0.0600** | **herb** | Sukhaja_Mechetka_l.4 | Mammuthus_primigenius | NA |
| **48.40** | **44.30** | **0.0600** | **herb** | Sukhaja_Mechetka_l.4 | Rangifer_tarandus | NA |
| **48.40** | **44.30** | **0.0600** | **herb** | Sukhaja_Mechetka_l.4 | Saiga_tatarica | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Bos_primigenius | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Capreolus_capreolus | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Cervus_elaphus | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Dama_dama | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Hippopotamus_amphibius | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Stephanorhinus_hemitoechus | NA |
| **42.50** | **12.00** | **0.0600** | **herb** | Torre_del_Pagliaccetto | Sus_scrofa | NA |
| **43.80** | **70.30** | **0.0600** | **herb** | Ushbas_cave | Saiga_tatarica | NA |
| **55.22** | **91.65** | **0.0600** | **herb** | Ust'-Izhul | Bison_priscus | NA |
| **55.22** | **91.65** | **0.0600** | **herb** | Ust'-Izhul | Coelodonta_antiquitatis | NA |
| **55.22** | **91.65** | **0.0600** | **herb** | Ust'-Izhul | Mammuthus_primigenius | NA |
| **48.55** | **10.15** | **0.0600** | **herb** | Bocksteinschmiede_f/h | Cervus_elaphus | NA |
| **48.55** | **10.15** | **0.0600** | **herb** | Bocksteinschmiede_f/h | Coelodonta_antiquitatis | NA |
| **48.55** | **10.15** | **0.0600** | **herb** | Bocksteinschmiede_f/h | Equus_ferus | NA |
| **48.55** | **10.15** | **0.0600** | **herb** | Bocksteinschmiede_f/h | Mammuthus_primigenius | NA |
| **48.55** | **10.15** | **0.0600** | **herb** | Bocksteinschmiede_f/h | Ovibos_moschatus | NA |
| **48.55** | **10.15** | **0.0600** | **herb** | Bocksteinschmiede_f/h | Rangifer_tarandus | NA |
| **52.10** | **-7.63** | **0.0600** | **herb** | Shandon_Cave | Cervus_elaphus | NA |
| **52.10** | **-7.63** | **0.0600** | **herb** | Shandon_Cave | Equus_ferus | NA |
| **52.10** | **-7.63** | **0.0600** | **herb** | Shandon_Cave | Mammuthus_primigenius | NA |
| **52.10** | **-7.63** | **0.0600** | **herb** | Shandon_Cave | Rangifer_tarandus | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Capra_ibex | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Cervus_elaphus | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Coelodonta_antiquitatis | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Equus_ferus | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Rangifer_tarandus | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Saiga_tatarica | NA |
| **43.44** | **6.24** | **0.0600** | **herb** | Trou_du_Renard | Sus_scrofa | NA |
| **44.08** | **1.72** | **0.0602** | **herb** | Abri_des_Battus_3 | Capra_ibex | NA |
| **44.08** | **1.72** | **0.0602** | **herb** | Abri_des_Battus_3 | Cervus_elaphus | NA |
| **44.08** | **1.72** | **0.0602** | **herb** | Abri_des_Battus_3 | Equus_hydruntinus | NA |
| **44.08** | **1.72** | **0.0602** | **herb** | Abri_des_Battus_3 | Equus_ferus | NA |
| **44.08** | **1.72** | **0.0602** | **herb** | Abri_des_Battus_3 | Rangifer_tarandus | NA |
| **44.08** | **1.72** | **0.0602** | **herb** | Abri_des_Battus_3 | Rupicapra_rupicapra | NA |
| **45.63** | **0.15** | **0.0602** | **herb** | Artenac_8 | Capreolus_capreolus | NA |
| **45.63** | **0.15** | **0.0602** | **herb** | Artenac_8 | Equus_hydruntinus | NA |
| **45.63** | **0.15** | **0.0602** | **herb** | Artenac_8 | Equus_ferus | NA |
| **45.63** | **0.15** | **0.0602** | **herb** | Artenac_8 | Rangifer_tarandus | NA |
| **45.63** | **0.15** | **0.0602** | **herb** | Artenac_8 | Sus_scrofa | NA |
| **51.26** | **0.18** | **0.0602** | **herb** | Bacon_hole_ | Bison_priscus | NA |
| **51.26** | **0.18** | **0.0602** | **herb** | Bacon_hole_ | Capreolus_capreolus | NA |
| **51.26** | **0.18** | **0.0602** | **herb** | Bacon_hole_ | Cervus_elaphus | NA |
| **51.26** | **0.18** | **0.0602** | **herb** | Bacon_hole_ | Mammuthus_primigenius | NA |
| **51.26** | **0.18** | **0.0602** | **herb** | Bacon_hole_ | Stephanorhinus_hemitoechus | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Bison_priscus | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Cervus_elaphus | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Coelodonta_antiquitatis | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Equus_hydruntinus | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Equus_ferus | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Mammuthus_primigenius | NA |
| **45.83** | **5.11** | **0.0602** | **herb** | Carriere_Fournier,_Chatillon-Saint-Jean_(Drome) | Megaloceros_giganteus | NA |

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|---|---|---|---|---|---|---|
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Bison_priscus | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Bos_primigenius | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Capra_ibex | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Cervus_elaphus | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Coelodonta_antiquitatis | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Dama_dama | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Equus_hydruntinus | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Equus_ferus | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Mammuthus_primigenius | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Rangifer_tarandus | NA |
| **50.43** | **5.00** | **0.0602** | **herb** | Grotte_Scladina1A | Sus_scrofa | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Bison_priscus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Bos_primigenius | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Capreolus_capreolus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Cervus_elaphus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Coelodonta_antiquitatis | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Equus_hydruntinus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Equus_ferus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Mammuthus_primigenius | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Megaloceros_giganteus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Rangifer_tarandus | NA |
| **48.80** | **9.22** | **0.0602** | **herb** | Villa_Seckendorff-Bad_Cannstatt | Rupicapra_rupicapra | NA |
| **50.53** | **7.30** | **0.0603** | **herb** | Ariendorf | Cervus_elaphus | NA |
| **50.53** | **7.30** | **0.0603** | **herb** | Ariendorf | Coelodonta_antiquitatis | NA |
| **50.53** | **7.30** | **0.0603** | **herb** | Ariendorf | Equus_ferus | NA |
| **50.53** | **7.30** | **0.0603** | **herb** | Ariendorf | Mammuthus_primigenius | NA |
| **50.83** | **5.68** | **0.0603** | **herb** | Maastricht-Belvedere_4 | Capreolus_capreolus | NA |
| **50.83** | **5.68** | **0.0603** | **herb** | Maastricht-Belvedere_4 | Cervus_elaphus | NA |
| **50.83** | **5.68** | **0.0603** | **herb** | Maastricht-Belvedere_4 | Megaloceros_giganteus | NA |
| **50.83** | **5.68** | **0.0603** | **herb** | Maastricht-Belvedere_4 | Stephanorhinus_hemitoechus | NA |
| **48.12** | **20.65** | **0.0604** | **herb** | Budospest | Bison_priscus | NA |
| **48.12** | **20.65** | **0.0604** | **herb** | Budospest | Cervus_elaphus | NA |
| **48.12** | **20.65** | **0.0604** | **herb** | Budospest | Rupicapra_rupicapra | NA |
| **43.08** | **-1.34** | **0.0604** | **herb** | Cueva_de_Abauntz | Cervus_elaphus | NA |
| **43.08** | **-1.34** | **0.0604** | **herb** | Cueva_de_Abauntz | Rangifer_tarandus | NA |
| **43.08** | **-1.34** | **0.0604** | **herb** | Cueva_de_Abauntz | Sus_scrofa | NA |
| **44.88** | **4.84** | **0.0605** | **herb** | Baume_Moula-Guercy_IV_~_Soyons_(Ardeche) | Cervus_elaphus | NA |
| **44.88** | **4.84** | **0.0605** | **herb** | Baume_Moula-Guercy_IV_~_Soyons_(Ardeche) | Rangifer_tarandus | NA |
| **45.72** | **13.70** | **0.0605** | **herb** | GabrovizzaII | Bos_primigenius | NA |
| **45.72** | **13.70** | **0.0605** | **herb** | GabrovizzaII | Capreolus_capreolus | NA |
| **45.72** | **13.70** | **0.0605** | **herb** | GabrovizzaII | Equus_ferus | NA |
| **45.72** | **13.70** | **0.0605** | **herb** | GabrovizzaII | Sus_scrofa | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Alces_alces | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Bos_primigenius | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Capra_ibex | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Capreolus_capreolus | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Cervus_elaphus | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Megaloceros_giganteus | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Rupicapra_rupicapra | NA |
| **45.32** | **11.33** | **0.0605** | **herb** | Grotta_Maggiore | Sus_scrofa | NA |
| **44.82** | **1.18** | **0.0605** | **herb** | Grotte_Maldidier | Capra_ibex | NA |
| **44.82** | **1.18** | **0.0605** | **herb** | Grotte_Maldidier | Cervus_elaphus | NA |
| **44.82** | **1.18** | **0.0605** | **herb** | Grotte_Maldidier | Equus_ferus | NA |
| **44.82** | **1.18** | **0.0605** | **herb** | Grotte_Maldidier | Rangifer_tarandus | NA |
| **44.82** | **1.18** | **0.0605** | **herb** | Grotte_Maldidier | Rupicapra_rupicapra | NA |
| **47.70** | **8.63** | **0.0605** | **herb** | Schweizerbild_4 | Capra_ibex | NA |
| **47.70** | **8.63** | **0.0605** | **herb** | Schweizerbild_4 | Capreolus_capreolus | NA |
| **47.70** | **8.63** | **0.0605** | **herb** | Schweizerbild_4 | Cervus_elaphus | NA |
| **47.70** | **8.63** | **0.0605** | **herb** | Schweizerbild_4 | Rangifer_tarandus | NA |
| **47.70** | **8.63** | **0.0605** | **herb** | Schweizerbild_4 | Sus_scrofa | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Capra_ibex | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Capreolus_capreolus | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Cervus_elaphus | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Equus_hydruntinus | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Equus_ferus | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Megaloceros_giganteus | NA |
| **42.94** | **25.42** | **0.0607** | **herb** | Bacho_Kiro13 | Rupicapra_rupicapra | NA |
| **40.50** | **15.24** | **0.0607** | **herb** | Castelcivita | Capra_ibex | NA |
| **40.50** | **15.24** | **0.0607** | **herb** | Castelcivita | Capreolus_capreolus | NA |
| **40.50** | **15.24** | **0.0607** | **herb** | Castelcivita | Cervus_elaphus | NA |
| **40.50** | **15.24** | **0.0607** | **herb** | Castelcivita | Rupicapra_rupicapra | NA |
| **40.50** | **15.24** | **0.0607** | **herb** | Castelcivita | Sus_scrofa | NA |

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| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Bison_priscus | NA |
| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Cervus_elaphus | NA |
| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Equus_ferus | NA |
| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Megaloceros_giganteus | NA |
| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Rangifer_tarandus | NA |
| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Stephanorhinus_hemitoechus | NA |
| **45.04** | **5.07** | **0.0607** | **herb** | Châtillon-Saint-Jean,_Drôme | Sus_scrofa | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Bos_primigenius | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Capreolus_capreolus | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Cervus_elaphus | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Coelodonta_antiquitatis | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Mammuthus_primigenius | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Rangifer_tarandus | NA |
| **46.58** | **4.81** | **0.0607** | **herb** | Gr._Velars_Etrigny | Sus_scrofa | NA |
| **45.37** | **11.20** | **0.0607** | **herb** | Grotta_del_Cerè | Capra_ibex | NA |
| **45.37** | **11.20** | **0.0607** | **herb** | Grotta_del_Cerè | Cervus_elaphus | NA |
| **45.37** | **11.20** | **0.0607** | **herb** | Grotta_del_Cerè | Rupicapra_rupicapra | NA |
| **45.37** | **11.20** | **0.0607** | **herb** | Grotta_del_Cerè | Sus_scrofa | NA |
| **44.42** | **24.71** | **0.0607** | **herb** | Icoana | Capreolus_capreolus | NA |
| **44.42** | **24.71** | **0.0607** | **herb** | Icoana | Cervus_elaphus | NA |
| **44.42** | **24.71** | **0.0607** | **herb** | Icoana | Rupicapra_rupicapra | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Bos_primigenius | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Capra_caucasica | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Capreolus_capreolus | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Cervus_elaphus | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Dama_dama | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Hemitragus_cedrensis | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Megaloceros_giganteus | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Rupicapra_rupicapra | NA |
| **40.30** | **21.36** | **0.0607** | **herb** | Neapolis_(Haliakmon_basin) | Sus_scrofa | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Alces_alces | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Capreolus_capreolus | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Cervus_elaphus | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Equus_hydruntinus | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Equus_ferus | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Mammuthus_primigenius | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Rangifer_tarandus | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Rupicapra_rupicapra | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Stephanorhinus_kirchbergensis | NA |
| **50.64** | **11.42** | **0.0607** | **herb** | Roter_Berg | Sus_scrofa | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Cervus_elaphus | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Coelodonta_antiquitatis | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Equus_ferus | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Mammuthus_primigenius | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Megaloceros_giganteus | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Rangifer_tarandus | NA |
| **50.59** | **5.21** | **0.0607** | **herb** | Trou_du_Docteur | Sus_scrofa | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Alces_alces | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Bison_priscus | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Capreolus_capreolus | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Cervus_elaphus | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Equus_ferus | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Ovibos_moschatus | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Rangifer_tarandus | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Rupicapra_rupicapra | NA |
| **50.21** | **4.97** | **0.0607** | **herb** | Trou_Reuviau-a-Furfooz | Sus_scrofa | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Bos_primigenius | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Capra_caucasica | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Capreolus_capreolus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Cervus_elaphus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Dama_dama | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Hemitragus_cedrensis | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Megaloceros_giganteus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Rupicapra_rupicapra | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_4_(Vaucluse) | Sus_scrofa | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Bos_primigenius | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Capreolus_capreolus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Cervus_elaphus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Dama_dama | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Equus_ferus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Hemitragus_cedrensis | NA |

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| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Megaloceros_giganteus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Rangifer_tarandus | NA |
| **43.80** | **5.30** | **0.0607** | **herb** | Bau_de_l'Aubesiere,_Couche_IH_(Vaucluse) | Sus_scrofa | NA |
| **43.18** | **-2.10** | **0.0608** | **herb** | Cueva_de_Ermittia | Capreolus_capreolus | NA |
| **43.18** | **-2.10** | **0.0608** | **herb** | Cueva_de_Ermittia | Cervus_elaphus | NA |
| **43.18** | **-2.10** | **0.0608** | **herb** | Cueva_de_Ermittia | Rangifer_tarandus | NA |
| **43.18** | **-2.10** | **0.0608** | **herb** | Cueva_de_Ermittia | Sus_scrofa | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Alces_alces | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Bison_priscus | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Bos_primigenius | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Capreolus_capreolus | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Cervus_elaphus | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Equus_ferus | NA |
| **45.71** | **13.71** | **0.0608** | **herb** | Grotta_Tilde | Megaloceros_giganteus | NA |
| **43.93** | **10.33** | **0.0609** | **herb** | Buca_della_Iena | Bos_primigenius | NA |
| **43.93** | **10.33** | **0.0609** | **herb** | Buca_della_Iena | Capreolus_capreolus | NA |
| **43.93** | **10.33** | **0.0609** | **herb** | Buca_della_Iena | Equus_hydruntinus | NA |
| **43.93** | **10.33** | **0.0609** | **herb** | Buca_della_Iena | Equus_ferus | NA |
| **43.93** | **10.33** | **0.0609** | **herb** | Buca_della_Iena | Sus_scrofa | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Capra_ibex | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Capreolus_capreolus | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Cervus_elaphus | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Dama_clactoniana | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Equus_ferus | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Megaloceros_giganteus | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Rangifer_tarandus | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Rupicapra_rupicapra | NA |
| **40.19** | **21.52** | **0.0609** | **herb** | Dafnero_(Haliakmon_basin) | Stephanorhinus_hemitoechus | NA |
| **45.65** | **11.20** | **0.0611** | **herb** | Covoli_di_Velo | Capra_ibex | NA |
| **45.65** | **11.20** | **0.0611** | **herb** | Covoli_di_Velo | Cervus_elaphus | NA |
| **45.65** | **11.20** | **0.0611** | **herb** | Covoli_di_Velo | Dama_dama | NA |
| **45.65** | **11.20** | **0.0611** | **herb** | Covoli_di_Velo | Sus_scrofa | NA |
| **45.61** | **10.95** | **0.0611** | **herb** | Grotte_di_Veja_A | Capra_ibex | NA |
| **45.61** | **10.95** | **0.0611** | **herb** | Grotte_di_Veja_A | Cervus_elaphus | NA |
| **45.61** | **10.95** | **0.0611** | **herb** | Grotte_di_Veja_A | Dama_dama | NA |
| **45.61** | **10.95** | **0.0611** | **herb** | Grotte_di_Veja_A | Sus_scrofa | NA |
| **41.01** | **-3.01** | **0.0611** | **herb** | Las_Figuras_(Alcorlo)_ | Bos_primigenius | NA |
| **41.01** | **-3.01** | **0.0611** | **herb** | Las_Figuras_(Alcorlo)_ | Capra_pyrenaica | NA |
| **41.01** | **-3.01** | **0.0611** | **herb** | Las_Figuras_(Alcorlo)_ | Capreolus_capreolus | NA |
| **41.01** | **-3.01** | **0.0611** | **herb** | Las_Figuras_(Alcorlo)_ | Cervus_elaphus | NA |
| **41.01** | **-3.01** | **0.0611** | **herb** | Las_Figuras_(Alcorlo)_ | Equus_ferus | NA |
| **41.01** | **-3.01** | **0.0611** | **herb** | Las_Figuras_(Alcorlo)_ | Rupicapra_rupicapra | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Bison_priscus | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Bos_primigenius | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Cervus_elaphus | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Equus_hydruntinus | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Equus_ferus | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Megaloceros_giganteus | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Rangifer_tarandus | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Rupicapra_rupicapra | NA |
| **47.34** | **0.43** | **0.0612** | **herb** | La_Roche_Cotard_[37_-_Langeais] | Sus_scrofa | NA |
| **45.31** | **10.59** | **0.0612** | **herb** | Riparo_Tagliente | Alces_alces | NA |
| **45.31** | **10.59** | **0.0612** | **herb** | Riparo_Tagliente | Capra_ibex | NA |
| **45.31** | **10.59** | **0.0612** | **herb** | Riparo_Tagliente | Capreolus_capreolus | NA |
| **45.31** | **10.59** | **0.0612** | **herb** | Riparo_Tagliente | Cervus_elaphus | NA |
| **45.31** | **10.59** | **0.0612** | **herb** | Riparo_Tagliente | Rupicapra_rupicapra | NA |
| **45.31** | **10.59** | **0.0612** | **herb** | Riparo_Tagliente | Sus_scrofa | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Bos_primigenius | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Bubalus_murrensis | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Capreolus_capreolus | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Cervus_elaphus | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Elephas_antiquus | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Megaloceros_giganteus | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Stephanorhinus_hemitoechus | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Stephanorhinus_kirchbergensis | NA |
| **48.58** | **9.16** | **0.0612** | **herb** | Steinheim_middle_level | Sus_scrofa | NA |
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Alces_alces | NA |
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Cervus_elaphus | NA |
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Coelodonta_antiquitatis | NA |
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Equus_hydruntinus | NA |

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|---|---|---|---|---|---|---|
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Equus_ferus | NA |
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Mammuthus_primigenius | NA |
| **49.27** | **16.70** | **0.0612** | **herb** | Sveduv_Stul_12 | Sus_scrofa | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Bison_priscus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Capreolus_capreolus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Cervus_elaphus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Coelodonta_antiquitatis | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Dama_clactoniana | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Equus_ferus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Hemitragus_bonali | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Mammuthus_primigenius | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Megaloceros_giganteus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Rangifer_tarandus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Stephanorhinus_hemitoechus | NA |
| **44.08** | **1.51** | **0.0613** | **herb** | Abìmes_de_la_Fage,_Corrèze | Stephanorhinus_kirchbergensis | NA |
| **45.07** | **5.23** | **0.0613** | **herb** | Abri_de_Campalou | Alces_alces | NA |
| **45.07** | **5.23** | **0.0613** | **herb** | Abri_de_Campalou | Capra_ibex | NA |
| **45.07** | **5.23** | **0.0613** | **herb** | Abri_de_Campalou | Cervus_elaphus | NA |
| **45.07** | **5.23** | **0.0613** | **herb** | Abri_de_Campalou | Equus_ferus | NA |
| **45.07** | **5.23** | **0.0613** | **herb** | Abri_de_Campalou | Rangifer_tarandus | NA |
| **45.07** | **5.23** | **0.0613** | **herb** | Abri_de_Campalou | Sus_scrofa | NA |
| **44.08** | **1.72** | **0.0613** | **herb** | Abri_des_Battus_5 | Capra_ibex | NA |
| **44.08** | **1.72** | **0.0613** | **herb** | Abri_des_Battus_5 | Cervus_elaphus | NA |
| **44.08** | **1.72** | **0.0613** | **herb** | Abri_des_Battus_5 | Equus_ferus | NA |
| **44.08** | **1.72** | **0.0613** | **herb** | Abri_des_Battus_5 | Rangifer_tarandus | NA |
| **44.08** | **1.72** | **0.0613** | **herb** | Abri_des_Battus_5 | Rupicapra_rupicapra | NA |
| **44.08** | **1.72** | **0.0613** | **herb** | Abri_des_Battus_5 | Sus_scrofa | NA |
| **42.05** | **-3.47** | **0.0613** | **herb** | Cueva_Millan_1a | Capra_pyrenaica | NA |
| **42.05** | **-3.47** | **0.0613** | **herb** | Cueva_Millan_1a | Capreolus_capreolus | NA |
| **42.05** | **-3.47** | **0.0613** | **herb** | Cueva_Millan_1a | Cervus_elaphus | NA |
| **42.05** | **-3.47** | **0.0613** | **herb** | Cueva_Millan_1a | Equus_ferus | NA |
| **42.05** | **-3.47** | **0.0613** | **herb** | Cueva_Millan_1a | Rupicapra_rupicapra | NA |
| **39.36** | **-9.37** | **0.0613** | **herb** | Furninha | Bos_primigenius | NA |
| **39.36** | **-9.37** | **0.0613** | **herb** | Furninha | Cervus_elaphus | NA |
| **39.36** | **-9.37** | **0.0613** | **herb** | Furninha | Stephanorhinus_hemitoechus | NA |
| **45.61** | **10.95** | **0.0613** | **herb** | Grotte_di_Veja_C | Alces_alces | NA |
| **45.61** | **10.95** | **0.0613** | **herb** | Grotte_di_Veja_C | Bos_primigenius | NA |
| **45.61** | **10.95** | **0.0613** | **herb** | Grotte_di_Veja_C | Capra_ibex | NA |
| **45.61** | **10.95** | **0.0613** | **herb** | Grotte_di_Veja_C | Cervus_elaphus | NA |
| **45.61** | **10.95** | **0.0613** | **herb** | Grotte_di_Veja_C | Sus_scrofa | NA |
| **48.50** | **20.30** | **0.0613** | **herb** | Horvolgy | Capreolus_capreolus | NA |
| **48.50** | **20.30** | **0.0613** | **herb** | Horvolgy | Cervus_elaphus | NA |
| **41.77** | **15.65** | **0.0613** | **herb** | Ingarano_d/e | Bos_primigenius | NA |
| **41.77** | **15.65** | **0.0613** | **herb** | Ingarano_d/e | Capreolus_capreolus | NA |
| **41.77** | **15.65** | **0.0613** | **herb** | Ingarano_d/e | Cervus_elaphus | NA |
| **41.77** | **15.65** | **0.0613** | **herb** | Ingarano_d/e | Equus_hydruntinus | NA |
| **45.03** | **0.50** | **0.0613** | **herb** | La_Grotte_des_Fees | Cervus_elaphus | NA |
| **45.03** | **0.50** | **0.0613** | **herb** | La_Grotte_des_Fees | Equus_ferus | NA |
| **45.03** | **0.50** | **0.0613** | **herb** | La_Grotte_des_Fees | Rangifer_tarandus | NA |
| **45.03** | **0.50** | **0.0613** | **herb** | La_Grotte_des_Fees | Rupicapra_rupicapra | NA |
| **45.03** | **0.50** | **0.0613** | **herb** | La_Grotte_des_Fees | Saiga_tatarica | NA |
| **45.03** | **0.50** | **0.0613** | **herb** | La_Grotte_des_Fees | Sus_scrofa | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Bison_priscus | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Bos_primigenius | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Cervus_elaphus | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Equus_ferus | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Megaloceros_giganteus | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Ovis_ammon | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Saiga_tatarica | NA |
| **44.42** | **28.52** | **0.0613** | **herb** | Pestera_la_Adam29 | Sus_scrofa | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Alces_alces | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Bison_priscus | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Bos_primigenius | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Capra_ibex | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Capreolus_capreolus | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Cervus_elaphus | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Dama_dama | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Mammuthus_trogontherii | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Megaloceros_giganteus | NA |
| **45.27** | **11.00** | **0.0613** | **herb** | Quinzano | Rupicapra_rupicapra | NA |

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|---|---|---|---|---|---|---|
| **40.22** | **18.22** | **0.0613** | **herb** | Sternatia | Bos_primigenius | NA |
| **40.22** | **18.22** | **0.0613** | **herb** | Sternatia | Capra_ibex | NA |
| **40.22** | **18.22** | **0.0613** | **herb** | Sternatia | Cervus_elaphus | NA |
| **40.22** | **18.22** | **0.0613** | **herb** | Sternatia | Dama_dama | NA |
| **40.22** | **18.22** | **0.0613** | **herb** | Sternatia | Equus_hydruntinus | NA |
| **40.22** | **18.22** | **0.0613** | **herb** | Sternatia | Equus_ferus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Bos_primigenius | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Capreolus_capreolus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Cervus_elaphus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Equus_hydruntinus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Equus_ferus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Megaloceros_giganteus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Rangifer_tarandus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Stephanorhinus_hemitoechus | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Stephanorhinus_kirchbergensis | NA |
| **50.90** | **1.90** | **0.0615** | **herb** | Biache_Saint_Waast_(Pas_de_Calais) | Sus_scrofa | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Bos_primigenius | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Capreolus_capreolus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Cervus_elaphus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Equus_hydruntinus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Equus_ferus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Megaloceros_giganteus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Rangifer_tarandus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Stephanorhinus_hemitoechus | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Stephanorhinus_kirchbergensis | NA |
| **41.40** | **24.20** | **0.0615** | **herb** | Drama_basin_(E._Macedonia) | Sus_scrofa | NA |
| **51.47** | **10.02** | **0.0616** | **herb** | Bettenroder_Berg_14 | Capreolus_capreolus | NA |
| **51.47** | **10.02** | **0.0616** | **herb** | Bettenroder_Berg_14 | Cervus_elaphus | NA |
| **51.47** | **10.02** | **0.0616** | **herb** | Bettenroder_Berg_14 | Rangifer_tarandus | NA |
| **51.47** | **10.02** | **0.0616** | **herb** | Bettenroder_Berg_14 | Sus_scrofa | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Bison_priscus | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Bos_primigenius | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Capreolus_capreolus | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Cervus_elaphus | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Equus_ferus | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Rupicapra_rupicapra | NA |
| **43.28** | **-3.95** | **0.0616** | **herb** | Castillo22 | Stephanorhinus_kirchbergensis | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Bos_primigenius | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Capra_ibex | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Capreolus_capreolus | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Cervus_elaphus | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Dama_dama | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Equus_ferus | NA |
| **45.73** | **13.73** | **0.0616** | **herb** | Grotta_San_Leonardo | Sus_scrofa | NA |
| **43.80** | **3.87** | **0.0616** | **herb** | Hortus_Grotte_ | Capra_caucasica | NA |
| **43.80** | **3.87** | **0.0616** | **herb** | Hortus_Grotte_ | Capreolus_capreolus | NA |
| **43.80** | **3.87** | **0.0616** | **herb** | Hortus_Grotte_ | Cervus_elaphus | NA |
| **43.80** | **3.87** | **0.0616** | **herb** | Hortus_Grotte_ | Equus_ferus | NA |
| **43.80** | **3.87** | **0.0616** | **herb** | Hortus_Grotte_ | Rangifer_tarandus | NA |
| **43.80** | **3.87** | **0.0616** | **herb** | Hortus_Grotte_ | Stephanorhinus_kirchbergensis | NA |
| **57.09** | **84.50** | **0.0616** | **herb** | Krasny_Jar_2 | Bison_priscus | NA |
| **57.09** | **84.50** | **0.0616** | **herb** | Krasny_Jar_2 | Equus_ferus | NA |
| **57.09** | **84.50** | **0.0616** | **herb** | Krasny_Jar_2 | Mammuthus_trogontherii | NA |
| **57.09** | **84.50** | **0.0616** | **herb** | Krasny_Jar_2 | Stephanorhinus_hemitoechus | NA |
| **46.20** | **11.16** | **0.0616** | **herb** | Riparo_Predastel | Capra_ibex | NA |
| **46.20** | **11.16** | **0.0616** | **herb** | Riparo_Predastel | Capreolus_capreolus | NA |
| **46.20** | **11.16** | **0.0616** | **herb** | Riparo_Predastel | Cervus_elaphus | NA |
| **46.20** | **11.16** | **0.0616** | **herb** | Riparo_Predastel | Sus_scrofa | NA |
| **44.01** | **0.50** | **0.0617** | **herb** | Gr._de_la_Nauterie_I_[La_Romieu] | Bos_primigenius | NA |
| **44.01** | **0.50** | **0.0617** | **herb** | Gr._de_la_Nauterie_I_[La_Romieu] | Cervus_elaphus | NA |
| **44.01** | **0.50** | **0.0617** | **herb** | Gr._de_la_Nauterie_I_[La_Romieu] | Equus_ferus | NA |
| **45.30** | **10.59** | **0.0617** | **herb** | Riparo_Mezzena | Capra_ibex | NA |
| **45.30** | **10.59** | **0.0617** | **herb** | Riparo_Mezzena | Cervus_elaphus | NA |
| **45.30** | **10.59** | **0.0617** | **herb** | Riparo_Mezzena | Dama_dama | NA |
| **45.30** | **10.59** | **0.0617** | **herb** | Riparo_Mezzena | Equus_ferus | NA |
| **45.30** | **10.59** | **0.0617** | **herb** | Riparo_Mezzena | Sus_scrofa | NA |

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|---|---|---|---|---|---|---|
| **45.42** | **11.25** | **0.0617** | **herb** | Soave | Bison_priscus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Soave | Capreolus_capreolus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Soave | Cervus_elaphus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Soave | Dama_dama | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Capreolus_capreolus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Cervus_elaphus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Dama_dama | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Elephas_antiquus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Hippopotamus_amphibius | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Megaloceros_giganteus | NA |
| **45.42** | **11.25** | **0.0617** | **herb** | Zoppenga_1 | Stephanorhinus_kirchbergensis | NA |
| **44.82** | **0.09** | **0.0619** | **herb** | Abri_du_Morin_B1 | Cervus_elaphus | NA |
| **44.82** | **0.09** | **0.0619** | **herb** | Abri_du_Morin_B1 | Equus_ferus | NA |
| **44.82** | **0.09** | **0.0619** | **herb** | Abri_du_Morin_B1 | Megaloceros_giganteus | NA |
| **44.82** | **0.09** | **0.0619** | **herb** | Abri_du_Morin_B1 | Rangifer_tarandus | NA |
| **44.82** | **0.09** | **0.0619** | **herb** | Abri_du_Morin_B1 | Sus_scrofa | NA |
| **41.05** | **22.50** | **0.0619** | **herb** | Agios_Georgios | Cervus_elaphus | NA |
| **41.05** | **22.50** | **0.0619** | **herb** | Agios_Georgios | Equus_hydruntinus | NA |
| **41.05** | **22.50** | **0.0619** | **herb** | Agios_Georgios | Equus_ferus | NA |
| **45.90** | **13.70** | **0.0619** | **herb** | Grotta_Azzurra | Capra_ibex | NA |
| **45.90** | **13.70** | **0.0619** | **herb** | Grotta_Azzurra | Capreolus_capreolus | NA |
| **45.90** | **13.70** | **0.0619** | **herb** | Grotta_Azzurra | Cervus_elaphus | NA |
| **45.90** | **13.70** | **0.0619** | **herb** | Grotta_Azzurra | Sus_scrofa | NA |
| **45.67** | **13.75** | **0.0619** | **herb** | Grotta_Benussi | Alces_alces | NA |
| **45.67** | **13.75** | **0.0619** | **herb** | Grotta_Benussi | Capreolus_capreolus | NA |
| **45.67** | **13.75** | **0.0619** | **herb** | Grotta_Benussi | Cervus_elaphus | NA |
| **45.67** | **13.75** | **0.0619** | **herb** | Grotta_Benussi | Sus_scrofa | NA |
| **41.93** | **12.50** | **0.0619** | **herb** | Monte_Delle_Gioie | Bos_primigenius | NA |
| **41.93** | **12.50** | **0.0619** | **herb** | Monte_Delle_Gioie | Cervus_elaphus | NA |
| **41.93** | **12.50** | **0.0619** | **herb** | Monte_Delle_Gioie | Dama_dama | NA |
| **41.93** | **12.50** | **0.0619** | **herb** | Monte_Delle_Gioie | Elephas_antiquus | NA |
| **41.93** | **12.50** | **0.0619** | **herb** | Monte_Delle_Gioie | Hippopotamus_amphibius | NA |
| **41.93** | **12.50** | **0.0619** | **herb** | Monte_Delle_Gioie | Stephanorhinus_hemitoechus | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Bison_priscus | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Bos_primigenius | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Camelus_knoblochi | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Cervus_elaphus | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Coelodonta_antiquitatis | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Equus_ferus | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Mammuthus_trogontherii | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Megaloceros_giganteus | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Saiga_tatarica | NA |
| **47.02** | **47.44** | **0.0619** | **herb** | Singil | Stephanorhinus_kirchbergensis | NA |
| **45.63** | **0.15** | **0.0620** | **herb** | Artenac_10 | Bos_primigenius | NA |
| **45.63** | **0.15** | **0.0620** | **herb** | Artenac_10 | Cervus_elaphus | NA |
| **45.63** | **0.15** | **0.0620** | **herb** | Artenac_10 | Equus_hydruntinus | NA |
| **45.63** | **0.15** | **0.0620** | **herb** | Artenac_10 | Equus_ferus | NA |
| **45.73** | **13.73** | **0.0620** | **herb** | Bristie_1 | Bos_primigenius | NA |
| **45.73** | **13.73** | **0.0620** | **herb** | Bristie_1 | Capreolus_capreolus | NA |
| **45.73** | **13.73** | **0.0620** | **herb** | Bristie_1 | Cervus_elaphus | NA |
| **45.73** | **13.73** | **0.0620** | **herb** | Bristie_1 | Sus_scrofa | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Bos_primigenius | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Capreolus_capreolus | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Cervus_elaphus | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Elephas_antiquus | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Mammuthus_primigenius | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Megaloceros_giganteus | NA |
| **48.79** | **9.18** | **0.0620** | **herb** | Cannstatt_I | Sus_scrofa | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Capra_pyrenaica | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Capreolus_capreolus | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Cervus_elaphus | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Equus_ferus | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Rupicapra_rupicapra | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Stephanorhinus_hemitoechus | NA |
| **40.95** | **-2.28** | **0.0620** | **herb** | Los_Casares_B_(Guadalajara) | Sus_scrofa | NA |
| **45.00** | **39.00** | **0.0620** | **herb** | Mezmaiskaya_Cave_2A | Bison_priscus | NA |
| **45.00** | **39.00** | **0.0620** | **herb** | Mezmaiskaya_Cave_2A | Capra_caucasica | NA |
| **45.00** | **39.00** | **0.0620** | **herb** | Mezmaiskaya_Cave_2A | Capreolus_capreolus | NA |
| **45.00** | **39.00** | **0.0620** | **herb** | Mezmaiskaya_Cave_2A | Cervus_elaphus | NA |

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|---|---|---|---|---|---|---|
| **45.00** | **39.00** | **0.0620** | **herb** | Mezmaiskaya_Cave_2A | Rangifer_tarandus | NA |
| **43.11** | **0.37** | **0.0620** | **herb** | Montousse_I_(Haute_Pyrenees) | Bison_priscus | NA |
| **43.11** | **0.37** | **0.0620** | **herb** | Montousse_I_(Haute_Pyrenees) | Capreolus_capreolus | NA |
| **43.11** | **0.37** | **0.0620** | **herb** | Montousse_I_(Haute_Pyrenees) | Cervus_elaphus | NA |
| **43.11** | **0.37** | **0.0620** | **herb** | Montousse_I_(Haute_Pyrenees) | Equus_ferus | NA |
| **43.11** | **0.37** | **0.0620** | **herb** | Montousse_I_(Haute_Pyrenees) | Stephanorhinus_hemitoechus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Bison_priscus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Bos_primigenius | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Capreolus_capreolus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Cervus_elaphus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Equus_hydruntinus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Equus_ferus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Megaloceros_giganteus | NA |
| **44.81** | **1.22** | **0.0620** | **herb** | Combe_Grenal_[Domme,_Dordogne]50 | Sus_scrofa | NA |
| **46.71** | **0.87** | **0.0623** | **herb** | A._Rousseau_[Dousse] | Capreolus_capreolus | NA |
| **46.71** | **0.87** | **0.0623** | **herb** | A._Rousseau_[Dousse] | Cervus_elaphus | NA |
| **46.71** | **0.87** | **0.0623** | **herb** | A._Rousseau_[Dousse] | Equus_hydruntinus | NA |
| **46.71** | **0.87** | **0.0623** | **herb** | A._Rousseau_[Dousse] | Equus_ferus | NA |
| **46.71** | **0.87** | **0.0623** | **herb** | A._Rousseau_[Dousse] | Rangifer_tarandus | NA |
| **46.71** | **0.87** | **0.0623** | **herb** | A._Rousseau_[Dousse] | Sus_scrofa | NA |
| **44.85** | **1.27** | **0.0623** | **herb** | Abri_Caminade-Ouest | Capreolus_capreolus | NA |
| **44.85** | **1.27** | **0.0623** | **herb** | Abri_Caminade-Ouest | Cervus_elaphus | NA |
| **44.85** | **1.27** | **0.0623** | **herb** | Abri_Caminade-Ouest | Equus_ferus | NA |
| **44.85** | **1.27** | **0.0623** | **herb** | Abri_Caminade-Ouest | Rangifer_tarandus | NA |
| **44.85** | **1.27** | **0.0623** | **herb** | Abri_Caminade-Ouest | Sus_scrofa | NA |
| **44.82** | **0.09** | **0.0623** | **herb** | Abri_du_Morin_A4 | Capreolus_capreolus | NA |
| **44.82** | **0.09** | **0.0623** | **herb** | Abri_du_Morin_A4 | Cervus_elaphus | NA |
| **44.82** | **0.09** | **0.0623** | **herb** | Abri_du_Morin_A4 | Equus_hydruntinus | NA |
| **44.82** | **0.09** | **0.0623** | **herb** | Abri_du_Morin_A4 | Equus_ferus | NA |
| **44.82** | **0.09** | **0.0623** | **herb** | Abri_du_Morin_A4 | Rangifer_tarandus | NA |
| **44.82** | **0.09** | **0.0623** | **herb** | Abri_du_Morin_A4 | Sus_scrofa | NA |
| **47.25** | **6.00** | **0.0623** | **herb** | Baume_de_Gonvillars_(Becanson) | Bison_priscus | NA |
| **47.25** | **6.00** | **0.0623** | **herb** | Baume_de_Gonvillars_(Becanson) | Capreolus_capreolus | NA |
| **47.25** | **6.00** | **0.0623** | **herb** | Baume_de_Gonvillars_(Becanson) | Cervus_elaphus | NA |
| **47.25** | **6.00** | **0.0623** | **herb** | Baume_de_Gonvillars_(Becanson) | Equus_ferus | NA |
| **47.25** | **6.00** | **0.0623** | **herb** | Baume_de_Gonvillars_(Becanson) | Stephanorhinus_kirchbergensis | NA |
| **47.25** | **6.00** | **0.0623** | **herb** | Baume_de_Gonvillars_(Becanson) | Sus_scrofa | NA |
| **42.80** | **2.75** | **0.0623** | **herb** | Caune_de_L'Arago,_Complexe_Sommital_(Pyrennes) | Bison_priscus | NA |
| **42.80** | **2.75** | **0.0623** | **herb** | Caune_de_L'Arago,_Complexe_Sommital_(Pyrennes) | Capra_caucasica | NA |
| **42.80** | **2.75** | **0.0623** | **herb** | Caune_de_L'Arago,_Complexe_Sommital_(Pyrennes) | Cervus_elaphus | NA |
| **42.80** | **2.75** | **0.0623** | **herb** | Caune_de_L'Arago,_Complexe_Sommital_(Pyrennes) | Equus_ferus | NA |
| **42.80** | **2.75** | **0.0623** | **herb** | Caune_de_L'Arago,_Complexe_Sommital_(Pyrennes) | Hemitragus_cedrensis | NA |
| **42.80** | **2.75** | **0.0623** | **herb** | Caune_de_L'Arago,_Complexe_Sommital_(Pyrennes) | Sus_scrofa | NA |
| **49.30** | **1.03** | **0.0623** | **herb** | Cleon | Bos_primigenius | NA |
| **49.30** | **1.03** | **0.0623** | **herb** | Cleon | Cervus_elaphus | NA |
| **49.30** | **1.03** | **0.0623** | **herb** | Cleon | Elephas_antiquus | NA |
| **49.30** | **1.03** | **0.0623** | **herb** | Cleon | Stephanorhinus_hemitoechus | NA |
| **40.87** | **-3.33** | **0.0623** | **herb** | Cueva_del_Congosto,_Guadalajara | Bos_primigenius | NA |
| **40.87** | **-3.33** | **0.0623** | **herb** | Cueva_del_Congosto,_Guadalajara | Capreolus_capreolus | NA |
| **40.87** | **-3.33** | **0.0623** | **herb** | Cueva_del_Congosto,_Guadalajara | Cervus_elaphus | NA |
| **40.87** | **-3.33** | **0.0623** | **herb** | Cueva_del_Congosto,_Guadalajara | Equus_ferus | NA |
| **40.87** | **-3.33** | **0.0623** | **herb** | Cueva_del_Congosto,_Guadalajara | Stephanorhinus_hemitoechus | NA |
| **40.87** | **-3.33** | **0.0623** | **herb** | Cueva_del_Congosto,_Guadalajara | Sus_scrofa | NA |
| **42.00** | **0.83** | **0.0623** | **herb** | Grotta_Cola | Capreolus_capreolus | NA |
| **42.00** | **0.83** | **0.0623** | **herb** | Grotta_Cola | Cervus_elaphus | NA |
| **42.00** | **0.83** | **0.0623** | **herb** | Grotta_Cola | Dama_dama | NA |
| **42.00** | **0.83** | **0.0623** | **herb** | Grotta_Cola | Sus_scrofa | NA |
| **45.28** | **11.36** | **0.0623** | **herb** | Grotta_Perin | Bos_primigenius | NA |
| **45.28** | **11.36** | **0.0623** | **herb** | Grotta_Perin | Capreolus_capreolus | NA |
| **45.28** | **11.36** | **0.0623** | **herb** | Grotta_Perin | Cervus_elaphus | NA |
| **45.28** | **11.36** | **0.0623** | **herb** | Grotta_Perin | Sus_scrofa | NA |
| **40.37** | **23.15** | **0.0623** | **herb** | Petralona_(Chalkidiki) | Bison_priscus | NA |
| **40.37** | **23.15** | **0.0623** | **herb** | Petralona_(Chalkidiki) | Capreolus_capreolus | NA |
| **40.37** | **23.15** | **0.0623** | **herb** | Petralona_(Chalkidiki) | Cervus_elaphus | NA |
| **40.37** | **23.15** | **0.0623** | **herb** | Petralona_(Chalkidiki) | Equus_ferus | NA |
| **40.37** | **23.15** | **0.0623** | **herb** | Petralona_(Chalkidiki) | Stephanorhinus_kirchbergensis | NA |
| **40.37** | **23.15** | **0.0623** | **herb** | Petralona_(Chalkidiki) | Sus_scrofa | NA |
| **42.10** | **12.52** | **0.0623** | **herb** | Riano | Cervus_elaphus | NA |

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| **42.10** | **12.52** | **0.0623** | **herb** | Riano | Dama_clactoniana | NA |
| **42.10** | **12.52** | **0.0623** | **herb** | Riano | Elephas_antiquus | NA |
| **42.10** | **12.52** | **0.0623** | **herb** | Riano | Stephanorhinus_hemitoechus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Bison_priscus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Bos_primigenius | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Capreolus_capreolus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Cervus_elaphus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Dama_dama | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Equus_hydruntinus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Equus_ferus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Stephanorhinus_hemitoechus | NA |
| **40.11** | **18.30** | **0.0623** | **herb** | San_Sidero | Sus_scrofa | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Bos_primigenius | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Cervus_elaphus | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Elephas_antiquus | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Equus_ferus | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Megaloceros_giganteus | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Stephanorhinus_hemitoechus | NA |
| **41.92** | **12.20** | **0.0623** | **herb** | Torre_In_Pietra_(Lower_Beds) | Sus_scrofa | NA |
| **41.78** | **12.40** | **0.0623** | **herb** | Vitinia_(Upper_Beds)_(Roma_province) | Bos_primigenius | NA |
| **41.78** | **12.40** | **0.0623** | **herb** | Vitinia_(Upper_Beds)_(Roma_province) | Cervus_elaphus | NA |
| **41.78** | **12.40** | **0.0623** | **herb** | Vitinia_(Upper_Beds)_(Roma_province) | Dama_dama | NA |
| **41.78** | **12.40** | **0.0623** | **herb** | Vitinia_(Upper_Beds)_(Roma_province) | Elephas_antiquus | NA |
| **41.31** | **24.00** | **0.0623** | **herb** | Volax_(E._Macedonia) | Bison_priscus | NA |
| **41.31** | **24.00** | **0.0623** | **herb** | Volax_(E._Macedonia) | Capra_caucasica | NA |
| **41.31** | **24.00** | **0.0623** | **herb** | Volax_(E._Macedonia) | Cervus_elaphus | NA |
| **41.31** | **24.00** | **0.0623** | **herb** | Volax_(E._Macedonia) | Equus_ferus | NA |
| **41.31** | **24.00** | **0.0623** | **herb** | Volax_(E._Macedonia) | Hemitragus_cedrensis | NA |
| **41.31** | **24.00** | **0.0623** | **herb** | Volax_(E._Macedonia) | Sus_scrofa | NA |
| **50.99** | **4.50** | **0.0625** | **herb** | Hofstade_I | Coelodonta_antiquitatis | NA |
| **50.99** | **4.50** | **0.0625** | **herb** | Hofstade_I | Mammuthus_primigenius | NA |
| **50.99** | **4.50** | **0.0625** | **herb** | Hofstade_I | Megaloceros_giganteus | NA |
| **50.99** | **4.50** | **0.0625** | **herb** | Hofstade_I | Rangifer_tarandus | NA |
| **50.23** | **16.90** | **0.0625** | **herb** | Jaskinia_Niedwiedzia | Capreolus_capreolus | NA |
| **50.23** | **16.90** | **0.0625** | **herb** | Jaskinia_Niedwiedzia | Sus_scrofa | NA |
| **48.40** | **9.77** | **0.0625** | **herb** | Sirgenstein_cave | Capra_ibex | NA |
| **48.40** | **9.77** | **0.0625** | **herb** | Sirgenstein_cave | Coelodonta_antiquitatis | NA |
| **48.40** | **9.77** | **0.0625** | **herb** | Sirgenstein_cave | Equus_ferus | NA |
| **48.40** | **9.77** | **0.0625** | **herb** | Sirgenstein_cave | Mammuthus_primigenius | NA |
| **48.40** | **9.77** | **0.0625** | **herb** | Sirgenstein_cave | Rangifer_tarandus | NA |
| **45.84** | **15.87** | **0.0625** | **herb** | Veternica_cave_i | Alces_alces | NA |
| **45.84** | **15.87** | **0.0625** | **herb** | Veternica_cave_i | Bos_primigenius | NA |
| **45.84** | **15.87** | **0.0625** | **herb** | Veternica_cave_i | Capreolus_capreolus | NA |
| **45.84** | **15.87** | **0.0625** | **herb** | Veternica_cave_i | Cervus_elaphus | NA |
| **45.84** | **15.87** | **0.0625** | **herb** | Veternica_cave_i | Megaloceros_giganteus | NA |
| **50.42** | **8.13** | **0.0625** | **herb** | Wildenscheuer_cave_st._I-II | Coelodonta_antiquitatis | NA |
| **50.42** | **8.13** | **0.0625** | **herb** | Wildenscheuer_cave_st._I-II | Megaloceros_giganteus | NA |
| **45.00** | **39.00** | **0.0625** | **herb** | Mezmaiskaya_Cave_1–2 | Bison_priscus | NA |
| **45.00** | **39.00** | **0.0625** | **herb** | Mezmaiskaya_Cave_1–2 | Capra_caucasica | NA |
| **45.00** | **39.00** | **0.0625** | **herb** | Mezmaiskaya_Cave_1–2 | Cervus_elaphus | NA |
| **45.00** | **39.00** | **0.0625** | **herb** | Mezmaiskaya_Cave_1–2 | Equus_hydruntinus | NA |
| **41.92** | **12.50** | **0.0625** | **herb** | Prati_Fiscali | Bos_primigenius | NA |
| **41.92** | **12.50** | **0.0625** | **herb** | Prati_Fiscali | Cervus_elaphus | NA |
| **41.92** | **12.50** | **0.0625** | **herb** | Prati_Fiscali | Dama_dama | NA |
| **41.92** | **12.50** | **0.0625** | **herb** | Prati_Fiscali | Elephas_antiquus | NA |
| **41.92** | **12.50** | **0.0625** | **herb** | Prati_Fiscali | Equus_ferus | NA |
| **41.92** | **12.50** | **0.0625** | **herb** | Prati_Fiscali | Stephanorhinus_hemitoechus | NA |
| **42.45** | **11.25** | **0.0626** | **herb** | Brecce_di_Soave | Capreolus_capreolus | NA |
| **42.45** | **11.25** | **0.0626** | **herb** | Brecce_di_Soave | Cervus_elaphus | NA |
| **42.45** | **11.25** | **0.0626** | **herb** | Brecce_di_Soave | Dama_dama | NA |
| **42.45** | **11.25** | **0.0626** | **herb** | Brecce_di_Soave | Equus_ferus | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Bison_priscus | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Cervus_elaphus | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Dama_clactoniana | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Equus_ferus | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Hemitragus_bonali | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Praeovibos_priscus | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Rangifer_tarandus | NA |
| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Rupicapra_rupicapra | NA |

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| **42.80** | **2.75** | **0.0626** | **herb** | Caune_de_L'Arago_CM_III_(Pyrenees) | Stephanorhinus_hemitoechus | NA |
| **40.90** | **-0.71** | **0.0626** | **herb** | Cueva_de_los_Huesos | Cervus_elaphus | NA |
| **40.90** | **-0.71** | **0.0626** | **herb** | Cueva_de_los_Huesos | Equus_ferus | NA |
| **51.43** | **0.30** | **0.0626** | **herb** | Purfleet_gravels | Capreolus_capreolus | NA |
| **51.43** | **0.30** | **0.0626** | **herb** | Purfleet_gravels | Cervus_elaphus | NA |
| **51.43** | **0.30** | **0.0626** | **herb** | Purfleet_gravels | Dama_dama | NA |
| **51.43** | **0.30** | **0.0626** | **herb** | Purfleet_gravels | Equus_ferus | NA |
| **40.80** | **-4.37** | **0.0626** | **herb** | Villacastin_C2 | Cervus_elaphus | NA |
| **40.80** | **-4.37** | **0.0626** | **herb** | Villacastin_C2 | Dama_clactoniana | NA |
| **40.80** | **-4.37** | **0.0626** | **herb** | Villacastin_C2 | Equus_ferus | NA |
| **40.80** | **-4.37** | **0.0626** | **herb** | Villacastin_C2 | Sus_scrofa | NA |
| **43.47** | **11.62** | **0.0628** | **herb** | Bucine_(Arezzo) | Capreolus_capreolus | NA |
| **43.47** | **11.62** | **0.0628** | **herb** | Bucine_(Arezzo) | Cervus_elaphus | NA |
| **43.47** | **11.62** | **0.0628** | **herb** | Bucine_(Arezzo) | Dama_dama | NA |
| **43.47** | **11.62** | **0.0628** | **herb** | Bucine_(Arezzo) | Elephas_antiquus | NA |
| **43.47** | **11.62** | **0.0628** | **herb** | Bucine_(Arezzo) | Mammuthus_primigenius | NA |
| **43.47** | **11.62** | **0.0628** | **herb** | Bucine_(Arezzo) | Sus_scrofa | NA |
| **40.91** | **-3.81** | **0.0628** | **herb** | Pinilla_del_Valle,_Madrid | Capreolus_capreolus | NA |
| **40.91** | **-3.81** | **0.0628** | **herb** | Pinilla_del_Valle,_Madrid | Cervus_elaphus | NA |
| **40.91** | **-3.81** | **0.0628** | **herb** | Pinilla_del_Valle,_Madrid | Equus_ferus | NA |
| **40.91** | **-3.81** | **0.0628** | **herb** | Pinilla_del_Valle,_Madrid | Stephanorhinus_hemitoechus | NA |
| **40.91** | **-3.81** | **0.0628** | **herb** | Pinilla_del_Valle,_Madrid | Sus_scrofa | NA |
| **41.15** | **-2.50** | **0.0629** | **herb** | Ambrona | Bos_primigenius | NA |
| **41.15** | **-2.50** | **0.0629** | **herb** | Ambrona | Cervus_elaphus | NA |
| **41.15** | **-2.50** | **0.0629** | **herb** | Ambrona | Dama_dama | NA |
| **41.15** | **-2.50** | **0.0629** | **herb** | Ambrona | Elephas_antiquus | NA |
| **41.15** | **-2.50** | **0.0629** | **herb** | Ambrona | Equus_ferus | NA |
| **41.15** | **-2.50** | **0.0629** | **herb** | Ambrona | Stephanorhinus_hemitoechus | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Bos_primigenius | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Cervus_elaphus | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Dama_dama | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Elephas_antiquus | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Equus_hydruntinus | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Equus_ferus | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Stephanorhinus_hemitoechus | NA |
| **42.22** | **12.73** | **0.0629** | **herb** | Fara_Sabina | Sus_scrofa | NA |
| **41.00** | **-3.25** | **0.0629** | **herb** | Los_Torrejones | Capreolus_capreolus | NA |
| **41.00** | **-3.25** | **0.0629** | **herb** | Los_Torrejones | Cervus_elaphus | NA |
| **41.00** | **-3.25** | **0.0629** | **herb** | Los_Torrejones | Equus_hydruntinus | NA |
| **41.00** | **-3.25** | **0.0629** | **herb** | Los_Torrejones | Equus_ferus | NA |
| **41.00** | **-3.25** | **0.0629** | **herb** | Los_Torrejones | Stephanorhinus_hemitoechus | NA |
| **41.00** | **-3.25** | **0.0629** | **herb** | Los_Torrejones | Sus_scrofa | NA |
| **55.00** | **3.00** | **0.0630** | **herb** | Dogger_Bank | Bos_primigenius | NA |
| **55.00** | **3.00** | **0.0630** | **herb** | Dogger_Bank | Cervus_elaphus | NA |
| **55.00** | **3.00** | **0.0630** | **herb** | Dogger_Bank | Rangifer_tarandus | NA |
| **43.30** | **47.00** | **0.0630** | **herb** | Alkhast | Capreolus_capreolus | NA |
| **43.30** | **47.00** | **0.0630** | **herb** | Alkhast | Cervus_elaphus | NA |
| **43.30** | **47.00** | **0.0630** | **herb** | Alkhast | Equus_ferus | NA |
| **43.30** | **47.00** | **0.0630** | **herb** | Alkhast | Sus_scrofa | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_B | Capra_ibex | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_B | Cervus_elaphus | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_B | Dama_dama | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_B | Hippopotamus_amphibius | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_C | Capra_ibex | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_C | Cervus_elaphus | NA |
| **37.00** | **22.58** | **0.0630** | **herb** | Apidima_Cave_C | Dama_dama | NA |
| **41.98** | **12.10** | **0.0630** | **herb** | Cerveteri_(Rome) | Bos_primigenius | NA |
| **41.98** | **12.10** | **0.0630** | **herb** | Cerveteri_(Rome) | Cervus_elaphus | NA |
| **41.98** | **12.10** | **0.0630** | **herb** | Cerveteri_(Rome) | Dama_dama | NA |
| **41.98** | **12.10** | **0.0630** | **herb** | Cerveteri_(Rome) | Elephas_antiquus | NA |
| **41.98** | **12.10** | **0.0630** | **herb** | Cerveteri_(Rome) | Equus_ferus | NA |
| **36.22** | **-5.50** | **0.0630** | **herb** | Devil's_Tower | Bos_primigenius | NA |
| **36.22** | **-5.50** | **0.0630** | **herb** | Devil's_Tower | Capra_pyrenaica | NA |
| **36.22** | **-5.50** | **0.0630** | **herb** | Devil's_Tower | Cervus_elaphus | NA |
| **36.22** | **-5.50** | **0.0630** | **herb** | Devil's_Tower | Elephas_antiquus | NA |
| **36.22** | **-5.50** | **0.0630** | **herb** | Devil's_Tower | Sus_scrofa | NA |
| **45.60** | **43.00** | **0.0630** | **herb** | Zejukovo,_Nal'chik | Cervus_elaphus | NA |
| **45.60** | **43.00** | **0.0630** | **herb** | Zejukovo,_Nal'chik | Equus_ferus | NA |

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|---|---|---|---|---|---|---|
| **45.60** | **43.00** | **0.0630** | **herb** | Zejukovo,_Nal'chik | Sus_scrofa | NA |
| **49.00** | **32.00** | **0.0632** | **herb** | Andreevka | Cervus_elaphus | NA |
| **49.00** | **32.00** | **0.0632** | **herb** | Andreevka | Equus_hydruntinus | NA |
| **49.00** | **32.00** | **0.0632** | **herb** | Andreevka | Equus_ferus | NA |
| **49.00** | **32.00** | **0.0632** | **herb** | Andreevka | Sus_scrofa | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Bison_priscus | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Bos_primigenius | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Capreolus_capreolus | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Cervus_elaphus | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Equus_ferus | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Mammuthus_trogontherii | NA |
| **45.91** | **3.05** | **0.0633** | **herb** | Maar_de_Saint_Hippolyte | Rangifer_tarandus | NA |
| **41.45** | **13.70** | **0.0633** | **herb** | Pontecorvo_(Frosinone) | Cervus_elaphus | NA |
| **41.45** | **13.70** | **0.0633** | **herb** | Pontecorvo_(Frosinone) | Elephas_antiquus | NA |
| **41.45** | **13.70** | **0.0633** | **herb** | Pontecorvo_(Frosinone) | Equus_ferus | NA |
| **41.45** | **13.70** | **0.0633** | **herb** | Pontecorvo_(Frosinone) | Hippopotamus_amphibius | NA |
| **41.45** | **13.70** | **0.0633** | **herb** | Pontecorvo_(Frosinone) | Megaloceros_giganteus | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Bos_primigenius | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Capreolus_capreolus | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Cervus_elaphus | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Dama_dama | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Elephas_antiquus | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Equus_ferus | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Hippopotamus_amphibius | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Stephanorhinus_hemitoechus | NA |
| **44.00** | **10.16** | **0.0634** | **herb** | Montignoso | Sus_scrofa | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Bos_primigenius | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Cervus_elaphus | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Dama_clactoniana | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Elephas_antiquus | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Equus_hydruntinus | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Equus_ferus | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Hippopotamus_amphibius | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Stephanorhinus_hemitoechus | NA |
| **42.00** | **12.62** | **0.0634** | **herb** | Sedia_Del_Diavolo | Sus_scrofa | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Bos_primigenius | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Capreolus_capreolus | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Cervus_elaphus | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Dama_dama | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Elephas_antiquus | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Equus_ferus | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Hippopotamus_amphibius | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Stephanorhinus_hemitoechus | NA |
| **41.92** | **12.20** | **0.0636** | **herb** | Torre_In_Pietra_(Upper_Beds) | Sus_scrofa | NA |
| **41.90** | **12.25** | **0.0638** | **herb** | La_Polledrara_di_Cecanibbio | Bos_primigenius | NA |
| **41.90** | **12.25** | **0.0638** | **herb** | La_Polledrara_di_Cecanibbio | Cervus_elaphus | NA |
| **41.90** | **12.25** | **0.0638** | **herb** | La_Polledrara_di_Cecanibbio | Elephas_antiquus | NA |
| **41.90** | **12.25** | **0.0638** | **herb** | La_Polledrara_di_Cecanibbio | Equus_ferus | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Bos_primigenius | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Capreolus_capreolus | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Cervus_elaphus | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Dama_clactoniana | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Elephas_antiquus | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Equus_ferus | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Hippopotamus_amphibius | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Stephanorhinus_hemitoechus | NA |
| **41.88** | **12.18** | **0.0640** | **herb** | Malagrotta_(Roma_province) | Sus_scrofa | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Bos_primigenius | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Capreolus_capreolus | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Cervus_elaphus | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Equus_ferus | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Hemitragus_bonali | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Rangifer_tarandus | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Stephanorhinus_kirchbergensis | NA |
| **44.87** | **1.25** | **0.0640** | **herb** | Pech_de_l'Aze,_Couche_9_(Dordogne) | Sus_scrofa | NA |
| **48.53** | **9.51** | **0.0641** | **herb** | Heppenloch | Bison_priscus | NA |
| **48.53** | **9.51** | **0.0641** | **herb** | Heppenloch | Capreolus_capreolus | NA |
| **48.53** | **9.51** | **0.0641** | **herb** | Heppenloch | Cervus_elaphus | NA |

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| **48.53** | **9.51** | **0.0641** | **herb** | Heppenloch | Equus_ferus | NA |
| **48.53** | **9.51** | **0.0641** | **herb** | Heppenloch | Stephanorhinus_hemitoechus | NA |
| **48.53** | **9.51** | **0.0641** | **herb** | Heppenloch | Sus_scrofa | NA |
| **45.00** | **39.00** | **0.0641** | **herb** | Mezmaiskaya_Cave_2B | Bison_priscus | NA |
| **45.00** | **39.00** | **0.0641** | **herb** | Mezmaiskaya_Cave_2B | Capra_caucasica | NA |
| **45.00** | **39.00** | **0.0641** | **herb** | Mezmaiskaya_Cave_2B | Cervus_elaphus | NA |
| **45.00** | **39.00** | **0.0641** | **herb** | Mezmaiskaya_Cave_2B | Sus_scrofa | NA |
| **43.21** | **0.63** | **0.0641** | **herb** | Montmaurin | Cervus_elaphus | heide |
| **43.21** | **0.63** | **0.0641** | **herb** | Montmaurin | Equus_ferus | heide |
| **43.21** | **0.63** | **0.0641** | **herb** | Montmaurin | Stephanorhinus_kirchbergensis | heide |
| **43.21** | **0.63** | **0.0641** | **herb** | Montmaurin | Sus_scrofa | heide |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Bison_priscus | NA |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Bos_primigenius | NA |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Cervus_elaphus | NA |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Dama_clactoniana | NA |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Equus_ferus | NA |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Stephanorhinus_hemitoechus | NA |
| **51.30** | **11.07** | **0.0642** | **herb** | Bilzingsleben_II | Stephanorhinus_kirchbergensis | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Capreolus_capreolus | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Cervus_elaphus | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Dama_dama | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Elephas_antiquus | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Equus_ferus | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Hippopotamus_amphibius | NA |
| **41.92** | **12.57** | **0.0645** | **herb** | Casal_De'_Pazzi_(Rebibbia) | Sus_scrofa | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Bison_priscus | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Bos_primigenius | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Capra_pyrenaica | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Capreolus_capreolus | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Cervus_elaphus | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Elephas_antiquus | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Equus_ferus | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Mammuthus_trogontherii | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Rupicapra_rupicapra | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Stephanorhinus_hemitoechus | NA |
| **37.57** | **-2.91** | **0.0651** | **herb** | La_Solana_del_Zamborino,_Granada | Sus_scrofa | NA |
| **52.50** | **0.67** | **0.0655** | **herb** | Lynford | Bison_priscus | NA |
| **52.50** | **0.67** | **0.0655** | **herb** | Lynford | Coelodonta_antiquitatis | NA |
| **52.50** | **0.67** | **0.0655** | **herb** | Lynford | Equus_ferus | NA |
| **52.50** | **0.67** | **0.0655** | **herb** | Lynford | Mammuthus_primigenius | NA |
| **52.50** | **0.67** | **0.0655** | **herb** | Lynford | Rangifer_tarandus | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Bison_schoetensacki | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Cervus_elaphus | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Dama_clactoniana | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Equus_ferus | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Hemitragus_bonali | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Rangifer_tarandus | NA |
| **42.80** | **2.75** | **0.0657** | **herb** | Caune_de_L'Arago_CM_I_(Pyrenees) | Stephanorhinus_hemitoechus | NA |
| **48.58** | **9.16** | **0.0659** | **herb** | Steinheim_lower_level | Bison_priscus | NA |
| **48.58** | **9.16** | **0.0659** | **herb** | Steinheim_lower_level | Cervus_elaphus | NA |
| **48.58** | **9.16** | **0.0659** | **herb** | Steinheim_lower_level | Equus_ferus | NA |
| **48.58** | **9.16** | **0.0659** | **herb** | Steinheim_lower_level | Mammuthus_trogontherii | NA |
| **48.58** | **9.16** | **0.0659** | **herb** | Steinheim_lower_level | Stephanorhinus_kirchbergensis | NA |
| **43.33** | **2.71** | **0.0680** | **herb** | Grotte_d'Aldene,_Couche_K_(Herault) | Cervus_elaphus | NA |
| **43.33** | **2.71** | **0.0680** | **herb** | Grotte_d'Aldene,_Couche_K_(Herault) | Equus_ferus | NA |
| **43.33** | **2.71** | **0.0680** | **herb** | Grotte_d'Aldene,_Couche_K_(Herault) | Hemitragus_bonali | NA |
| **43.33** | **2.71** | **0.0680** | **herb** | Grotte_d'Aldene,_Couche_K_(Herault) | Stephanorhinus_hundsheimensis | NA |
| **50.53** | **7.30** | **0.0685** | **herb** | Ariendorf,_Aufschluß_B_(outcrop_B),_base_of_Löss-Decke_III_(LD_III) | Cervus_elaphus | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_5',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_6_composite_list',_Commune_de_Saint-Mary,_Charente, | Capreolus_capreolus | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_6_composite_list',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_7',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |

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|---|---|---|---|---|---|---|
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_8',_Commune_de_Saint-Mary,_Charente, | Capreolus_capreolus | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_8',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_8',_Commune_de_Saint-Mary,_Charente, | Sus_scrofa | NA |
| **45.65** | **0.15** | **0.0685** | **herb** | Artenac_'Bed_9',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |
| **52.14** | **-0.47** | **0.0685** | **herb** | Bedford | Hippopotamus_amphibius | NA |
| **52.72** | **0.92** | **0.0685** | **herb** | Beetley | Hippopotamus_amphibius | NA |
| **50.82** | **-0.13** | **0.0685** | **herb** | Black_Rock | Hippopotamus_amphibius | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Alcelaphus_buselaphus | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Connochaetes_gnou | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Diceros_bicornis | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Hippopotamus_amphibius | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Hippotragus_leucophaeus | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Loxodonta_africana | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Oreotragus_oreotragus | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Raphicerus_melanotis | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Raphicerus_campestris | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Redunca_arundinum | NA |
| **-34.42** | **21.22** | **0.0685** | **herb** | Blombos_Cave | Syncerus_caffer | NA |
| **60.53** | **4.88** | **0.0685** | **herb** | Blomvag | Rangifer_tarandus | NA |
| **-29.21** | **16.93** | **0.0685** | **herb** | Boegoeberg_1 | Antidorcas_marsupialis | NA |
| **-29.21** | **16.93** | **0.0685** | **herb** | Boegoeberg_1 | Connochaetes_taurinus | NA |
| **-29.21** | **16.93** | **0.0685** | **herb** | Boegoeberg_1 | Diceros_bicornis | NA |
| **-29.21** | **16.93** | **0.0685** | **herb** | Boegoeberg_1 | Oryx_gazella | NA |
| **-29.21** | **16.93** | **0.0685** | **herb** | Boegoeberg_1 | Raphicerus_campestris | NA |
| **-29.21** | **16.93** | **0.0685** | **herb** | Boegoeberg_1 | Redunca_arundinum | NA |
| **52.88** | **-1.41** | **0.0685** | **herb** | Boulton_Moor | Hippopotamus_amphibius | NA |
| **51.49** | **-0.31** | **0.0685** | **herb** | Brentford | Hippopotamus_amphibius | NA |
| **52.20** | **0.13** | **0.0685** | **herb** | Cambridge | Hippopotamus_amphibius | NA |
| **52.98** | **-3.08** | **0.0685** | **herb** | Cefn_Cave | Hippopotamus_amphibius | NA |
| **51.74** | **0.47** | **0.0685** | **herb** | Chelmsford | Hippopotamus_amphibius | NA |
| **53.26** | **-1.20** | **0.0685** | **herb** | Crewsell_Crags | Hippopotamus_amphibius | NA |
| **52.10** | **-2.00** | **0.0685** | **herb** | Cropthorn | Hippopotamus_amphibius | NA |
| **52.47** | **-2.62** | **0.0685** | **herb** | Durdham_Down | Hippopotamus_amphibius | NA |
| **51.79** | **0.98** | **0.0685** | **herb** | East_Mersea | Hippopotamus_amphibius | NA |
| **50.35** | **-4.00** | **0.0685** | **herb** | Eastern_Torrs_Quarry | Hippopotamus_amphibius | NA |
| **-32.32** | **18.32** | **0.0685** | **herb** | Eland's_Bay_Cave | Raphicerus_sharpei | NA |
| **-32.32** | **18.32** | **0.0685** | **herb** | Eland's_Bay_Cave | Raphicerus_campestris | NA |
| **-32.32** | **18.32** | **0.0685** | **herb** | Eland's_Bay_Cave | Syncerus_caffer | NA |
| **53.09** | **-1.86** | **0.0685** | **herb** | Elderbush_Cave | Hippopotamus_amphibius | NA |
| **51.98** | **4.07** | **0.0685** | **herb** | Eurogeul | Alces_alces | NA |
| **51.98** | **4.07** | **0.0685** | **herb** | Eurogeul | Cervus_elaphus | NA |
| **51.98** | **4.07** | **0.0685** | **herb** | Eurogeul | Ovibos_moschatus | NA |
| **51.98** | **4.07** | **0.0685** | **herb** | Eurogeul | Rangifer_tarandus | NA |
| **51.48** | **0.33** | **0.0685** | **herb** | Grays | Hippopotamus_amphibius | NA |
| **45.55** | **11.55** | **0.0685** | **herb** | Grotta_Maggiore_do_S._Bernardino_(Pleistocene),_Colli_Berici,_Northern_Italy | Alces_alces | NA |
| **45.55** | **11.55** | **0.0685** | **herb** | Grotta_Maggiore_do_S._Bernardino_(Pleistocene),_Colli_Berici,_Northern_Italy | Bos_primigenius | NA |
| **45.55** | **11.55** | **0.0685** | **herb** | Grotta_Maggiore_do_S._Bernardino_(Pleistocene),_Colli_Berici,_Northern_Italy | Capra_ibex | NA |
| **45.55** | **11.55** | **0.0685** | **herb** | Grotta_Maggiore_do_S._Bernardino_(Pleistocene),_Colli_Berici,_Northern_Italy | Capreolus_capreolus | NA |
| **45.55** | **11.55** | **0.0685** | **herb** | Grotta_Maggiore_do_S._Bernardino_(Pleistocene),_Colli_Berici,_Northern_Italy | Rupicapra_rupicapra | NA |
| **45.55** | **11.55** | **0.0685** | **herb** | Grotta_Maggiore_do_S._Bernardino_(Pleistocene),_Colli_Berici,_Northern_Italy | Sus_scrofa | NA |
| **23.01** | **79.12** | **0.0685** | **herb** | GSI_20032 | Equus_hemionus | NA |
| **22.83** | **77.97** | **0.0685** | **herb** | GSI_20033 | Equus_hemionus | NA |
| **23.01** | **79.12** | **0.0685** | **herb** | GSI_20034 | Equus_hemionus | NA |
| **23.03** | **79.02** | **0.0685** | **herb** | GSI_20035 | Equus_hemionus | NA |
| **22.85** | **77.86** | **0.0685** | **herb** | GSI_20036 | Equus_hemionus | NA |
| **22.84** | **77.87** | **0.0685** | **herb** | GSI_20037 | Equus_hemionus | NA |
| **23.01** | **79.11** | **0.0685** | **herb** | GSI_20038 | Equus_hemionus | NA |
| **-34.05** | **22.40** | **0.0685** | **herb** | Herolds_Bay | Alcelaphus_buselaphus | NA |
| **-34.05** | **22.40** | **0.0685** | **herb** | Herolds_Bay | Antidorcas_marsupialis | NA |
| **-34.05** | **22.40** | **0.0685** | **herb** | Herolds_Bay | Connochaetes_gnou | NA |
| **-34.05** | **22.40** | **0.0685** | **herb** | Herolds_Bay | Hippotragus_leucophaeus | NA |
| **50.80** | **-3.19** | **0.0685** | **herb** | Honiton | Hippopotamus_amphibius | NA |
| **40.66** | **110.00** | **0.0685** | **herb** | Houshuigou,_bed_2,_Baotou | Cervus_elaphus | NA |
| **40.66** | **110.00** | **0.0685** | **herb** | Houshuigou,_bed_4,_Baotou | Cervus_elaphus | NA |
| **40.66** | **110.00** | **0.0685** | **herb** | Houshuigou,_bed_6,_Baotou | Cervus_elaphus | NA |
| **33.13** | **110.22** | **0.0685** | **herb** | Huanglong_Cave | Elaphodus_cephalophus | NA |
| **33.13** | **110.22** | **0.0685** | **herb** | Huanglong_Cave | Hydropotes_inermis | NA |

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|---|---|---|---|---|---|---|
| **33.13** | **110.22** | **0.0685** | **herb** | Huanglong_Cave | Moschus_moschiferus | NA |
| **33.13** | **110.22** | **0.0685** | **herb** | Huanglong_Cave | Muntiacus_reevesi | NA |
| **33.13** | **110.22** | **0.0685** | **herb** | Huanglong_Cave | Muntiacus_muntjak | NA |
| **33.13** | **110.22** | **0.0685** | **herb** | Huanglong_Cave | Sus_scrofa | NA |
| **68.75** | **160.00** | **0.0685** | **herb** | Kolyma_River,_between_the_mouth_of_Omolon_and_Anjuj,_Jedoma-Suite | Alces_alces | NA |
| **68.75** | **160.00** | **0.0685** | **herb** | Kolyma_River,_between_the_mouth_of_Omolon_and_Anjuj,_Jedoma-Suite | Cervus_elaphus | NA |
| **68.75** | **160.00** | **0.0685** | **herb** | Kolyma_River,_between_the_mouth_of_Omolon_and_Anjuj,_Jedoma-Suite | Rangifer_tarandus | NA |
| **52.11** | **0.80** | **0.0685** | **herb** | Lavenham | Hippopotamus_amphibius | NA |
| **53.80** | **-1.55** | **0.0685** | **herb** | Leeds | Hippopotamus_amphibius | NA |
| **69.00** | **161.00** | **0.0685** | **herb** | Lower_part_of_Kolyma_River,_Aljoschka-Suite | Rangifer_tarandus | NA |
| **69.00** | **161.00** | **0.0685** | **herb** | Lower_part_of_Kolyma_River,_Aljoschka-Suite | Saiga_tatarica | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Giraffa_camelopardalis | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Oreotragus_oreotragus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Phacochoerus_aethiopicus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Potamochoerus_porcus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Raphicerus_campestris | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_110-80cm | Redunca_fulvorufula | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Equus_grevyi | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Oreotragus_oreotragus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Oryx_gazella | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Phacochoerus_aethiopicus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Potamochoerus_porcus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Raphicerus_campestris | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Redunca_fulvorufula | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_160-110cm | Tragelaphus_scriptus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_80-0cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_80-0cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_80-0cm | Oreotragus_oreotragus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_80-0cm | Phacochoerus_aethiopicus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_80-0cm | Raphicerus_campestris | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_19,_80-0cm | Redunca_fulvorufula | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Diceros_bicornis | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Equus_grevyi | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Oreotragus_oreotragus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Oryx_gazella | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Phacochoerus_aethiopicus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Raphicerus_campestris | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_22,_250-100cm | Redunca_fulvorufula | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_170-0cm | Aepyceros_melampus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_170-0cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_170-0cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_170-0cm | Equus_grevyi | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_170-0cm | Raphicerus_campestris | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_170-0cm | Redunca_fulvorufula | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_330-170cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_Undated_rockshelter | Aepyceros_melampus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_Undated_rockshelter | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_Undated_rockshelter | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_Undated_rockshelter | Raphicerus_campestris | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_46,_Undated_rockshelter | Redunca_fulvorufula | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_HIll_GvJm_62,_390-180cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_HIll_GvJm_62,_390-180cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_HIll_GvJm_62,_390-180cm | Equus_grevyi | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_62_180-70cm | Alcelaphus_buselaphus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_62_180-70cm | Connochaetes_taurinus | NA |
| **-1.47** | **37.05** | **0.0685** | **herb** | Lukenya_Hill_GvJm_62_180-70cm | Redunca_fulvorufula | NA |
| **28.32** | **109.72** | **0.0685** | **herb** | Luosixuan_cave,_bed_1,_Jishou_county | Sus_scrofa | NA |
| **28.32** | **109.72** | **0.0685** | **herb** | Luosixuan_cave,_bed_3,_Jishou_county | Sus_scrofa | NA |
| **51.96** | **4.05** | **0.0685** | **herb** | Maasvlakte,_Fauna_II | Bos_primigenius | NA |
| **51.96** | **4.05** | **0.0685** | **herb** | Maasvlakte,_Fauna_II | Rangifer_tarandus | NA |
| **-33.67** | **18.43** | **0.0685** | **herb** | Melkbos | Diceros_bicornis | NA |
| **-33.67** | **18.43** | **0.0685** | **herb** | Melkbos | Hippopotamus_amphibius | NA |
| **-33.67** | **18.43** | **0.0685** | **herb** | Melkbos | Loxodonta_africana | NA |
| **51.21** | **-2.65** | **0.0685** | **herb** | Milton_Hill | Hippopotamus_amphibius | NA |

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|---|---|---|---|---|---|---|
| **-34.10** | **23.40** | **0.0685** | **herb** | Nelson_Bay_Cave,_Pleistocene | Phacochoerus_aethiopicus | NA |
| **-34.10** | **23.40** | **0.0685** | **herb** | Nelson_Bay_Cave,_Pleistocene | Potamochoerus_porcus | NA |
| **-34.10** | **23.40** | **0.0685** | **herb** | Nelson_Bay_Cave,_Pleistocene | Redunca_fulvorufula | NA |
| **-34.10** | **23.40** | **0.0685** | **herb** | Nelson_Bay_Cave,_Pleistocene | Redunca_arundinum | NA |
| **-34.10** | **23.40** | **0.0685** | **herb** | Nelson_Bay_Cave,_Pleistocene | Syncerus_caffer | NA |
| **51.75** | **1.26** | **0.0685** | **herb** | Oxford | Hippopotamus_amphibius | NA |
| **23.00** | **120.00** | **0.0685** | **herb** | Penghu_Channel | Elaphurus_davidianus | NA |
| **-8.14** | **111.03** | **0.0685** | **herb** | Punung | Muntiacus_muntjak | NA |
| **51.55** | **-4.19** | **0.0685** | **herb** | Ravenscliff_Cave | Hippopotamus_amphibius | NA |
| **53.91** | **-2.07** | **0.0685** | **herb** | Raygill_Fissure | Hippopotamus_amphibius | NA |
| **38.58** | **68.50** | **0.0685** | **herb** | Samarkand_Paleolithic_Horse | Cervus_elaphus | NA |
| **54.10** | **-0.17** | **0.0685** | **herb** | Sewerby | Hippopotamus_amphibius | NA |
| **52.50** | **0.92** | **0.0685** | **herb** | Shropham | Hippopotamus_amphibius | NA |
| **54.57** | **-1.31** | **0.0685** | **herb** | Stockton-on-Tees | Hippopotamus_amphibius | NA |
| **-30.04** | **17.25** | **0.0685** | **herb** | Swart_Duinen | Raphicerus_campestris | NA |
| **32.72** | **35.05** | **0.0685** | **herb** | Tabun_Cave_Level_C_&_D | Capreolus_capreolus | NA |
| **32.72** | **35.05** | **0.0685** | **herb** | Tabun_Cave_Level_C_&_D | Cervus_elaphus | NA |
| **32.72** | **35.05** | **0.0685** | **herb** | Tabun_Cave_Level_C_&_D | Equus_hemionus | NA |
| **32.72** | **35.05** | **0.0685** | **herb** | Tabun_Cave_Level_C_&_D | Hippopotamus_amphibius | NA |
| **51.37** | **1.04** | **0.0685** | **herb** | Tankerton | Hippopotamus_amphibius | NA |
| **50.13** | **-3.66** | **0.0685** | **herb** | Tornewton_Cave | Hippopotamus_amphibius | NA |
| **51.51** | **-0.13** | **0.0685** | **herb** | Trafalgar_Square | Hippopotamus_amphibius | NA |
| **50.95** | **84.75** | **0.0685** | **herb** | Ust'-Kanskaia_Cave | Equus_hemionus | NA |
| **50.95** | **84.75** | **0.0685** | **herb** | Ust'-Kanskaia_Cave | Ovis_ammon | NA |
| **36.13** | **-5.34** | **0.0685** | **herb** | Vangaurd_Cave | Capra_ibex | NA |
| **36.13** | **-5.34** | **0.0685** | **herb** | Vangaurd_Cave | Cervus_elaphus | NA |
| **36.13** | **-5.34** | **0.0685** | **herb** | Vangaurd_Cave | Sus_scrofa | NA |
| **51.87** | **1.29** | **0.0685** | **herb** | Walton-on-the-Naze,_Late_Pleistocene | Hippopotamus_amphibius | NA |
| **52.04** | **-0.64** | **0.0685** | **herb** | Water_Hall_Farm | Hippopotamus_amphibius | NA |
| **3.37** | **35.95** | **0.0685** | **herb** | West_Turkana_-_Eliye_Springs | Syncerus_caffer | NA |
| **52.11** | **-2.04** | **0.0685** | **herb** | Wick | Hippopotamus_amphibius | NA |
| **4.67** | **36.37** | **0.0685** | **herb** | East_Turkana_-_Area_105_-_Galana_Boi | Tragelaphus_strepsiceros | NA |
| **4.6700** | **36.3720** | **0.0690** | **herb** | East_Turkana_-_Area_105_-_Galana_Boi | Gazella_praethomsoni | NA |
| **4.6700** | **36.3720** | **0.0690** | **herb** | East_Turkana_-_Area_105_-_Galana_Boi | Tragelaphus_strepsiceros | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Bison_schoetensacki | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Bison_priscus | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Coelodonta_antiquitatis | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Equus_suessenbornensis | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Equus_ferus | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Mammuthus_trogontherii | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Praeovibos_priscus | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Rangifer_tarandus | NA |
| **51.35** | **11.10** | **0.0697** | **herb** | Bad_Frankenhausen_ | Soergelia_mayfieldi | NA |
| **52.70** | **51.00** | **0.0700** | **herb** | Alekseevka_late | Cervus_elaphus | NA |
| **52.70** | **51.00** | **0.0700** | **herb** | Alekseevka_late | Mammuthus_primigenius | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Bison_priscus | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Cervus_elaphus | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Coelodonta_antiquitatis | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Equus_hydruntinus | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Equus_ferus | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Mammuthus_primigenius | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Megaloceros_giganteus | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Rangifer_tarandus | NA |
| **45.00** | **33.77** | **0.0700** | **herb** | Chokurcha_I_cave | Saiga_tatarica | NA |
| **38.66** | **68.66** | **0.0700** | **herb** | Khudji | Cervus_elaphus | NA |
| **38.66** | **68.66** | **0.0700** | **herb** | Khudji | Equus_hemionus | NA |
| **38.66** | **68.66** | **0.0700** | **herb** | Khudji | Sus_scrofa | NA |
| **55.98** | **92.82** | **0.0700** | **herb** | Majachnaja_cave | Coelodonta_antiquitatis | NA |
| **55.98** | **92.82** | **0.0700** | **herb** | Majachnaja_cave | Ovis_nivicola | NA |
| **39.53** | **-8.59** | **0.0700** | **herb** | Oliveira_Cave | Capra_pyrenaica | NA |
| **39.53** | **-8.59** | **0.0700** | **herb** | Oliveira_Cave | Cervus_elaphus | NA |
| **39.53** | **-8.59** | **0.0700** | **herb** | Oliveira_Cave | Equus_ferus | NA |
| **74.00** | **100.00** | **0.0700** | **herb** | Tajmyr_p-la_LtPl | Alces_alces | NA |
| **74.00** | **100.00** | **0.0700** | **herb** | Tajmyr_p-la_LtPl | Bison_priscus | NA |
| **74.00** | **100.00** | **0.0700** | **herb** | Tajmyr_p-la_LtPl | Mammuthus_primigenius | NA |
| **74.00** | **100.00** | **0.0700** | **herb** | Tajmyr_p-la_LtPl | Ovibos_moschatus | NA |
| **74.00** | **100.00** | **0.0700** | **herb** | Tajmyr_p-la_LtPl | Rangifer_tarandus | NA |
| **50.98** | **4.39** | **0.0700** | **herb** | Zemst_IIIC | Cervus_elaphus | NA |
| **50.98** | **4.39** | **0.0700** | **herb** | Zemst_IIIC | Coelodonta_antiquitatis | NA |
| **50.98** | **4.39** | **0.0700** | **herb** | Zemst_IIIC | Mammuthus_primigenius | NA |
| **50.98** | **4.39** | **0.0700** | **herb** | Zemst_IIIC | Megaloceros_giganteus | NA |
| **50.98** | **4.39** | **0.0700** | **herb** | Zemst_IIIC | Rangifer_tarandus | NA |
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Bos_primigenius | NA |

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|---|---|---|---|---|---|---|
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Cervus_elaphus | NA |
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Elephas_antiquus | NA |
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Hippopotamus_amphibius | NA |
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Mammuthus_primigenius | NA |
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Stephanorhinus_hemitoechus | NA |
| **40.91** | **14.37** | **0.0705** | **herb** | Quisisana,_Capri | Sus_scrofa | NA |
| **50.22** | **19.77** | **0.0706** | **herb** | Jaskinia_Nietoperzowa | Bison_priscus | NA |
| **50.22** | **19.77** | **0.0706** | **herb** | Jaskinia_Nietoperzowa | Rangifer_tarandus | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Bos_primigenius | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Capreolus_capreolus | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Cervus_elaphus | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Dama_dama | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Elephas_antiquus | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Equus_ferus | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Hippopotamus_amphibius | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Stephanorhinus_kirchbergensis | NA |
| **40.10** | **18.43** | **0.0710** | **herb** | Grotta_Romanelli | Sus_scrofa | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Bos_primigenius | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Capra_ibex | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Capreolus_capreolus | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Cervus_elaphus | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Equus_ferus | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Rupicapra_rupicapra | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Stephanorhinus_hemitoechus | NA |
| **43.99** | **3.26** | **0.0735** | **herb** | Les_Canalettes_[12_-_Nant] | Sus_scrofa | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Bison_priscus | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Bos_primigenius | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Cervus_elaphus | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Dama_dama | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Elephas_antiquus | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Hippopotamus_antiquus | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Mammuthus_primigenius | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Stephanorhinus_hemitoechus | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Stephanorhinus_kirchbergensis | NA |
| **37.40** | **22.13** | **0.0745** | **herb** | Megalopolis_basin_(Peloponnese) | Sus_scrofa | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Bos_primigenius | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Capreolus_capreolus | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Cervus_elaphus | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Dama_dama | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Hemitragus_cedrensis | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Rangifer_tarandus | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Rupicapra_rupicapra | NA |
| **43.00** | **2.95** | **0.0746** | **herb** | Grotte_de_Cres_(Var) | Sus_scrofa | NA |
| **45.83** | **18.43** | **0.0749** | **herb** | Villany_3_upper | Hemitragus_orientalis | NA |
| **45.83** | **18.43** | **0.0749** | **herb** | Villany_3_upper | Mammuthus_trogontherii | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Cervus_elaphus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Elephas_antiquus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Equus_hydruntinus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Equus_ferus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Hippopotamus_antiquus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Mammuthus_primigenius | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Megaloceros_giganteus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Stephanorhinus_hemitoechus | NA |
| **40.60** | **23.50** | **0.0754** | **herb** | N._Chalkidiki_(Central_Macedonia) | Sus_scrofa | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Bison_priscus | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Cervus_elaphus | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Coelodonta_antiquitatis | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Equus_hydruntinus | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Equus_ferus | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Mammuthus_primigenius | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Ovibos_moschatus | NA |
| **50.43** | **5.02** | **0.0755** | **herb** | Goyet_Cave_st.4 | Rangifer_tarandus | NA |
| **50.83** | **5.68** | **0.0755** | **herb** | Maastricht-Belvedere_5 | Cervus_elaphus | NA |
| **50.83** | **5.68** | **0.0755** | **herb** | Maastricht-Belvedere_5 | Coelodonta_antiquitatis | NA |
| **50.83** | **5.68** | **0.0755** | **herb** | Maastricht-Belvedere_5 | Mammuthus_primigenius | NA |
| **50.83** | **5.68** | **0.0755** | **herb** | Maastricht-Belvedere_5 | Rangifer_tarandus | NA |
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Bison_priscus | NA |

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|---|---|---|---|---|---|---|
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Coelodonta_antiquitatis | NA |
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Equus_hydruntinus | NA |
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Mammuthus_primigenius | NA |
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Megaloceros_giganteus | NA |
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Ovibos_moschatus | NA |
| **52.47** | **4.62** | **0.0755** | **herb** | Noordzee_III | Rangifer_tarandus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Bison_priscus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Bos_primigenius | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Cervus_elaphus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Coelodonta_antiquitatis | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Equus_hydruntinus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Equus_ferus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Mammuthus_primigenius | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Megaloceros_giganteus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Rangifer_tarandus | NA |
| **45.00** | **34.60** | **0.0755** | **herb** | Prolom_2_cave | Saiga_tatarica | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Bison_priscus | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Cervus_elaphus | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Coelodonta_antiquitatis | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Equus_ferus | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Mammuthus_primigenius | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Megaloceros_giganteus | NA |
| **48.50** | **35.40** | **0.0755** | **herb** | Staryj_Kodak | Rangifer_tarandus | NA |
| **48.00** | **26.90** | **0.0755** | **herb** | Trinka_I_l.3-4 | Bison_priscus | NA |
| **48.00** | **26.90** | **0.0755** | **herb** | Trinka_I_l.3-4 | Cervus_elaphus | NA |
| **48.00** | **26.90** | **0.0755** | **herb** | Trinka_I_l.3-4 | Coelodonta_antiquitatis | NA |
| **48.00** | **26.90** | **0.0755** | **herb** | Trinka_I_l.3-4 | Equus_ferus | NA |
| **48.00** | **26.90** | **0.0755** | **herb** | Trinka_I_l.3-4 | Megaloceros_giganteus | NA |
| **48.00** | **26.90** | **0.0755** | **herb** | Trinka_I_l.3-4 | Rangifer_tarandus | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Bison_schoetensacki | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Bos_primigenius | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Capreolus_capreolus | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Cervus_elaphus | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Equus_hydruntinus | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Equus_ferus | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Hippopotamus_antiquus | NA |
| **43.66** | **4.07** | **0.0759** | **herb** | Lunel-Viel,_Hérault | Sus_scrofa | NA |
| **43.50** | **40.17** | **0.0759** | **herb** | Akhshtyrskaja_cave_Mouster | Bison_priscus | NA |
| **43.50** | **40.17** | **0.0759** | **herb** | Akhshtyrskaja_cave_Mouster | Capra_caucasica | NA |
| **43.50** | **40.17** | **0.0759** | **herb** | Akhshtyrskaja_cave_Mouster | Cervus_elaphus | NA |
| **43.50** | **40.17** | **0.0759** | **herb** | Akhshtyrskaja_cave_Mouster | Megaloceros_giganteus | NA |
| **43.50** | **40.17** | **0.0759** | **herb** | Akhshtyrskaja_cave_Mouster | Sus_scrofa | NA |
| **45.25** | **11.15** | **0.0762** | **herb** | Viatelle | Capreolus_capreolus | NA |
| **45.25** | **11.15** | **0.0762** | **herb** | Viatelle | Cervus_elaphus | NA |
| **45.25** | **11.15** | **0.0762** | **herb** | Viatelle | Dama_dama | NA |
| **45.25** | **11.15** | **0.0762** | **herb** | Viatelle | Megaloceros_giganteus | NA |
| **45.25** | **11.15** | **0.0762** | **herb** | Viatelle | Sus_scrofa | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Cervus_elaphus | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Coelodonta_antiquitatis | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Equus_ferus | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Mammuthus_primigenius | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Megaloceros_giganteus | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Rangifer_tarandus | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Saiga_tatarica | NA |
| **44.95** | **34.40** | **0.0775** | **herb** | Kosh-Koba | Sus_scrofa | NA |
| **47.53** | **4.28** | **0.0785** | **herb** | Montagne_de_Girault_[Genay]2 | Cervus_elaphus | NA |
| **47.53** | **4.28** | **0.0785** | **herb** | Montagne_de_Girault_[Genay]2 | Mammuthus_primigenius | NA |
| **47.53** | **4.28** | **0.0785** | **herb** | Montagne_de_Girault_[Genay]2 | Rangifer_tarandus | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Bos_primigenius | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Capreolus_capreolus | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Cervus_elaphus | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Equus_ferus | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Hemitragus_bonali | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Rangifer_tarandus | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Stephanorhinus_kirchbergensis | NA |
| **44.87** | **1.25** | **0.0790** | **herb** | Pech_de_l'Aze,_Couche_4_(Dordogne) | Sus_scrofa | NA |
| **41.90** | **12.30** | **0.0791** | **herb** | Castel_di_Guido | Equus_ferus | NA |
| **41.90** | **12.30** | **0.0791** | **herb** | Castel_di_Guido | Hippopotamus_amphibius | NA |
| **47.63** | **18.92** | **0.0800** | **herb** | Bivak_cave_Wurm | Cervus_elaphus | NA |
| **47.63** | **18.92** | **0.0800** | **herb** | Bivak_cave_Wurm | Megaloceros_giganteus | NA |
| **47.63** | **18.92** | **0.0800** | **herb** | Bivak_cave_Wurm | Rangifer_tarandus | NA |
| **47.63** | **18.92** | **0.0800** | **herb** | Bivak_cave_Wurm | Sus_scrofa | NA |

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| **43.78** | **7.50** | **0.0800** | **herb** | Grotte_du_Prince | Elephas_antiquus | NA |
| **43.78** | **7.50** | **0.0800** | **herb** | Grotte_du_Prince | Hippopotamus_amphibius | NA |
| **43.78** | **7.50** | **0.0800** | **herb** | Grotte_du_Prince | Rangifer_tarandus | NA |
| **43.78** | **7.50** | **0.0800** | **herb** | Grotte_du_Prince | Stephanorhinus_kirchbergensis | NA |
| **49.50** | **11.58** | **0.0800** | **herb** | Hunas,_Riss | Alces_alces | NA |
| **49.50** | **11.58** | **0.0800** | **herb** | Hunas,_Riss | Bison_bonasus | NA |
| **49.50** | **11.58** | **0.0800** | **herb** | Hunas,_Riss | Cervus_elaphus | NA |
| **49.50** | **11.58** | **0.0800** | **herb** | Hunas,_Riss | Stephanorhinus_kirchbergensis | NA |
| **50.83** | **20.50** | **0.0800** | **herb** | Jaskinia_Raj | Alces_alces | NA |
| **50.83** | **20.50** | **0.0800** | **herb** | Jaskinia_Raj | Bison_priscus | NA |
| **50.83** | **20.50** | **0.0800** | **herb** | Jaskinia_Raj | Cervus_elaphus | NA |
| **50.83** | **20.50** | **0.0800** | **herb** | Jaskinia_Raj | Ovibos_moschatus | NA |
| **50.83** | **20.50** | **0.0800** | **herb** | Jaskinia_Raj | Rangifer_tarandus | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Bos_primigenius | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Capreolus_capreolus | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Elephas_antiquus | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Equus_hydruntinus | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Equus_ferus | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Hippopotamus_antiquus | NA |
| **39.38** | **22.25** | **0.0809** | **herb** | Larissa | Stephanorhinus_hemitoechus | NA |
| **44.15** | **8.30** | **0.0809** | **herb** | Valdemino_(Borgio_Verezzi) | Bos_primigenius | NA |
| **44.15** | **8.30** | **0.0809** | **herb** | Valdemino_(Borgio_Verezzi) | Capreolus_capreolus | NA |
| **44.15** | **8.30** | **0.0809** | **herb** | Valdemino_(Borgio_Verezzi) | Cervus_elaphus | NA |
| **44.15** | **8.30** | **0.0809** | **herb** | Valdemino_(Borgio_Verezzi) | Mammuthus_trogontherii | NA |
| **44.15** | **8.30** | **0.0809** | **herb** | Valdemino_(Borgio_Verezzi) | Stephanorhinus_kirchbergensis | NA |
| **44.15** | **8.30** | **0.0809** | **herb** | Valdemino_(Borgio_Verezzi) | Sus_scrofa | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Bison_priscus | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Bos_primigenius | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Cervus_elaphus | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Dama_clactoniana | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Elephas_antiquus | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Equus_ferus | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Hemitragus_bonali | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Stephanorhinus_hemitoechus | NA |
| **44.30** | **4.43** | **0.0812** | **herb** | Orgnac_3_(Ardeche) | Sus_scrofa | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Cervus_elaphus | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Dama_dama | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Equus_altidens | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Hippopotamus_amphibius | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Mammuthus_trogontherii | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Megaloceros_savini | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Praemegaceros_verticornis | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Stephanorhinus_hundsheimensis | NA |
| **52.45** | **1.71** | **0.0819** | **herb** | Pakefield | Sus_scrofa | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Bos_primigenius | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Capreolus_capreolus | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Cervus_elaphus | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Dama_dama | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Elephas_antiquus | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Equus_hydruntinus | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Equus_ferus | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Hippopotamus_amphibius | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Mammuthus_primigenius | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Megaloceros_giganteus | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Stephanorhinus_hundsheimensis | NA |
| **41.58** | **12.65** | **0.0835** | **herb** | Campoverde_(Aprilia_Latina) | Stephanorhinus_hemitoechus | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Bison_schoetensacki | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Capreolus_capreolus | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Cervus_elaphus | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Dama_clactoniana | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Equus_ferus | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Ovis_ammon | NA |
| **45.77** | **13.63** | **0.0836** | **herb** | Visogliano_(Duino_Aurisia) | Stephanorhinus_hundsheimensis | NA |
| **43.20** | **11.53** | **0.0842** | **herb** | Monte_Oliveto_(Siena_province) | Bos_primigenius | NA |

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| **43.20** | **11.53** | **0.0842** | **herb** | Monte_Oliveto_(Siena_province) | Cervus_elaphus | NA |
| **43.20** | **11.53** | **0.0842** | **herb** | Monte_Oliveto_(Siena_province) | Elephas_antiquus | NA |
| **43.20** | **11.53** | **0.0842** | **herb** | Monte_Oliveto_(Siena_province) | Equus_ferus | NA |
| **43.20** | **11.53** | **0.0842** | **herb** | Monte_Oliveto_(Siena_province) | Hippopotamus_antiquus | NA |
| **43.20** | **11.53** | **0.0842** | **herb** | Monte_Oliveto_(Siena_province) | Praemegaceros_solhilacus | NA |
| **40.95** | **15.82** | **0.0844** | **herb** | Notarchirico | Bison_schoetensacki | NA |
| **40.95** | **15.82** | **0.0844** | **herb** | Notarchirico | Bos_primigenius | NA |
| **40.95** | **15.82** | **0.0844** | **herb** | Notarchirico | Cervus_elaphus | NA |
| **40.95** | **15.82** | **0.0844** | **herb** | Notarchirico | Dama_clactoniana | NA |
| **40.95** | **15.82** | **0.0844** | **herb** | Notarchirico | Elephas_antiquus | NA |
| **40.95** | **15.82** | **0.0844** | **herb** | Notarchirico | Sus_scrofa | NA |
| **47.15** | **-0.30** | **0.0875** | **herb** | Verchiezeuil_(Saone_et_Loire) | Bos_primigenius | NA |
| **47.15** | **-0.30** | **0.0875** | **herb** | Verchiezeuil_(Saone_et_Loire) | Capreolus_capreolus | NA |
| **47.15** | **-0.30** | **0.0875** | **herb** | Verchiezeuil_(Saone_et_Loire) | Cervus_elaphus | NA |
| **47.15** | **-0.30** | **0.0875** | **herb** | Verchiezeuil_(Saone_et_Loire) | Equus_ferus | NA |
| **47.15** | **-0.30** | **0.0875** | **herb** | Verchiezeuil_(Saone_et_Loire) | Stephanorhinus_hemitoechus | NA |
| **49.50** | **11.55** | **0.0885** | **herb** | Hunas_st._D | Alces_alces | NA |
| **49.50** | **11.55** | **0.0885** | **herb** | Hunas_st._D | Bison_priscus | NA |
| **49.50** | **11.55** | **0.0885** | **herb** | Hunas_st._D | Capreolus_capreolus | NA |
| **49.50** | **11.55** | **0.0885** | **herb** | Hunas_st._D | Cervus_elaphus | NA |
| **49.50** | **11.55** | **0.0885** | **herb** | Hunas_st._D | Stephanorhinus_kirchbergensis | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Bison_priscus | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Capra_sibirica | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Capreolus_pygargus | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Cervus_elaphus | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Coelodonta_antiquitatis | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Equus_hydruntinus | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Mammuthus_primigenius | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Ovis_ammon | NA |
| **51.40** | **84.67** | **0.0900** | **herb** | Denisova_Cave_l.19-21 | Saiga_tatarica | NA |
| **49.50** | **11.58** | **0.0900** | **herb** | Hunas_Riss-Wurm | Stephanorhinus_kirchbergensis | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Bison_priscus | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Cervus_elaphus | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Coelodonta_antiquitatis | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Mammuthus_primigenius | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Megaloceros_giganteus | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Rangifer_tarandus | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Saiga_tatarica | NA |
| **44.95** | **34.40** | **0.0900** | **herb** | Kosh_Koba | Sus_scrofa | NA |
| **44.60** | **39.60** | **0.0900** | **herb** | Matuzka_l._3-7 | Capreolus_capreolus | NA |
| **44.60** | **39.60** | **0.0900** | **herb** | Matuzka_l._3-7 | Cervus_elaphus | NA |
| **44.60** | **39.60** | **0.0900** | **herb** | Matuzka_l._3-7 | Sus_scrofa | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Bison_priscus | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Cervus_elaphus | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Dama_dama | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Equus_hydruntinus | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Mammuthus_primigenius | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Stephanorhinus_kirchbergensis | NA |
| **50.98** | **11.33** | **0.0900** | **herb** | Taubach_Weimar_Ehringsdorf_2,4 | Sus_scrofa | NA |
| **50.41** | **8.13** | **0.0900** | **herb** | Wildenscheuer_cave_st._I-II | Capra_ibex | NA |
| **39.32** | **45.37** | **0.0900** | **herb** | Azykh | Cervus_elaphus | heide |
| **39.32** | **45.37** | **0.0900** | **herb** | Azykh | Equus_hydruntinus | heide |
| **39.32** | **45.37** | **0.0900** | **herb** | Azykh | Equus_ferus | heide |
| **39.32** | **45.37** | **0.0900** | **herb** | Azykh | Stephanorhinus_kirchbergensis | heide |
| **39.32** | **45.37** | **0.0900** | **herb** | Azykh | Sus_scrofa | heide |
| **52.45** | **1.73** | **0.0934** | **herb** | Corton | Mammuthus_trogontherii | NA |
| **44.87** | **-0.60** | **0.0941** | **herb** | Bruges_(Pres_de_Bordeaux) | Capreolus_capreolus | NA |
| **44.87** | **-0.60** | **0.0941** | **herb** | Bruges_(Pres_de_Bordeaux) | Cervus_elaphus | NA |
| **44.87** | **-0.60** | **0.0941** | **herb** | Bruges_(Pres_de_Bordeaux) | Elephas_antiquus | NA |
| **44.87** | **-0.60** | **0.0941** | **herb** | Bruges_(Pres_de_Bordeaux) | Stephanorhinus_hemitoechus | NA |
| **44.87** | **-0.60** | **0.0941** | **herb** | Bruges_(Pres_de_Bordeaux) | Sus_scrofa | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Cervalces_latifrons | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Cervus_elaphus | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Elephas_antiquus | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Equus_altidens | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Hippopotamus_amphibius | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Mammuthus_trogontherii | NA |

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| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Megaloceros_savini | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Praemegaceros_dawkinsi | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Praemegaceros_verticornis | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Stephanorhinus_hundsheimensis | NA |
| **52.45** | **1.71** | **0.0944** | **herb** | Pakefield_rootlet_bed | Sus_scrofa | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Cervalces_latifrons | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Equus_altidens | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Equus_suessenbornensis | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Equus_ferus | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Mammuthus_trogontherii | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Megaloceros_savini | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Praemegaceros_verticornis | NA |
| **52.93** | **1.23** | **0.0948** | **herb** | West_Runton_freshwaterbed | Sus_scrofa | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Bos_primigenius | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Cervus_elaphus | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Coelodonta_antiquitatis | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Equus_ferus | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Mammuthus_primigenius | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Megaloceros_giganteus | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Rangifer_tarandus | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Saiga_tatarica | NA |
| **44.97** | **34.42** | **0.0970** | **herb** | Kiik-Koba | Sus_scrofa | NA |
| **40.50** | **49.50** | **0.0980** | **herb** | Binagady | Cervus_elaphus | NA |
| **40.50** | **49.50** | **0.0980** | **herb** | Binagady | Equus_ferus | NA |
| **40.50** | **49.50** | **0.0980** | **herb** | Binagady | Saiga_tatarica | NA |
| **40.50** | **49.50** | **0.0980** | **herb** | Binagady | Stephanorhinus_hemitoechus | NA |
| **56.01** | **92.80** | **0.1000** | **herb** | Torgashinskaja_cave | Capreolus_capreolus | NA |
| **56.01** | **92.80** | **0.1000** | **herb** | Torgashinskaja_cave | Cervus_elaphus | NA |
| **56.01** | **92.80** | **0.1000** | **herb** | Torgashinskaja_cave | Coelodonta_antiquitatis | NA |
| **56.01** | **92.80** | **0.1000** | **herb** | Torgashinskaja_cave | Ovis_ammon | NA |
| **56.01** | **92.80** | **0.1000** | **herb** | Torgashinskaja_cave | Rangifer_tarandus | NA |
| **53.61** | **76.20** | **0.1000** | **herb** | Urljutjub | Cervus_elaphus | NA |
| **53.61** | **76.20** | **0.1000** | **herb** | Urljutjub | Mammuthus_primigenius | NA |
| **53.61** | **76.20** | **0.1000** | **herb** | Urljutjub | Megaloceros_giganteus | NA |
| **45.40** | **11.25** | **0.1004** | **herb** | Monte_Tenda_(Soave,_Verona) | Cervus_elaphus | NA |
| **45.40** | **11.25** | **0.1004** | **herb** | Monte_Tenda_(Soave,_Verona) | Elephas_antiquus | NA |
| **45.40** | **11.25** | **0.1004** | **herb** | Monte_Tenda_(Soave,_Verona) | Equus_suessenbornensis | NA |
| **45.40** | **11.25** | **0.1004** | **herb** | Monte_Tenda_(Soave,_Verona) | Mammuthus_trogontherii | NA |
| **44.00** | **41.00** | **0.1012** | **herb** | Treugol'naya_Cave_6 | Bison_schoetensacki | NA |
| **44.00** | **41.00** | **0.1012** | **herb** | Treugol'naya_Cave_6 | Capra_caucasica | NA |
| **44.00** | **41.00** | **0.1012** | **herb** | Treugol'naya_Cave_6 | Cervus_elaphus | NA |
| **44.00** | **41.00** | **0.1012** | **herb** | Treugol'naya_Cave_6 | Equus_altidens | NA |
| **44.00** | **41.00** | **0.1012** | **herb** | Treugol'naya_Cave_6 | Stephanorhinus_hundsheimensis | NA |
| **48.13** | **16.93** | **0.1029** | **herb** | Hundsheim_ | Bison_schoetensacki | NA |
| **48.13** | **16.93** | **0.1029** | **herb** | Hundsheim_ | Capreolus_capreolus | NA |
| **48.13** | **16.93** | **0.1029** | **herb** | Hundsheim_ | Cervus_elaphus | NA |
| **48.13** | **16.93** | **0.1029** | **herb** | Hundsheim_ | Equus_ferus | NA |
| **48.13** | **16.93** | **0.1029** | **herb** | Hundsheim_ | Stephanorhinus_hundsheimensis | NA |
| **48.13** | **16.93** | **0.1029** | **herb** | Hundsheim_ | Sus_scrofa | NA |
| **40.88** | **17.10** | **0.1040** | **herb** | Contrada_Monticelli_(Castellana) | Dama_dama | NA |
| **40.88** | **17.10** | **0.1040** | **herb** | Contrada_Monticelli_(Castellana) | Elephas_antiquus | NA |
| **40.88** | **17.10** | **0.1040** | **herb** | Contrada_Monticelli_(Castellana) | Equus_ferus | NA |
| **40.88** | **17.10** | **0.1040** | **herb** | Contrada_Monticelli_(Castellana) | Stephanorhinus_hundsheimensis | NA |
| **50.47** | **5.60** | **0.1069** | **herb** | La_Belle_Roche | Bison_schoetensacki | NA |
| **50.47** | **5.60** | **0.1069** | **herb** | La_Belle_Roche | Capreolus_capreolus | NA |
| **50.47** | **5.60** | **0.1069** | **herb** | La_Belle_Roche | Cervus_elaphus | NA |
| **50.47** | **5.60** | **0.1069** | **herb** | La_Belle_Roche | Equus_ferus | NA |
| **50.47** | **5.60** | **0.1069** | **herb** | La_Belle_Roche | Hemitragus_bonali | NA |
| **50.47** | **5.60** | **0.1069** | **herb** | La_Belle_Roche | Rangifer_tarandus | NA |
| **47.50** | **46.80** | **0.1070** | **herb** | Kopanovka | Cervus_elaphus | NA |
| **47.50** | **46.80** | **0.1070** | **herb** | Kopanovka | Equus_ferus | NA |
| **47.50** | **46.80** | **0.1070** | **herb** | Kopanovka | Megaloceros_giganteus | NA |
| **47.50** | **46.80** | **0.1070** | **herb** | Kopanovka | Saiga_tatarica | NA |
| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Bison_schoetensacki | NA |
| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Cervus_elaphus | NA |
| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Dama_clactoniana | NA |
| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Equus_ferus | NA |
| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Hippopotamus_antiquus | NA |

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| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Praemegaceros_solhilacus | NA |
| **42.33** | **12.73** | **0.1074** | **herb** | Cesi | Stephanorhinus_hundsheimensis | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Bison_schoetensacki | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Cervalces_latifrons | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Cervus_elaphus | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Equus_ferus | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Mammuthus_trogontherii | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Praeovibos_priscus | NA |
| **49.93** | **14.83** | **0.1165** | **herb** | Koneprusy_C718_bei_Karlstejn | Sus_scrofa | NA |
| **51.50** | **0.27** | **0.1200** | **herb** | Aveley | Cervus_elaphus | NA |
| **51.50** | **0.27** | **0.1200** | **herb** | Aveley | Elephas_antiquus | NA |
| **51.50** | **0.27** | **0.1200** | **herb** | Aveley | Equus_ferus | NA |
| **51.50** | **0.27** | **0.1200** | **herb** | Aveley | Mammuthus_primigenius | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Bison_priscus | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Bos_primigenius | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Cervus_elaphus | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Dama_dama | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Elephas_antiquus | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Hippopotamus_amphibius | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Megaloceros_giganteus | NA |
| **52.12** | **0.03** | **0.1200** | **herb** | Barrington | Stephanorhinus_hemitoechus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Alces_alces | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Bison_priscus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Bos_primigenius | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Capreolus_capreolus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Cervus_elaphus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Elephas_antiquus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Hippopotamus_amphibius | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Mammuthus_primigenius | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Megaloceros_giganteus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Rangifer_tarandus | NA |
| **49.38** | **8.50** | **0.1200** | **herb** | Bruehl_1 | Sus_scrofa | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Bison_priscus | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Cervus_elaphus | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Coelodonta_antiquitatis | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Dama_dama | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Equus_hydruntinus | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Equus_ferus | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Mammuthus_primigenius | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Megaloceros_giganteus | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Stephanorhinus_hemitoechus | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Stephanorhinus_kirchbergensis | NA |
| **51.13** | **10.62** | **0.1200** | **herb** | Burgtonna | Sus_scrofa | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Bison_priscus | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Bos_primigenius | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Cervus_elaphus | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Coelodonta_antiquitatis | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Equus_ferus | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Mammuthus_primigenius | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Megaloceros_giganteus | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Ovibos_moschatus | NA |
| **51.45** | **0.18** | **0.1200** | **herb** | Crayford | Stephanorhinus_hemitoechus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Alces_alces | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Bison_priscus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Bos_primigenius | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Capreolus_capreolus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Cervus_elaphus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Elephas_antiquus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Mammuthus_primigenius | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Megaloceros_giganteus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Rangifer_tarandus | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Stephanorhinus_kirchbergensis | NA |
| **49.82** | **8.53** | **0.1200** | **herb** | Crumstadt_1 | Sus_scrofa | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Alces_alces | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Bison_priscus | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Bos_primigenius | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Cervus_elaphus | NA |

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| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Coelodonta_antiquitatis | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Dama_dama | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Hippopotamus_amphibius | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Mammuthus_primigenius | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Megaloceros_giganteus | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Rangifer_tarandus | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Stephanorhinus_hemitoechus | NA |
| **49.75** | **8.43** | **0.1200** | **herb** | Eich | Stephanorhinus_kirchbergensis | NA |
| **51.47** | **12.28** | **0.1200** | **herb** | Grabschutz | Capreolus_capreolus | NA |
| **51.47** | **12.28** | **0.1200** | **herb** | Grabschutz | Cervus_elaphus | NA |
| **51.47** | **12.28** | **0.1200** | **herb** | Grabschutz | Elephas_antiquus | NA |
| **51.47** | **12.28** | **0.1200** | **herb** | Grabschutz | Stephanorhinus_kirchbergensis | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Alces_alces | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Bison_priscus | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Bos_primigenius | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Cervus_elaphus | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Coelodonta_antiquitatis | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Dama_dama | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Elephas_antiquus | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Hippopotamus_amphibius | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Mammuthus_primigenius | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Megaloceros_giganteus | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Stephanorhinus_kirchbergensis | NA |
| **49.70** | **8.46** | **0.1200** | **herb** | Gross_Rohrheim | Sus_scrofa | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Cervus_elaphus | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Dama_dama | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Elephas_antiquus | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Hippopotamus_amphibius | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Megaloceros_giganteus | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Stephanorhinus_hemitoechus | NA |
| **50.48** | **-3.77** | **0.1200** | **herb** | Joint_Mitnor_cave | Sus_scrofa | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Alces_alces | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Bison_priscus | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Capreolus_capreolus | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Cervus_elaphus | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Coelodonta_antiquitatis | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Equus_hydruntinus | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Mammuthus_primigenius | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Megaloceros_giganteus | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Rangifer_tarandus | NA |
| **48.17** | **20.58** | **0.1200** | **herb** | Kalman_Lambrecht_cave | Sus_scrofa | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Bison_priscus | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Cervus_elaphus | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Dama_dama | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Elephas_antiquus | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Equus_ferus | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Hippopotamus_amphibius | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Megaloceros_giganteus | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Stephanorhinus_hemitoechus | NA |
| **54.27** | **-0.92** | **0.1200** | **herb** | Kirkdale_cave | Sus_scrofa | NA |
| **-3.50** | **35.00** | **0.1200** | **herb** | Laetoli_14 | Ceratotherium_praecox | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Bison_priscus | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Bos_primigenius | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Capreolus_capreolus | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Elephas_antiquus | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Hippopotamus_amphibius | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Mammuthus_primigenius | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Megaloceros_giganteus | NA |
| **49.85** | **8.40** | **0.1200** | **herb** | Leeheim | Stephanorhinus_kirchbergensis | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Bos_primigenius | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Capreolus_capreolus | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Cervus_elaphus | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Dama_dama | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Elephas_antiquus | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Equus_ferus | NA |
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Megaloceros_giganteus | NA |

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|---|---|---|---|---|---|---|
| **52.87** | **9.39** | **0.1200** | **herb** | Lehringen | Stephanorhinus_kirchbergensis | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Alces_alces | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Bison_priscus | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Capreolus_capreolus | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Cervus_elaphus | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Coelodonta_antiquitatis | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Dama_dama | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Elephas_antiquus | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Mammuthus_primigenius | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Megaloceros_giganteus | NA |
| **52.42** | **6.45** | **0.1200** | **herb** | Luttenberg | Rangifer_tarandus | NA |
| **51.82** | **-0.64** | **0.1200** | **herb** | Marsworth | Cervus_elaphus | NA |
| **51.82** | **-0.64** | **0.1200** | **herb** | Marsworth | Hippopotamus_amphibius | NA |
| **51.82** | **-0.64** | **0.1200** | **herb** | Marsworth | Megaloceros_giganteus | NA |
| **51.82** | **-0.64** | **0.1200** | **herb** | Marsworth | Stephanorhinus_hemitoechus | NA |
| **51.33** | **11.87** | **0.1200** | **herb** | Neumark_Nord | Bos_primigenius | NA |
| **51.33** | **11.87** | **0.1200** | **herb** | Neumark_Nord | Dama_dama | NA |
| **51.33** | **11.87** | **0.1200** | **herb** | Neumark_Nord | Elephas_antiquus | NA |
| **51.33** | **11.87** | **0.1200** | **herb** | Neumark_Nord | Megaloceros_giganteus | NA |
| **51.33** | **11.87** | **0.1200** | **herb** | Neumark_Nord | Stephanorhinus_kirchbergensis | NA |
| **48.33** | **20.53** | **0.1200** | **herb** | Poroslyuk | Bison_priscus | NA |
| **48.33** | **20.53** | **0.1200** | **herb** | Poroslyuk | Capreolus_capreolus | NA |
| **48.33** | **20.53** | **0.1200** | **herb** | Poroslyuk | Cervus_elaphus | NA |
| **48.33** | **20.53** | **0.1200** | **herb** | Poroslyuk | Sus_scrofa | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Alces_alces | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Bison_priscus | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Bos_primigenius | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Capreolus_capreolus | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Cervus_elaphus | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Elephas_antiquus | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Megaloceros_giganteus | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Stephanorhinus_kirchbergensis | NA |
| **51.43** | **12.18** | **0.1200** | **herb** | Rabutz | Sus_scrofa | NA |
| **55.48** | **9.45** | **0.1200** | **herb** | Seest | Bison_priscus | NA |
| **55.48** | **9.45** | **0.1200** | **herb** | Seest | Dama_dama | NA |
| **55.48** | **9.45** | **0.1200** | **herb** | Seest | Megaloceros_giganteus | NA |
| **55.48** | **9.45** | **0.1200** | **herb** | Seest | Stephanorhinus_kirchbergensis | NA |
| **52.00** | **107.00** | **0.1200** | **herb** | Selenga_river | Bison_bonasus | NA |
| **52.00** | **107.00** | **0.1200** | **herb** | Selenga_river | Coelodonta_antiquitatis | NA |
| **52.00** | **107.00** | **0.1200** | **herb** | Selenga_river | Equus_hemionus | NA |
| **46.00** | **11.00** | **0.1200** | **herb** | Serbaro | Bos_primigenius | NA |
| **46.00** | **11.00** | **0.1200** | **herb** | Serbaro | Capreolus_capreolus | NA |
| **46.00** | **11.00** | **0.1200** | **herb** | Serbaro | Cervus_elaphus | NA |
| **46.00** | **11.00** | **0.1200** | **herb** | Serbaro | Dama_dama | NA |
| **46.00** | **11.00** | **0.1200** | **herb** | Serbaro | Stephanorhinus_kirchbergensis | NA |
| **46.00** | **11.00** | **0.1200** | **herb** | Serbaro | Sus_scrofa | NA |
| **50.00** | **40.80** | **0.1200** | **herb** | Shkurlat | Bison_priscus | NA |
| **50.00** | **40.80** | **0.1200** | **herb** | Shkurlat | Coelodonta_antiquitatis | NA |
| **50.00** | **40.80** | **0.1200** | **herb** | Shkurlat | Elephas_antiquus | NA |
| **50.00** | **40.80** | **0.1200** | **herb** | Shkurlat | Equus_ferus | NA |
| **50.00** | **40.80** | **0.1200** | **herb** | Shkurlat | Mammuthus_primigenius | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Bison_priscus | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Bos_primigenius | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Cervus_elaphus | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Elephas_antiquus | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Hippopotamus_amphibius | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Mammuthus_primigenius | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Megaloceros_giganteus | NA |
| **49.01** | **8.44** | **0.1200** | **herb** | Stockstadt | Rangifer_tarandus | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Bos_primigenius | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Capreolus_capreolus | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Cervus_elaphus | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Elephas_antiquus | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Equus_hydruntinus | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Megaloceros_giganteus | NA |
| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Stephanorhinus_hemitoechus | NA |

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| **48.75** | **9.23** | **0.1200** | **herb** | Stuttgart_-_Unterturkheim | Sus_scrofa | NA |
| **52.71** | **0.98** | **0.1200** | **herb** | Swanton_Morley | Hippopotamus_amphibius | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Alces_alces | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Bison_priscus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Bos_primigenius | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Capreolus_capreolus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Cervus_elaphus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Coelodonta_antiquitatis | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Dama_dama | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Elephas_antiquus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Equus_hydruntinus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Equus_ferus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Mammuthus_primigenius | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Megaloceros_giganteus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Rangifer_tarandus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Stephanorhinus_hemitoechus | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Stephanorhinus_kirchbergensis | NA |
| **50.95** | **11.37** | **0.1200** | **herb** | Taubach | Sus_scrofa | NA |
| **51.50** | **-0.17** | **0.1200** | **herb** | Trafalger_Square | Bos_primigenius | NA |
| **51.50** | **-0.17** | **0.1200** | **herb** | Trafalger_Square | Cervus_elaphus | NA |
| **51.50** | **-0.17** | **0.1200** | **herb** | Trafalger_Square | Dama_dama | NA |
| **51.50** | **-0.17** | **0.1200** | **herb** | Trafalger_Square | Elephas_antiquus | NA |
| **51.50** | **-0.17** | **0.1200** | **herb** | Trafalger_Square | Hippopotamus_amphibius | NA |
| **46.29** | **16.04** | **0.1200** | **herb** | Velica_Pecina_k | Alces_alces | NA |
| **46.29** | **16.04** | **0.1200** | **herb** | Velica_Pecina_k | Bison_priscus | NA |
| **46.29** | **16.04** | **0.1200** | **herb** | Velica_Pecina_k | Rangifer_tarandus | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Bos_primigenius | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Capreolus_capreolus | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Cervus_elaphus | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Dama_dama | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Megaloceros_giganteus | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Stephanorhinus_kirchbergensis | NA |
| **45.84** | **15.87** | **0.1200** | **herb** | Veternica_j | Sus_scrofa | NA |
| **54.08** | **-2.27** | **0.1200** | **herb** | Victoria_Cave | Cervus_elaphus | NA |
| **54.08** | **-2.27** | **0.1200** | **herb** | Victoria_Cave | Elephas_antiquus | NA |
| **54.08** | **-2.27** | **0.1200** | **herb** | Victoria_Cave | Hippopotamus_amphibius | NA |
| **54.08** | **-2.27** | **0.1200** | **herb** | Victoria_Cave | Stephanorhinus_hemitoechus | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Alces_alces | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Bison_priscus | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Bos_primigenius | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Cervus_elaphus | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Dama_dama | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Elephas_antiquus | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Mammuthus_primigenius | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Megaloceros_giganteus | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Rangifer_tarandus | NA |
| **49.87** | **8.51** | **0.1200** | **herb** | Wolfskehlen | Stephanorhinus_kirchbergensis | NA |
| **53.60** | **76.00** | **0.1200** | **herb** | Zhelezinka | Mammuthus_primigenius | NA |
| **45.00** | **34.00** | **0.1225** | **herb** | Zaskal'naya_ | Bison_priscus | NA |
| **45.00** | **34.00** | **0.1225** | **herb** | Zaskal'naya_ | Equus_ferus | NA |
| **45.00** | **34.00** | **0.1225** | **herb** | Zaskal'naya_ | Saiga_tatarica | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Bos_primigenius | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Capreolus_capreolus | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Cervus_elaphus | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Dama_dama | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Elephas_antiquus | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Equus_stenonis | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Equus_ferus | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Hippopotamus_amphibius | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Mammuthus_meridionalis | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Megaloceros_giganteus | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Stephanorhinus_kirchbergensis | NA |
| **46.10** | **11.50** | **0.1251** | **herb** | Romagnano_I-II | Sus_scrofa | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Cervus_elaphus | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Elephas_antiquus | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Equus_hydruntinus | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Equus_ferus | NA |

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| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Hippopotamus_antiquus | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Mammuthus_primigenius | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Megaloceros_giganteus | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Stephanorhinus_hemitoechus | NA |
| **48.90** | **2.30** | **0.1258** | **herb** | Levallois_(Region_Parisienne) | Sus_scrofa | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Bison_schoetensacki | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Capreolus_capreolus | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Cervalces_latifrons | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Cervus_elaphus | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Elephas_antiquus | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Equus_ferus | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Hippopotamus_amphibius | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Stephanorhinus_hundsheimensis | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Stephanorhinus_kirchbergensis | NA |
| **49.33** | **8.81** | **0.1258** | **herb** | Mauer_bei_Heidelberg | Sus_scrofa | NA |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Capreolus_capreolus | heide |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Cervus_elaphus | heide |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Dama_dama | heide |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Equus_ferus | heide |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Praemegaceros_verticornis | heide |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Stephanorhinus_hundsheimensis | heide |
| **50.85** | **-0.71** | **0.1258** | **herb** | Boxgrove | Sus_scrofa | heide |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Bos_primigenius | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Capreolus_capreolus | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Cervus_elaphus | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Coelodonta_antiquitatis | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Mammuthus_primigenius | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Megaloceros_giganteus | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Rangifer_tarandus | NA |
| **50.99** | **4.39** | **0.1262** | **herb** | Zemst_IIB | Sus_scrofa | NA |
| **49.50** | **11.58** | **0.1300** | **herb** | Hunas_Riss | Alces_alces | NA |
| **49.50** | **11.58** | **0.1300** | **herb** | Hunas_Riss | Cervus_elaphus | NA |
| **49.50** | **11.58** | **0.1300** | **herb** | Hunas_Riss | Stephanorhinus_kirchbergensis | NA |
| **51.00** | **11.33** | **0.1300** | **herb** | Taubach-Weimar_Ehringsdorf_1 | Coelodonta_antiquitatis | NA |
| **51.00** | **11.33** | **0.1300** | **herb** | Taubach-Weimar_Ehringsdorf_1 | Mammuthus_primigenius | NA |
| **39.37** | **23.00** | **0.1318** | **herb** | Volos_(Thessaly) | Hemitragus_orientalis | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Bison_schoetensacki | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Bison_priscus | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Capreolus_suessenbornensis | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Cervalces_latifrons | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Elephas_antiquus | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Equus_ferus | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Hippopotamus_amphibius | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Mammuthus_trogontherii | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Praeovibos_priscus | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Stephanorhinus_etruscus | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Stephanorhinus_kirchbergensis | NA |
| **50.40** | **8.16** | **0.1352** | **herb** | Mosbach_2 | Sus_scrofa | NA |
| **44.80** | **1.20** | **0.1379** | **herb** | Grotte_de_l'Eglise | Cervus_elaphus | NA |
| **44.80** | **1.20** | **0.1379** | **herb** | Grotte_de_l'Eglise | Hemitragus_bonali | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Axis_farnetensis | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Cervus_elaphus | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Elephas_antiquus | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Equus_altidens | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Hemibos_galerianus | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Hippopotamus_antiquus | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Mammuthus_trogontherii | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Megaloceros_savini | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Praemegaceros_verticornis | NA |
| **41.82** | **12.30** | **0.1485** | **herb** | Ponte_Galeria_2 | Stephanorhinus_hundsheimensis | NA |
| **50.00** | **106.00** | **0.1500** | **herb** | Chikoj_river_Alluvial_terrace | Bison_priscus | NA |
| **50.00** | **106.00** | **0.1500** | **herb** | Chikoj_river_Alluvial_terrace | Coelodonta_antiquitatis | NA |
| **42.00** | **-1.00** | **0.1500** | **herb** | La_Parte | Bison_priscus | NA |
| **42.00** | **-1.00** | **0.1500** | **herb** | La_Parte | Cervus_elaphus | NA |
| **42.00** | **-1.00** | **0.1500** | **herb** | La_Parte | Coelodonta_antiquitatis | NA |
| **42.00** | **-1.00** | **0.1500** | **herb** | La_Parte | Equus_ferus | NA |

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| **42.00** | **-1.00** | **0.1500** | **herb** | La_Parte | Megaloceros_giganteus | NA |
| **42.00** | **-1.00** | **0.1500** | **herb** | La_Parte | Rangifer_tarandus | NA |
| **45.81** | **18.38** | **0.1502** | **herb** | Nagyharsanyhegy_4 | Equus_altidens | NA |
| **45.81** | **18.38** | **0.1502** | **herb** | Nagyharsanyhegy_4 | Gazellospira_torticornis | NA |
| **45.81** | **18.38** | **0.1502** | **herb** | Nagyharsanyhegy_4 | Procamptoceras_brivatense | NA |
| **50.48** | **7.45** | **0.1550** | **herb** | Miesenheim_1 | Capreolus_capreolus | NA |
| **50.48** | **7.45** | **0.1550** | **herb** | Miesenheim_1 | Cervus_elaphus | NA |
| **50.48** | **7.45** | **0.1550** | **herb** | Miesenheim_1 | Mammuthus_trogontherii | NA |
| **50.48** | **7.45** | **0.1550** | **herb** | Miesenheim_1 | Stephanorhinus_etruscus | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Bos_primigenius | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Capra_pyrenaica | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Capreolus_capreolus | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Cervus_elaphus | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Elephas_antiquus | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Equus_ferus | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Rupicapra_rupicapra | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Stephanorhinus_hemitoechus | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Stephanorhinus_kirchbergensis | NA |
| **38.96** | **-0.47** | **0.1575** | **herb** | Cova_Negra_IV | Sus_scrofa | NA |
| **43.60** | **0.60** | **0.1607** | **herb** | Nautiere_(Gers) | Bison_schoetensacki | NA |
| **43.60** | **0.60** | **0.1607** | **herb** | Nautiere_(Gers) | Capreolus_capreolus | NA |
| **43.60** | **0.60** | **0.1607** | **herb** | Nautiere_(Gers) | Cervus_elaphus | NA |
| **43.60** | **0.60** | **0.1607** | **herb** | Nautiere_(Gers) | Hippopotamus_antiquus | NA |
| **43.60** | **0.60** | **0.1607** | **herb** | Nautiere_(Gers) | Stephanorhinus_hundsheimensis | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Capra_ibex | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Capreolus_capreolus | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Cervus_elaphus | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Dama_clactoniana | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Elephas_antiquus | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Equus_ferus | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Megaloceros_giganteus | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Rangifer_tarandus | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Rupicapra_rupicapra | NA |
| **43.70** | **7.30** | **0.1700** | **herb** | Grotte_du_Lazaret_CII_(Nice) | Stephanorhinus_hemitoechus | NA |
| **50.19** | **14.60** | **0.1742** | **herb** | Prezletice | Capreolus_suessenbornensis | NA |
| **50.19** | **14.60** | **0.1742** | **herb** | Prezletice | Equus_ferus | NA |
| **50.19** | **14.60** | **0.1742** | **herb** | Prezletice | Mammuthus_trogontherii | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Alces_alces | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Bison_priscus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Bos_primigenius | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Capreolus_capreolus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Cervus_elaphus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Coelodonta_antiquitatis | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Equus_ferus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Mammuthus_primigenius | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Megaloceros_giganteus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Ovibos_moschatus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Rangifer_tarandus | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Saiga_tatarica | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Stephanorhinus_kirchbergensis | NA |
| **54.00** | **48.50** | **0.1785** | **herb** | Tunguz_peninsula | Sus_scrofa | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Bison_schoetensacki | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Bos_primigenius | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Elephas_antiquus | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Equus_altidens | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Equus_suessenbornensis | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Praemegaceros_solhilacus | NA |
| **40.95** | **15.82** | **0.1788** | **herb** | Venosa-Loreto | Stephanorhinus_hundsheimensis | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Bison_schoetensacki | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Bison_priscus | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Capreolus_capreolus | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Elephas_antiquus | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Equus_ferus | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Mammuthus_trogontherii | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Praemegaceros_verticornis | NA |
| **49.85** | **9.97** | **0.1800** | **herb** | Randersacker,_Würzburg | Stephanorhinus_etruscus | NA |
| **54.20** | **30.35** | **0.1800** | **herb** | Shklov_early | Stephanorhinus_kirchbergen | NA |

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| **51.24** | **-2.71** | **0.1838** | **herb** | Westbury_sub_Mendip | Ovis_ammon | NA |
| **51.24** | **-2.71** | **0.1838** | **herb** | Westbury_sub_Mendip | Praeovibos_priscus | NA |
| **39.00** | **121.80** | **0.1900** | **herb** | Xiaogushan | Cervus_elaphus | NA |
| **39.00** | **121.80** | **0.1900** | **herb** | Xiaogushan | Cervus_nippon | NA |
| **39.00** | **121.80** | **0.1900** | **herb** | Xiaogushan | Stephanorhinus_kirchbergensis | NA |
| **39.00** | **121.80** | **0.1900** | **herb** | Xiaogushan | Sus_scrofa | NA |
| **46.00** | **129.00** | **0.1900** | **herb** | Yushu | Bos_primigenius | NA |
| **46.00** | **129.00** | **0.1900** | **herb** | Yushu | Cervus_elaphus | NA |
| **46.00** | **129.00** | **0.1900** | **herb** | Yushu | Stephanorhinus_kirchbergensis | NA |
| **46.00** | **129.00** | **0.1900** | **herb** | Yushu | Sus_scrofa | NA |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | NA | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Capra_ibex | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Capreolus_capreolus | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Cervus_elaphus | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | NA | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Stephanorhinus_hemitoechus | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Equus_ferus | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Megaloceros_giganteus | heide |
| **43.6939** | **7.2892** | **0.1900** | **herb** | Lazaret | Rupicapra_rupicapra | heide |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Bison_priscus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Capreolus_capreolus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Cervalces_latifrons | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Cervus_elaphus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Equus_ferus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Mammuthus_primigenius | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Megaloceros_giganteus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Rangifer_tarandus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Stephanorhinus_hemitoechus | NA |
| **50.98** | **11.31** | **0.1920** | **herb** | Weimar-Ehringsdorf_UT | Sus_scrofa | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Bison_schoetensacki | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Bison_priscus | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Capreolus_suessenbornensis | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Cervalces_latifrons | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Equus_suessenbornensis | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Equus_ferus | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Hippopotamus_amphibius | NA |
| **49.82** | **9.95** | **0.1965** | **herb** | Wurzburg-Schalksberg | Stephanorhinus_etruscus | NA |
| **44.04** | **6.01** | **0.1992** | **herb** | L'Escale_a_Saint_Esteve_Janson | Hemitragus_bonali | NA |
| **44.04** | **6.01** | **0.1992** | **herb** | L'Escale_a_Saint_Esteve_Janson | Praemegaceros_solhilacus | NA |
| **44.04** | **6.01** | **0.1992** | **herb** | L'Escale_a_Saint_Esteve_Janson | Stephanorhinus_kirchbergensis | NA |
| **44.00** | **43.00** | **0.2100** | **herb** | Kalaus,_Stavropol_fauna | Bos_primigenius | NA |
| **44.00** | **43.00** | **0.2100** | **herb** | Kalaus,_Stavropol_fauna | Megaloceros_giganteus | NA |
| **44.00** | **43.00** | **0.2100** | **herb** | Kalaus,_Stavropol_fauna | Saiga_tatarica | NA |
| **40.55** | **14.23** | **0.2100** | **herb** | Quisisana-Certosa | Bos_primigenius | NA |
| **40.55** | **14.23** | **0.2100** | **herb** | Quisisana-Certosa | Cervus_elaphus | NA |
| **40.55** | **14.23** | **0.2100** | **herb** | Quisisana-Certosa | Mammuthus_trogontherii | NA |
| **40.55** | **14.23** | **0.2100** | **herb** | Quisisana-Certosa | Stephanorhinus_hemitoechus | NA |
| **40.55** | **14.23** | **0.2100** | **herb** | Quisisana-Certosa | Sus_scrofa | NA |
| **49.50** | **11.55** | **0.2150** | **herb** | Hunas_st_E-F | Bison_priscus | NA |
| **49.50** | **11.55** | **0.2150** | **herb** | Hunas_st_E-F | Capreolus_capreolus | NA |
| **49.50** | **11.55** | **0.2150** | **herb** | Hunas_st_E-F | Cervus_elaphus | NA |
| **49.50** | **11.55** | **0.2150** | **herb** | Hunas_st_E-F | Rangifer_tarandus | NA |
| **49.50** | **11.55** | **0.2150** | **herb** | Hunas_st_E-F | Stephanorhinus_kirchbergensis | NA |
| **48.90** | **16.65** | **0.2162** | **herb** | Stranska_skala | Bos_primigenius | NA |
| **48.90** | **16.65** | **0.2162** | **herb** | Stranska_skala | Coelodonta_antiquitatis | NA |
| **48.90** | **16.65** | **0.2162** | **herb** | Stranska_skala | Equus_altidens | NA |
| **48.90** | **16.65** | **0.2162** | **herb** | Stranska_skala | Equus_suessenbornensis | NA |
| **48.90** | **16.65** | **0.2162** | **herb** | Stranska_skala | Mammuthus_trogontherii | NA |
| **48.90** | **16.65** | **0.2162** | **herb** | Stranska_skala | Stephanorhinus_etruscus | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Bison_schoetensacki | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Capreolus_capreolus | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Cervus_elaphus | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Elephas_antiquus | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Equus_altidens | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Equus_suessenbornensis | NA |

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| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Hemitragus_orientalis | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Hippopotamus_antiquus | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Mammuthus_meridionalis | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Praemegaceros_solhilacus | NA |
| **45.11** | **3.88** | **0.2262** | **herb** | Soleilhac_(Haute_Loire) | Stephanorhinus_hundsheimensis | NA |
| **43.22** | **11.90** | **0.2278** | **herb** | Borgonuovo_(Siena) | Elephas_antiquus | NA |
| **43.22** | **11.90** | **0.2278** | **herb** | Borgonuovo_(Siena) | Equus_suessenbornensis | NA |
| **43.22** | **11.90** | **0.2278** | **herb** | Borgonuovo_(Siena) | Hippopotamus_antiquus | NA |
| **43.22** | **11.90** | **0.2278** | **herb** | Borgonuovo_(Siena) | Praemegaceros_verticornis | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Bison_priscus | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Capreolus_capreolus | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Cervalces_latifrons | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Cervus_elaphus | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Equus_major | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Hippopotamus_amphibius | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Mammuthus_meridionalis | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Mammuthus_trogontherii | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Praemegaceros_verticornis | NA |
| **49.16** | **8.30** | **0.2299** | **herb** | Jockgrim,_Pfalz | Stephanorhinus_etruscus | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Bison_menneri | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Cervalces_latifrons | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Equus_major | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Hippopotamus_antiquus | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Mammuthus_meridionalis | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Mammuthus_trogontherii | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Praeovibos_priscus | NA |
| **52.47** | **4.62** | **0.2304** | **herb** | Noordzee_II | Stephanorhinus_etruscus | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Capreolus_suessenbornensis | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Cervus_elaphus | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Equus_altidens | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Equus_suessenbornensis | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Mammuthus_meridionalis | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Megaloceros_savini | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Praemegaceros_verticornis | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Stephanorhinus_etruscus | NA |
| **51.40** | **11.31** | **0.2304** | **herb** | Voigtstedt | Sus_scrofa | NA |
| **42.19** | **13.17** | **0.2320** | **herb** | Pagliare_di_Sassa | Dama_clactoniana | NA |
| **42.19** | **13.17** | **0.2320** | **herb** | Pagliare_di_Sassa | Elephas_antiquus | NA |
| **42.19** | **13.17** | **0.2320** | **herb** | Pagliare_di_Sassa | Hippopotamus_antiquus | NA |
| **42.19** | **13.17** | **0.2320** | **herb** | Pagliare_di_Sassa | Megaloceros_savini | NA |
| **42.19** | **13.17** | **0.2320** | **herb** | Pagliare_di_Sassa | Praemegaceros_verticornis | NA |
| **42.19** | **13.17** | **0.2320** | **herb** | Pagliare_di_Sassa | Stephanorhinus_hundsheimensis | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Bison_priscus | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Capreolus_capreolus | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Cervalces_latifrons | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Cervus_elaphus | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Dama_dama | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Elephas_antiquus | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Megaloceros_giganteus | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Stephanorhinus_hemitoechus | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Stephanorhinus_kirchbergensis | NA |
| **50.98** | **11.31** | **0.2350** | **herb** | Weimar-Ehringsdorf_LT | Sus_scrofa | NA |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Cervus_grayi | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | NA | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Stephanorhinus_kirchbergensis | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Equus_dalianensis | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Procapra_przewalskii | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Hydropotes_inermis | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | NA | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Alces_ordosianus | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Spirocerus_kiakhtensis | heide |
| **40.5778** | **122.4439** | **0.2370** | **herb** | Jinniushan | Sus_lydekkeri | heide |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10A | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10B | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10B | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10B | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10C | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10C | Cervus_elaphus | NA |

| | | | | | | |
|---|---|---|---|---|---|---|
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10C | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10cc | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10cc | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10cc | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10cc | Stephanorhinus_hemitoechus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10D | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10D | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10D | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG10D | Stephanorhinus_hemitoechus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG11 | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG8 | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TG9 | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TN5 | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TN5 | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TN6 | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TN6 | Cervus_elaphus | NA |
| **42.66** | **-3.50** | **0.2400** | **herb** | Atapuerca_TN7 | Cervus_elaphus | NA |
| **42.66** | **-3.50** | **0.2400** | **herb** | Atapuerca_TN7 | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TZ | Bison_priscus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TZ | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2400** | **herb** | Atapuerca_TZ | Dama_dama | NA |
| **39.50** | **-8.61** | **0.2410** | **herb** | Galeria_Pesada_(Almonda) | Cervus_elaphus | NA |
| **39.50** | **-8.61** | **0.2410** | **herb** | Galeria_Pesada_(Almonda) | Dama_clactoniana | NA |
| **39.50** | **-8.61** | **0.2410** | **herb** | Galeria_Pesada_(Almonda) | Equus_ferus | NA |
| **39.50** | **-8.61** | **0.2410** | **herb** | Galeria_Pesada_(Almonda) | Ovis_ammon | NA |
| **39.50** | **-8.61** | **0.2410** | **herb** | Galeria_Pesada_(Almonda) | Stephanorhinus_hemitoechus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Alces_alces | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Bison_priscus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Bos_primigenius | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Cervus_elaphus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Equus_hydruntinus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Equus_ferus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Megaloceros_giganteus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Ovibos_moschatus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Rangifer_tarandus | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Saiga_tatarica | NA |
| **48.05** | **46.05** | **0.2435** | **herb** | Chernyj_Jar(Nizhnee_Zajmishch) | Stephanorhinus_kirchbergensis | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG10A | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG10A | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG10A | Equus_ferus | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG11 | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG11 | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG11 | Equus_ferus | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG11 | Hemitragus_bonali | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TG11 | Stephanorhinus_hemitoechus | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TN6da | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TN6da | Dama_dama | NA |
| **42.33** | **-3.50** | **0.2465** | **herb** | Atapuerca_TN6da | Equus_ferus | NA |
| **42.33** | **-3.50** | **0.2473** | **herb** | Atapuerca_TD8inf | Axis_nestii | NA |
| **42.33** | **-3.50** | **0.2473** | **herb** | Atapuerca_TD8inf | Eucladoceros_giulii | NA |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Antilope_cervicapra | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | NA | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Bos_gaurus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Bos_namadicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Bos_planifrons | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | NA | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Bubalus_bubalis | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Rucervus_duvaucelii | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | NA | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Elephas_hysudrindicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Elephas_namadicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Equus_ferus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Equus_hemionus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Equus_namadicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Hexaprotodon_palaeindicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Hexaprotodon_sivalensis | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Hippopotamus_namadicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Hippopotamus_palaeindicus | heide |

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|---|---|---|---|---|---|---|
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | NA | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Elephas_namadicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Rhinoceros_unicornis | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Stegodon_gaensa | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Stegodon_insignis | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Stegodon_namadicus | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | NA | heide |
| **22.8206** | **77.8539** | **0.2500** | **herb** | Narmada_(hathorna) | Sus_scrofa | heide |
| **44.17** | **11.09** | **0.2600** | **herb** | Campoverde_2 | Bos_primigenius | NA |
| **44.17** | **11.09** | **0.2600** | **herb** | Campoverde_2 | Capreolus_capreolus | NA |
| **44.17** | **11.09** | **0.2600** | **herb** | Campoverde_2 | Cervus_elaphus | NA |
| **44.17** | **11.09** | **0.2600** | **herb** | Campoverde_2 | Dama_dama | NA |
| **44.17** | **11.09** | **0.2600** | **herb** | Campoverde_2 | Equus_hydruntinus | NA |
| **44.17** | **11.09** | **0.2600** | **herb** | Campoverde_2 | Mammuthus_trogontherii | NA |
| **44.00** | **11.00** | **0.2600** | **herb** | Valoncello | Bos_primigenius | NA |
| **44.00** | **11.00** | **0.2600** | **herb** | Valoncello | Cervus_elaphus | NA |
| **50.40** | **8.16** | **0.2692** | **herb** | Mosbach_1 | Cervalces_latifrons | NA |
| **50.40** | **8.16** | **0.2692** | **herb** | Mosbach_1 | Cervus_elaphus | NA |
| **50.40** | **8.16** | **0.2692** | **herb** | Mosbach_1 | Hippopotamus_antiquus | NA |
| **50.40** | **8.16** | **0.2692** | **herb** | Mosbach_1 | Mammuthus_trogontherii | NA |
| **50.40** | **8.16** | **0.2692** | **herb** | Mosbach_1 | Praemegaceros_verticornis | NA |
| **50.40** | **8.16** | **0.2692** | **herb** | Mosbach_1 | Stephanorhinus_etruscus | NA |
| **55.05** | **49.00** | **0.2700** | **herb** | Mysy_-_Mansurovo_early | Mammuthus_trogontherii | NA |
| **55.05** | **49.00** | **0.2700** | **herb** | Mysy_-_Mansurovo_early | Stephanorhinus_kirchbergensis | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Bos_primigenius | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Cervus_elaphus | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Coelodonta_antiquitatis | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Elephas_antiquus | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Hippopotamus_amphibius | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Mammuthus_primigenius | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Megaloceros_giganteus | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Stephanorhinus_hemitoechus | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Stephanorhinus_kirchbergensis | NA |
| **49.29** | **8.57** | **0.2700** | **herb** | Reilingen | Sus_scrofa | NA |
| **34.8660** | **109.7329** | **0.2700** | **herb** | Dali | Coelodonta_antiquitatis | heide |
| **34.8660** | **109.7329** | **0.2700** | **herb** | Dali | Stephanorhinus_kirchbergensis | heide |
| **34.8660** | **109.7329** | **0.2700** | **herb** | Dali | NA | heide |
| **34.8660** | **109.7329** | **0.2700** | **herb** | Dali | NA | heide |
| **34.8660** | **109.7329** | **0.2700** | **herb** | Dali | Palaeoloxodon_naumanni | heide |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Cervus_elaphus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Dama_dama | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Elephas_antiquus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Equus_hydruntinus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Equus_stenonis | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Equus_ferus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Hippopotamus_antiquus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Leptobos_elatus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Mammuthus_meridionalis | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Praemegaceros_solhilacus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Praemegaceros_verticornis | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Stephanorhinus_etruscus | NA |
| **50.00** | **1.88** | **0.2700** | **herb** | Abbeville | Sus_scrofa | NA |
| **50.00** | **33.00** | **0.2715** | **herb** | Lubni | Bison_priscus | NA |
| **50.00** | **33.00** | **0.2715** | **herb** | Lubni | Cervus_elaphus | NA |
| **50.00** | **33.00** | **0.2715** | **herb** | Lubni | Coelodonta_antiquitatis | NA |
| **50.00** | **33.00** | **0.2715** | **herb** | Lubni | Equus_ferus | NA |
| **50.00** | **33.00** | **0.2715** | **herb** | Lubni | Mammuthus_primigenius | NA |
| **50.00** | **33.00** | **0.2715** | **herb** | Lubni | Rangifer_tarandus | NA |
| **42.33** | **-3.50** | **0.3000** | **herb** | Atapuerca_TD10 | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.3000** | **herb** | Atapuerca_TD10 | Dama_dama | NA |
| **42.33** | **-3.50** | **0.3000** | **herb** | Atapuerca_TD10 | Stephanorhinus_hemitoechus | NA |
| **42.33** | **-3.50** | **0.3000** | **herb** | Atapuerca_TD10 | Sus_scrofa | NA |
| **42.33** | **-3.50** | **0.3000** | **herb** | Atapuerca_TD11 | Stephanorhinus_hemitoechus | NA |
| **44.72** | **123.69** | **0.3000** | **herb** | Dubasu | Bos_primigenius | NA |
| **44.72** | **123.69** | **0.3000** | **herb** | Dubasu | Camelus_knoblochi | NA |
| **44.72** | **123.69** | **0.3000** | **herb** | Dubasu | Coelodonta_antiquitatis | NA |
| **44.72** | **123.69** | **0.3000** | **herb** | Dubasu | Equus_hemionus | NA |

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|---|---|---|---|---|---|---|
| **44.72** | **123.69** | **0.3000** | **herb** | Dubasu | Mammuthus_primigenius | NA |
| **24.18** | **109.43** | **0.3000** | **herb** | Liujiang_Cave | Tapirus_augustus | NA |
| **24.18** | **109.43** | **0.3000** | **herb** | Liujiang_Cave | Moschus_moschiferus | NA |
| **24.18** | **109.43** | **0.3000** | **herb** | Liujiang_Cave | Naemorhedus_goral | NA |
| **24.18** | **109.43** | **0.3000** | **herb** | Liujiang_Cave | Stegodon_orientalis | NA |
| **24.18** | **109.43** | **0.3000** | **herb** | Liujiang_Cave | Sus_scrofa | NA |
| **42.00** | **130.00** | **0.3000** | **herb** | Nanshan-tun | Bos_primigenius | NA |
| **42.00** | **130.00** | **0.3000** | **herb** | Nanshan-tun | Coelodonta_antiquitatis | NA |
| **42.00** | **130.00** | **0.3000** | **herb** | Nanshan-tun | Mammuthus_primigenius | NA |
| **-7.16** | **111.33** | **0.3000** | **herb** | Ngandong | Tapirus_indicus | NA |
| **39.90** | **115.60** | **0.3000** | **herb** | Niuyan_Cave | Pseudois_nayaur | NA |
| **-8.13** | **111.01** | **0.3000** | **herb** | Punung | Elephas_maximus | NA |
| **-8.13** | **111.01** | **0.3000** | **herb** | Punung | Rhinoceros_sondaicus | NA |
| **-8.13** | **111.01** | **0.3000** | **herb** | Punung | Sus_scrofa | NA |
| **-8.13** | **111.01** | **0.3000** | **herb** | Punung | Tapirus_indicus | NA |
| **27.43** | **101.51** | **0.3000** | **herb** | Qinglonggou | Sus_scrofa | NA |
| **25.11** | **99.15** | **0.3000** | **herb** | Shangjiang_Cave | Stegodon_orientalis | NA |
| **32.91** | **101.70** | **0.3000** | **herb** | Tangke | Bos_primigenius | NA |
| **32.91** | **101.70** | **0.3000** | **herb** | Tangke | Coelodonta_antiquitatis | NA |
| **26.60** | **100.60** | **0.3000** | **herb** | Tuanjie_Cave | Sus_scrofa | NA |
| **31.40** | **100.63** | **0.3000** | **herb** | Xialatuo | Equus_hemionus | NA |
| **40.10** | **113.98** | **0.3000** | **herb** | Xujiayao | Bos_primigenius | NA |
| **40.10** | **113.98** | **0.3000** | **herb** | Xujiayao | Cervus_elaphus | NA |
| **40.10** | **113.98** | **0.3000** | **herb** | Xujiayao | Cervus_nippon | NA |
| **40.10** | **113.98** | **0.3000** | **herb** | Xujiayao | Coelodonta_antiquitatis | NA |
| **40.10** | **113.98** | **0.3000** | **herb** | Xujiayao | Equus_hemionus | NA |
| **40.10** | **113.98** | **0.3000** | **herb** | Xujiayao | Gazella_subgutturosa | NA |
| **23.06** | **102.76** | **0.3000** | **herb** | Yemao_Cave | Sus_scrofa | NA |
| **52.51** | **77.33** | **0.3000** | **herb** | Zhana-Aul_AG2 | Bison_priscus | NA |
| **52.51** | **77.33** | **0.3000** | **herb** | Zhana-Aul_AG2 | Mammuthus_trogontherii | NA |
| **39.68** | **115.93** | **0.3000** | **herb** | Zhoukoudian_Upper_Cave_sapiens | Equus_hemionus | NA |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Bos_primigenius | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Camelus_knoblochi | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Capra_aegagrus | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Cervus_elaphus | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Dama_mesopotamica | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Equus_hydruntinus | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Equus_ferus | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Equus_suessenbornensis | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Mammuthus_trogontherii | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Megaloceros_giganteus | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | NA | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Elephas_antiquus | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | NA | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Stephanorhinus_kirchbergensis | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | NA | heide |
| **39.6192** | **46.9886** | **0.3000** | **herb** | Azykh | Sus_scrofa | heide |
| **40.6667** | **23.0000** | **0.3000** | **herb** | Petralona | Capra_ibex | heide |
| **40.6667** | **23.0000** | **0.3000** | **herb** | Petralona | Pliotragus_macedonicus | heide |
| **43.33** | **-5.00** | **0.3061** | **herb** | Mestas_de_Con | Capreolus_capreolus | NA |
| **43.33** | **-5.00** | **0.3061** | **herb** | Mestas_de_Con | Cervus_elaphus | NA |
| **43.33** | **-5.00** | **0.3061** | **herb** | Mestas_de_Con | Equus_suessenbornensis | NA |
| **43.33** | **-5.00** | **0.3061** | **herb** | Mestas_de_Con | Stephanorhinus_etruscus | NA |
| **44.3343** | **4.4126** | **0.3080** | **herb** | Orgnac_3 | Capreolus_suessenbornensis | heide |
| **44.3343** | **4.4126** | **0.3080** | **herb** | Orgnac_3 | Cervus_elaphus | heide |
| **44.3343** | **4.4126** | **0.3080** | **herb** | Orgnac_3 | NA | heide |
| **44.3343** | **4.4126** | **0.3080** | **herb** | Orgnac_3 | Equus_ferus | heide |
| **44.3343** | **4.4126** | **0.3080** | **herb** | Orgnac_3 | Sus_scrofa | heide |
| **43.67** | **4.09** | **0.3200** | **herb** | Lunel-Viel | Haploidoceros_mediterraneus | NA |
| **44.00** | **41.20** | **0.3200** | **herb** | Treugol'naja_cave_4 | Bison_schoetensacki | NA |
| **44.00** | **41.20** | **0.3200** | **herb** | Treugol'naja_cave_4 | Cervus_elaphus | NA |
| **49.40** | **16.80** | **0.3312** | **herb** | Chlum | Mammuthus_trogontherii | NA |
| **49.40** | **16.80** | **0.3312** | **herb** | Chlum | Stephanorhinus_etruscus | NA |
| **44.00** | **41.00** | **0.3380** | **herb** | Treugol'naya_Cave_4b | Bison_schoetensacki | NA |
| **44.00** | **41.00** | **0.3380** | **herb** | Treugol'naya_Cave_4b | Capra_caucasica | NA |
| **44.00** | **41.00** | **0.3380** | **herb** | Treugol'naya_Cave_4b | Cervus_elaphus | NA |
| **51.2811** | **11.0686** | **0.3500** | **herb** | Bilzingsleben | Bison_priscus | heide |
| **51.2811** | **11.0686** | **0.3500** | **herb** | Bilzingsleben | Bos_primigenius | heide |
| **51.2811** | **11.0686** | **0.3500** | **herb** | Bilzingsleben | Cervus_elaphus | heide |
| **51.2811** | **11.0686** | **0.3500** | **herb** | Bilzingsleben | Dama_clactoniana | heide |
| **51.2811** | **11.0686** | **0.3500** | **herb** | Bilzingsleben | Equus_ferus | heide |

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| **51.2811** | **11.0686** | **0.3500** | **herb** | Bilzingsleben | Stephanorhinus_hemitoechus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Bos_primigenius | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Capreolus_capreolus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Cervus_elaphus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Dama_clactoniana | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Equus_ferus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Equus_hydruntinus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Megaloceros_giganteus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Elephas_antiquus | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | NA | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | NA | heide |
| **51.4456** | **0.2991** | **0.3500** | **herb** | Swanscombe | Sus_scrofa | heide |
| **39.6800** | **115.9300** | **0.3500** | **herb** | Zhoukoudian_3 | Cervus_nippon | erec |
| **39.6800** | **115.9300** | **0.3500** | **herb** | Zhoukoudian_3 | Sus_lydekkeri | erec |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Alces_alces | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Bison_priscus | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Capra_sibirica | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Capreolus_capreolus | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Cervus_elaphus | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Coelodonta_antiquitatis | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Mammuthus_primigenius | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Ovis_ammon | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Poephagus_baikalensis | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Rangifer_tarandus | NA |
| **51.39** | **84.67** | **0.3600** | **herb** | Denisova_Cave_l.12-14 | Saiga_tatarica | NA |
| **54.35** | **86.21** | **0.3600** | **herb** | Kuznetskaja_kotlovina_l.III-IV | Mammuthus_trogontherii | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Capreolus_capreolus | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Cervus_elaphus | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Equus_hydruntinus | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Equus_ferus | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Megaloceros_giganteus | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Stephanorhinus_kirchbergensis | NA |
| **39.32** | **45.37** | **0.3640** | **herb** | Azykh,_layer_5 | Sus_scrofa | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Bison_priscus | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Cervus_elaphus | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Equus_hydruntinus | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Megaloceros_giganteus | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Saiga_tatarica | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Stephanorhinus_kirchbergensis | NA |
| **47.80** | **46.40** | **0.3640** | **herb** | Nikolskoe_(Volga) | Sus_scrofa | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Bison_priscus | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Camelus_knoblochi | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Cervus_elaphus | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Elasmotherium_sibiricum | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Elephas_antiquus | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Mammuthus_trogontherii | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Megaloceros_giganteus | NA |
| **48.40** | **44.95** | **0.3640** | **herb** | Rajgorod | Saiga_tatarica | NA |
| **42.00** | **43.24** | **0.3640** | **herb** | Tsona_cave | Capra_caucasica | NA |
| **42.00** | **43.24** | **0.3640** | **herb** | Tsona_cave | Capreolus_capreolus | NA |
| **42.00** | **43.24** | **0.3640** | **herb** | Tsona_cave | Cervus_elaphus | NA |
| **47.61** | **19.05** | **0.3781** | **herb** | Budakalasz | Cervus_elaphus | NA |
| **47.61** | **19.05** | **0.3781** | **herb** | Budakalasz | Equus_stenonis | NA |
| **47.61** | **19.05** | **0.3781** | **herb** | Budakalasz | Stephanorhinus_etruscus | NA |
| **43.70** | **7.20** | **0.3800** | **herb** | Terra_amata_(Alpes_Maritimes) | Bos_primigenius | NA |
| **43.70** | **7.20** | **0.3800** | **herb** | Terra_amata_(Alpes_Maritimes) | Cervus_elaphus | NA |
| **43.70** | **7.20** | **0.3800** | **herb** | Terra_amata_(Alpes_Maritimes) | Elephas_antiquus | NA |
| **43.70** | **7.20** | **0.3800** | **herb** | Terra_amata_(Alpes_Maritimes) | Hemitragus_bonali | NA |
| **43.70** | **7.20** | **0.3800** | **herb** | Terra_amata_(Alpes_Maritimes) | Stephanorhinus_hemitoechus | NA |
| **43.70** | **7.20** | **0.3800** | **herb** | Terra_amata_(Alpes_Maritimes) | Sus_scrofa | NA |
| **44.23** | **16.83** | **0.3867** | **herb** | Trlica | Cervus_elaphus | NA |
| **44.23** | **16.83** | **0.3867** | **herb** | Trlica | Equus_stenonis | NA |
| **44.23** | **16.83** | **0.3867** | **herb** | Trlica | Eucladoceros_giulii | NA |
| **44.23** | **16.83** | **0.3867** | **herb** | Trlica | Megalovis_balcanicus | NA |
| **44.23** | **16.83** | **0.3867** | **herb** | Trlica | Soergelia_intermedia | NA |
| **52.13** | **6.61** | **0.3900** | **herb** | Neede | Cervus_elaphus | NA |
| **52.13** | **6.61** | **0.3900** | **herb** | Neede | Stephanorhinus_kirchbergensis | NA |
| **51.44** | **0.31** | **0.3900** | **herb** | Swanscombe | Dama_dama | heide |

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| **25.70** | **101.88** | **0.3900** | **herb** | Yuanmo-hominid | Metacervulus_capreolinus | erec |
| **25.70** | **101.88** | **0.3900** | **herb** | Yuanmo-hominid | Sus_scrofa | erec |
| **33.00** | **35.60** | **0.3905** | **herb** | Jisr_Banat_Yaqub | Hippopotamus_amphibius | NA |
| **37.00** | **22.58** | **0.3960** | **herb** | Apidima_Cave_A | Capra_ibex | NA |
| **37.00** | **22.58** | **0.3960** | **herb** | Apidima_Cave_A | Hippopotamus_amphibius | NA |
| **37.00** | **22.58** | **0.3960** | **herb** | Apidima_Cave_D | Capra_ibex | NA |
| **45.98** | **0.15** | **0.3960** | **herb** | Artenac_'Deuxieme_macromammal_Assemblage',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |
| **45.98** | **0.15** | **0.3960** | **herb** | Artenac_'Deuxieme_macromammal_Assemblage',_Commune_de_Saint-Mary,_Charente, | Sus_scrofa | NA |
| **45.65** | **0.15** | **0.3960** | **herb** | Artenac_'Premiere_macromammal_Assemblage',_Commune_de_Saint-Mary,_Charente, | Rangifer_tarandus | NA |
| **45.73** | **13.73** | **0.3960** | **herb** | Grotta_Tilde,_Gabrovizza,_Trieste,_Northern_Italy | Alces_alces | NA |
| **45.73** | **13.73** | **0.3960** | **herb** | Grotta_Tilde,_Gabrovizza,_Trieste,_Northern_Italy | Bos_primigenius | NA |
| **45.73** | **13.73** | **0.3960** | **herb** | Grotta_Tilde,_Gabrovizza,_Trieste,_Northern_Italy | Capreolus_capreolus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_excavation | Aepyceros_melampus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_excavation | Equus_grevyi | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_excavation | Giraffa_camelopardalis | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_excavation | Hippotragus_equinus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_excavation | Litocranius_walleri | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_excavation | Phacochoerus_aethiopicus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Aepyceros_melampus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Damaliscus_lunatus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Equus_grevyi | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Giraffa_camelopardalis | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Hippotragus_equinus | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Litocranius_walleri | NA |
| **-1.77** | **36.17** | **0.3960** | **herb** | Lainyamok_-_surface | Potamochoerus_porcus | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Aepyceros_melampus | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Ceratotherium_simum | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Connochaetes_taurinus | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Diceros_bicornis | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Equus_quagga | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Giraffa_camelopardalis | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Hippopotamus_amphibius | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Hippotragus_equinus | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Kobus_ellipsiprymnus | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Kobus_kob | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Loxodonta_africana | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Oryx_gazella | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Phacochoerus_aethiopicus | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Redunca_redunca | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Syncerus_caffer | NA |
| **-3.67** | **35.00** | **0.3960** | **herb** | Lake_Eyasi | Tragelaphus_strepsiceros | NA |
| **45.45** | **11.00** | **0.3960** | **herb** | Quinzano,_Verona,_Northern_Italy | Alces_alces | NA |
| **45.45** | **11.00** | **0.3960** | **herb** | Quinzano,_Verona,_Northern_Italy | Bos_primigenius | NA |
| **45.45** | **11.00** | **0.3960** | **herb** | Quinzano,_Verona,_Northern_Italy | Capra_ibex | NA |
| **45.45** | **11.00** | **0.3960** | **herb** | Quinzano,_Verona,_Northern_Italy | Capreolus_capreolus | NA |
| **45.45** | **11.00** | **0.3960** | **herb** | Quinzano,_Verona,_Northern_Italy | Rupicapra_rupicapra | NA |
| **22.77** | **111.57** | **0.3960** | **herb** | Xiashan_Cave,_lower_part_(Guangdong_Province) | Sus_scrofa | NA |
| **49.74** | **84.27** | **0.3960** | **herb** | Zyryanovsk | Bos_primigenius | NA |
| **59.80** | **109.00** | **0.4000** | **herb** | Nizhnjaja_Tunguzka_early | Coelodonta_antiquitatis | NA |
| **67.50** | **161.00** | **0.4000** | **herb** | Utkinskij_kamen_early | Coelodonta_antiquitatis | NA |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | Bison_priscus | heide |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | Cervus_elaphus | heide |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | NA | heide |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | Hemitragus_bonali | heide |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | Ovis_ammon | heide |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | Rangifer_tarandus | heide |
| **42.8394** | **2.7550** | **0.4000** | **herb** | Arago | NA | heide |
| **43.2167** | **0.6000** | **0.4000** | **herb** | Montmaurin | Bos_primigenius | heide |
| **43.2167** | **0.6000** | **0.4000** | **herb** | Montmaurin | Capreolus_capreolus | heide |
| **43.2167** | **0.6000** | **0.4000** | **herb** | Montmaurin | NA | heide |
| **43.2167** | **0.6000** | **0.4000** | **herb** | Montmaurin | NA | heide |
| **43.2167** | **0.6000** | **0.4000** | **herb** | Montmaurin | Equus_ferus | heide |
| **43.2167** | **0.6000** | **0.4000** | **herb** | Montmaurin | Capra_ibex | heide |
| **38.97** | **-3.93** | **0.4001** | **herb** | Valverde_de_Calatrava | Equus_ferus | NA |
| **38.97** | **-3.93** | **0.4001** | **herb** | Valverde_de_Calatrava | Eucladoceros_dicranios | NA |
| **38.97** | **-3.93** | **0.4001** | **herb** | Valverde_de_Calatrava | Hippopotamus_antiquus | NA |
| **38.97** | **-3.93** | **0.4001** | **herb** | Valverde_de_Calatrava | Leptobos_etruscus | NA |
| **38.97** | **-3.93** | **0.4001** | **herb** | Valverde_de_Calatrava | Mammuthus_meridionalis | NA |
| **44.00** | **41.00** | **0.4060** | **herb** | Treugol'naya_Cave_5b | Bison_schoetensacki | NA |
| **44.00** | **41.00** | **0.4060** | **herb** | Treugol'naya_Cave_5b | Capra_caucasica | NA |

| | | | | | | |
|---|---|---|---|---|---|---|
| **44.00** | **41.00** | **0.4060** | **herb** | Treugol'naya_Cave_5b | Cervus_elaphus | NA |
| **44.00** | **41.00** | **0.4060** | **herb** | Treugol'naya_Cave_5b | Stephanorhinus_hundsheimensis | NA |
| **44.00** | **41.20** | **0.4100** | **herb** | Treugol'naja_cave_5 | Bison_schoetensacki | NA |
| **44.00** | **41.20** | **0.4100** | **herb** | Treugol'naja_cave_5 | Cervus_elaphus | NA |
| **44.00** | **41.20** | **0.4100** | **herb** | Treugol'naja_cave_5 | Dama_dama | NA |
| **44.00** | **41.20** | **0.4100** | **herb** | Treugol'naja_cave_5 | Stephanorhinus_hundsheimensis | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Axis_farnetensis | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Equus_altidens | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Hippopotamus_antiquus | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Leptobos_vallisarni | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Mammuthus_trogontherii | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Praemegaceros_verticornis | NA |
| **44.35** | **11.70** | **0.4450** | **herb** | Imola | Stephanorhinus_hundsheimensis | NA |
| **68.00** | **160.00** | **0.4500** | **herb** | Kolyma_river_low_stream | Coelodonta_antiquitatis | NA |
| **70.00** | **133.00** | **0.4500** | **herb** | Yana_r._low_stream | Coelodonta_antiquitatis | NA |
| **50.00** | **1.89** | **0.4535** | **herb** | Abbeville_(Somme_River_terrace),_Pas_de_Calais | Cervus_elaphus | NA |
| **50.00** | **1.89** | **0.4535** | **herb** | Abbeville_(Somme_River_terrace),_Pas_de_Calais | Sus_scrofa | NA |
| **37.17** | **-8.30** | **0.4535** | **herb** | Algoz | Hippopotamus_antiquus | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS1 | Bos_primigenius | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS1 | Cervus_elaphus | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS1/2 | Bos_primigenius | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS1/2 | Cervus_elaphus | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS2 | Cervus_elaphus | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS3 | Bos_primigenius | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS3 | Cervus_elaphus | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS4 | Bos_primigenius | NA |
| **41.17** | **-2.50** | **0.4535** | **herb** | Ambrona_level_AS4 | Cervus_elaphus | NA |
| **50.53** | **7.30** | **0.4535** | **herb** | Ariendorf,_Aufschluß_B_(outcrop_B),_Rinnenfüllung,_R2 | Rangifer_tarandus | NA |
| **42.35** | **-3.52** | **0.4535** | **herb** | Atapuerca_TD8 | Hippopotamus_amphibius | NA |
| **51.35** | **11.10** | **0.4535** | **herb** | Bad_Frankenhausen_bei_Sangerhausen | Rangifer_tarandus | NA |
| **51.92** | **10.15** | **0.4535** | **herb** | Bornhausen_bei_Seesen_am_Harz | Rangifer_tarandus | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Bristie_1,_Sgonico,_Trieste,_Northern_Italy | Capreolus_capreolus | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Bristie_1,_Sgonico,_Trieste,_Northern_Italy | Sus_scrofa | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Bristie_2,_Sgonico,_Trieste,_Northern_Italy | Sus_scrofa | NA |
| **23.17** | **108.28** | **0.4535** | **herb** | Bulali_Mountain,_Wuming_County,_Guangxi | Sus_scrofa | NA |
| **43.65** | **10.67** | **0.4535** | **herb** | Casa_La_Rotta | Cervus_elaphus | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Castello,_Brecce_di_Soave,_Verona,_Northern_Italy | Capreolus_capreolus | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Cengelle_1,_Brecce_di_Soave,_Verona,_Northern_Italy | Capreolus_capreolus | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Cengelle_1,_Brecce_di_Soave,_Verona,_Northern_Italy | Sus_scrofa | NA |
| **42.03** | **12.73** | **0.4535** | **herb** | Cesi,_Colfiorito_Basin | Cervus_elaphus | NA |
| **52.47** | **1.74** | **0.4535** | **herb** | Corton_rootlet_bed,_Suffolk,_England | Sus_scrofa | NA |
| **31.87** | **-8.87** | **0.4535** | **herb** | Djebel_Irhoud,_Ennouchi_collection,_1960s | Connochaetes_taurinus | NA |
| **43.93** | **3.95** | **0.4535** | **herb** | Durfort,_Gard,_Southern_France | Hippopotamus_amphibius | NA |
| **46.42** | **23.87** | **0.4535** | **herb** | Feldioara-Cariera,_lower_level | Capreolus_capreolus | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Grotta_san_Leonardo,_Sgonico,_Trieste,_Northern_Italy. | Bos_primigenius | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Grotta_san_Leonardo,_Sgonico,_Trieste,_Northern_Italy. | Capra_ibex | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Grotta_san_Leonardo,_Sgonico,_Trieste,_Northern_Italy. | Capreolus_capreolus | NA |
| **45.74** | **13.75** | **0.4535** | **herb** | Grotta_san_Leonardo,_Sgonico,_Trieste,_Northern_Italy. | Sus_scrofa | NA |
| **44.80** | **1.20** | **0.4535** | **herb** | Grotte_de_l'Eglise,_Cenac-et-Saint-Julien,_Dordogne,_Aquitaine | Cervus_elaphus | NA |
| **44.80** | **1.20** | **0.4535** | **herb** | Grotte_de_l'Eglise,_Cenac-et-Saint-Julien,_Dordogne,_Aquitaine | Hemitragus_jemlahicus | NA |
| **48.53** | **9.52** | **0.4535** | **herb** | Heppenloch_bei_Urach | Capreolus_capreolus | NA |
| **48.53** | **9.52** | **0.4535** | **herb** | Heppenloch_bei_Urach | Cervus_elaphus | NA |
| **48.53** | **9.52** | **0.4535** | **herb** | Heppenloch_bei_Urach | Sus_scrofa | NA |
| **-33.03** | **17.96** | **0.4535** | **herb** | Hoedjiespunt_1 | Alcelaphus_buselaphus | NA |
| **-33.03** | **17.96** | **0.4535** | **herb** | Hoedjiespunt_1 | Connochaetes_gnou | NA |
| **48.14** | **16.93** | **0.4535** | **herb** | Hundsheim_bei_Hainburg | Capreolus_capreolus | NA |
| **48.14** | **16.93** | **0.4535** | **herb** | Hundsheim_bei_Hainburg | Cervus_elaphus | NA |
| **48.14** | **16.93** | **0.4535** | **herb** | Hundsheim_bei_Hainburg | Hemitragus_jemlahicus | NA |
| **48.14** | **16.93** | **0.4535** | **herb** | Hundsheim_bei_Hainburg | Sus_scrofa | NA |
| **41.60** | **14.23** | **0.4535** | **herb** | Isernia_la_Pineta_sector_1,_Upper_Voluturno,_Molise | Sus_scrofa | NA |
| **41.88** | **12.30** | **0.4535** | **herb** | Layer_4,_Sedia_del_Diavolo,_Rome | Bos_primigenius | NA |
| **41.88** | **12.30** | **0.4535** | **herb** | Layer_4,_Sedia_del_Diavolo,_Rome | Cervus_elaphus | NA |
| **41.88** | **12.30** | **0.4535** | **herb** | Layer_4,_Sedia_del_Diavolo,_Rome | Hippopotamus_amphibius | NA |
| **41.88** | **12.30** | **0.4535** | **herb** | Layer_4,_Sedia_del_Diavolo,_Rome | Sus_scrofa | NA |
| **24.67** | **113.58** | **0.4535** | **herb** | Lion_Rock | Muntiacus_muntjak | NA |
| **24.67** | **113.58** | **0.4535** | **herb** | Lion_Rock | Sus_scrofa | NA |
| **51.92** | **1.22** | **0.4535** | **herb** | Little_Oakley_fauna_(Lister_and_McGlade,_1990) | Sus_scrofa | NA |
| **51.96** | **4.05** | **0.4535** | **herb** | Maasvlakte,_Fauna_I | Sus_scrofa | NA |

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|---|---|---|---|---|---|---|
| **41.85** | **12.20** | **0.4535** | **herb** | Malagrotta,_Rome | Bos_primigenius | NA |
| **68.43** | **161.00** | **0.4535** | **herb** | Maly_Anjuj,_Utka_layers | Rangifer_tarandus | NA |
| **40.52** | **-3.77** | **0.4535** | **herb** | Manzanares_River_terrace,_near_Madrid | Cervus_elaphus | NA |
| **50.48** | **7.45** | **0.4535** | **herb** | Miesenheim_1_bei_Andernach | Capreolus_capreolus | NA |
| **50.48** | **7.45** | **0.4535** | **herb** | Miesenheim_1_bei_Andernach | Cervus_elaphus | NA |
| **43.22** | **0.63** | **0.4535** | **herb** | Montmaurin,_Haute-Garonne | Cervus_elaphus | NA |
| **43.22** | **0.63** | **0.4535** | **herb** | Montmaurin,_Haute-Garonne | Sus_scrofa | NA |
| **50.07** | **8.27** | **0.4535** | **herb** | Mosbach_2_main_fauna,_bei_Wiesbaden | Cervus_elaphus | NA |
| **50.07** | **8.27** | **0.4535** | **herb** | Mosbach_2_main_fauna,_bei_Wiesbaden | Hippopotamus_amphibius | NA |
| **50.07** | **8.27** | **0.4535** | **herb** | Mosbach_2_main_fauna,_bei_Wiesbaden | Sus_scrofa | NA |
| **35.15** | **38.82** | **0.4535** | **herb** | Nadaouiyeh_Aïn_Askar | Bos_primigenius | NA |
| **35.15** | **38.82** | **0.4535** | **herb** | Nadaouiyeh_Aïn_Askar | Equus_hemionus | NA |
| **35.15** | **38.82** | **0.4535** | **herb** | Nadaouiyeh_Aïn_Askar | Gazella_dorcas | NA |
| **35.15** | **38.82** | **0.4535** | **herb** | Nadaouiyeh_Aïn_Askar | Gazella_gazella | NA |
| **35.15** | **38.82** | **0.4535** | **herb** | Nadaouiyeh_Aïn_Askar | Gazella_subgutturosa | NA |
| **33.58** | **-7.58** | **0.4535** | **herb** | Oulad_Hamida_1_-_Rhino_Cave | Ceratotherium_simum | NA |
| **52.46** | **1.73** | **0.4535** | **herb** | Pakefield/Kessingland_gravel,_Suffolk,_England | Cervus_elaphus | NA |
| **52.46** | **1.73** | **0.4535** | **herb** | Pakefield/Kessingland_gravel,_Suffolk,_England | Hippopotamus_amphibius | NA |
| **52.46** | **1.73** | **0.4535** | **herb** | Pakefield/Kessingland_gravel,_Suffolk,_England | Sus_scrofa | NA |
| **52.46** | **1.73** | **0.4535** | **herb** | Pakefield/Kessingland_rootlet_bed,_Suffolk,_England | Cervus_elaphus | NA |
| **52.46** | **1.73** | **0.4535** | **herb** | Pakefield/Kessingland_rootlet_bed,_Suffolk,_England | Hippopotamus_amphibius | NA |
| **52.46** | **1.73** | **0.4535** | **herb** | Pakefield/Kessingland_rootlet_bed,_Suffolk,_England | Sus_scrofa | NA |
| **25.63** | **104.73** | **0.4535** | **herb** | Panxian_Dadong | Sus_scrofa | NA |
| **50.18** | **14.58** | **0.4535** | **herb** | Prezletice_bei_Prag | Equus_hemionus | NA |
| **45.78** | **13.65** | **0.4535** | **herb** | Riparo_di_Visogliano,_Trieste,_Northern_Italy | Capreolus_capreolus | NA |
| **45.83** | **25.55** | **0.4535** | **herb** | Rotbav-<br>Dealul_Tiganilor,_upper_level_1,_(level_2),_clay_A | Capreolus_capreolus | NA |
| **45.83** | **25.55** | **0.4535** | **herb** | Rotbav-<br>Dealul_Tiganilor,_upper_level_2,_(level_3),_clay_B | Capreolus_capreolus | NA |
| **51.42** | **51.92** | **0.4535** | **herb** | Rubezhka | Saiga_tatarica | NA |
| **46.02** | **11.10** | **0.4535** | **herb** | Serbaro_di_Romagnano,_Commune_di_Grezzana,_Verona,_Northern_Italy | Bos_primigenius | NA |
| **46.02** | **11.10** | **0.4535** | **herb** | Serbaro_di_Romagnano,_Commune_di_Grezzana,_Verona,_Northern_Italy | Capreolus_capreolus | NA |
| **46.02** | **11.10** | **0.4535** | **herb** | Serbaro_di_Romagnano,_Commune_di_Grezzana,_Verona,_Northern_Italy | Hippopotamus_amphibius | NA |
| **46.02** | **11.10** | **0.4535** | **herb** | Serbaro_di_Romagnano,_Commune_di_Grezzana,_Verona,_Northern_Italy | Sus_scrofa | NA |
| **23.00** | **111.70** | **0.4535** | **herb** | Shanbeiyan_Cave,_Luoding | Sus_scrofa | NA |
| **52.91** | **1.36** | **0.4535** | **herb** | Sidestrand | Sus_scrofa | NA |
| **45.77** | **13.66** | **0.4535** | **herb** | Slivia,_Trieste,_Northern_Italy | Sus_scrofa | NA |
| **45.33** | **11.43** | **0.4535** | **herb** | Spessa_2,_Colli_Berici,_Vincenza,_Northern_Italy | Capreolus_capreolus | NA |
| **45.33** | **11.43** | **0.4535** | **herb** | Spessa_2,_Colli_Berici,_Vincenza,_Northern_Italy | Sus_scrofa | NA |
| **47.60** | **19.02** | **0.4535** | **herb** | Uromhegy | Hippopotamus_antiquus | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Viatelle,_Brecce_di_Soave,_Verona,_Northern_Italy | Capreolus_capreolus | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Viatelle,_Brecce_di_Soave,_Verona,_Northern_Italy | Sus_scrofa | NA |
| **51.40** | **11.32** | **0.4535** | **herb** | Voigtstedt_bei_Sangerhausen,_Lehmzone | Sus_scrofa | NA |
| **52.94** | **1.25** | **0.4535** | **herb** | West_Runton_Freshwater_Bed,_Norfolk,_England | Capreolus_capreolus | NA |
| **52.94** | **1.25** | **0.4535** | **herb** | West_Runton_Freshwater_Bed,_Norfolk,_England | Cervus_elaphus | NA |
| **52.94** | **1.25** | **0.4535** | **herb** | West_Runton_Freshwater_Bed,_Norfolk,_England | Sus_scrofa | NA |
| **41.02** | **28.96** | **0.4535** | **herb** | Yarimburgaz_Cave,_Bosphorus | Sus_scrofa | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Zoppega_1,_Brecce_di_Soave,_Verona,_Northern_Italy | Capreolus_capreolus | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Zoppega_1,_Brecce_di_Soave,_Verona,_Northern_Italy | Hippopotamus_amphibius | NA |
| **45.42** | **11.25** | **0.4535** | **herb** | Zoppega_2,_Brecce_di_Soave,_Verona,_Northern_Italy | Sus_scrofa | NA |
| **37.60** | **-2.57** | **0.4538** | **herb** | Cullar_de_Baza-_1_Granada | Equus_altidens | NA |
| **37.60** | **-2.57** | **0.4538** | **herb** | Cullar_de_Baza-_1_Granada | Equus_suessenbornensis | NA |
| **37.60** | **-2.57** | **0.4538** | **herb** | Cullar_de_Baza-_1_Granada | Mammuthus_trogontherii | NA |
| **37.60** | **-2.57** | **0.4538** | **herb** | Cullar_de_Baza-_1_Granada | Megaloceros_savini | NA |
| **37.60** | **-2.57** | **0.4538** | **herb** | Cullar_de_Baza-_1_Granada | Stephanorhinus_etruscus | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Bos_primigenius | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Cervus_elaphus | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Dama_clactoniana | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Elephas_antiquus | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Equus_ferus | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Hippopotamus_amphibius | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Stephanorhinus_hundsheimensis | NA |
| **41.73** | **13.20** | **0.4580** | **herb** | Fontana_Ranuccio_(Anagni) | Sus_scrofa | NA |
| **50.05** | **8.26** | **0.4600** | **herb** | Mosbach_5 | Cervalces_latifrons | NA |
| **50.05** | **8.26** | **0.4600** | **herb** | Mosbach_5 | Bison_schoetensacki | NA |
| **50.05** | **8.26** | **0.4600** | **herb** | Mosbach_5 | Bison_priscus | NA |
| **50.05** | **8.26** | **0.4600** | **herb** | Mosbach_5 | Mammuthus_trogontherii | NA |
| **50.05** | **8.26** | **0.4600** | **herb** | Mosbach_5 | Stephanorhinus_kirchbergen | NA |

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| **50.05** | **8.26** | **0.4600** | **herb** | Mosbach_5 | Sus_scrofa | NA |
| **50.98** | **11.38** | **0.4600** | **herb** | Suessenborn_3 | Cervalces_latifrons | NA |
| **50.98** | **11.38** | **0.4600** | **herb** | Suessenborn_3 | Bison_priscus | NA |
| **50.98** | **11.38** | **0.4600** | **herb** | Suessenborn_3 | Equus_hemionus | NA |
| **50.98** | **11.38** | **0.4600** | **herb** | Suessenborn_3 | Mammuthus_trogontherii | NA |
| **50.98** | **11.38** | **0.4600** | **herb** | Suessenborn_3 | Ovibos_moschatus | NA |
| **50.98** | **11.38** | **0.4600** | **herb** | Suessenborn_3 | Sus_scrofa | NA |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(GDR) | Ceratotherium_simum | NA |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(GDR) | Equus_mauritanicus | NA |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(GDR) | Gazella_atlantica | NA |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(GDR) | Parmularius_angusticornis | NA |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(GDR) | Pelorovis_antiquus | NA |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(GDR) | Phacochoerus_africanus | NA |
| **33.5800** | **-7.5800** | **0.5000** | **herb** | Oulad_Hamida_1_-_Rhino_Cave | Ceratotherium_simum | NA |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Capreolus_capreolus | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Cervus_elaphus | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Dama_dama | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Equus_ferus | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Praemegaceros_dawkinsi | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Praemegaceros_verticornis | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Stephanorhinus_hundsheimensis | heide |
| **50.8500** | **0.7167** | **0.5000** | **herb** | Boxgrove | Sus_scrofa | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | Hippopotamus_amphibius | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | Syncerus_caffer | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **0.7833** | **36.0833** | **0.5000** | **herb** | Kapthurin | NA | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Bison_schoetensacki | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Capreolus_capreolus | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Cervalces_latifrons | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Cervus_elaphus | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Equus_ferus | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Hippopotamus_amphibius | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Elephas_antiquus | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Stephanorhinus_hundsheimensis | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Stephanorhinus_kirchbergensis | heide |
| **49.3333** | **8.5000** | **0.5000** | **herb** | Mauer | Sus_scrofa | heide |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(HEC) | Ceratotherium_simum | heide |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(HEC) | Connochaetes_taurinus | heide |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(HEC) | Equus_mauritanicus | heide |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(HEC) | Gazella_atlantica | heide |
| **33.5600** | **-7.5500** | **0.5000** | **herb** | Oulad_Hamida_1_(HEC) | Phacochoerus_africanus | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | Ceratotherium_simum | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | NA | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | Equus_mauritanicus | heide |
| **33.5667** | **-7.5514** | **0.5000** | **herb** | Thomas_Quarry | Equus_mauritanicus | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | Gazella_atlantica | heide |
| **33.5667** | **-7.5514** | **0.5000** | **herb** | Thomas_Quarry | Gazella_atlantica | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | Hippopotamus_sirensis | heide |
| **33.5667** | **-7.5514** | **0.5000** | **herb** | Thomas_Quarry | Hippopotamus_sirensis | heide |
| **33.5667** | **-7.5514** | **0.5000** | **herb** | Thomas_Quarry | NA | heide |
| **33.5667** | **-7.5514** | **0.5000** | **herb** | Thomas_Quarry | Loxodonta_atlantica | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | NA | heide |
| **33.5667** | **-7.5517** | **0.5000** | **herb** | Thomas_Quarry | Phacochoerus_aethiopicus | heide |
| **32.8400** | **110.5784** | **0.5000** | **herb** | Yunxian | Cervus_nippon | heide |
| **47.20** | **34.30** | **0.5200** | **herb** | Marganets | Mammuthus_meridionalis | NA |
| **46.85** | **35.30** | **0.5200** | **herb** | Tikhonovka_1 | Cervus_elaphus | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_5 | Bison_schoetensacki | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_5 | Capreolus_suessenbornensis | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_5 | Cervalces_latifrons | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_5 | Equus_ferus | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_5 | Stephanorhinus_etruscus | NA |

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| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_7_4a | Bison_schoetensacki | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_7_4a | Cervalces_latifrons | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_7_4a | Equus_ferus | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_7_4a | Mammuthus_trogontherii | NA |
| **46.96** | **22.03** | **0.5203** | **herb** | Betfia_7_4a | Stephanorhinus_etruscus | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Capreolus_capreolus | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Cervalces_latifrons | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Cervus_elaphus | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Equus_altidens | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Equus_ferus | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Mammuthus_trogontherii | NA |
| **46.41** | **23.86** | **0.5203** | **herb** | Feldioara-Cariera | Stephanorhinus_etruscus | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Cervalces_latifrons | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Hippopotamus_amphibius | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Mammuthus_meridionalis | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Praemegaceros_verticornis | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Praeovibos_priscus | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Soergelia_minor | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Stephanorhinus_etruscus | NA |
| **51.09** | **4.07** | **0.5203** | **herb** | Maasvlakte_1 | Sus_scrofa | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Bison_schoetensacki | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Cervalces_latifrons | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Cervus_elaphus | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Equus_suessenbornensis | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Mammuthus_trogontherii | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Praemegaceros_verticornis | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Stephanorhinus_etruscus | NA |
| **46.83** | **29.60** | **0.5203** | **herb** | Tiraspol | Stephanorhinus_kirchbergensis | NA |
| **37.61** | **-0.87** | **0.5592** | **herb** | Cueva_Victoria | Cervus_elaphus | NA |
| **37.61** | **-0.87** | **0.5592** | **herb** | Cueva_Victoria | Equus_stenonis | NA |
| **37.61** | **-0.87** | **0.5592** | **herb** | Cueva_Victoria | Mammuthus_meridionalis | NA |
| **37.61** | **-0.87** | **0.5592** | **herb** | Cueva_Victoria | Megaloceros_savini | NA |
| **37.61** | **-0.87** | **0.5592** | **herb** | Cueva_Victoria | Praeovibos_priscus | NA |
| **37.61** | **-0.87** | **0.5592** | **herb** | Cueva_Victoria | Stephanorhinus_etruscus | NA |
| **44.00** | **41.00** | **0.5830** | **herb** | Treugol'naya_Cave_7a | Bison_schoetensacki | NA |
| **44.00** | **41.00** | **0.5830** | **herb** | Treugol'naya_Cave_7a | Cervus_elaphus | NA |
| **32.67** | **35.57** | **0.5885** | **herb** | Ubeidiya | Axis_farnetensis | erec |
| **32.67** | **35.57** | **0.5885** | **herb** | Ubeidiya | Equus_tabeti | erec |
| **32.67** | **35.57** | **0.5885** | **herb** | Ubeidiya | Kolpochoerus_olduvaiensis | erec |
| **32.67** | **35.57** | **0.5885** | **herb** | Ubeidiya | Oryx_gazella | erec |
| **32.67** | **35.57** | **0.5885** | **herb** | Ubeidiya | Pelorovis_oldowayensis | erec |
| **32.67** | **35.57** | **0.5885** | **herb** | Ubeidiya | Sus_strozzii | erec |
| **62.50** | **132.50** | **0.6000** | **herb** | Tandinskoe_alluvial_?base | Cervalces_latifrons | NA |
| **62.50** | **132.50** | **0.6000** | **herb** | Tandinskoe_alluvial_?base | Bison_schoetensacki | NA |
| **62.50** | **132.50** | **0.6000** | **herb** | Tandinskoe_alluvial_?base | Mammuthus_trogontherii | NA |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Aepyceros_melampus | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | NA | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | NA | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Damaliscus_niro | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Palaeoloxodon_recki | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | NA | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | NA | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Kobus_leche | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Kolpochoerus_limnetes | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Kolpochoerus_majus | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Metridiochoerus_andrewsi | heide |
| **10.6250** | **40.5417** | **0.6000** | **herb** | Bodo | Syncerus_acoelotus | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Connochaetes_taurinus | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Damaliscus_pygargus | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Damaliscus_lunatus | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Diceros_bicornis | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Equus_quagga | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Giraffa_camelopardalis | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Libytherium_olduvaiense | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Litocranius_walleri | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Loxodonta_africana | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Oryx_gazella | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Phacochoerus_aethiopicus | heide |
| **-14.4167** | **28.5500** | **0.6000** | **herb** | Broken_Hill(Kabwe) | Taurotragus_oryx | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Antidorcas_australis | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Antidorcas_recki | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Ceratotherium_simum | heide |

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| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Diceros_bicornis | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Equus_capensis | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Equus_quagga | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Hippopotamus_amphibius | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Hippotragus_gigas | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Hippotragus_leucophaeus | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Kolpochoerus_paiceae | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Loxodonta_atlantica | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Megalotragus_priscus | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Metridiochoerus_andrewsi | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Oryx_gazella | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Rabaticeras_arambourgi | heide |
| **-33.1667** | **19.3333** | **0.6000** | **herb** | Elandsfontein | Raphicerus_melanotis | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Raphicerus_melanotis | heide |
| **-33.1667** | **19.3333** | **0.6000** | **herb** | Elandsfontein | Redunca_arundinum | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Sivatherium_maurusium | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Taurotragus_oryx | heide |
| **-33.0833** | **18.2500** | **0.6000** | **herb** | Elandsfontein | Tragelaphus_strepsiceros | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Bos_bubaloides | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Camelus_thomasi | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Connochaetes_taurinus | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Gazella_atlantica | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Gazella_dracula | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Giraffa_pomeli | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Hippopotamus_sirensis | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Oryx_eleulmensis | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Parmularius_ambiguus | heide |
| **31.0833** | **-8.0000** | **0.6000** | **herb** | Tighenif | Tragelaphus_algericus | heide |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Bison_schoetensacki | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Capreolus_capreolus | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Cervus_elaphus | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Dama_clactoniana | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Elephas_antiquus | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Hemitragus_bonali | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Hippopotamus_antiquus | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Praemegaceros_solhilacus | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Stephanorhinus_hundsheimensis | NA |
| **41.60** | **14.23** | **0.6050** | **herb** | Isernia_La_Pineta | Sus_scrofa | NA |
| **36.20** | **109.35** | **0.6800** | **herb** | Chenjiawo_S6 | Cervus_grayi | erec |
| **36.2000** | **109.3500** | **0.6855** | **herb** | Chenjiawo_S6 | Cervus_grayi | erec |
| **36.2000** | **109.3500** | **0.6855** | **herb** | Chenjiawo_S6 | Elephas_indet. | erec |
| **36.2000** | **109.3500** | **0.6855** | **herb** | Chenjiawo_S6 | Sus_lydekkeri | erec |
| **44.78** | **1.22** | **0.7000** | **herb** | Grotte_de_la_Martine | Equus_ferus | NA |
| **44.78** | **1.22** | **0.7000** | **herb** | Grotte_de_la_Martine | Mammuthus_primigenius | NA |
| **44.78** | **1.22** | **0.7000** | **herb** | Grotte_de_la_Martine | Rangifer_tarandus | NA |
| **50.98** | **11.38** | **0.7000** | **herb** | Suessenborn_2 | Mammuthus_trogontherii | NA |
| **50.98** | **11.38** | **0.7000** | **herb** | Suessenborn_2 | Stephanorhinus_etruscus | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Capra_ibex | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Cervus_elaphus | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Dama_mesopotamica | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Gazella_gazella | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Hippopotamus_amphibius | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Stephanorhinus_hemitoechus | NA |
| **32.80** | **35.56** | **0.7100** | **herb** | Gesher_Benot_Ya'aqov | Sus_scrofa | NA |
| **42.33** | **-3.50** | **0.7200** | **herb** | Atapuerca_TD8inf | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.7200** | **herb** | Atapuerca_TD8inf | Hippopotamus_amphibius | NA |
| **42.33** | **-3.50** | **0.7200** | **herb** | Atapuerca_TD8inf | Stephanorhinus_etruscus | NA |
| **37.70** | **-2.44** | **0.7248** | **herb** | Barranco_Leon_5 | Equus_altidens | erec |
| **37.70** | **-2.44** | **0.7248** | **herb** | Barranco_Leon_5 | Equus_major | erec |
| **37.70** | **-2.44** | **0.7248** | **herb** | Barranco_Leon_5 | Hemitragus_albus | erec |
| **37.70** | **-2.44** | **0.7248** | **herb** | Barranco_Leon_5 | Hippopotamus_antiquus | erec |
| **37.70** | **-2.44** | **0.7248** | **herb** | Barranco_Leon_5 | Praemegaceros_obscurus | erec |
| **37.70** | **-2.44** | **0.7248** | **herb** | Barranco_Leon_5 | Stephanorhinus_hundsheimensis | erec |
| **48.03** | **20.51** | **0.7672** | **herb** | Kovesvarad | Capreolus_suessenbornensis | NA |
| **50.15** | **14.58** | **0.7700** | **herb** | Prezletice | Cervus_elaphus | NA |
| **50.15** | **14.58** | **0.7700** | **herb** | Prezletice | Equus_hemionus | NA |
| **50.15** | **14.58** | **0.7700** | **herb** | Prezletice | Stephanorhinus_etruscus | NA |
| **38.20** | **69.57** | **0.7780** | **herb** | Lakhuti-2 | Camelus_knoblochi | NA |
| **38.20** | **69.57** | **0.7780** | **herb** | Lakhuti-2 | Equus_namadicus | NA |
| **37.81** | **-2.70** | **0.7908** | **herb** | Huescar_1 | Elephas_antiquus | NA |

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|---|---|---|---|---|---|---|
| **37.8100** | **-2.7000** | **0.7908** | **herb** | Huescar_1 | Elephas_antiquus | NA |
| **37.81** | **-2.70** | **0.7908** | **herb** | Huescar_1 | Equus_stenonis | NA |
| **37.81** | **-2.70** | **0.7908** | **herb** | Huescar_1 | Equus_suessenbornensis | NA |
| **37.8100** | **-2.7000** | **0.7908** | **herb** | Huescar_1 | Equus_stenonis | NA |
| **37.8100** | **-2.7000** | **0.7908** | **herb** | Huescar_1 | Equus_suessenbornensis | NA |
| **37.81** | **-2.70** | **0.7908** | **herb** | Huescar_1 | Hippopotamus_antiquus | NA |
| **37.8100** | **-2.7000** | **0.7908** | **herb** | Huescar_1 | Hippopotamus_antiquus | NA |
| **37.81** | **-2.70** | **0.7908** | **herb** | Huescar_1 | Praemegaceros_solhilacus | NA |
| **37.8100** | **-2.7000** | **0.7908** | **herb** | Huescar_1 | Praemegaceros_solhilacus | NA |
| **37.81** | **-2.70** | **0.7908** | **herb** | Huescar_1 | Stephanorhinus_etruscus | NA |
| **37.8100** | **-2.7000** | **0.7908** | **herb** | Huescar_1 | Stephanorhinus_etruscus | NA |
| **47.20** | **38.90** | **0.8094** | **herb** | Rostov_(na_Donu)_-_Taganrog | Elephas_planifrons | NA |
| **47.20** | **38.90** | **0.8094** | **herb** | Rostov_(na_Donu)_-_Taganrog | Equus_stenonis | NA |
| **45.81** | **25.55** | **0.8146** | **herb** | Rotbav-Dealul | Cervalces_latifrons | NA |
| **45.81** | **25.55** | **0.8146** | **herb** | Rotbav-Dealul | Equus_altidens | NA |
| **45.81** | **25.55** | **0.8146** | **herb** | Rotbav-Dealul | Mammuthus_trogontherii | NA |
| **45.81** | **25.55** | **0.8146** | **herb** | Rotbav-Dealul | Stephanorhinus_etruscus | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Bison_schoetensacki | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Cervalces_carnotorum | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Equus_altidens | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Eucladoceros_giulii | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Hippopotamus_antiquus | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Mammuthus_meridionalis | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Megaloceros_savini | NA |
| **48.45** | **1.50** | **0.8187** | **herb** | Saint_Prest_(Chatres) | Stephanorhinus_hundsheimensis | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Axis_farnetensis | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Bison_schoetensacki | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Eobison_tamanensis | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Equus_altidens | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Hippopotamus_antiquus | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Mammuthus_meridionalis | NA |
| **41.93** | **12.52** | **0.8206** | **herb** | Redicicoli_(Roma) | Stephanorhinus_hundsheimensis | NA |
| **5.2500** | **37.5000** | **0.8700** | **herb** | Konso_-_Interval_6 | Metridiochoerus_modestus | erec |
| **5.2500** | **37.5000** | **0.8700** | **herb** | Konso_-_Interval_6 | Palaeoloxodon_recki | erec |
| **45.66** | **3.90** | **0.8758** | **herb** | Sainzelles_(Haute_Loire) | Bison_schoetensacki | NA |
| **45.66** | **3.90** | **0.8758** | **herb** | Sainzelles_(Haute_Loire) | Equus_altidens | NA |
| **45.66** | **3.90** | **0.8758** | **herb** | Sainzelles_(Haute_Loire) | Hippopotamus_antiquus | NA |
| **45.66** | **3.90** | **0.8758** | **herb** | Sainzelles_(Haute_Loire) | Mammuthus_meridionalis | NA |
| **45.66** | **3.90** | **0.8758** | **herb** | Sainzelles_(Haute_Loire) | Stephanorhinus_hundsheimensis | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Equus_hipparionoides | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Equus_suessenbornensis | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Eucladoceros_giulii | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Hippopotamus_antiquus | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Mammuthus_meridionalis | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Mammuthus_trogontherii | NA |
| **41.21** | **43.30** | **0.8800** | **herb** | Akhalkalaki | Stephanorhinus_etruscus | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(A) | Capra_ibex | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(A) | Dama_dama | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(A) | Hippopotamus_amphibius | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(B) | Capra_ibex | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(B) | Cervus_elaphus | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(B) | Dama_dama | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(B) | Hippopotamus_amphibius | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(C) | Capra_ibex | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(C) | Cervus_elaphus | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(C) | Dama_dama | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(D) | Capra_ibex | NA |
| **37.00** | **22.58** | **0.8800** | **herb** | Apidima_(D) | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.8800** | **herb** | Atapuerca_TD6 | Axis_nestii | NA |
| **42.33** | **-3.50** | **0.8800** | **herb** | Atapuerca_TD6 | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.8800** | **herb** | Atapuerca_TD6 | Equus_altidens | NA |
| **42.33** | **-3.50** | **0.8800** | **herb** | Atapuerca_TD6 | Eucladoceros_giulii | NA |
| **42.33** | **-3.50** | **0.8800** | **herb** | Atapuerca_TD6 | Stephanorhinus_etruscus | NA |
| **42.33** | **-3.50** | **0.8800** | **herb** | Atapuerca_TD6 | Sus_scrofa | NA |
| **34.28** | **117.30** | **0.8800** | **herb** | Baiyundong_Cave | Cervus_grayi | NA |
| **19.36** | **98.96** | **0.8800** | **herb** | Ban_Fa_Suai | Axis_porcinus | NA |
| **19.36** | **98.96** | **0.8800** | **herb** | Ban_Fa_Suai | Muntiacus_muntjak | NA |
| **19.36** | **98.96** | **0.8800** | **herb** | Ban_Fa_Suai | Naemorhedus_goral | NA |
| **19.36** | **98.96** | **0.8800** | **herb** | Ban_Fa_Suai | Sus_scrofa | NA |
| **24.31** | **109.38** | **0.8800** | **herb** | Bijiashan_Cave | Tapirus_augustus | NA |

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|---|---|---|---|---|---|---|
| **24.31** | **109.38** | **0.8800** | **herb** | Bijiashan_Cave | Moschus_moschiferus | NA |
| **24.31** | **109.38** | **0.8800** | **herb** | Bijiashan_Cave | Naemorhedus_goral | NA |
| **24.31** | **109.38** | **0.8800** | **herb** | Bijiashan_Cave | Stegodon_orientalis | NA |
| **24.31** | **109.38** | **0.8800** | **herb** | Bijiashan_Cave | Sus_scrofa | NA |
| **27.03** | **106.02** | **0.8800** | **herb** | Guanyindong | Tapirus_augustus | NA |
| **27.03** | **106.02** | **0.8800** | **herb** | Guanyindong | Stegodon_orientalis | NA |
| **27.03** | **106.02** | **0.8800** | **herb** | Guanyindong | Sus_scrofa | NA |
| **25.18** | **102.53** | **0.8800** | **herb** | Heshang_Cave | Tapirus_augustus | NA |
| **25.18** | **102.53** | **0.8800** | **herb** | Huahong_Cave_I | Elephas_maximus | NA |
| **22.00** | **106.50** | **0.8800** | **herb** | Keo_Leng | Tapirus_augustus | NA |
| **22.00** | **106.50** | **0.8800** | **herb** | Keo_Leng | Stegodon_orientalis | NA |
| **22.00** | **106.50** | **0.8800** | **herb** | Keo_Leng | Sus_scrofa | NA |
| **38.29** | **69.89** | **0.8800** | **herb** | Lakhuti_2 | Bison_schoetensacki | NA |
| **38.29** | **69.89** | **0.8800** | **herb** | Lakhuti_2 | Camelus_knoblochi | NA |
| **34.35** | **109.51** | **0.8800** | **herb** | Laochihe | Cervus_grayi | NA |
| **34.35** | **109.51** | **0.8800** | **herb** | Laochihe | Tapirus_augustus | NA |
| **34.35** | **109.51** | **0.8800** | **herb** | Laochihe | Stegodon_orientalis | NA |
| **34.35** | **109.51** | **0.8800** | **herb** | Laochihe | Stephanorhinus_kirchbergensis | NA |
| **34.35** | **109.51** | **0.8800** | **herb** | Laochihe | Sus_scrofa | NA |
| **-3.85** | **33.71** | **0.8800** | **herb** | Manonga_4 | Alcelaphus_buselaphus | NA |
| **-3.85** | **33.71** | **0.8800** | **herb** | Manonga_4 | Connochaetes_taurinus | NA |
| **-3.85** | **33.71** | **0.8800** | **herb** | Manonga_4 | Hippopotamus_amphibius | NA |
| **-3.85** | **33.71** | **0.8800** | **herb** | Manonga_4 | Loxodonta_africana | NA |
| **-3.85** | **33.71** | **0.8800** | **herb** | Manonga_4 | Phacochoerus_africanus | NA |
| **-3.85** | **33.71** | **0.8800** | **herb** | Manonga_4 | Syncerus_caffer | NA |
| **25.62** | **104.73** | **0.8800** | **herb** | Panxian_Dadong | Tapirus_augustus | NA |
| **25.62** | **104.73** | **0.8800** | **herb** | Panxian_Dadong | Naemorhedus_goral | NA |
| **25.62** | **104.73** | **0.8800** | **herb** | Panxian_Dadong | Stegodon_orientalis | NA |
| **19.75** | **103.16** | **0.8800** | **herb** | Tam_Hang | Tapirus_augustus | NA |
| **19.75** | **103.16** | **0.8800** | **herb** | Tam_Hang | Stegodon_orientalis | NA |
| **42.31** | **78.75** | **0.8800** | **herb** | Tepke_1 | Stephanorhinus_etruscus | NA |
| **21.98** | **106.48** | **0.8800** | **herb** | Tham_Hai | Stegodon_orientalis | NA |
| **21.98** | **106.48** | **0.8800** | **herb** | Tham_Hai | Sus_scrofa | NA |
| **21.95** | **106.50** | **0.8800** | **herb** | Tham_Khuyen | Tapirus_augustus | NA |
| **21.95** | **106.50** | **0.8800** | **herb** | Tham_Khuyen | Stegodon_orientalis | NA |
| **21.95** | **106.50** | **0.8800** | **herb** | Tham_Khuyen | Sus_scrofa | NA |
| **20.25** | **105.16** | **0.8800** | **herb** | Tham_Om | Tapirus_augustus | NA |
| **20.25** | **105.16** | **0.8800** | **herb** | Tham_Om | Stegodon_orientalis | NA |
| **20.25** | **105.16** | **0.8800** | **herb** | Tham_Om | Sus_scrofa | NA |
| **16.35** | **101.83** | **0.8800** | **herb** | Thum_Winam_Nakin | Sus_scrofa | NA |
| **28.13** | **106.82** | **0.8800** | **herb** | Tongzi | Tapirus_augustus | NA |
| **28.13** | **106.82** | **0.8800** | **herb** | Tongzi | Stegodon_orientalis | NA |
| **28.13** | **106.82** | **0.8800** | **herb** | Tongzi | Sus_scrofa | NA |
| **23.60** | **107.12** | **0.8800** | **herb** | Wuyun_Cave | Elephas_maximus | NA |
| **23.60** | **107.12** | **0.8800** | **herb** | Wuyun_Cave | Tapirus_augustus | NA |
| **23.60** | **107.12** | **0.8800** | **herb** | Wuyun_Cave | Stegodon_orientalis | NA |
| **23.60** | **107.12** | **0.8800** | **herb** | Wuyun_Cave | Sus_scrofa | NA |
| **30.81** | **108.35** | **0.8800** | **herb** | Yanjinggou | Elaphodus_cephalophus | NA |
| **30.81** | **108.35** | **0.8800** | **herb** | Yanjinggou | Tapirus_augustus | NA |
| **30.81** | **108.35** | **0.8800** | **herb** | Yanjinggou | Moschus_moschiferus | NA |
| **30.81** | **108.35** | **0.8800** | **herb** | Yanjinggou | Naemorhedus_goral | NA |
| **30.81** | **108.35** | **0.8800** | **herb** | Yanjinggou | Stegodon_orientalis | NA |
| **30.81** | **108.35** | **0.8800** | **herb** | Yanjinggou | Sus_scrofa | NA |
| **34.20** | **109.46** | **0.8800** | **herb** | Gongwangling | Cervus_grayi | erec |
| **34.20** | **109.46** | **0.8800** | **herb** | Gongwangling | Elaphodus_cephalophus | erec |
| **34.20** | **109.46** | **0.8800** | **herb** | Gongwangling | Leptobos_brevicornis | erec |
| **34.20** | **109.46** | **0.8800** | **herb** | Gongwangling | Tapirus_augustus | erec |
| **34.20** | **109.46** | **0.8800** | **herb** | Gongwangling | Stegodon_orientalis | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Axis_lydekkeri | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Bibos_palaeosondaicus | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Bubalus_palaeokerabau | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Duboisia_santeng | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Elephas_hysudrindicus | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Epileptobos_groeneveldtii | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Hexaprotodon_sivalensis | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Muntiacus_muntjak | erec |
| **-7.50** | **111.66** | **0.8800** | **herb** | Kedung_Brubus | Rhinoceros_sondaicus | erec |
| **-7.50** | **111.66** | **0.8800** | **herb** | Kedung_Brubus | Rhinoceros_unicornis | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Rhinoceros_sondaicus | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Rhinoceros_unicornis | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Stegodon_hypsilophus | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Stegodon_trigonocephalus | erec |

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|---|---|---|---|---|---|---|
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Sus_macrognathus | erec |
| **-7.50** | **111.66** | **0.8800** | **herb** | Kedung_Brubus | Tapirus_indicus | erec |
| **-7.5000** | **111.6600** | **0.8800** | **herb** | Kedung_Brubus | Tapirus_indicus | erec |
| **41.20** | **24.33** | **0.8900** | **herb** | Aivaliki | Stephanorhinus_etruscus | NA |
| **1.66** | **31.66** | **0.8900** | **herb** | Albertine_5 | Phacochoerus_aethiopicus | NA |
| **45.50** | **12.00** | **0.8900** | **herb** | Alonte | Leptobos_etruscus | NA |
| **11.00** | **43.00** | **0.8900** | **herb** | Anabo_Koma | Antidorcas_recki | NA |
| **11.00** | **43.00** | **0.8900** | **herb** | Anabo_Koma | Hippopotamus_amphibius | NA |
| **11.00** | **43.00** | **0.8900** | **herb** | Anabo_Koma | Kobus_kob | NA |
| **11.00** | **43.00** | **0.8900** | **herb** | Anabo_Koma | Metridiochoerus_andrewsi | NA |
| **42.33** | **-3.50** | **0.8900** | **herb** | Atapuerca_E-14 | Stephanorhinus_etruscus | NA |
| **42.33** | **-3.50** | **0.8900** | **herb** | Atapuerca_E-19 | Stephanorhinus_hemitoechus | NA |
| **42.33** | **-3.50** | **0.8900** | **herb** | Atapuerca_TDW4__&_TDE5 | Cervus_elaphus | NA |
| **42.33** | **-3.50** | **0.8900** | **herb** | Atapuerca_TDW4__&_TDE5 | Stephanorhinus_etruscus | NA |
| **42.33** | **-3.50** | **0.8900** | **herb** | Atapuerca_TDW4__&_TDE5 | Sus_scrofa | NA |
| **10.61** | **40.53** | **0.8900** | **herb** | Awash_9 | Aepyceros_melampus | NA |
| **10.61** | **40.53** | **0.8900** | **herb** | Awash_9 | Alcelaphus_buselaphus | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Bison_priscus | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Bos_primigenius | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Capreolus_capreolus | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Cervus_elaphus | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Dama_dama | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Elephas_antiquus | NA |
| **43.47** | **11.61** | **0.8900** | **herb** | Bucine | Sus_scrofa | NA |
| **43.33** | **11.08** | **0.8900** | **herb** | Casa_Fratta | Leptobos_etruscus | NA |
| **41.54** | **12.28** | **0.8900** | **herb** | Castel_di_Guido | Bos_primigenius | NA |
| **41.54** | **12.28** | **0.8900** | **herb** | Castel_di_Guido | Cervus_elaphus | NA |
| **41.54** | **12.28** | **0.8900** | **herb** | Castel_di_Guido | Elephas_antiquus | NA |
| **41.54** | **12.28** | **0.8900** | **herb** | Castel_di_Guido | Stephanorhinus_hundsheimensis | NA |
| **41.54** | **12.28** | **0.8900** | **herb** | Castel_di_Guido | Sus_scrofa | NA |
| **41.81** | **12.35** | **0.8900** | **herb** | Cava_Arnolfi_(Ponte_Galeria) | Bos_primigenius | NA |
| **41.81** | **12.35** | **0.8900** | **herb** | Cava_Arnolfi_(Ponte_Galeria) | Dama_dama | NA |
| **41.81** | **12.35** | **0.8900** | **herb** | Cava_Arnolfi_(Ponte_Galeria) | Hippopotamus_amphibius | NA |
| **41.81** | **12.35** | **0.8900** | **herb** | Cava_Arnolfi_(Ponte_Galeria) | Praemegaceros_verticornis | NA |
| **46.33** | **2.16** | **0.8900** | **herb** | Champeix | Cervus_elaphus | NA |
| **46.33** | **2.16** | **0.8900** | **herb** | Champeix | Elephas_antiquus | NA |
| **51.79** | **1.14** | **0.8900** | **herb** | Clacton-on-Sea | Dama_dama | NA |
| **51.79** | **1.14** | **0.8900** | **herb** | Clacton-on-Sea | Sus_scrofa | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Axis_farnetensis | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Eobison_tamanensis | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Bison_schoetensacki | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Hippopotamodon_antiquus | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Mammuthus_meridionalis | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Praemegaceros_verticornis | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Axis_farnetensis | NA |
| **43.00** | **13.00** | **0.8900** | **herb** | Colle_Curti | Stephanorhinus_hundsheimensis | NA |
| **43.00** | **11.66** | **0.8900** | **herb** | Colle_S._Andrea | Leptobos_vallisarni | NA |
| **40.00** | **9.00** | **0.8900** | **herb** | Corsica | Cervus_elaphus | NA |
| **52.45** | **1.74** | **0.8900** | **herb** | Corton | Megaloceros_savini | NA |
| **52.45** | **1.74** | **0.8900** | **herb** | Corton | Praemegaceros_verticornis | NA |
| **52.45** | **1.74** | **0.8900** | **herb** | Corton | Stephanorhinus_hundsheimensis | NA |
| **52.45** | **1.74** | **0.8900** | **herb** | Corton | Sus_scrofa | NA |
| **25.83** | **29.00** | **0.8900** | **herb** | Dakhleh_Oasis | Gazella_dorcas | NA |
| **25.83** | **29.00** | **0.8900** | **herb** | Dakhleh_Oasis | Gazella_leptoceros | NA |
| **25.83** | **29.00** | **0.8900** | **herb** | Dakhleh_Oasis | Hippopotamus_amphibius | NA |
| **25.83** | **29.00** | **0.8900** | **herb** | Dakhleh_Oasis | Loxodonta_africana | NA |
| **25.83** | **29.00** | **0.8900** | **herb** | Dakhleh_Oasis | Pelorovis_antiquus | NA |
| **25.83** | **29.00** | **0.8900** | **herb** | Dakhleh_Oasis | Phacochoerus_aethiopicus | NA |
| **3.00** | **36.00** | **0.8900** | **herb** | East_Turkana_7 | Aepyceros_melampus | NA |
| **3.00** | **36.00** | **0.8900** | **herb** | East_Turkana_7 | Antidorcas_recki | NA |
| **3.00** | **36.00** | **0.8900** | **herb** | East_Turkana_7 | Ceratotherium_simum | NA |
| **3.00** | **36.00** | **0.8900** | **herb** | East_Turkana_7 | Equus_grevyi | NA |
| **3.00** | **36.00** | **0.8900** | **herb** | East_Turkana_7 | Kobus_kob | NA |
| **3.00** | **36.00** | **0.8900** | **herb** | East_Turkana_7 | Tragelaphus_strepsiceros | NA |
| **36.60** | **10.87** | **0.8900** | **herb** | El_Geffel | Alcelaphus_buselaphus | NA |
| **36.60** | **10.87** | **0.8900** | **herb** | El_Geffel | Ceratotherium_simum | NA |
| **36.60** | **10.87** | **0.8900** | **herb** | El_Geffel | Phacochoerus_aethiopicus | NA |
| **37.40** | **31.83** | **0.8900** | **herb** | Emirkaya | Cervus_elaphus | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Bison_priscus | NA |

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| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Bos_primigenius | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Capreolus_capreolus | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Cervus_elaphus | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Dama_clactoniana | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Elephas_antiquus | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Hippopotamus_amphibius | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Praemegaceros_solhilacus | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Stephanorhinus_hundsheimensis | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Stephanorhinus_hemitoechus | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Stephanorhinus_kirchbergensis | NA |
| **42.16** | **14.00** | **0.8900** | **herb** | Fontana_Ranuccio | Sus_scrofa | NA |
| **34.28** | **-6.65** | **0.8900** | **herb** | Fouarat | Ceratotherium_simum | NA |
| **34.28** | **-6.65** | **0.8900** | **herb** | Fouarat | Loxodonta_africana | NA |
| **48.41** | **9.78** | **0.8900** | **herb** | Grosse_Grotte_(Blaubeuren) | Capra_ibex | NA |
| **48.41** | **9.78** | **0.8900** | **herb** | Grosse_Grotte_(Blaubeuren) | Cervus_elaphus | NA |
| **48.41** | **9.78** | **0.8900** | **herb** | Grosse_Grotte_(Blaubeuren) | Coelodonta_antiquitatis | NA |
| **48.41** | **9.78** | **0.8900** | **herb** | Grosse_Grotte_(Blaubeuren) | Mammuthus_primigenius | NA |
| **48.41** | **9.78** | **0.8900** | **herb** | Grosse_Grotte_(Blaubeuren) | Rangifer_tarandus | NA |
| **48.41** | **9.78** | **0.8900** | **herb** | Grosse_Grotte_(Blaubeuren) | Rupicapra_rupicapra | NA |
| **11.00** | **42.83** | **0.8900** | **herb** | HRD | Hippopotamus_amphibius | NA |
| **24.00** | **88.00** | **0.8900** | **herb** | Indo-Gangnetic | Antilope_cervicapra | NA |
| **24.00** | **88.00** | **0.8900** | **herb** | Indo-Gangnetic | Axis_axis | NA |
| **24.00** | **88.00** | **0.8900** | **herb** | Indo-Gangnetic | Axis_porcinus | NA |
| **24.00** | **88.00** | **0.8900** | **herb** | Indo-Gangnetic | Elephas_maximus | NA |
| **24.00** | **88.00** | **0.8900** | **herb** | Indo-Gangnetic | Equus_hemionus | NA |
| **24.00** | **88.00** | **0.8900** | **herb** | Indo-Gangnetic | Gazella_gazella | NA |
| **22.91** | **94.10** | **0.8900** | **herb** | Irrawady_3 | Stegodon_orientalis | NA |
| **22.91** | **94.10** | **0.8900** | **herb** | Irrawady_3 | Sus_scrofa | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Axis_farnetensis | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Bison_schoetensacki | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Bos_primigenius | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Cervus_elaphus | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Dama_clactoniana | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Elephas_antiquus | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Hippopotamodon_antiquus | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Mammuthus_trogontherii | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Praemegaceros_solhilacus | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Megaloceros_savini | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Ovis_ammon | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Praemegaceros_verticornis | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Stephanorhinus_hundsheimensis | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Stephanorhinus_hemitoechus | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Stephanorhinus_kirchbergensis | NA |
| **41.50** | **14.50** | **0.8900** | **herb** | Isernia-Notarchirico | Sus_scrofa | NA |
| **0.33** | **34.48** | **0.8900** | **herb** | Kanam_East_3 | Hylochoerus_meinertzhageni | NA |
| **-1.00** | **33.08** | **0.8900** | **herb** | Kangera | Hippopotamus_amphibius | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_1 | Antidorcas_recki | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_1 | Ceratotherium_simum | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_1 | Diceros_bicornis | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_1 | Hippopotamus_amphibius | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_1 | Loxodonta_africana | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_3 | Diceros_bicornis | NA |
| **0.38** | **35.00** | **0.8900** | **herb** | Kanjera_3 | Loxodonta_africana | NA |
| **9.50** | **40.00** | **0.8900** | **herb** | Kesem-Kebena_4 | Antidorcas_recki | NA |
| **50.06** | **19.98** | **0.8900** | **herb** | KrakÃ³w_Spadzista_Street_(B) | Coelodonta_antiquitatis | NA |
| **50.06** | **19.98** | **0.8900** | **herb** | KrakÃ³w_Spadzista_Street_(B) | Mammuthus_primigenius | NA |
| **50.06** | **19.98** | **0.8900** | **herb** | KrakÃ³w_Spadzista_Street_(B) | Rangifer_tarandus | NA |
| **35.50** | **36.33** | **0.8900** | **herb** | Latamne | Bison_priscus | NA |
| **35.50** | **36.33** | **0.8900** | **herb** | Latamne | Bos_primigenius | NA |
| **35.50** | **36.33** | **0.8900** | **herb** | Latamne | Dama_mesopotamica | NA |
| **35.50** | **36.33** | **0.8900** | **herb** | Latamne | Giraffa_camelopardalis | NA |
| **35.50** | **36.33** | **0.8900** | **herb** | Latamne | Mammuthus_trogontherii | NA |
| **35.50** | **36.33** | **0.8900** | **herb** | Latamne | Praemegaceros_verticornis | NA |
| **47.13** | **4.94** | **0.8900** | **herb** | Les_Valerots-2 | Stephanorhinus_etruscus | NA |
| **44.24** | **1.70** | **0.8900** | **herb** | l'Igue_des_Rameaux | Haploidoceros_mediterraneus | NA |

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| **20.62** | **105.27** | **0.8900** | **herb** | Ma_U`Oi_Cave | Sus_scrofa | NA |
| **36.16** | **6.00** | **0.8900** | **herb** | Mansourah | Kobus_kob | NA |
| **36.16** | **6.00** | **0.8900** | **herb** | Mansourah | Oryx_gazella | NA |
| **43.33** | **11.08** | **0.8900** | **herb** | Matassino | Leptobos_etruscus | NA |
| **42.50** | **11.00** | **0.8900** | **herb** | Monte_Argentario | Leptobos_etruscus | NA |
| **44.58** | **10.16** | **0.8900** | **herb** | Mugello | Leptobos_vallisarni | NA |
| **51.74** | **0.04** | **0.8900** | **herb** | Nazeing | Mammuthus_primigenius | NA |
| **51.74** | **0.04** | **0.8900** | **herb** | Nazeing | Rangifer_tarandus | NA |
| **-34.01** | **23.38** | **0.8900** | **herb** | Nelsen_Bay_Cave | Equus_quagga | NA |
| **-34.01** | **23.38** | **0.8900** | **herb** | Nelsen_Bay_Cave | Pelorovis_antiquus | NA |
| **-34.01** | **23.38** | **0.8900** | **herb** | Nelsen_Bay_Cave | Syncerus_caffer | NA |
| **5.00** | **36.00** | **0.8900** | **herb** | North_Turkana_1 | Aepyceros_melampus | NA |
| **5.00** | **36.00** | **0.8900** | **herb** | North_Turkana_1 | Kobus_kob | NA |
| **5.00** | **36.00** | **0.8900** | **herb** | North_Turkana_1 | Metridiochoerus_andrewsi | NA |
| **5.00** | **36.00** | **0.8900** | **herb** | North_Turkana_2 | Metridiochoerus_andrewsi | NA |
| **5.00** | **36.00** | **0.8900** | **herb** | North_Turkana_3 | Metridiochoerus_andrewsi | NA |
| **6.00** | **37.00** | **0.8900** | **herb** | Omo_5 | Ceratotherium_simum | NA |
| **6.00** | **37.00** | **0.8900** | **herb** | Omo_5 | Diceros_bicornis | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | NA | NA |
| **33.56** | **-7.55** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Ceratotherium_simum | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Ceratotherium_simum | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | NA | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | NA | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Equus_mauritanicus | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Gazella_atlantica | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | NA | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Parmularius_angusticornis | NA |
| **33.56** | **-7.55** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Pelorovis_antiquus | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Pelorovis_antiquus | NA |
| **33.56** | **-7.55** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Phacochoerus_africanus | NA |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(GDR) | Phacochoerus_aethiopicus | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Cervus_elaphus | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Dama_dama | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Hippopotamus_amphibius | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Mammuthus_trogontherii | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Megaloceros_savini | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Praemegaceros_verticornis | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Stephanorhinus_hundsheimensis | NA |
| **52.45** | **1.73** | **0.8900** | **herb** | Pakefield/Kessingland | Sus_scrofa | NA |
| **24.00** | **80.00** | **0.8900** | **herb** | Peninsular_India | Antilope_cervicapra | NA |
| **24.00** | **80.00** | **0.8900** | **herb** | Peninsular_India | Axis_axis | NA |
| **24.00** | **80.00** | **0.8900** | **herb** | Peninsular_India | Elephas_maximus | NA |
| **24.00** | **80.00** | **0.8900** | **herb** | Peninsular_India | Equus_hemionus | NA |
| **24.00** | **80.00** | **0.8900** | **herb** | Peninsular_India | Rhinoceros_unicornis | NA |
| **45.00** | **8.00** | **0.8900** | **herb** | Piedmont | Praemegaceros_verticornis | NA |
| **43.00** | **11.50** | **0.8900** | **herb** | Pietrafitta | Leptobos_vallisarni | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Axis_farnetensis | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Bison_schoetensacki | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Cervus_elaphus | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Elephas_antiquus | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Hippopotamodon_antiquus | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Mammuthus_trogontherii | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Praemegaceros_obscurus | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Megaloceros_savini | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Praemegaceros_verticornis | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Axis_farnetensis | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Stephanorhinus_hundsheimensis | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Stephanorhinus_hemitoechus | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Stephanorhinus_kirchbergensis | NA |
| **42.33** | **12.50** | **0.8900** | **herb** | Ponte_Galeria | Sus_scrofa | NA |
| **51.48** | **0.22** | **0.8900** | **herb** | Purfleet | Dama_dama | NA |
| **32.40** | **51.55** | **0.8900** | **herb** | Qaleh_Bozi | Equus_hydruntinus | NA |
| **32.40** | **51.55** | **0.8900** | **herb** | Qaleh_Bozi | Equus_hemionus | NA |
| **0.41** | **35.00** | **0.8900** | **herb** | Rawi_2 | Hylochoerus_meinertzhageni | NA |
| **43.46** | **11.03** | **0.8900** | **herb** | San_Gimignano | Elephas_antiquus | NA |
| **43.46** | **11.03** | **0.8900** | **herb** | San_Gimignano | Praemegaceros_verticornis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Axis_farnetensis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Bison_schoetensacki | NA |

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|---|---|---|---|---|---|---|
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Cervus_elaphus | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Elephas_antiquus | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Hippopotamodon_antiquus | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Mammuthus_meridionalis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Mammuthus_trogontherii | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Praemegaceros_verticornis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Axis_farnetensis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Stephanorhinus_hundsheimensis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Stephanorhinus_hemitoechus | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Stephanorhinus_kirchbergensis | NA |
| **45.66** | **13.66** | **0.8900** | **herb** | Slivia | Sus_scrofa | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Antidorcas_recki | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Antidorcas_bondi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Metridiochoerus_andrewsi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Oreotragus_oreotragus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Pelea_capreolus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Raphicerus_campestris | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Redunca_arundinum | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Hanging_Remnant) | Tragelaphus_strepsiceros | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Lower_bank) | Antidorcas_australis | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Lower_bank) | Antidorcas_bondi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Lower_bank) | Metridiochoerus_andrewsi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Lower_bank) | Oreotragus_oreotragus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Lower_bank) | Pelea_capreolus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_1_(Lower_bank) | Raphicerus_campestris | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Antidorcas_recki | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Antidorcas_australis | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Antidorcas_bondi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Hippotragus_niger | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Kobus_leche | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Metridiochoerus_andrewsi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Oreotragus_oreotragus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Ourebia_ourebi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Pelea_capreolus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Raphicerus_campestris | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Tragelaphus_scriptus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_2 | Tragelaphus_strepsiceros | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Antidorcas_recki | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Antidorcas_australis | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Hippotragus_niger | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Kobus_leche | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Metridiochoerus_andrewsi | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Oreotragus_oreotragus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Pelea_capreolus | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Raphicerus_campestris | NA |
| **-26.08** | **27.76** | **0.8900** | **herb** | Swartkrans_3 | Tragelaphus_strepsiceros | NA |
| **33.56** | **-7.55** | **0.8900** | **herb** | Thomas_Quarry_1_(HEC) | Ceratotherium_simum | NA |
| **33.56** | **-7.55** | **0.8900** | **herb** | Thomas_Quarry_1_(HEC) | Phacochoerus_africanus | NA |
| **52.31** | **1.54** | **0.8900** | **herb** | Thorington_(Westleton_Beds) | Anancus_arvernensis | NA |
| **6.00** | **37.00** | **0.8900** | **herb** | Todenyang | Giraffa_gracilis | NA |
| **43.50** | **12.00** | **0.8900** | **herb** | Vali_di_chiana | Leptobos_etruscus | NA |
| **43.50** | **12.00** | **0.8900** | **herb** | Vali_di_chiana | Leptobos_vallisarni | NA |
| **44.00** | **4.00** | **0.8900** | **herb** | Vayssiere | Bison_schoetensacki | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Aepyceros_melampus | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Antidorcas_recki | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Ceratotherium_simum | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Diceros_bicornis | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Equus_grevyi | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Gazella_janenschi | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Kobus_sigmoidalis | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Metridiochoerus_andrewsi | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Potamochoerus_porcus | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Tragelaphus_scriptus | NA |
| **3.83** | **35.83** | **0.8900** | **herb** | West_Turkana_7 | Tragelaphus_strepsiceros | NA |
| **4.33** | **35.90** | **0.8900** | **herb** | West_Turkana_8 | Aepyceros_melampus | NA |
| **4.33** | **35.90** | **0.8900** | **herb** | West_Turkana_8 | Ceratotherium_simum | NA |
| **4.33** | **35.90** | **0.8900** | **herb** | West_Turkana_8 | Equus_grevyi | NA |
| **4.33** | **35.90** | **0.8900** | **herb** | West_Turkana_8 | Gazella_janenschi | NA |
| **4.33** | **35.90** | **0.8900** | **herb** | West_Turkana_8 | Kobus_kob | NA |
| **4.33** | **35.90** | **0.8900** | **herb** | West_Turkana_8 | Tragelaphus_strepsiceros | NA |

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| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Aepyceros_melampus | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Ceratotherium_simum | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Diceros_bicornis | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Giraffa_camelopardalis | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Hippopotamus_amphibius | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Kobus_leche | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Tragelaphus_scriptus | NA |
| **4.33** | **35.86** | **0.8900** | **herb** | West_Turkana_9 | Tragelaphus_strepsiceros | NA |
| **39.82** | **30.42** | **0.8900** | **herb** | Yukaris | Anancus_arvernensis | NA |
| **39.82** | **30.42** | **0.8900** | **herb** | Yukaris | Gazella_borbonica | NA |
| **39.82** | **30.42** | **0.8900** | **herb** | Yukaris | Mammuthus_meridionalis | NA |
| **51.00** | **11.00** | **0.8900** | **herb** | Bilzingsleben | Stephanorhinus_hemitoechus | heide |
| **51.00** | **11.00** | **0.8900** | **herb** | Bilzingsleben | Stephanorhinus_kirchbergensis | heide |
| **49.33** | **8.50** | **0.8900** | **herb** | Mauer | Stephanorhinus_hundsheimensis | heide |
| **49.33** | **8.50** | **0.8900** | **herb** | Mauer | Stephanorhinus_kirchbergensis | heide |
| **33.56** | **-7.55** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Ceratotherium_simum | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Ceratotherium_simum | heide |
| **33.56** | **-7.55** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Connochaetes_taurinus | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Connochaetes_taurinus | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | NA | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Equus_mauritanicus | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Gazella_atlantica | heide |
| **33.56** | **-7.55** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Phacochoerus_africanus | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | Phacochoerus_aethiopicus | heide |
| **33.5600** | **-7.5500** | **0.8900** | **herb** | Oulad_Hamida_1_(HEC) | NA | heide |
| **40.66** | **23.00** | **0.8900** | **herb** | Petralona | Capra_ibex | heide |
| **31.08** | **-8.00** | **0.8900** | **herb** | Tighenif | Camelus_thomasi | heide |
| **31.08** | **-8.00** | **0.8900** | **herb** | Tighenif | Ceratotherium_simum | heide |
| **31.08** | **-8.00** | **0.8900** | **herb** | Tighenif | Connochaetes_taurinus | heide |
| **31.08** | **-8.00** | **0.8900** | **herb** | Tighenif | Oryx_gazella | heide |
| **38.37** | **31.76** | **0.8900** | **herb** | Dursunlu | Bos_primigenius | erec |
| **38.37** | **31.76** | **0.8900** | **herb** | Dursunlu | Mammuthus_trogontherii | erec |
| **6.00** | **40.00** | **0.8900** | **herb** | Konso_2 | Ceratotherium_simum | erec |
| **6.00** | **40.00** | **0.8900** | **herb** | Konso_2 | Diceros_bicornis | erec |
| **6.00** | **40.00** | **0.8900** | **herb** | Konso_2 | Kobus_sigmoidalis | erec |
| **6.00** | **40.00** | **0.8900** | **herb** | Konso_2 | Tragelaphus_scriptus | erec |
| **6.00** | **40.00** | **0.8900** | **herb** | Konso_2 | Tragelaphus_strepsiceros | erec |
| **32.66** | **35.58** | **0.8900** | **herb** | Ubeidiya | Gazella_gazella | erec |
| **32.66** | **35.58** | **0.8900** | **herb** | Ubeidiya | Mammuthus_meridionalis | erec |
| **32.66** | **35.58** | **0.8900** | **herb** | Ubeidiya | Praemegaceros_verticornis | erec |
| **32.66** | **35.58** | **0.8900** | **herb** | Ubeidiya | Stephanorhinus_etruscus | erec |
| **-2.9667** | **35.3167** | **0.9000** | **herb** | Olduvai_Beds_III_-_IV_General | Damaliscus_niro | erec |
| **-2.9667** | **35.3167** | **0.9000** | **herb** | Olduvai_Beds_III_-_IV_General | Kobus_ellipsiprymnus | erec |
| **-2.9667** | **35.3167** | **0.9000** | **herb** | Olduvai_Beds_III_-_IV_General | Megalotragus_kattwinkeli | erec |
| **-2.9667** | **35.3167** | **0.9000** | **herb** | Olduvai_Beds_III_-_IV_General | Syncerus_acoelotus | erec |
| **-2.9667** | **35.3167** | **0.9000** | **herb** | Olduvai_Beds_III_-_IV_General | Taurotragus_arkelli | erec |
| **-1.5750** | **36.4311** | **0.9000** | **herb** | Olorgesailie_member_6/7 | Gazella_granti | erec |
| **-1.5750** | **36.4311** | **0.9000** | **herb** | Olorgesailie_member_6/7 | Hippopotamus_gorgops | erec |
| **-1.5750** | **36.4311** | **0.9000** | **herb** | Olorgesailie_member_6/7 | Palaeoloxodon_recki | erec |
| **15.20** | **36.18** | **0.9050** | **herb** | Atbara_River_Valley_KG15 | Gazella_dorcas | NA |
| **15.20** | **36.18** | **0.9050** | **herb** | Atbara_River_Valley_KG15 | Hippopotamus_amphibius | NA |
| **15.20** | **36.18** | **0.9050** | **herb** | Atbara_River_Valley_KG16 | Hippopotamus_amphibius | NA |
| **15.20** | **36.18** | **0.9050** | **herb** | Atbara_River_Valley_KG73 | Hippopotamus_amphibius | NA |
| **15.20** | **36.18** | **0.9050** | **herb** | Atbara_River_Valley_KG74 | Hippopotamus_amphibius | NA |
| **45.77** | **8.81** | **0.9050** | **herb** | Bardello,_Lago_di_Varese | Capreolus_capreolus | NA |
| **45.77** | **8.81** | **0.9050** | **herb** | Bardello,_Lago_di_Varese | Cervus_elaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Bayara_A | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Bayara_A | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Bayara_A | Hippopotamus_amphibius | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Alcelaphus_buselaphus | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Diceros_bicornis | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Equus_zebra | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Loxodonta_africana | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Oreotragus_oreotragus | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Phacochoerus_aethiopicus | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Potamochoerus_porcus | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Redunca_fulvorufula | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Redunca_arundinum | NA |
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Syncerus_caffer | NA |

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|---|---|---|---|---|---|---|
| **-33.57** | **22.07** | **0.9050** | **herb** | Boomplas_Cave | Tragelaphus_strepsiceros | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Aepyceros_melampus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Alcelaphus_buselaphus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Antidorcas_marsupialis | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Connochaetes_taurinus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Hippopotamus_amphibius | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Kobus_ellipsiprymnus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Loxodonta_africana | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Oreotragus_oreotragus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Phacochoerus_aethiopicus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Potamochoerus_porcus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Raphicerus_campestris | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Redunca_fulvorufula | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Syncerus_caffer | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Tragelaphus_scriptus | NA |
| **-27.21** | **31.88** | **0.9050** | **herb** | Border_Cave | Tragelaphus_strepsiceros | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Alcelaphus_buselaphus | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Connochaetes_gnou | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Diceros_bicornis | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Equus_zebra | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Hippopotamus_amphibius | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Loxodonta_africana | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Oreotragus_oreotragus | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Phacochoerus_aethiopicus | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Raphicerus_melanotis | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Raphicerus_campestris | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Redunca_fulvorufula | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Syncerus_caffer | NA |
| **-33.55** | **21.76** | **0.9050** | **herb** | Buffelskloof | Tragelaphus_strepsiceros | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Diceros_bicornis | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Equus_quagga | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Hippopotamus_amphibius | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Hippotragus_leucophaeus | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Loxodonta_africana | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Oreotragus_oreotragus | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Phacochoerus_aethiopicus | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Potamochoerus_porcus | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Raphicerus_melanotis | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Raphicerus_campestris | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Redunca_fulvorufula | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Redunca_arundinum | NA |
| **-34.62** | **19.35** | **0.9050** | **herb** | Byeneskranskop_Cave | Syncerus_caffer | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Alcelaphus_buselaphus | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Antidorcas_marsupialis | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Connochaetes_gnou | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Diceros_bicornis | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Equus_quagga | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Hippopotamus_amphibius | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Loxodonta_africana | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Oreotragus_oreotragus | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Redunca_fulvorufula | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Redunca_arundinum | NA |
| **-34.57** | **19.25** | **0.9050** | **herb** | Die_Kelders | Syncerus_caffer | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Alcelaphus_buselaphus | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Antidorcas_marsupialis | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Connochaetes_gnou | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Equus_quagga | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Hippopotamus_amphibius | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Oreotragus_oreotragus | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Phacochoerus_aethiopicus | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Raphicerus_campestris | NA |
| **-28.69** | **23.80** | **0.9050** | **herb** | Dikbosch_1 | Redunca_fulvorufula | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | GS_Area_2A+2B | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | GS_Area_2A+2B | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | GS_Area_2A+2B | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | GS_Area_2A+2B | Hippopotamus_amphibius | NA |
| **32.10** | **20.49** | **0.9050** | **herb** | Hagfet_et_Tera | Alcelaphus_buselaphus | NA |
| **32.83** | **22.12** | **0.9050** | **herb** | Haua_Fteah | Alcelaphus_buselaphus | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Alcelaphus_buselaphus | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Capra_hircus | NA |
| **32.83** | **22.12** | **0.9050** | **herb** | Haua_Fteah | Ceratotherium_simum | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Ceratotherium_simum | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Gazella_thomsonii | NA |

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|---|---|---|---|---|---|---|
| **32.83** | **22.12** | **0.9050** | **herb** | Haua_Fteah | Loxodonta_africana | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Loxodonta_africana | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Ovis_aries | NA |
| **32.83** | **22.12** | **0.9050** | **herb** | Haua_Fteah | Sus_scrofa | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Sus_scrofa | NA |
| **32.8300** | **22.1200** | **0.9050** | **herb** | Haua_Fteah | Taurotragus_oryx | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Aepyceros_melampus | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Antidorcas_marsupialis | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Damaliscus_lunatus | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Hippopotamus_amphibius | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Hippotragus_equinus | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Hippotragus_niger | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Oreotragus_oreotragus | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Phacochoerus_aethiopicus | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Potamochoerus_porcus | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Raphicerus_campestris | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Redunca_fulvorufula | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Syncerus_caffer | NA |
| **-33.64** | **25.54** | **0.9050** | **herb** | Heuningneskrans_Shelter | Tragelaphus_strepsiceros | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_G._INF. | Damaliscus_lunatus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_G._INF. | Hippopotamus_amphibius | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_G._INF. | Phacochoerus_aethiopicus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Alcelaphus_buselaphus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Damaliscus_lunatus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Hippopotamus_amphibius | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Kobus_ellipsiprymnus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Phacochoerus_aethiopicus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Potamochoerus_porcus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Redunca_redunca | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N._Tuf. | Syncerus_caffer | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Damaliscus_lunatus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Hippopotamus_amphibius | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Hippotragus_equinus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Hylochoerus_meinertzhagen i | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Kobus_ellipsiprymnus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Phacochoerus_aethiopicus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Potamochoerus_porcus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Redunca_redunca | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Tragelaphus_scriptus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_N.F.P. | Tragelaphus_strepsiceros | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Alcelaphus_buselaphus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Damaliscus_lunatus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Hippopotamus_amphibius | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Hippotragus_equinus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Kobus_ellipsiprymnus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Kobus_kob | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Phacochoerus_aethiopicus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Potamochoerus_porcus | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Redunca_redunca | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Syncerus_caffer | NA |
| **0.09** | **29.52** | **0.9050** | **herb** | Ishango_-_Z._Post-Em. | Tragelaphus_scriptus | NA |
| **-14.16** | **32.41** | **0.9050** | **herb** | Kalemba_Rock-Shelter | Hippotragus_niger | NA |
| **-14.16** | **32.41** | **0.9050** | **herb** | Kalemba_Rock-Shelter | Kobus_ellipsiprymnus | NA |
| **-14.16** | **32.41** | **0.9050** | **herb** | Kalemba_Rock-Shelter | Tragelaphus_scriptus | NA |
| **-14.16** | **32.41** | **0.9050** | **herb** | Kalemba_Rock-Shelter | Tragelaphus_strepsiceros | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_16_-_Katanda_Beds | Hippopotamus_amphibius | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_2_-_Katanda_Beds | Hippopotamus_amphibius | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_2_-_Katanda_Beds | Potamochoerus_porcus | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_2_-_Katanda_Beds | Syncerus_caffer | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_9_-_Katanda_Beds | Connochaetes_taurinus | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_9_-_Katanda_Beds | Hippopotamus_amphibius | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_9_-_Katanda_Beds | Loxodonta_africana | NA |
| **0.06** | **29.50** | **0.9050** | **herb** | Katanda_9_-_Katanda_Beds | Potamochoerus_porcus | NA |
| **25.37** | **30.46** | **0.9050** | **herb** | Kharga_Depression | Gazella_dorcas | NA |
| **25.37** | **30.46** | **0.9050** | **herb** | Kharga_Depression | Ovis_ammon | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Khorel-silIII-IVMisc | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Khorel-silIII-IVMisc | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Khorel-silIII-IVMisc | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Khorel-silIII-IVMisc | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_Ia | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IIa | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IIa | Hippopotamus_amphibius | NA |

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| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IIb | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IIb | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IIb | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IV | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IV | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | KO/Khor_el-sil_IV | Hippopotamus_amphibius | NA |
| **-33.01** | **18.04** | **0.9050** | **herb** | Lang._Baards_Quarry-up_assem. | Hippotragus_leucophaeus | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Aepyceros_melampus | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Connochaetes_taurinus | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Damaliscus_lunatus | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Hippopotamus_amphibius | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Phacochoerus_aethiopicus | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Raphicerus_sharpei | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Syncerus_caffer | NA |
| **-15.46** | **28.66** | **0.9050** | **herb** | Leopard's_Hill_Cave | Tragelaphus_strepsiceros | NA |
| **-3.97** | **33.76** | **0.9050** | **herb** | Manonga_-_BS_2_-_Clays | Phacochoerus_africanus | NA |
| **-3.97** | **33.76** | **0.9050** | **herb** | Manonga_-_BS1_-_Clays | Connochaetes_taurinus | NA |
| **-3.93** | **33.61** | **0.9050** | **herb** | Manonga_-_In_1_-_Clays | Connochaetes_taurinus | NA |
| **-3.93** | **33.61** | **0.9050** | **herb** | Manonga_-_In_1_-_Clays | Phacochoerus_africanus | NA |
| **-3.95** | **33.65** | **0.9050** | **herb** | Manonga_-_In_2_-_Clays | Loxodonta_africana | NA |
| **-3.95** | **33.65** | **0.9050** | **herb** | Manonga_-_In_2_-_Clays | Phacochoerus_africanus | NA |
| **-3.95** | **33.63** | **0.9050** | **herb** | Manonga_-_In_3_-_Clays | Phacochoerus_africanus | NA |
| **-3.92** | **33.61** | **0.9050** | **herb** | Manonga_-_Ki_2_-_Clays | Phacochoerus_africanus | NA |
| **-3.92** | **33.60** | **0.9050** | **herb** | Manonga_-_Ki_3_-_Clays | Alcelaphus_buselaphus | NA |
| **-3.92** | **33.60** | **0.9050** | **herb** | Manonga_-_Ki_4_-_Clays | Connochaetes_taurinus | NA |
| **-4.03** | **33.83** | **0.9050** | **herb** | Manonga_-_Kn_-_Clays | Hippopotamus_amphibius | NA |
| **-4.38** | **33.68** | **0.9050** | **herb** | Manonga_-_Mw_3_-_Clays | Connochaetes_taurinus | NA |
| **-3.97** | **33.71** | **0.9050** | **herb** | Manonga_-_Ng_2_-_Clays | Phacochoerus_africanus | NA |
| **-3.93** | **33.86** | **0.9050** | **herb** | Manonga_-_Ny_-_Clays | Connochaetes_taurinus | NA |
| **-3.93** | **33.86** | **0.9050** | **herb** | Manonga_-_Ny_-_Clays | Phacochoerus_africanus | NA |
| **-3.93** | **33.60** | **0.9050** | **herb** | Manonga_-_Sh_Hill_-_Clays | Syncerus_caffer | NA |
| **-4.38** | **33.67** | **0.9050** | **herb** | Manonga_-_TW_-_Clays | Phacochoerus_africanus | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Hylochoerus_meinertzhagen i | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Kobus_kob | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Loxodonta_africana | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Okapia_johnstoni | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Oreotragus_oreotragus | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Phacochoerus_aethiopicus | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Potamochoerus_porcus | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Redunca_redunca | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Syncerus_caffer | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Tragelaphus_eurycerus | NA |
| **1.33** | **29.75** | **0.9050** | **herb** | Matupi_Cave_-_Unit_Matupi_II | Tragelaphus_scriptus | NA |
| **10.85** | **40.41** | **0.9050** | **herb** | Middle_Awash_-_Andalee_mbr. | Phacochoerus_aethiopicus | NA |
| **10.57** | **40.47** | **0.9050** | **herb** | Middle_Awash_-_Bodo_1 | Alcelaphus_buselaphus | NA |
| **10.67** | **40.43** | **0.9050** | **herb** | Middle_Awash_-_Meadura_mbr. | Phacochoerus_aethiopicus | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Aepyceros_melampus | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Damaliscus_lunatus | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Hippotragus_equinus | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Hippotragus_niger | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Oreotragus_oreotragus | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Raphicerus_sharpei | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Raphicerus_campestris | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Redunca_fulvorufula | NA |
| **-26.46** | **31.32** | **0.9050** | **herb** | Mlawula | Tragelaphus_strepsiceros | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_el_'Aliya | Bos_primigenius | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_el_'Aliya | Gazella_dorcas | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_el_'Aliya | Hippopotamus_amphibius | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_el_'Aliya | Phacochoerus_africanus | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_el_'Aliya | Sus_scrofa | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_el_Khail | Sus_scrofa | NA |
| **35.73** | **5.88** | **0.9050** | **herb** | Mugharet_es_Saifiya | Sus_scrofa | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_II | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_II | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_III | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_III | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_III | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_III | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_IV | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_IV | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_IV | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_V | Alcelaphus_buselaphus | NA |

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|---|---|---|---|---|---|---|
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_V | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_V | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_V | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_VI | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_VI | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_VI | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_Area_VI | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_AreaIII+IV | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | Sebil_AreaIII+IV | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | SebilArea_I | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | SebilArea_I | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | SebilArea_I | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9050** | **herb** | SebilArea_I | Hippopotamus_amphibius | NA |
| **47.87** | **18.39** | **0.9050** | **herb** | Strekov | Sus_scrofa | NA |
| **-33.15** | **18.12** | **0.9050** | **herb** | Elandsfontein | Ceratotherium_simum | heide |
| **-33.15** | **18.12** | **0.9050** | **herb** | Elandsfontein | Diceros_bicornis | heide |
| **-33.15** | **18.12** | **0.9050** | **herb** | Elandsfontein | Hippopotamus_amphibius | heide |
| **-33.15** | **18.12** | **0.9050** | **herb** | Elandsfontein | Tragelaphus_strepsiceros | heide |
| **10.22** | **40.48** | **0.9050** | **herb** | Middle_Awash_-_Bouri | Connochaetes_taurinus | erec |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_0" | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_0" | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_0" | Gazella_leptoceros | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_0" | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_1" | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_1" | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_1" | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "GSIII,Lev_1" | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSIII,Lev2" | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSIII,Lev2" | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSIII,Lev2" | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSIII,Lev3" | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSIII,Lev3" | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec1" | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec2" | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec2" | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec2" | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec3" | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec4" | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | "KomOmbo-GSXIII,Sec4" | Bos_primigenius | NA |
| **41.97** | **44.25** | **0.9105** | **herb** | Akhalkalaki_1 | Hippopotamus_amphibius | NA |
| **41.14** | **123.24** | **0.9105** | **herb** | Anping | Moschus_moschiferus | NA |
| **41.14** | **123.24** | **0.9105** | **herb** | Anping | Sus_scrofa | NA |
| **42.37** | **-3.61** | **0.9105** | **herb** | Atapuerca_TD6-AS | Sus_scrofa | NA |
| **-5.49** | **120.90** | **0.9105** | **herb** | Beru | Babyrousa_babyrussa | NA |
| **22.89** | **28.62** | **0.9105** | **herb** | Bir_Sahara_11 | Phacochoerus_aethiopicus | NA |
| **22.89** | **28.64** | **0.9105** | **herb** | Bir_Sahara_12 | Ceratotherium_simum | NA |
| **22.86** | **28.52** | **0.9105** | **herb** | Bir_Sahara_13 | Ceratotherium_simum | NA |
| **47.58** | **19.03** | **0.9105** | **herb** | Budakalasz | Hippopotamus_antiquus | NA |
| **14.78** | **39.78** | **0.9105** | **herb** | Danakil_-_general | Ceratotherium_simum | NA |
| **14.78** | **39.78** | **0.9105** | **herb** | Danakil_-_general | Kobus_ellipsiprymnus | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Alcelaphus_buselaphus | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Ceratotherium_simum | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Connochaetes_gnou | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Diceros_bicornis | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Equus_quagga | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Hippopotamus_amphibius | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Hippotragus_leucophaeus | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Loxodonta_africana | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Oreotragus_oreotragus | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Potamochoerus_porcus | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Raphicerus_melanotis | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Raphicerus_campestris | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Redunca_fulvorufula | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Redunca_arundinum | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Syncerus_caffer | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Tragelaphus_scriptus | NA |
| **-34.57** | **19.25** | **0.9105** | **herb** | Die_Kelders_1 | Tragelaphus_strepsiceros | NA |
| **-32.37** | **18.32** | **0.9105** | **herb** | Diepkloof_Rock_Shelter | Equus_zebra | NA |
| **-32.37** | **18.32** | **0.9105** | **herb** | Diepkloof_Rock_Shelter | Hippopotamus_amphibius | NA |
| **-32.37** | **18.32** | **0.9105** | **herb** | Diepkloof_Rock_Shelter | Oreotragus_oreotragus | NA |
| **-32.37** | **18.32** | **0.9105** | **herb** | Diepkloof_Rock_Shelter | Redunca_arundinum | NA |
| **-28.69** | **23.80** | **0.9105** | **herb** | Dikbosch_2 | Equus_quagga | NA |
| **-28.69** | **23.80** | **0.9105** | **herb** | Dikbosch_2 | Phacochoerus_aethiopicus | NA |

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|---|---|---|---|---|---|---|
| **-28.69** | **23.80** | **0.9105** | **herb** | Dikbosch_2 | Raphicerus_campestris | NA |
| **-28.69** | **23.80** | **0.9105** | **herb** | Dikbosch_2 | Syncerus_caffer | NA |
| **34.43** | **-6.85** | **0.9105** | **herb** | Doukkala_II | Alcelaphus_buselaphus | NA |
| **34.43** | **-6.85** | **0.9105** | **herb** | Doukkala_II | Bos_primigenius | NA |
| **34.43** | **-6.85** | **0.9105** | **herb** | Doukkala_II | Connochaetes_taurinus | NA |
| **34.43** | **-6.85** | **0.9105** | **herb** | Doukkala_II | Gazella_cuvieri | NA |
| **34.43** | **-6.85** | **0.9105** | **herb** | Doukkala_II | Gazella_dorcas | NA |
| **34.43** | **-6.85** | **0.9105** | **herb** | Doukkala_II | Sus_scrofa | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Antidorcas_marsupialis | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Ceratotherium_simum | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Diceros_bicornis | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Hippopotamus_amphibius | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Hippotragus_leucophaeus | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Loxodonta_africana | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Raphicerus_melanotis | NA |
| **-33.03** | **17.89** | **0.9105** | **herb** | Duinefontein_2 | Syncerus_caffer | NA |
| **-33.87** | **18.14** | **0.9105** | **herb** | Elandsfontein_(Cutting_10) | Equus_zebra | NA |
| **-33.87** | **18.14** | **0.9105** | **herb** | Elandsfontein_(Cutting_10) | Loxodonta_africana | NA |
| **-33.87** | **18.14** | **0.9105** | **herb** | Elandsfontein_(Cutting_10) | Redunca_arundinum | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | El-Kilh_E71P1 | Alcelaphus_buselaphus | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | El-Kilh_E71P1 | Hippopotamus_amphibius | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | El-Kilh_E71P2 | Alcelaphus_buselaphus | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | El-Kilh_E71P2 | Gazella_dorcas | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | El-Kilh_E71P2 | Hippopotamus_amphibius | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Antidorcas_marsupialis | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Connochaetes_gnou | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Connochaetes_taurinus | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Diceros_bicornis | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Giraffa_camelopardalis | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Hippopotamus_amphibius | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Kobus_leche | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Phacochoerus_aethiopicus | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Raphicerus_campestris | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Redunca_fulvorufula | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Syncerus_caffer | NA |
| **-27.66** | **24.51** | **0.9105** | **herb** | Equus_Cave | Tragelaphus_strepsiceros | NA |
| **-3.04** | **35.23** | **0.9105** | **herb** | FC_II_West_General | Ceratotherium_simum | NA |
| **-3.04** | **35.24** | **0.9105** | **herb** | FLK_I-Level_13 | Tragelaphus_strepsiceros | NA |
| **-3.04** | **35.24** | **0.9105** | **herb** | FLKI-Level_15 | Tragelaphus_strepsiceros | NA |
| **33.07** | **35.54** | **0.9105** | **herb** | Gesher_Benot_Ya'aqov_-_the_'Bar',_Jordan_Valley | Gazella_gazella | NA |
| **45.59** | **11.01** | **0.9105** | **herb** | Grotta_del_Cere,_Verona,_Northern_Italy | Capra_ibex | NA |
| **45.59** | **11.01** | **0.9105** | **herb** | Grotta_del_Cere,_Verona,_Northern_Italy | Rupicapra_rupicapra | NA |
| **45.59** | **11.01** | **0.9105** | **herb** | Grotta_del_Cere,_Verona,_Northern_Italy | Sus_scrofa | NA |
| **32.70** | **21.54** | **0.9105** | **herb** | Hagfet_ed_Dabba | Alcelaphus_buselaphus | NA |
| **32.70** | **21.54** | **0.9105** | **herb** | Hagfet_ed_Dabba | Ceratotherium_simum | NA |
| **37.37** | **14.62** | **0.9105** | **herb** | Island_fossil_ungulates_and_their_predators | Bos_primigenius | NA |
| **37.37** | **14.62** | **0.9105** | **herb** | Island_fossil_ungulates_and_their_predators | Cervus_elaphus | NA |
| **37.37** | **14.62** | **0.9105** | **herb** | Island_fossil_ungulates_and_their_predators | Sus_scrofa | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K1 | Alcelaphus_buselaphus | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K1 | Alcelaphus_buselaphus | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K1 | Bos_primigenius | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K1 | Gazella_dorcas | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K1 | Gazella_dorcas | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K18 | Alcelaphus_buselaphus | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K18 | Gazella_dorcas | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K3 | Alcelaphus_buselaphus | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K3 | Alcelaphus_buselaphus | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K3 | Bos_primigenius | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K3 | Gazella_dorcas | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K3 | Gazella_dorcas | NA |
| **25.20** | **32.44** | **0.9105** | **herb** | Isna_E71K3 | Hippopotamus_amphibius | NA |
| **25.2000** | **32.4400** | **0.9105** | **herb** | Isna_E71K3 | Hippopotamus_amphibius | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | Isna_E71K9 | Alcelaphus_buselaphus | NA |
| **25.2900** | **32.4400** | **0.9105** | **herb** | Isna_E71K9 | Alcelaphus_buselaphus | NA |
| **25.2900** | **32.4400** | **0.9105** | **herb** | Isna_E71K9 | Bos_primigenius | NA |
| **25.29** | **32.44** | **0.9105** | **herb** | Isna_E71K9 | Gazella_dorcas | NA |
| **25.2900** | **32.4400** | **0.9105** | **herb** | Isna_E71K9 | Gazella_dorcas | NA |
| **50.49** | **7.37** | **0.9105** | **herb** | Karlich_'See-Ufer' | Cervus_elaphus | NA |
| **50.49** | **7.37** | **0.9105** | **herb** | Karlich_'See-Ufer' | Sus_scrofa | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Alcelaphus_buselaphus | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Ceratotherium_simum | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Connochaetes_gnou | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Giraffa_camelopardalis | NA |

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|---|---|---|---|---|---|---|
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Hippopotamus_amphibius | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Phacochoerus_aethiopicus | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Syncerus_caffer | NA |
| **-27.70** | **23.73** | **0.9105** | **herb** | Kathu_Pan | Tragelaphus_strepsiceros | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Alcelaphus_buselaphus | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Diceros_bicornis | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Equus_quagga | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Hippopotamus_amphibius | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Hippotragus_leucophaeus | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Loxodonta_africana | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Phacochoerus_aethiopicus | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Potamochoerus_porcus | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Raphicerus_melanotis | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Redunca_fulvorufula | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Redunca_arundinum | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Syncerus_caffer | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Tragelaphus_scriptus | NA |
| **-34.14** | **24.29** | **0.9105** | **herb** | Klasies_River_Mouth_Main_Site | Tragelaphus_strepsiceros | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KO/Khor_el-sil_IIIa | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KO/Khor_el-sil_IIIa | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KO/Khor_el-sil_IIIb | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Bayara | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Bayara | Hippopotamus_amphibius | NA |
| **24.39** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS_3 | Alcelaphus_buselaphus | NA |
| **24.39** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS_3 | Gazella_dorcas | NA |
| **24.39** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS_3 | Gazella_leptoceros | NA |
| **24.39** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS_3 | Hippopotamus_amphibius | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS1 | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS1 | Bos_primigenius | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS1 | Gazella_dorcas | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS1 | Hippopotamus_amphibius | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS2 | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS2 | Gazella_dorcas | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_GS2 | Hippopotamus_amphibius | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Khor_el_Sil | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Khor_el_Sil | Gazella_dorcas | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Khor_el_Sil | Hippopotamus_amphibius | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Oasis | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Oasis | Gazella_dorcas | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Oasis | Hippopotamus_amphibius | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Sebil | Alcelaphus_buselaphus | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Sebil | Gazella_dorcas | NA |
| **24.72** | **32.89** | **0.9105** | **herb** | Kom_Ombo_Sebil | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_IX | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_IX | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_IX | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_X | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_X | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_X | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GS_X | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSMisc | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSMisc | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSV | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSVII | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSVII | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmboGSXIII/MoundH | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmboGSXIII/MoundH | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXIV | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXIV | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXIV | Gazella_dorcas | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXIV | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXV | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXV | Bos_primigenius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXV | Hippopotamus_amphibius | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | KomOmbo-GSXVIII | Gazella_dorcas | NA |
| **5.20** | **37.41** | **0.9105** | **herb** | Konso_-_KGA10 | Tragelaphus_strepsiceros | NA |
| **-2.38** | **34.73** | **0.9105** | **herb** | Loiyangalani-Site_HcJd1-D | Aepyceros_melampus | NA |
| **-2.38** | **34.73** | **0.9105** | **herb** | Loiyangalani-Site_HcJd1-D | Alcelaphus_buselaphus | NA |
| **-2.38** | **34.73** | **0.9105** | **herb** | Loiyangalani-Site_HcJd1-D | Connochaetes_taurinus | NA |
| **-2.38** | **34.73** | **0.9105** | **herb** | Loiy-HcJd1-E:LSA | Hippopotamus_amphibius | NA |
| **0.45** | **35.90** | **0.9105** | **herb** | Middle_Silts/Gravels_mbr. | Hippopotamus_amphibius | NA |
| **0.45** | **35.90** | **0.9105** | **herb** | Middle_Silts/Gravels_mbr. | Kobus_ellipsiprymnus | NA |
| **-3.04** | **35.24** | **0.9105** | **herb** | MNKII_MainSt-Mddle_BdII | Ceratotherium_simum | NA |

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|---|---|---|---|---|---|---|
| **-3.04** | **35.24** | **0.9105** | **herb** | MNKII_MainSt-Mddle_BdII | Kobus_kob | NA |
| **-3.04** | **35.24** | **0.9105** | **herb** | MNKII_MainSt-Mddle_BdII | Tragelaphus_strepsiceros | NA |
| **-3.04** | **35.24** | **0.9105** | **herb** | MNKII_Skull_St-MddleBdII | Ceratotherium_simum | NA |
| **49.38** | **9.04** | **0.9105** | **herb** | Mosbach | Rangifer_tarandus | NA |
| **-23.62** | **15.31** | **0.9105** | **herb** | Namib_4 | Syncerus_caffer | NA |
| **-3.03** | **32.27** | **0.9105** | **herb** | Olduvai_-_EF_-_HR | Ceratotherium_simum | NA |
| **-3.04** | **35.24** | **0.9105** | **herb** | Olduvai_-_FLK_Masek_Beds | Tragelaphus_strepsiceros | NA |
| **-3.03** | **34.21** | **0.9105** | **herb** | Olduvai_-_HEBE | Ceratotherium_simum | NA |
| **-3.03** | **34.21** | **0.9105** | **herb** | Olduvai_-_HEBE | Diceros_bicornis | NA |
| **-3.03** | **34.21** | **0.9105** | **herb** | Olduvai_-_HEBW | Ceratotherium_simum | NA |
| **-3.03** | **34.21** | **0.9105** | **herb** | Olduvai_-_HEBW | Diceros_bicornis | NA |
| **-3.01** | **35.18** | **0.9105** | **herb** | Olduvai_-_PDK | Tragelaphus_strepsiceros | NA |
| **-3.04** | **35.26** | **0.9105** | **herb** | Olduvai_-_WK | Ceratotherium_simum | NA |
| **-3.04** | **35.26** | **0.9105** | **herb** | Olduvai_-_WK | Diceros_bicornis | NA |
| **-3.04** | **35.26** | **0.9105** | **herb** | Olduvai_-_WK | Tragelaphus_strepsiceros | NA |
| **-1.63** | **36.36** | **0.9105** | **herb** | Olorgesailie_-_H/9 | Equus_grevyi | NA |
| **-1.62** | **36.36** | **0.9105** | **herb** | Olorgesailie_-_Upper_Member_1 | Ceratotherium_simum | NA |
| **-1.62** | **36.36** | **0.9105** | **herb** | Olorgesailie_-_Upper_Member_1 | Equus_grevyi | NA |
| **-1.62** | **36.36** | **0.9105** | **herb** | Olorgesailie_-_Upper_Member_1 | Hippopotamus_amphibius | NA |
| **33.57** | **-7.62** | **0.9105** | **herb** | Oulad_Hamida_1_-_Homo_erectus_cave | Ceratotherium_simum | NA |
| **33.57** | **-7.62** | **0.9105** | **herb** | Oulad_Hamida_1_-_Homo_erectus_cave | Connochaetes_taurinus | NA |
| **-2.38** | **35.86** | **0.9105** | **herb** | Peninj-Kipalagu | Ceratotherium_simum | NA |
| **-2.38** | **35.86** | **0.9105** | **herb** | Peninj-Kipalagu | Connochaetes_taurinus | NA |
| **-2.38** | **35.86** | **0.9105** | **herb** | Peninj-Kipalagu | Tragelaphus_strepsiceros | NA |
| **-26.21** | **27.62** | **0.9105** | **herb** | Plovers_Lake | Kobus_ellipsiprymnus | NA |
| **-26.21** | **27.62** | **0.9105** | **herb** | Plovers_Lake | Tragelaphus_scriptus | NA |
| **43.46** | **10.69** | **0.9105** | **herb** | Podere_i_Sorbi | Cervus_elaphus | NA |
| **53.24** | **-3.61** | **0.9105** | **herb** | Pontnewydd_Cave | Cervus_elaphus | NA |
| **45.74** | **14.19** | **0.9105** | **herb** | Postojna_Cave | Hippopotamus_antiquus | NA |
| **-28.57** | **24.36** | **0.9105** | **herb** | Power's_Site | Antidorcas_marsupialis | NA |
| **-28.57** | **24.36** | **0.9105** | **herb** | Power's_Site | Ceratotherium_simum | NA |
| **-28.57** | **24.36** | **0.9105** | **herb** | Power's_Site | Hippopotamus_amphibius | NA |
| **-28.57** | **24.36** | **0.9105** | **herb** | Power's_Site | Phacochoerus_aethiopicus | NA |
| **-28.57** | **24.36** | **0.9105** | **herb** | Power's_Site | Redunca_arundinum | NA |
| **-28.57** | **24.36** | **0.9105** | **herb** | Power's_Site | Syncerus_caffer | NA |
| **43.51** | **10.46** | **0.9105** | **herb** | S._Regolo | Hippopotamus_antiquus | NA |
| **40.35** | **18.15** | **0.9105** | **herb** | San_Sidero_3,_Maglie_(Lecce),_Salento,_Puglia | Bos_primigenius | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Alcelaphus_buselaphus | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Antidorcas_marsupialis | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Ceratotherium_simum | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Connochaetes_gnou | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Equus_quagga | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Hippopotamus_amphibius | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Hippotragus_leucophaeus | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Loxodonta_africana | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Oreotragus_oreotragus | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Phacochoerus_aethiopicus | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Raphicerus_melanotis | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Raphicerus_campestris | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Redunca_arundinum | NA |
| **-33.27** | **17.84** | **0.9105** | **herb** | Sea_Harvest_Site | Tragelaphus_strepsiceros | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | Sebil_Area_VII | Alcelaphus_buselaphus | NA |
| **24.45** | **32.94** | **0.9105** | **herb** | Sebil_Area_VII | Bos_primigenius | NA |
| **-3.04** | **35.23** | **0.9105** | **herb** | SHKII-Mddle_BdII | Ceratotherium_simum | NA |
| **-3.04** | **35.23** | **0.9105** | **herb** | SHKII-Mddle_BdII | Kobus_kob | NA |
| **-3.04** | **35.23** | **0.9105** | **herb** | SHKII-Mddle_BdII | Tragelaphus_strepsiceros | NA |
| **-4.25** | **120.52** | **0.9105** | **herb** | Sompe,_Pleistocene | Babyrousa_babyrussa | NA |
| **-4.25** | **120.52** | **0.9105** | **herb** | Sompe,_Pleistocene | Bubalus_depressicornis | NA |
| **-0.55** | **35.13** | **0.9105** | **herb** | Songhor_MSA-Excav | Kobus_ellipsiprymnus | NA |
| **51.01** | **11.29** | **0.9105** | **herb** | Sussenborn | Ovibos_moschatus | NA |
| **51.01** | **11.29** | **0.9105** | **herb** | Sussenborn | Rangifer_tarandus | NA |
| **51.01** | **11.29** | **0.9105** | **herb** | Sussenborn | Sus_scrofa | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Antidorcas_marsupialis | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Ceratotherium_simum | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Equus_quagga | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Hippopotamus_amphibius | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Hippotragus_leucophaeus | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Raphicerus_melanotis | NA |
| **-34.87** | **18.57** | **0.9105** | **herb** | Swartklip_1 | Redunca_arundinum | NA |
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Equus_capensis | NA |
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Eurygnathohippus_libycum | NA |
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Metridiochoerus_meadowsi | NA |
| **-26.21** | **27.62** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Oreotragus_oreotragus | NA |

| | | | | | | |
|---|---|---|---|---|---|---|
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Oreotragus_oreotragus | NA |
| **-26.21** | **27.62** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Raphicerus_campestris | NA |
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Raphicerus_campestris | NA |
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Taurotragus_oryx | NA |
| **-26.21** | **27.62** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Tragelaphus_strepsiceros | NA |
| **-26.2100** | **27.6200** | **0.9105** | **herb** | Swartkrans_-_Member_3 | Tragelaphus_strepsiceros | NA |
| **-26.21** | **27.62** | **0.9105** | **herb** | Swartkrans_-_Member_5 | Raphicerus_campestris | NA |
| **32.66** | **34.97** | **0.9105** | **herb** | Tabun_Cave_Level_E | Capreolus_capreolus | NA |
| **32.66** | **34.97** | **0.9105** | **herb** | Tabun_Cave_Level_E | Equus_hemionus | NA |
| **32.66** | **34.97** | **0.9105** | **herb** | Tabun_Cave_Level_E | Hippopotamus_amphibius | NA |
| **33.57** | **-7.62** | **0.9105** | **herb** | Thomas_Quarry_1_level_G | Ceratotherium_simum | NA |
| **33.5700** | **-7.6200** | **0.9105** | **herb** | Thomas_Quarry_1_level_G | Ceratotherium_simum | NA |
| **33.57** | **-7.62** | **0.9105** | **herb** | Thomas_Quarry_1_level_G | Connochaetes_taurinus | NA |
| **33.5700** | **-7.6200** | **0.9105** | **herb** | Thomas_Quarry_1_level_G | Connochaetes_taurinus | NA |
| **35.40** | **0.29** | **0.9105** | **herb** | Tighenif-general | Ceratotherium_simum | NA |
| **35.40** | **0.29** | **0.9105** | **herb** | Tighenif-general | Connochaetes_taurinus | NA |
| **40.82** | **-4.46** | **0.9105** | **herb** | Villacastin_(Zone_C,_level_2) | Cervus_elaphus | NA |
| **40.82** | **-4.46** | **0.9105** | **herb** | Villacastin_(Zone_C,_level_2) | Sus_scrofa | NA |
| **40.82** | **-4.46** | **0.9105** | **herb** | Villacastin_(Zone_C,_level_3) | Cervus_elaphus | NA |
| **4.20** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Kaitio_I | Ceratotherium_simum | NA |
| **4.18** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Nachukui_II | Diceros_bicornis | NA |
| **4.19** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Nachukui_III | Kobus_leche | NA |
| **4.20** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Natoo_region | Tragelaphus_strepsiceros | NA |
| **-27.66** | **24.53** | **0.9105** | **herb** | Witkrans_Cave-Lower | Phacochoerus_aethiopicus | NA |
| **-27.88** | **23.45** | **0.9105** | **herb** | Wonderwerk_Cave | Connochaetes_gnou | NA |
| **-27.88** | **23.45** | **0.9105** | **herb** | Wonderwerk_Cave | Phacochoerus_aethiopicus | NA |
| **-33.37** | **18.04** | **0.9105** | **herb** | Ysterfontein_1 | Connochaetes_gnou | NA |
| **-33.37** | **18.04** | **0.9105** | **herb** | Ysterfontein_1 | Diceros_bicornis | NA |
| **-33.37** | **18.04** | **0.9105** | **herb** | Ysterfontein_1 | Hippotragus_leucophaeus | NA |
| **-33.37** | **18.04** | **0.9105** | **herb** | Ysterfontein_1 | Raphicerus_campestris | NA |
| **-33.37** | **18.04** | **0.9105** | **herb** | Ysterfontein_1 | Redunca_arundinum | NA |
| **-33.37** | **18.04** | **0.9105** | **herb** | Ysterfontein_1 | Tragelaphus_strepsiceros | NA |
| **24.76** | **100.85** | **0.9105** | **herb** | Yuanmou_formation,_third_member,_lower_part,_Shangnabang | Sus_scrofa | NA |
| **26.01** | **115.27** | **0.9105** | **herb** | Yudu | Sus_scrofa | NA |
| **3.85** | **36.13** | **0.9105** | **herb** | East_Turkana_-_Area_103_-_Okote | Aepyceros_melampus | NA |
| **3.85** | **36.13** | **0.9105** | **herb** | East_Turkana_-_Area_103_-_Okote | Kobus_kob | NA |
| **3.85** | **36.13** | **0.9105** | **herb** | East_Turkana_-_Area_103_-_Okote | Tragelaphus_strepsiceros | NA |
| **4.18** | **36.33** | **0.9105** | **herb** | East_Turkana_-_Area_129_-_KBS | Tragelaphus_strepsiceros | NA |
| **4.19** | **36.15** | **0.9105** | **herb** | East_Turkana_-_Area_7A_-_Okote | Kobus_kob | NA |
| **0.45** | **35.90** | **0.9105** | **herb** | East_Turkana_-_Kapthurin_fm. | Ceratotherium_simum | NA |
| **0.45** | **35.90** | **0.9105** | **herb** | East_Turkana_-_Kapthurin_fm. | Hippopotamus_amphibius | NA |
| **0.45** | **35.90** | **0.9105** | **herb** | East_Turkana_-_Kapthurin_fm. | Phacochoerus_aethiopicus | NA |
| **0.45** | **35.90** | **0.9105** | **herb** | East_Turkana_-_Kapthurin_fm. | Potamochoerus_porcus | NA |
| **50.51** | **5.50** | **0.9105** | **herb** | La_Belle-Roche | Capreolus_capreolus | erec |
| **50.5100** | **5.5000** | **0.9105** | **herb** | La_Belle-Roche | Capreolus_capreolus | erec |
| **50.51** | **5.50** | **0.9105** | **herb** | La_Belle-Roche | Cervus_elaphus | erec |
| **50.5100** | **5.5000** | **0.9105** | **herb** | La_Belle-Roche | Cervus_elaphus | erec |
| **50.5100** | **5.5000** | **0.9105** | **herb** | La_Belle-Roche | Equus_ferus | erec |
| **50.51** | **5.50** | **0.9105** | **herb** | La_Belle-Roche | Rangifer_tarandus | erec |
| **50.5100** | **5.5000** | **0.9105** | **herb** | La_Belle-Roche | Rangifer_tarandus | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Aepyceros_melampus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Aepyceros_melampus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Cephalophus_sylvicultor | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Damaliscus_lunatus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Damaliscus_hunteri | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Damaliscus_lunatus | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Equus_grevyi | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Equus_grevyi | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Gazella_granti | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Gazella_thomsonii | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Giraffa_camelopardalis | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Giraffa_camelopardalis | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Hippotragus_equinus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Hippotragus_equinus | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Litocranius_walleri | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Litocranius_walleri | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Oryx_beisa | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Phacochoerus_aethiopicus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Phacochoerus_aethiopicus | erec |
| **-1.80** | **36.18** | **0.9105** | **herb** | Lainyamok | Potamochoerus_porcus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Potamochoerus_porcus | erec |
| **-1.8000** | **36.1800** | **0.9105** | **herb** | Lainyamok | Taurotragus_oryx | erec |

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|---|---|---|---|---|---|---|
| **-3.02** | **35.21** | **0.9105** | **herb** | Olduvai_Beds_III_-_IV_General | Kobus_ellipsiprymnus | erec |
| **4.11** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Kalochoro_I | Tragelaphus_strepsiceros | erec |
| **4.13** | **35.67** | **0.9105** | **herb** | West_Turkana_-_Kalochoro_II | Tragelaphus_strepsiceros | erec |
| **4.16** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Nachukui_I | Ceratotherium_simum | erec |
| **4.16** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Nachukui_I | Hippopotamus_amphibius | erec |
| **4.16** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Nachukui_I | Kobus_ellipsiprymnus | erec |
| **4.16** | **35.68** | **0.9105** | **herb** | West_Turkana_-_Nachukui_I | Tragelaphus_scriptus | erec |
| **4.26** | **36.17** | **0.9105** | **herb** | East_Turkana_-_Area_1_-_Okote | Aepyceros_melampus | erec |
| **4.26** | **36.17** | **0.9105** | **herb** | East_Turkana_-_Area_1_-_Okote | Kobus_kob | erec |
| **4.26** | **36.17** | **0.9105** | **herb** | East_Turkana_-_Area_1_-_Okote | Tragelaphus_strepsiceros | erec |
| **3.82** | **36.26** | **0.9105** | **herb** | East_Turkana_-_Area_123_-_KBS | Aepyceros_melampus | erec |
| **3.82** | **36.26** | **0.9105** | **herb** | East_Turkana_-_Area_123_-_KBS | Ceratotherium_simum | erec |
| **3.82** | **36.26** | **0.9105** | **herb** | East_Turkana_-_Area_123_-_KBS | Diceros_bicornis | erec |
| **3.82** | **36.26** | **0.9105** | **herb** | East_Turkana_-_Area_123_-_KBS | Tragelaphus_strepsiceros | erec |
| **3.88** | **36.23** | **0.9105** | **herb** | East_Turkana_-_Area_124_-_KBS | Aepyceros_melampus | erec |
| **3.88** | **36.23** | **0.9105** | **herb** | East_Turkana_-_Area_124_-_KBS | Tragelaphus_strepsiceros | erec |
| **4.27** | **36.16** | **0.9105** | **herb** | East_Turkana_-_Area_1A_-_Okote | Aepyceros_melampus | erec |
| **4.27** | **36.16** | **0.9105** | **herb** | East_Turkana_-_Area_1A_-_Okote | Kobus_kob | erec |
| **4.27** | **36.16** | **0.9105** | **herb** | East_Turkana_-_Area_1A_-_Okote | Tragelaphus_strepsiceros | erec |
| **4.24** | **36.13** | **0.9105** | **herb** | East_Turkana_-_Area_6A_-_Okote | Tragelaphus_strepsiceros | erec |
| **33.48** | **108.86** | **0.9400** | **herb** | Huangjiawan | Budorcas_taxicolor | NA |
| **33.48** | **108.86** | **0.9400** | **herb** | Huangjiawan | Tapirus_augustus | NA |
| **33.48** | **108.86** | **0.9400** | **herb** | Huangjiawan | Moschus_moschiferus | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Axis_nestii | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Bison_schoetensacki | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Equus_altidens | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Equus_suessenbornensis | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Mammuthus_meridionalis | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Praemegaceros_verticornis | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Praeovibos_priscus | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Stephanorhinus_hundsheimensis | NA |
| **43.79** | **7.45** | **0.9500** | **herb** | Le_Vallonet_(Alpes_Maritimes) | Sus_strozzii | NA |
| **43.22** | **5.71** | **0.9680** | **herb** | Cimay,_Var | Hemitragus_jemlahicus | NA |
| **42.94** | **12.91** | **0.9680** | **herb** | Collecurti__Colfiorito_Basin__Central_Italy | Hippopotamus_antiquus | NA |
| **43.36** | **-5.11** | **0.9680** | **herb** | Mestas_de_Con,_Cangas_de_Onis,_Asturias | Capreolus_capreolus | NA |
| **51.69** | **-1.39** | **0.9680** | **herb** | Sugworth_full_faunal_list,_Berkshire | Cervus_elaphus | NA |
| **42.37** | **13.25** | **0.9778** | **herb** | Madonna_della_Strada_(Scoppito,_Aquila) | Hippopotamus_antiquus | NA |
| **42.37** | **13.25** | **0.9778** | **herb** | Madonna_della_Strada_(Scoppito,_Aquila) | Mammuthus_meridionalis | NA |
| **42.37** | **13.25** | **0.9778** | **herb** | Madonna_della_Strada_(Scoppito,_Aquila) | Praemegaceros_obscurus | NA |
| **42.37** | **13.25** | **0.9778** | **herb** | Madonna_della_Strada_(Scoppito,_Aquila) | Stephanorhinus_hundsheimensis | NA |
| **31.0000** | **-8.0000** | **0.9800** | **herb** | Ain_Maarouf | Elephas_iolensis | NA |
| **31.0000** | **-8.0000** | **0.9800** | **herb** | Ain_Maarouf | Equus_ferus | NA |
| **31.0000** | **-8.0000** | **0.9800** | **herb** | Ain_Maarouf | Equus_mauritanicus | NA |
| **31.0000** | **-8.0000** | **0.9800** | **herb** | Ain_Maarouf | Hippopotamus_sirensis | NA |
| **31.0000** | **-8.0000** | **0.9800** | **herb** | Ain_Maarouf | Loxodonta_atlantica | NA |
| **31.0000** | **-8.0000** | **0.9800** | **herb** | Ain_Maarouf | Parmularius_ambiguus | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1(L) | Equus_mauritanicus | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1(L) | Gazella_atlantica | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1(L) | Hippopotamus_sirensis | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1(L) | Loxodonta_atlantica | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1_(HEC) | Ceratotherium_simum | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1_(HEC) | Equus_mauritanicus | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1_(HEC) | Gazella_atlantica | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1_(HEC) | Hippopotamus_sirensis | NA |
| **33.5600** | **-7.5500** | **0.9800** | **herb** | Thomas_Quarry_1_(HEC) | Phacochoerus_africanus | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Equus_altidens | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Eucladoceros_giulii | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Hemitragus_albus | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Hippopotamus_antiquus | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Mammuthus_meridionalis | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Soergelia_minor | NA |
| **37.73** | **-2.70** | **0.9830** | **herb** | Venta_Micena | Stephanorhinus_etruscus | NA |
| **10.3167** | **40.5500** | **1.0000** | **herb** | Middle_Awash_-_Dakanihyalo_mbr | Palaeoloxodon_recki | NA |
| **10.2200** | **40.4800** | **1.0000** | **herb** | Middle_Awash_-_Bouri | Connochaetes_taurinus | erec |
| **10.2200** | **40.4800** | **1.0000** | **herb** | Middle_Awash_-_Bouri | Megalotragus_kattwinkeli | erec |
| **10.2200** | **40.4800** | **1.0000** | **herb** | Middle_Awash_-_Bouri | Parmularius_angusticornis | erec |
| **52.00** | **5.00** | **1.0300** | **herb** | Het_Gat | Cervalces_latifrons | NA |
| **52.00** | **5.00** | **1.0300** | **herb** | Het_Gat | Mammuthus_meridionalis | NA |
| **52.00** | **5.00** | **1.0300** | **herb** | Het_Gat | Mammuthus_trogontherii | NA |
| **52.00** | **5.00** | **1.0300** | **herb** | Het_Gat | Stephanorhinus_etruscus | NA |
| **45.86** | **18.45** | **1.0478** | **herb** | Somssich_2 | Capreolus_suessenbornensis | NA |

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|---|---|---|---|---|---|---|
| **45.86** | **18.45** | **1.0478** | **herb** | Somssich_2 | Stephanorhinus_etruscus | NA |
| **50.05** | **8.26** | **1.0600** | **herb** | Mosbach | Cervalces_latifrons | NA |
| **50.05** | **8.26** | **1.0600** | **herb** | Mosbach | Mammuthus_trogontherii | NA |
| **50.05** | **8.26** | **1.0600** | **herb** | Mosbach | Stephanorhinus_etruscus | NA |
| **42.95** | **12.92** | **1.1000** | **herb** | Colle_Curti_(Colfiorito) | Axis_farnetensis | NA |
| **42.95** | **12.92** | **1.1000** | **herb** | Colle_Curti_(Colfiorito) | Hippopotamus_antiquus | NA |
| **42.95** | **12.92** | **1.1000** | **herb** | Colle_Curti_(Colfiorito) | Mammuthus_meridionalis | NA |
| **42.95** | **12.92** | **1.1000** | **herb** | Colle_Curti_(Colfiorito) | Praemegaceros_verticornis | NA |
| **42.95** | **12.92** | **1.1000** | **herb** | Colle_Curti_(Colfiorito) | Stephanorhinus_hundsheimensis | NA |
| **33.0000** | **35.1100** | **1.1000** | **herb** | Evron_quarry | Bos_primigenius | NA |
| **33.0000** | **35.1100** | **1.1000** | **herb** | Evron_quarry | Cervus_elaphus | NA |
| **33.0000** | **35.1100** | **1.1000** | **herb** | Evron_quarry | Gazella_gazella | NA |
| **33.0000** | **35.1100** | **1.1000** | **herb** | Evron_quarry | Kolpochoerus_evronensis | NA |
| **47.00** | **39.01** | **1.1000** | **herb** | Semibalki | Eobison_tamanensis | NA |
| **47.00** | **39.01** | **1.1000** | **herb** | Semibalki | Equus_major | NA |
| **47.00** | **39.01** | **1.1000** | **herb** | Semibalki | Mammuthus_meridionalis | NA |
| **47.00** | **39.01** | **1.1000** | **herb** | Semibalki | Pontoceros_ambigus | NA |
| **47.00** | **39.01** | **1.1000** | **herb** | Semibalki | Praemegaceros_pliotarandoides | NA |
| **50.51** | **10.42** | **1.1000** | **herb** | Untermassfeld | Bison_menneri | NA |
| **50.51** | **10.42** | **1.1000** | **herb** | Untermassfeld | Eucladoceros_giulii | NA |
| **50.51** | **10.42** | **1.1000** | **herb** | Untermassfeld | Procapreolus_cusanus | NA |
| **50.51** | **10.42** | **1.1000** | **herb** | Untermassfeld | Rusa_rhenana | NA |
| **50.51** | **10.42** | **1.1000** | **herb** | Untermassfeld | Stephanorhinus_etruscus | NA |
| **50.51** | **10.42** | **1.1000** | **herb** | Untermassfeld | Sus_scrofa | NA |
| **40.2000** | **114.6700** | **1.1000** | **herb** | Donggutuo | Bison_sp. | erec |
| **40.2000** | **114.6700** | **1.1000** | **herb** | Donggutuo | Coelodonta_antiquitatis | erec |
| **40.2000** | **114.6700** | **1.1000** | **herb** | Donggutuo | Equus_sanmeniensis | erec |
| **40.2000** | **114.6700** | **1.1000** | **herb** | Donggutuo | Gazella_sp. | erec |
| **40.2000** | **114.6700** | **1.1000** | **herb** | Donggutuo | Palaeoloxodon_sp. | erec |
| **38.3700** | **31.7600** | **1.1000** | **herb** | Dursunlu | Bos_primigenius | erec |
| **38.3700** | **31.7600** | **1.1000** | **herb** | Dursunlu | Equus_ferus | erec |
| **38.3700** | **31.7600** | **1.1000** | **herb** | Dursunlu | Mammuthus_trogontherii | erec |
| **30.4000** | **109.1000** | **1.1000** | **herb** | Longgupo | Equus_yunnanensis | erec |
| **30.4000** | **109.1000** | **1.1000** | **herb** | Longgupo | Nestoritherium | erec |
| **30.4000** | **109.1000** | **1.1000** | **herb** | Longgupo | Sinomastodon | erec |
| **40.75** | **23.30** | **1.1300** | **herb** | Apollonia_(APL) | Bison_schoetensacki | NA |
| **37.30** | **22.30** | **1.1300** | **herb** | Kaiafas | Praemegaceros_verticornis | NA |
| **37.15** | **22.15** | **1.1300** | **herb** | Megalopolis | Bos_primigenius | NA |
| **37.15** | **22.15** | **1.1300** | **herb** | Megalopolis | Hippopotamus_amphibius | NA |
| **37.15** | **22.15** | **1.1300** | **herb** | Megalopolis | Mammuthus_meridionalis | NA |
| **37.15** | **22.15** | **1.1300** | **herb** | Megalopolis | Praemegaceros_verticornis | NA |
| **37.15** | **22.15** | **1.1300** | **herb** | Megalopolis | Stephanorhinus_etruscus | NA |
| **40.30** | **23.30** | **1.1300** | **herb** | Ravin_Vulgarakis | Hippopotamus_amphibius | NA |
| **45.18** | **3.80** | **1.1300** | **herb** | Sennaja,_Tsimbala | Mammuthus_meridionalis | NA |
| **37.73** | **-2.38** | **1.1300** | **herb** | Venta_Micena-2 | Hippopotamus_amphibius | NA |
| **37.73** | **-2.38** | **1.1300** | **herb** | Venta_Micena-2 | Mammuthus_meridionalis | NA |
| **37.73** | **-2.38** | **1.1300** | **herb** | Venta_Micena-2 | Stephanorhinus_etruscus | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Axis_farnetensis | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Eucladoceros_dicranios | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Hippopotamus_antiquus | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Leptobos_vallisarni | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Mammuthus_meridionalis | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Stephanorhinus_hundsheimensis | NA |
| **44.00** | **11.25** | **1.1304** | **herb** | Mugello_(fluviolacustrine_phase,_Barberino) | Sus_strozzii | NA |
| **42.98** | **12.25** | **1.1357** | **herb** | Pietrafitta | Axis_farnetensis | NA |
| **42.98** | **12.25** | **1.1357** | **herb** | Pietrafitta | Mammuthus_meridionalis | NA |
| **42.98** | **12.25** | **1.1357** | **herb** | Pietrafitta | Praemegaceros_obscurus | NA |
| **42.98** | **12.25** | **1.1357** | **herb** | Pietrafitta | Stephanorhinus_hundsheimensis | NA |
| **43.91** | **3.95** | **1.1482** | **herb** | Durfort_(Gard) | Bison_schoetensacki | NA |
| **43.91** | **3.95** | **1.1482** | **herb** | Durfort_(Gard) | Hippopotamus_antiquus | NA |
| **43.91** | **3.95** | **1.1482** | **herb** | Durfort_(Gard) | Mammuthus_meridionalis | NA |
| **43.91** | **3.95** | **1.1482** | **herb** | Durfort_(Gard) | Rusa_rhenana | NA |
| **43.91** | **3.95** | **1.1482** | **herb** | Durfort_(Gard) | Stephanorhinus_hundsheimensis | NA |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Elaphodus_cephalodus | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Equus_sanmeniensis | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Gazella | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Leptobos | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Megaceros_robustus | erec |

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|---|---|---|---|---|---|---|
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Nestoritherium_cf._sinense | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Rhinoceros | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Rusa_(Deperetia) | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Sinomegaceros_kongwangliniensis | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Stegodon_orientalis | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Sus_lydekkeri | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Tapirus_indicus | erec |
| **34.0500** | **109.5000** | **1.1500** | **herb** | Gongwangling | Tapirus_sinensis | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Axis_farnetensis | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Axis_farnetensis | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Eobison_tamanensis | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Eobison_tamanensis | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Equus_altidens | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Equus_suessenbornensis | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Equus_altidens | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Equus_suessenbornensis | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Hippopotamus_antiquus | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Hippopotamus_antiquus | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Mammuthus_meridionalis | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Mammuthus_meridionalis | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Megalovis_balcanicus | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Megalovis_balcanicus | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Praemegaceros_obscurus | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Praemegaceros_obscurus | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Stephanorhinus_hundsheimensis | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Stephanorhinus_hundsheimensis | erec |
| **41.78** | **15.45** | **1.1638** | **herb** | Pirro_Nord | Sus_strozzii | erec |
| **41.7800** | **15.4500** | **1.1638** | **herb** | Pirro_Nord | Sus_strozzii | erec |
| **14.83** | **39.83** | **1.1800** | **herb** | Buia-Dandiero | Ceratotherium_simum | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Ceratotherium_simum | erec |
| **14.83** | **39.83** | **1.1800** | **herb** | Buia-Dandiero | Equus_grevyi | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Equus_grevyi | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Giraffa_jumae | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Hippopotamus_gorgops | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Hippotragus_gigas | erec |
| **14.83** | **39.83** | **1.1800** | **herb** | Buia-Dandiero | Kobus_ellipsiprymnus | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Kobus_ellipsiprymnus | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Kolpochoerus_majus | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Metridiochoerus_modestus | erec |
| **14.8300** | **39.8300** | **1.1800** | **herb** | Buia-Dandiero | Palaeoloxodon_recki | erec |
| **45.11** | **3.90** | **1.2000** | **herb** | Ceyssaguet | Equus_altidens | NA |
| **45.11** | **3.90** | **1.2000** | **herb** | Ceyssaguet | Eucladoceros_ctenoides | NA |
| **45.11** | **3.90** | **1.2000** | **herb** | Ceyssaguet | Praemegaceros_obscurus | NA |
| **45.11** | **3.90** | **1.2000** | **herb** | Ceyssaguet | Rusa_rhenana | NA |
| **45.11** | **3.90** | **1.2000** | **herb** | Ceyssaguet | Stephanorhinus_etruscus | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Ceratotherium_simum | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Equus_grevyi | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Equus_oldowayensis | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Hippopotamus_amphibius | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Hippopotamus_gorgops | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Palaeoloxodon_recki | NA |
| **-1.6200** | **36.3600** | **1.2000** | **herb** | Olorgesailie_-_Upper_Member_1 | Taurotragus_oryx | NA |
| **35.3800** | **1.2000** | **1.2000** | **herb** | El-Kherba | Elephas_maghrebiensis | erec |
| **35.3800** | **1.2000** | **1.2000** | **herb** | El-Kherba | Equus_numidicus | erec |
| **35.3800** | **1.2000** | **1.2000** | **herb** | El-Kherba | Equus_tabeti | erec |
| **35.3800** | **1.2000** | **1.2000** | **herb** | El-Kherba | Kolpochoerus_heseloni | erec |
| **35.3800** | **1.2000** | **1.2000** | **herb** | El-Kherba | Sivatherium_maurusium | erec |
| **-1.5686** | **36.4375** | **1.2000** | **herb** | Olorgesailie_Member_1 | Equus_oldowayensis | erec |
| **-1.5686** | **36.4375** | **1.2000** | **herb** | Olorgesailie_Member_1 | Hippopotamus_gorgops | erec |
| **-1.5686** | **36.4375** | **1.2000** | **herb** | Olorgesailie_Member_1 | Palaeoloxodon_recki | erec |
| **-1.5686** | **36.4375** | **1.2000** | **herb** | Olorgesailie_Member_1 | Taurotragus_oryx | erec |
| **41.90** | **12.25** | **1.2222** | **herb** | Leffe_(Lower_level) | Cervalces_carnotorum | NA |
| **41.90** | **12.25** | **1.2222** | **herb** | Leffe_(Lower_level) | Hippopotamus_antiquus | NA |
| **41.90** | **12.25** | **1.2222** | **herb** | Leffe_(Lower_level) | Leptobos_etruscus | NA |
| **41.90** | **12.25** | **1.2222** | **herb** | Leffe_(Lower_level) | Mammuthus_meridionalis | NA |
| **41.90** | **12.25** | **1.2222** | **herb** | Leffe_(Lower_level) | Stephanorhinus_etruscus | NA |
| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Axis_farnetensis | NA |
| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Cervalces_carnotorum | NA |
| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Hippopotamus_antiquus | NA |
| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Mammuthus_meridionalis | NA |

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| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Praemegaceros_obscurus | NA |
| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Stephanorhinus_etruscus | NA |
| **44.55** | **10.42** | **1.2419** | **herb** | Il_Crostolo | Sus_strozzii | NA |
| **39.20** | **22.80** | **1.2439** | **herb** | Halykes,_Magnesia | Equus_stenonis | NA |
| **39.20** | **22.80** | **1.2439** | **herb** | Halykes,_Magnesia | Gazellospira_torticornis | NA |
| **40.57** | **23.47** | **1.2526** | **herb** | Apollonia_1_ | Bison_schoetensacki | NA |
| **40.57** | **23.47** | **1.2526** | **herb** | Apollonia_1_ | Equus_apolloniensis | NA |
| **40.57** | **23.47** | **1.2526** | **herb** | Apollonia_1_ | Eucladoceros_giulii | NA |
| **40.57** | **23.47** | **1.2526** | **herb** | Apollonia_1_ | Pontoceros_ambiguus | NA |
| **40.57** | **23.47** | **1.2526** | **herb** | Apollonia_1_ | Soergelia_minor | NA |
| **38.00** | **21.80** | **1.2565** | **herb** | Livakos_(LIV) | Equus_stenonis | NA |
| **38.00** | **21.80** | **1.2565** | **herb** | Livakos_(LIV) | Hippopotamus_antiquus | NA |
| **38.00** | **21.80** | **1.2565** | **herb** | Livakos_(LIV) | Mitilanotherium_martinii | NA |
| **38.00** | **21.80** | **1.2565** | **herb** | Livakos_(LIV) | Pontoceros_ambiguus | NA |
| **45.00** | **79.00** | **1.2673** | **herb** | Kopaly | Equus_stenonis | NA |
| **45.00** | **79.00** | **1.2673** | **herb** | Kopaly | Leptobos_etruscus | NA |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Bison_palaeosinensis | erec |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Coelodonta_antiquitatis | erec |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Elaphurus__bifurcatus | erec |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Elasmotherium_inexpectatum | erec |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Equus_sanmeniensis | erec |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Euctenoceros_boulei | erec |
| **34.7000** | **110.7000** | **1.2700** | **herb** | Xihoudu | Proboscidipparion_sinense | erec |
| **37.40** | **-3.16** | **1.2729** | **herb** | Fonelas | Axis_nestii | NA |
| **37.40** | **-3.16** | **1.2729** | **herb** | Fonelas | Cervus_perrieri | NA |
| **37.40** | **-3.16** | **1.2729** | **herb** | Fonelas | Equus_stenonis | NA |
| **37.40** | **-3.16** | **1.2729** | **herb** | Fonelas | Gazellospira_torticornis | NA |
| **37.40** | **-3.16** | **1.2729** | **herb** | Fonelas | Sus_strozzii | NA |
| **41.20** | **-2.20** | **1.2729** | **herb** | Llobregat_ | Equus_stenonis | NA |
| **41.20** | **-2.20** | **1.2729** | **herb** | Llobregat_ | Hippopotamus_antiquus | NA |
| **41.20** | **-2.20** | **1.2729** | **herb** | Llobregat_ | Mammuthus_meridionalis | NA |
| **41.20** | **-2.20** | **1.2729** | **herb** | Llobregat_ | Stephanorhinus_etruscus | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Axis_nestii | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Equus_stenonis | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Eucladoceros_dicranios | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Hippopotamus_antiquus | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Mammuthus_meridionalis | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Stephanorhinus_etruscus | NA |
| **41.73** | **13.20** | **1.2777** | **herb** | Fontana_Acetosa | Sus_strozzii | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Ceratotherium_simum | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Connochaetes_taurinus | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Equus_mauritanicus | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Gazella_dracula | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Hippopotamus_sirensis | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Loxodonta_atlantica | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Metridiochoerus_compactus | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Parmularius_ambiguus | NA |
| **35.4000** | **0.2900** | **1.2935** | **herb** | Tighenif-general | Tragelaphus_algericus | NA |
| **4.6670** | **35.7500** | **1.2935** | **herb** | West_Turkana_-_Loruth_Kaado_III | Hippopotamus_gorgops | erec |
| **4.6670** | **35.7500** | **1.2935** | **herb** | West_Turkana_-_Loruth_Kaado_III | Hippopotamus_karumensis | erec |
| **4.6670** | **35.7500** | **1.2935** | **herb** | West_Turkana_-_Loruth_Kaado_III | Metridiochoerus_compactus | erec |
| **25.4167** | **30.5167** | **1.2940** | **herb** | Kharga_Depression | Bos_primigenius | NA |
| **25.4167** | **30.5167** | **1.2940** | **herb** | Kharga_Depression | Capra_aegagrus | NA |
| **25.4167** | **30.5167** | **1.2940** | **herb** | Kharga_Depression | Equus_asinus | NA |
| **25.4167** | **30.5167** | **1.2940** | **herb** | Kharga_Depression | Gazella_dorcas | NA |
| **25.4167** | **30.5167** | **1.2940** | **herb** | Kharga_Depression | Ovis_ammon | NA |
| **37.22** | **-4.12** | **1.2955** | **herb** | Cerro_Parejo | Hippopotamus_antiquus | NA |
| **30.36** | **77.05** | **1.2955** | **herb** | Chandigarh_-_Pinjor_Formation | Elephas_maximus | NA |
| **28.68** | **109.52** | **1.2955** | **herb** | Dongpaoshan,_bed_3 | Sus_scrofa | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Loess_above_Travertine_II | Rangifer_tarandus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Oberer_Travertin_I_(Upper_Travertine_I) | Capreolus_capreolus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Oberer_Travertin_I_(Upper_Travertine_I) | Cervus_elaphus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Oberer_Travertin_II_(Upper_Travertine_II) | Bos_primigenius | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Pariser_Horizont | Rangifer_tarandus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Alces_alces | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Alces_alces | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Bison_priscus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Bos_primigenius | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Bos_primigenius | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Capreolus_capreolus | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Capreolus_capreolus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Cervus_elaphus | NA |

| | | | | | | |
|---|---|---|---|---|---|---|
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Cervus_elaphus | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Stephanorhinus_hemitoechus | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Stephanorhinus_kirchbergensis | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | NA | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Elephas_antiquus | NA |
| **51.00** | **11.25** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Sus_scrofa | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf,_Unterer_Travertin_(Lower_Travertine) | Sus_scrofa | NA |
| **44.69** | **23.85** | **1.2955** | **herb** | Fintina_lui_Mitilan_(upper_faunal_level)__Tetoiu_2_middle_faunal_horizon | Equus_maior | NA |
| **52.52** | **1.43** | **1.2955** | **herb** | Happisburgh | Capreolus_capreolus | NA |
| **52.52** | **1.43** | **1.2955** | **herb** | Happisburgh | Sus_scrofa | NA |
| **41.37** | **1.96** | **1.2955** | **herb** | Llobregat_River_area__80_to_90_metre_terrace__Barcelona | Hippopotamus_antiquus | NA |
| **50.09** | **8.17** | **1.2955** | **herb** | Mosbach_1,_bei_Wiesbaden | Cervus_elaphus | NA |
| **50.09** | **8.17** | **1.2955** | **herb** | Mosbach_1,_bei_Wiesbaden | Hippopotamus_amphibius | NA |
| **50.09** | **8.17** | **1.2955** | **herb** | Mosbach_1,_bei_Wiesbaden | Sus_scrofa | NA |
| **5.35** | **35.89** | **1.2955** | **herb** | Omo_-_member_K7 | Ceratotherium_simum | NA |
| **5.35** | **35.89** | **1.2955** | **herb** | Omo_-_member_K7 | Diceros_bicornis | NA |
| **40.53** | **23.43** | **1.2955** | **herb** | Ravin_of_Voulgarakis | Hippopotamus_amphibius | NA |
| **45.09** | **3.77** | **1.2955** | **herb** | Sainzelles__Polignac__Haute-Loire | Hippopotamus_antiquus | NA |
| **45.14** | **3.76** | **1.2955** | **herb** | Soleilhac_19th_century_collection,_Blanzac,_Haute-Loire | Hippopotamus_amphibius | NA |
| **50.98** | **11.28** | **1.2955** | **herb** | Taubach,_Unterer_Travertin_(Lower_Travertine) | Alces_alces | NA |
| **50.98** | **11.28** | **1.2955** | **herb** | Taubach,_Unterer_Travertin_(Lower_Travertine) | Bos_primigenius | NA |
| **50.98** | **11.28** | **1.2955** | **herb** | Taubach,_Unterer_Travertin_(Lower_Travertine) | Capreolus_capreolus | NA |
| **50.98** | **11.28** | **1.2955** | **herb** | Taubach,_Unterer_Travertin_(Lower_Travertine) | Cervus_elaphus | NA |
| **50.98** | **11.28** | **1.2955** | **herb** | Taubach,_Unterer_Travertin_(Lower_Travertine) | Sus_scrofa | NA |
| **23.09** | **120.30** | **1.2955** | **herb** | Tso-chen | Elephas_maximus | NA |
| **37.74** | **-2.55** | **1.2955** | **herb** | Venta_Micena | Hippopotamus_amphibius | NA |
| **44.43** | **0.62** | **1.2955** | **herb** | Villeneuve-sur-Lot_(Lot-et-Garonne) | Capreolus_capreolus | NA |
| **44.43** | **0.62** | **1.2955** | **herb** | Villeneuve-sur-Lot_(Lot-et-Garonne) | Sus_scrofa | NA |
| **51.01** | **11.21** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Capreolus_capreolus | NA |
| **51.0100** | **11.2100** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Capreolus_capreolus | NA |
| **51.01** | **11.21** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Cervus_elaphus | NA |
| **51.0100** | **11.2100** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Cervus_elaphus | NA |
| **51.0100** | **11.2100** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Dihoplus_kirchbergensis | NA |
| **51.0100** | **11.2100** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Elephas_antiquus | NA |
| **51.01** | **11.21** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Sus_scrofa | NA |
| **51.0100** | **11.2100** | **1.2955** | **herb** | Weimar,_Unterer_Travertin_(Lower_Travertine) | Sus_scrofa | NA |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf_Loess_above_Travertine_II | NA | heide |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf_Loess_above_Travertine_II | Coelodonta_antiquitatis | heide |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf_Loess_above_Travertine_II | Equus_ferus | heide |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf_Loess_above_Travertine_II | Mammuthus_primigenius | heide |
| **51.0000** | **11.2500** | **1.2955** | **herb** | Ehringsdorf_Loess_above_Travertine_II | Rangifer_tarandus | heide |
| **4.62** | **36.26** | **1.2955** | **herb** | East_Turkana_-_Area_105_-_KBS | Ceratotherium_simum | NA |
| **4.62** | **36.26** | **1.2955** | **herb** | East_Turkana_-_Area_105_-_KBS | Diceros_bicornis | NA |
| **4.62** | **36.26** | **1.2955** | **herb** | East_Turkana_-_Area_105_-_KBS | Tragelaphus_strepsiceros | NA |
| **4.02** | **36.26** | **1.2955** | **herb** | East_Turkana_-_Area_105-_KBS-_FxJj3 | Kobus_ellipsiprymnus | NA |
| **4.03** | **36.24** | **1.2955** | **herb** | East_Turkana_-_Area_105-KBS-FxJj1 | Kobus_ellipsiprymnus | NA |
| **4.13** | **36.33** | **1.2955** | **herb** | East_Turkana_-_Area_130-_Okote-_FxJj18_lH | Kobus_ellipsiprymnus | NA |
| **4.13** | **36.33** | **1.2955** | **herb** | East_Turkana_-_Area_130-_Okote-_FxJj18_lH | Tragelaphus_strepsiceros | NA |
| **4.10** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Diceros_bicornis | NA |
| **4.10** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Kobus_ellipsiprymnus | NA |
| **4.10** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Tragelaphus_strepsiceros | NA |
| **37.74** | **-2.55** | **1.2955** | **herb** | Fuente_Nueva_3 | Hippopotamus_antiquus | erec |
| **37.7400** | **-2.5500** | **1.2955** | **herb** | Fuente_Nueva_3 | Hippopotamus_antiquus | erec |
| **37.7400** | **-2.5500** | **1.2955** | **herb** | Fuente_Nueva_3 | Praemegaceros_solhilacus | erec |
| **-7.43** | **111.77** | **1.2955** | **herb** | Kedung_Brubus | Muntiacus_muntjak | erec |
| **-7.39** | **111.46** | **1.2955** | **herb** | Trinil | Muntiacus_muntjak | erec |
| **-7.39** | **111.46** | **1.2955** | **herb** | Trinil | Rhinoceros_sondaicus | erec |
| **43.7900** | **7.3700** | **1.2955** | **herb** | Vallonnet_Cave_bed_3_'faunal_level',_Roquebrune-Cap-Martin,_Alpes_Maritimes | Equus_major | erec |
| **4.13** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_130-_KBS-_FxJj38SE | Ceratotherium_simum | erec |
| **4.13** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_130-_KBS-_FxJj38SE | Tragelaphus_strepsiceros | erec |
| **4.10** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20E | Ceratotherium_simum | erec |
| **4.10** | **36.31** | **1.2955** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20E | Tragelaphus_strepsiceros | erec |
| **-26.21** | **27.62** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Equus_quagga | NA |
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Equus_capensis | NA |
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Equus_quagga | NA |
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Eurygnathohippus_libycum | NA |
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Metridiochoerus_meadowsi | NA |
| **-26.21** | **27.62** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Raphicerus_campestris | NA |

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|---|---|---|---|---|---|---|
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Raphicerus_campestris | NA |
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Sivatherium_maurusium | NA |
| **-26.2100** | **27.6200** | **1.3000** | **herb** | Swartkrans_-_Member_2 | Taurotragus_oryx | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Antidorcas_australis | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Antidorcas_bondi | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Antidorcas_marsupialis | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Antidorcas_recki | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Equus_capensis | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Eurygnathohippus_libycum | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Hippotragus_niger | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Kobus_leche | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Metridiochoerus_andrewsi | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Metridiochoerus_modestus | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Oreotragus_oreotragus | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Ourebia_ourebi | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Pelea_capreolus | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Raphicerus_campestris | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Sivatherium_maurusium | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Taurotragus_oryx | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Tragelaphus_angasii | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Tragelaphus_scriptus | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_2 | Tragelaphus_strepsiceros | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Antidorcas_australis | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Antidorcas_marsupialis | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Antidorcas_recki | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Equus_capensis | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Eurygnathohippus_libycum | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Hippotragus_gigas | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Hippotragus_niger | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Kobus_leche | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Metridiochoerus_andrewsi | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Oreotragus_oreotragus | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Pelea_capreolus | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Raphicerus_campestris | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Taurotragus_oryx | NA |
| **-26.0800** | **27.7600** | **1.3000** | **herb** | Swartkrans_3 | Tragelaphus_strepsiceros | NA |
| **4.2881** | **36.2333** | **1.3000** | **herb** | East_Turkana_-_Area_6A_-_Chari | Hippopotamus_gorgops | NA |
| **0.4500** | **35.9000** | **1.3000** | **herb** | East_Turkana_-_Kapthurin_fm. | Ceratotherium_simum | NA |
| **0.4500** | **35.9000** | **1.3000** | **herb** | East_Turkana_-_Kapthurin_fm. | Hippopotamus_amphibius | NA |
| **0.4500** | **35.9000** | **1.3000** | **herb** | East_Turkana_-_Kapthurin_fm. | Kolpochoerus_majus | NA |
| **0.4500** | **35.9000** | **1.3000** | **herb** | East_Turkana_-_Kapthurin_fm. | Mesochoerus_majus | NA |
| **0.4500** | **35.9000** | **1.3000** | **herb** | East_Turkana_-_Kapthurin_fm. | Phacochoerus_aethiopicus | NA |
| **0.4500** | **35.9000** | **1.3000** | **herb** | East_Turkana_-_Kapthurin_fm. | Potamochoerus_porcus | NA |
| **37.7000** | **-2.4400** | **1.3000** | **herb** | Barranco_Leon_5 | Equus_altidens | erec |
| **37.7000** | **-2.4400** | **1.3000** | **herb** | Barranco_Leon_5 | Equus_major | erec |
| **37.7000** | **-2.4400** | **1.3000** | **herb** | Barranco_Leon_5 | Hemitragus_albus | erec |
| **37.7000** | **-2.4400** | **1.3000** | **herb** | Barranco_Leon_5 | Hippopotamus_antiquus | erec |
| **37.7000** | **-2.4400** | **1.3000** | **herb** | Barranco_Leon_5 | Praemegaceros_obscurus | erec |
| **37.7000** | **-2.4400** | **1.3000** | **herb** | Barranco_Leon_5 | Stephanorhinus_hundsheimensis | erec |
| **0.6500** | **36.2000** | **1.3000** | **herb** | Chemoigut_fm. | Deinotherium_bozasi | erec |
| **0.6500** | **36.2000** | **1.3000** | **herb** | Chemoigut_fm. | Mesochoerus_limnetes | erec |
| **0.6500** | **36.2000** | **1.3000** | **herb** | Chemoigut_fm. | Metridiochoerus_hopwoodi | erec |
| **0.6500** | **36.2000** | **1.3000** | **herb** | Chemoigut_fm. | Palaeoloxodon_recki | erec |
| **4.2920** | **36.2920** | **1.3000** | **herb** | East_Turkana_-_Area_11_-_Chari | Pelorovis_turkanensis | erec |
| **4.3000** | **36.2330** | **1.3000** | **herb** | East_Turkana_-_Area_4_-_Chari | Gazella_praethomsoni | erec |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_general | Tragelaphus_strepsiceros | NA |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_1 | Aepyceros_melampus | NA |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_1 | Ceratotherium_simum | NA |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_1 | Tragelaphus_strepsiceros | NA |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_3 | Ceratotherium_simum | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Basal_Sands_w/Clay | Ceratotherium_simum | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Basal_Sands_w/Clay | Connochaetes_taurinus | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Middle_Zone | Ceratotherium_simum | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Middle_Zone | Connochaetes_taurinus | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Upper_Sands_w/Clay | Aepyceros_melampus | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Upper_Sands_w/Clay | Ceratotherium_simum | NA |
| **-2.38** | **35.86** | **1.3005** | **herb** | Peninj-Upper_Sands_w/Clay | Tragelaphus_strepsiceros | NA |
| **4.14** | **35.64** | **1.3005** | **herb** | West_Turkana_-_Kalochoro_VI | Ceratotherium_simum | NA |
| **4.14** | **35.64** | **1.3005** | **herb** | West_Turkana_-_Kalochoro_VI | Tragelaphus_scriptus | NA |
| **4.14** | **35.64** | **1.3005** | **herb** | West_Turkana_-_Kalochoro_VI | Tragelaphus_strepsiceros | NA |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_4 | Ceratotherium_simum | erec |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_4 | Diceros_bicornis | erec |

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|---|---|---|---|---|---|---|
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_4 | Tragelaphus_scriptus | erec |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_5 | Ceratotherium_simum | erec |
| **5.20** | **37.41** | **1.3005** | **herb** | Konso_-_Interval_5 | Tragelaphus_strepsiceros | erec |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Albanohyus_Sivachoerus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Anancus_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Antilope_subtorta | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Bison_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Bos_acutifrons | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Bubalus_palaeindicus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Bubalus_platyceros | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Bucapra_daviesii | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Camelus_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Cervus_elaphus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Cervus_punjabiensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Cervus_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Cervus_triplidens | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Coelodonta_platyrhinus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Elephas_hysudrindicus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Elephas_platycephalus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Equus_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Gangicobus_asinalis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Giraffa_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hemibos_acuticornis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hemibos_antilopinus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hemibos_triquetricornis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hippohyus_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hippopotamodon_durandi | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hippopotamodon_vagus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hippopotamus_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Hippotragus_bohlini | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Leptobos_falconeri | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Nestoritherium_sivalense | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Oryx_cautleyi | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Oryx_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Platybos_aceros | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Potamochoerus_palaeindicus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Potamochoerus_theobaldi | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Rhinoceros_palaeindicus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Rhinoceros_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivacapra_crassicornis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivacapra_sivalensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivacapra_subhimalayaensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivacobus_palaeindicus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivadenota_biforis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivatherium_giganteum | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sivatherium_majori | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Stegodon_insignis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Stegodon_katliensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Stegodon_pinjorensis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Stegolophodon_stegodontoides | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sus_bakeri | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sus_choprai | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sus_falconeri | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sus_giganteus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Sus_hysudricus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Tetraconodon_magnus | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Vishnucobus_patulicornis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Vishnucobus_sterilis | NA |
| **30.7800** | **76.9100** | **1.3150** | **herb** | Pinjor | Vishnumeryx_daviesi | NA |
| **47.50** | **18.80** | **1.3200** | **herb** | Budapest_(ÃœrÃ¶mhegy) | Hippopotamus_amphibius | NA |
| **33.00** | **35.11** | **1.3200** | **herb** | Evron_quarry | Bos_primigenius | NA |
| **33.00** | **35.11** | **1.3200** | **herb** | Evron_quarry | Cervus_elaphus | NA |
| **33.00** | **35.11** | **1.3200** | **herb** | Evron_quarry | Gazella_gazella | NA |
| **30.78** | **76.91** | **1.3200** | **herb** | Pinjor | Tetraconodon_magnus | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Axis_nestii | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Equus_stenonis | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Eucladoceros_dicranios | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Hippopotamus_antiquus | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Leptobos_etruscus | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Mammuthus_meridionalis | NA |
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Stephanorhinus_etruscus | NA |

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|---|---|---|---|---|---|---|
| **42.25** | **11.75** | **1.3213** | **herb** | Monte_Riccio_(Tarquinia) | Sus_strozzii | NA |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Ancylotherium_hennigi | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Ceratotherium_simum | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Connochaetes_gentryi | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Damaliscus_niro | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Elephas_ileretensis | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Giraffa_jumae | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Kolpochoerus_limnetes | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Kolpochoerus_majus | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Metridiochoerus_compactus | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Metridiochoerus_hopwoodi | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Metridiochoerus_modestus | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Palaeoloxodon_recki | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Parmularius_angusticornis | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Syncerus_acoelotus | erec |
| **5.2500** | **37.5000** | **1.3300** | **herb** | Konso_-_Interval_5 | Tragelaphus_strepsiceros | erec |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Axis_nestii | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Equus_senezensis | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Equus_stenonis | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Eucladoceros_dicranios | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Hippopotamus_antiquus | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Leptobos_etruscus | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Leptobos_vallisarni | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Mammuthus_meridionalis | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Stephanorhinus_etruscus | NA |
| **43.53** | **11.58** | **1.3318** | **herb** | Valdarno_sup._(Tasso_FU) | Sus_strozzii | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Axis_nestii | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Equus_stenonis | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Eucladoceros_dicranios | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Leptobos_etruscus | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Leptobos_vallisarni | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Mammuthus_meridionalis | NA |
| **43.68** | **12.48** | **1.3353** | **herb** | Faella | Sus_strozzii | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Axis_nestii | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Equus_stenonis | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Eucladoceros_dicranios | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Leptobos_vallisarni | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Mammuthus_meridionalis | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Stephanorhinus_etruscus | NA |
| **43.47** | **12.40** | **1.3739** | **herb** | Bacino_Tiberino | Sus_strozzii | NA |
| **41.00** | **46.40** | **1.3800** | **herb** | Boz-Dag | Mammuthus_meridionalis | NA |
| **43.30** | **45.70** | **1.3800** | **herb** | Tash-Kala | Mammuthus_meridionalis | NA |
| **44.75** | **23.91** | **1.3816** | **herb** | Fintina_Alortitei | Equus_stenonis | NA |
| **44.75** | **23.91** | **1.3816** | **herb** | Fintina_Alortitei | Mammuthus_meridionalis | NA |
| **43.93** | **4.57** | **1.3870** | **herb** | La_Sartanette_(Porche_d'Entree) | Equus_stenonis | NA |
| **43.93** | **4.57** | **1.3870** | **herb** | La_Sartanette_(Porche_d'Entree) | Leptobos_etruscus | NA |
| **43.93** | **4.57** | **1.3870** | **herb** | La_Sartanette_(Porche_d'Entree) | Stephanorhinus_etruscus | NA |
| **44.20** | **10.62** | **1.3944** | **herb** | Selvella_(Pievepelago) | Axis_farnetensis | NA |
| **44.20** | **10.62** | **1.3944** | **herb** | Selvella_(Pievepelago) | Equus_altidens | NA |
| **44.20** | **10.62** | **1.3944** | **herb** | Selvella_(Pievepelago) | Leptobos_vallisarni | NA |
| **44.20** | **10.62** | **1.3944** | **herb** | Selvella_(Pievepelago) | Mammuthus_meridionalis | NA |
| **44.20** | **10.62** | **1.3944** | **herb** | Selvella_(Pievepelago) | Praemegaceros_obscurus | NA |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Axis_farnetensis | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Equus_tabeti | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Gazella_gazella | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Hippopotamus_behemoth | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Hippopotamus_gorgops | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Kolpochoerus_olduvaiensis | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Mammuthus_meridionalis | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Oryx_gazella | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Pelorovis_oldowayensis | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Praemegaceros_verticornis | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Stephanorhinus_etruscus | erec |
| **32.6700** | **35.5700** | **1.4000** | **herb** | Ubeidiya | Sus_strozzii | erec |
| **43.73** | **10.80** | **1.4089** | **herb** | Casa_Sgherri_(Massarella) | Axis_nestii | NA |
| **43.73** | **10.80** | **1.4089** | **herb** | Casa_Sgherri_(Massarella) | Equus_stenonis | NA |
| **43.73** | **10.80** | **1.4089** | **herb** | Casa_Sgherri_(Massarella) | Leptobos_etruscus | NA |
| **43.73** | **10.80** | **1.4089** | **herb** | Casa_Sgherri_(Massarella) | Stephanorhinus_etruscus | NA |
| **43.73** | **10.80** | **1.4089** | **herb** | Casa_Sgherri_(Massarella) | Sus_strozzii | NA |
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Axis_nestii | NA |
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Equus_stenonis | NA |
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Eucladoceros_dicranios | NA |
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Leptobos_etruscus | NA |

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|---|---|---|---|---|---|---|
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Mammuthus_meridionalis | NA |
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Stephanorhinus_etruscus | NA |
| **42.65** | **12.48** | **1.4246** | **herb** | Torre_di_Picchio | Sus_strozzii | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Axis_farnetensis | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Equus_senezensis | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Leptobos_etruscus | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Leptobos_vallisarni | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Mammuthus_meridionalis | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Praemegaceros_obscurus | NA |
| **43.22** | **11.85** | **1.4268** | **herb** | Val_di_Chiana_(Farneta_FU)_Toscana | Sus_strozzii | NA |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Ancylotherium_hennigi | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Ceratotherium_simum | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Connochaetes_gentryi | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Damaliscus_niro | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Diceros_bicornis | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Eurygnathohippus_libycum | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Giraffa_jumae | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Kolpochoerus_majus | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Metridiochoerus_compactus | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Metridiochoerus_hopwoodi | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Metridiochoerus_modestus | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Palaeoloxodon_recki | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Parmularius_angusticornis | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Syncerus_acoelotus | erec |
| **5.2500** | **37.5000** | **1.4300** | **herb** | Konso_-_Interval_4 | Tragelaphus_scriptus | erec |
| **43.62** | **11.47** | **1.4334** | **herb** | Matassino_(Figline_Valdarno) | Axis_nestii | NA |
| **43.62** | **11.47** | **1.4334** | **herb** | Matassino_(Figline_Valdarno) | Equus_stenonis | NA |
| **43.62** | **11.47** | **1.4334** | **herb** | Matassino_(Figline_Valdarno) | Eucladoceros_dicranios | NA |
| **43.62** | **11.47** | **1.4334** | **herb** | Matassino_(Figline_Valdarno) | Leptobos_etruscus | NA |
| **43.62** | **11.47** | **1.4334** | **herb** | Matassino_(Figline_Valdarno) | Mammuthus_meridionalis | NA |
| **43.62** | **11.47** | **1.4334** | **herb** | Matassino_(Figline_Valdarno) | Sus_strozzii | NA |
| **31.42** | **35.12** | **1.4377** | **herb** | Bethlem | Elephas_planifrons | NA |
| **31.42** | **35.12** | **1.4377** | **herb** | Bethlem | Giraffa_camaleopardalis | NA |
| **31.42** | **35.12** | **1.4377** | **herb** | Bethlem | Stephanorhinus_etruscus | NA |
| **31.42** | **35.12** | **1.4377** | **herb** | Bethlem | Sus_strozzii | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Axis_nestii | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Equus_major | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Equus_stenonis | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Mammuthus_meridionalis | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Megalovis_latifrons | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Mitilanotherium_inexspectatum | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Stephanorhinus_etruscus | NA |
| **44.65** | **23.93** | **1.4437** | **herb** | Fintina_lui_Mitilan_ | Sus_strozzii | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Axis_nestii | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Equus_stenonis | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Eucladoceros_dicranios | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Leptobos_etruscus | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Mammuthus_meridionalis | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Stephanorhinus_etruscus | NA |
| **43.61** | **11.45** | **1.4493** | **herb** | Poggio_Rosso_(Mugello) | Sus_strozzii | NA |
| **40.70** | **23.15** | **1.4503** | **herb** | Gerakarou_1_(GER) | Equus_stenonis | NA |
| **40.70** | **23.15** | **1.4503** | **herb** | Gerakarou_1_(GER) | Gazella_bouvrainae | NA |
| **40.70** | **23.15** | **1.4503** | **herb** | Gerakarou_1_(GER) | Gazellospira_torticornis | NA |
| **40.70** | **23.15** | **1.4503** | **herb** | Gerakarou_1_(GER) | Parastrepsiceros_koufosi | NA |
| **40.70** | **23.15** | **1.4503** | **herb** | Gerakarou_1_(GER) | Sus_strozzii | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Axis_nestii | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Equus_senezensis | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Eucladoceros_dicranios | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Leptobos_vallisarni | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Mammuthus_meridionalis | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Stephanorhinus_etruscus | NA |
| **43.62** | **11.47** | **1.4547** | **herb** | Casa_Frata | Sus_strozzii | NA |
| **45.83** | **18.43** | **1.4592** | **herb** | Villany_3_lower | Gazellospira_torticornis | NA |
| **45.83** | **18.43** | **1.4592** | **herb** | Villany_3_lower | Procamptoceras_brivatense | NA |
| **45.83** | **18.43** | **1.4592** | **herb** | Villany_3_lower | Stephanorhinus_etruscus | NA |
| **45.83** | **18.43** | **1.4592** | **herb** | Villany_3_lower | Tragospira_pannonica | NA |
| **35.88** | **107.45** | **1.4700** | **herb** | Bajiazui | Gazella_sinensis | NA |
| **-6.86** | **107.39** | **1.4700** | **herb** | Ci_Saat | Muntiacus_muntjak | NA |
| **36.57** | **107.29** | **1.4700** | **herb** | Gengjiagou | Gazella_sinensis | NA |
| **36.57** | **107.29** | **1.4700** | **herb** | Gengjiagou | Leptobos_brevicornis | NA |
| **21.83** | **104.83** | **1.4700** | **herb** | Hang_Hum_I | Tapirus_augustus | NA |
| **21.83** | **104.83** | **1.4700** | **herb** | Hang_Hum_I | Stegodon_orientalis | NA |

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|---|---|---|---|---|---|---|
| **21.83** | **104.83** | **1.4700** | **herb** | Hang_Hum_I | Sus_scrofa | NA |
| **21.83** | **104.83** | **1.4700** | **herb** | Hang_Hum_I | Tapirus_indicus | NA |
| **21.83** | **104.83** | **1.4700** | **herb** | Hang_Hum_II | Sus_scrofa | NA |
| **42.00** | **112.00** | **1.4700** | **herb** | Huituipo | Gazella_sinensis | NA |
| **34.96** | **110.11** | **1.4700** | **herb** | Lingyi | Eucladoceros_tetraceros | NA |
| **30.65** | **110.07** | **1.4700** | **herb** | Longgudong_Cave_14 | Stegodon_orientalis | NA |
| **30.65** | **110.07** | **1.4700** | **herb** | Longgudong_Cave_5 | Stegodon_orientalis | NA |
| **-7.36** | **111.35** | **1.4700** | **herb** | Trinil_H.K. | Rhinoceros_sondaicus | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_13 | Cervus_grayi | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_13 | Coelodonta_antiquitatis | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_13 | Hydropotes_inermis | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_13 | Stephanorhinus_kirchbergensis | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_9 | Cervus_grayi | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_9 | Coelodonta_antiquitatis | NA |
| **39.68** | **115.93** | **1.4700** | **herb** | Zhoukoudian_9 | Stephanorhinus_kirchbergensis | NA |
| **34.08** | **110.13** | **1.4700** | **herb** | Longyadong_Cave | Cervus_grayi | erec |
| **-7.4600** | **112.4300** | **1.4700** | **herb** | Mojokerto_Pucangan_formation | Axis_lydekkeri | erec |
| **-7.4600** | **112.4300** | **1.4700** | **herb** | Mojokerto_Pucangan_formation | Duboisia_santeng | erec |
| **-7.4600** | **112.4300** | **1.4700** | **herb** | Mojokerto_Pucangan_formation | Hexaprotodon_sivalensis | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Axis_lydekkeri | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Bibos_palaeosondaicus | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Bubalus_palaeokerabau | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Muntiacus_muntjak | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Rhinoceros_sondaicus | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Stegodon_trigonocephalus | erec |
| **-7.3667** | **111.3500** | **1.4700** | **herb** | Trinil | Sus_brachygnathus | erec |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Eobison_tamanensis | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Equus_major | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Eucladoceros_ctenoides | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Mammuthus_meridionalis | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Paracamelus_alutensis | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Praemegaceros_pliotarandoides | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Stephanorhinus_etruscus | NA |
| **44.49** | **39.12** | **1.4799** | **herb** | Psekups | Sus_strozzii | NA |
| **40.70** | **23.15** | **1.4843** | **herb** | Vassiloudi_(VSL) | Equus_stenonis | NA |
| **40.70** | **23.15** | **1.4843** | **herb** | Vassiloudi_(VSL) | Leptobos_furtivus | NA |
| **40.70** | **23.15** | **1.4843** | **herb** | Vassiloudi_(VSL) | Procamptoceras_brivatense | NA |
| **40.70** | **23.15** | **1.4843** | **herb** | Vassiloudi_(VSL) | Sus_strozzii | NA |
| **44.22** | **10.02** | **1.4858** | **herb** | Olivola | Axis_nestii | NA |
| **44.22** | **10.02** | **1.4858** | **herb** | Olivola | Equus_stenonis | NA |
| **44.22** | **10.02** | **1.4858** | **herb** | Olivola | Eucladoceros_dicranios | NA |
| **44.22** | **10.02** | **1.4858** | **herb** | Olivola | Leptobos_furtivus | NA |
| **44.22** | **10.02** | **1.4858** | **herb** | Olivola | Sus_strozzii | NA |
| **46.86** | **36.70** | **1.4900** | **herb** | Nogajsk_(Primorsk) | Mammuthus_meridionalis | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Axis_nestii | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Equus_stenonis | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Eucladoceros_dicranios | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Gallogoral_meneghinii | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Leptobos_etruscus | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Leptobos_furtivus | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Mammuthus_meridionalis | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Procamptoceras_brivatense | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Stephanorhinus_etruscus | NA |
| **43.53** | **11.58** | **1.4902** | **herb** | Valdarno_sup._ | Sus_strozzii | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Anancus_osiris | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Bos_bubaloides | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Bos_praeafricanus | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Ceratotherium_mauritanicum | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Elephas_maghrebiensis | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Eurygnathohippus_libycum | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Gazella_pomeli | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Giraffa_pomeli | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Gorgon_mediterraneus | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Hippopotamus_amphibius | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Kolpochoerus_heseloni | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Mammuthus_meridionalis | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Numidocapra_crassicornis | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Prostrepsiceros_libycus | NA |
| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Sivatherium_maurusium | NA |

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| **35.4100** | **4.1300** | **1.5000** | **herb** | Ain_Hanech | Taurotragus_gaudryi | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Bos_bubaloides | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Ceratotherium_mauritanicum | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Elephas_maghrebiensis | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Eurygnathohippus_libycum | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Gazella_pomeli | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Hippopotamus_sirensis | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Kobus_kob | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Kolpochoerus_maroccanus | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Oryx_gazella | NA |
| **36.1600** | **6.0000** | **1.5000** | **herb** | Mansourah | Tragelaphus_gaudryi | NA |
| **-2.3800** | **35.8600** | **1.5000** | **herb** | Peninj-Upper_Sands_w/Clay | Aepyceros_melampus | NA |
| **-2.3800** | **35.8600** | **1.5000** | **herb** | Peninj-Upper_Sands_w/Clay | Ceratotherium_simum | NA |
| **-2.3800** | **35.8600** | **1.5000** | **herb** | Peninj-Upper_Sands_w/Clay | Megalotragus_kattwinkeli | NA |
| **-2.3800** | **35.8600** | **1.5000** | **herb** | Peninj-Upper_Sands_w/Clay | Palaeoloxodon_recki | NA |
| **-2.3800** | **35.8600** | **1.5000** | **herb** | Peninj-Upper_Sands_w/Clay | Tragelaphus_strepsiceros | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Boocercus_flabellatus | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Boopsis_sinensis | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Cervus_grayi | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Coelodonta_antiquitatis | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Elephas_namadicus | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Equus_sanmeniensis | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Stephanorhinus_kirchbergensis | NA |
| **39.6800** | **115.9300** | **1.5000** | **herb** | Zhoukoudian_9 | Sus_lydekkeri | NA |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Capricornis_jianshiensis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Cervocerus_fenqii | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Rhinoceros_sinensis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Rusa_unicolor | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Rusa_yunnanensis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Stegodon_orientalis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Sus_peii | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Sus_xiaozhu | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Tapirus_sanyuanensis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_11 | Tapirus_sinensis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_2 | Cervocerus_fenqii | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_2 | Rusa_unicolor | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_2 | Rusa_yunnanensis | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_2 | Sus_peii | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_2 | Sus_xiaozhu | erec |
| **30.6500** | **110.0700** | **1.5000** | **herb** | Longgudong_Cave_2 | Tapirus_sinensis | erec |
| **40.2000** | **114.6500** | **1.5000** | **herb** | Xiaochangliang | Coelodonta_antiquitatis | erec |
| **40.2000** | **114.6500** | **1.5000** | **herb** | Xiaochangliang | Equus_sanmeniensis | erec |
| **40.2000** | **114.6500** | **1.5000** | **herb** | Xiaochangliang | Proboscidipparian_sinensis | erec |
| **42.87** | **12.38** | **1.5111** | **herb** | Pantalla_(Umbria) | Axis_nestii | NA |
| **42.87** | **12.38** | **1.5111** | **herb** | Pantalla_(Umbria) | Equus_stenonis | NA |
| **42.87** | **12.38** | **1.5111** | **herb** | Pantalla_(Umbria) | Sus_strozzii | NA |
| **44.18** | **24.00** | **1.5264** | **herb** | Leu | Cervalces_gallicus | NA |
| **44.18** | **24.00** | **1.5264** | **herb** | Leu | Leptobos_furtivus | NA |
| **44.18** | **24.00** | **1.5264** | **herb** | Leu | Pliotragus_ardeus | NA |
| **51.95** | **4.05** | **1.5400** | **herb** | Maasvlakte_(Fauna_0) | Cervalces_gallicus | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Aepyceros_melampus | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Connochaetes_gentryi | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Damaliscus_eppsi | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Gazella_praethomsoni | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Hexaprotodon_aethiopicus | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Hippopotamus_gorgops | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Hippopotamus_karumensis | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Kobus_kob | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Kolpochoerus_limnetes | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Megalotragus_isaaci | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Metridiochoerus_compactus | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Metridiochoerus_hopwoodi | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Palaeoloxodon_recki | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Pelorovis_turkanensis | NA |
| **3.8500** | **36.1300** | **1.5600** | **herb** | East_Turkana_-_Area_103_-_Okote | Tragelaphus_strepsiceros | NA |
| **4.2920** | **36.2920** | **1.5600** | **herb** | East_Turkana_-_Area_11_-_Okote | Kolpochoerus_limnetes | NA |
| **4.2920** | **36.2920** | **1.5600** | **herb** | East_Turkana_-_Area_11_-_Okote | Metridiochoerus_compactus | NA |
| **4.2920** | **36.2920** | **1.5600** | **herb** | East_Turkana_-_Area_11_-_Okote | Metridiochoerus_hopwoodi | NA |
| **4.1833** | **36.4333** | **1.5600** | **herb** | East_Turkana_-_Area_130-_Okote-_FxJj18_lH | Hippopotamus_karumensis | NA |
| **4.1833** | **36.4333** | **1.5600** | **herb** | East_Turkana_-_Area_130-_Okote-_FxJj18_lH | Kobus_ellipsiprymnus | NA |
| **4.1833** | **36.4333** | **1.5600** | **herb** | East_Turkana_-_Area_130-_Okote-_FxJj18_lH | Tragelaphus_strepsiceros | NA |

| | | | | | | |
|---|---|---|---|---|---|---|
| **4.1500** | **36.4167** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20S | Megalotragus_isaaci | NA |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Diceros_bicornis | NA |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Hippopotamus_karumensis | NA |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Kobus_ellipsiprymnus | NA |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Palaeoloxodon_recki | NA |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131_Okote_FxJj20M | Tragelaphus_strepsiceros | NA |
| **4.1333** | **36.3833** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj50 | Giraffa_jumae | NA |
| **4.1333** | **36.3833** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj50 | Hippopotamus_aethiopicus | NA |
| **4.1333** | **36.3833** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj50 | Hippopotamus_karumensis | NA |
| **4.1333** | **36.3833** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj50 | Megalotragus_isaaci | NA |
| **4.1333** | **36.3833** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj50 | Sivatherium_maurusium | NA |
| **4.1333** | **36.4000** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj64 | Hippopotamus_karumensis | NA |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Aepyceros_melampus | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Beatragus_antiquus | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Damaliscus_eppsi | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Giraffa_jumae | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Giraffa_pygmaea | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Giraffa_stillei | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Hexaprotodon_aethiopicus | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Hippopotamus_gorgops | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Hippopotamus_karumensis | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Kobus_kob | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Megalotragus_isaaci | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Menelikia_lyrocera | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Metridiochoerus_compactus | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Palaeoloxodon_recki | erec |
| **4.2600** | **36.1700** | **1.5600** | **herb** | East_Turkana_-_Area_1_-_Okote | Tragelaphus_strepsiceros | erec |
| **3.9420** | **36.2500** | **1.5600** | **herb** | East_Turkana_-_Area_102_-_Okote | Metridiochoerus_compactus | erec |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20E | Ceratotherium_simum | erec |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20E | Hippopotamus_aethiopicus | erec |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20E | Hippopotamus_karumensis | erec |
| **4.1000** | **36.3100** | **1.5600** | **herb** | East_Turkana_-_Area_131-_Okote-_FxJj_20E | Tragelaphus_strepsiceros | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Aepyceros_melampus | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Connochaetes_gentryi | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Giraffa_jumae | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Giraffa_pygmaea | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Hexaprotodon_aethiopicus | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Hippopotamus_gorgops | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Kobus_kob | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Kolpochoerus_limnetes | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Menelikia_lyrocera | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Metridiochoerus_compactus | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Metridiochoerus_hopwoodi | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Pelorovis_turkanensis | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Sivatherium_maurusium | erec |
| **4.2700** | **36.1600** | **1.5600** | **herb** | East_Turkana_-_Area_1A_-_Okote | Tragelaphus_strepsiceros | erec |
| **4.3080** | **36.2170** | **1.5600** | **herb** | East_Turkana_-_Area_2_-_Okote | Connochaetes_gentryi | erec |
| **4.2750** | **36.2420** | **1.5600** | **herb** | East_Turkana_-_Area_6_-_Okote | Hippopotamus_karumensis | erec |
| **4.2750** | **36.2420** | **1.5600** | **herb** | East_Turkana_-_Area_6_-_Okote | Kolpochoerus_limnetes | erec |
| **4.2750** | **36.2420** | **1.5600** | **herb** | East_Turkana_-_Area_6_-_Okote | Metridiochoerus_compactus | erec |
| **4.2750** | **36.2420** | **1.5600** | **herb** | East_Turkana_-_Area_6_-_Okote | Metridiochoerus_hopwoodi | erec |
| **4.2750** | **36.2420** | **1.5600** | **herb** | East_Turkana_-_Area_6_-_Okote | Metridiochoerus_modestus | erec |
| **4.2875** | **36.2333** | **1.5600** | **herb** | East_Turkana_-_Area_6A_-_Okote | Beatragus_antiquus | erec |
| **4.2875** | **36.2333** | **1.5600** | **herb** | East_Turkana_-_Area_6A_-_Okote | Connochaetes_gentryi | erec |
| **4.2875** | **36.2333** | **1.5600** | **herb** | East_Turkana_-_Area_6A_-_Okote | Megalotragus_isaaci | erec |
| **4.2875** | **36.2333** | **1.5600** | **herb** | East_Turkana_-_Area_6A_-_Okote | Metridiochoerus_compactus | erec |
| **4.2875** | **36.2333** | **1.5600** | **herb** | East_Turkana_-_Area_6A_-_Okote | Pelorovis_turkanensis | erec |
| **4.2875** | **36.2333** | **1.5600** | **herb** | East_Turkana_-_Area_6A_-_Okote | Tragelaphus_strepsiceros | erec |
| **4.2670** | **36.2920** | **1.5600** | **herb** | East_Turkana_-_Area_8_-_Okote | Hippopotamus_gorgops | erec |
| **4.2670** | **36.2920** | **1.5600** | **herb** | East_Turkana_-_Area_8_-_Okote | Kolpochoerus_limnetes | erec |
| **4.2670** | **36.2920** | **1.5600** | **herb** | East_Turkana_-_Area_8_-_Okote | Metridiochoerus_compactus | erec |
| **4.2586** | **36.2836** | **1.5600** | **herb** | East_Turkana_-_Area_8A_-_Okote | Kolpochoerus_limnetes | erec |
| **4.2586** | **36.2836** | **1.5600** | **herb** | East_Turkana_-_Area_8A_-_Okote | Metridiochoerus_compactus | erec |
| **4.2586** | **36.2836** | **1.5600** | **herb** | East_Turkana_-_Area_8A_-_Okote | Metridiochoerus_hopwoodi | erec |
| **4.2419** | **36.2833** | **1.5600** | **herb** | East_Turkana_-_Area_8B_-_Okote | Kolpochoerus_limnetes | erec |
| **4.2419** | **36.2833** | **1.5600** | **herb** | East_Turkana_-_Area_8B_-_Okote | Metridiochoerus_compactus | erec |
| **4.4083** | **35.8250** | **1.5700** | **herb** | West_Turkana_-_Natoo | Tragelaphus_nakuae | erec |
| **-26.0800** | **27.7600** | **1.6000** | **herb** | Swartkrans_1_(Hanging_Remnant) | Antidorcas_bondi | NA |
| **-26.0800** | **27.7600** | **1.6000** | **herb** | Swartkrans_1_(Hanging_Remnant) | Antidorcas_recki | NA |
| **-26.0800** | **27.7600** | **1.6000** | **herb** | Swartkrans_1_(Hanging_Remnant) | Equus_capensis | NA |
| **-26.0800** | **27.7600** | **1.6000** | **herb** | Swartkrans_1_(Hanging_Remnant) | Eurygnathohippus_libycum | NA |
| **-26.0800** | **27.7600** | **1.6000** | **herb** | Swartkrans_1_(Hanging_Remnant) | Hippotragus_gigas | NA |
| **-26.0800** | **27.7600** | **1.6000** | **herb** | Swartkrans_1_(Hanging_Remnant) | Metridiochoerus_andrewsi | NA |

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|---|---|---|---|---|---|---|
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Hanging_Remnant) | Oreotragus_oreotragus | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Hanging_Remnant) | Pelea_capreolus | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Hanging_Remnant) | Raphicerus_campestris | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Hanging_Remnant) | Redunca_arundinum | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Hanging_Remnant) | Tragelaphus_strepsiceros | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Antidorcas_australis | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Antidorcas_bondi | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Antidorcas_marsupialis | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Equus_capensis | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Eurygnathohippus_libycum | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Metridiochoerus_andrewsi | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Oreotragus_oreotragus | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Pelea_capreolus | NA |
| -26.0800 | 27.7600 | 1.6000 | herb | Swartkrans_1_(Lower_bank) | Raphicerus_campestris | NA |
| 37.91 | 21.72 | 1.6055 | herb | Livakos | Hippopotamus_amphibius | NA |
| 54.30 | 27.00 | 1.6100 | herb | Smorgon'_low_Pleisto | Stephanorhinus_etruscus | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Equus_major | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Equus_stenonis | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Eucladoceros_ctenoides | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Leptobos_etruscus | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Mammuthus_meridionalis | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Rusa_rhenana | NA |
| 45.16 | 3.42 | 1.6453 | herb | Blassac-La-Gironde_Haute-Loire | Stephanorhinus_etruscus | NA |
| 40.00 | 114.00 | 1.6500 | herb | Yangyuan-nihewan | Gazella_sinensis | NA |
| 43.11 | 0.37 | 1.6767 | herb | Montousse_5_(Haute_Pyrenees) | Cervalces_gallicus | NA |
| 43.11 | 0.37 | 1.6767 | herb | Montousse_5_(Haute_Pyrenees) | Procamptoceras_brivatense | NA |
| 43.11 | 0.37 | 1.6767 | herb | Montousse_5_(Haute_Pyrenees) | Rusa_rhenana | NA |
| 43.11 | 0.37 | 1.6767 | herb | Montousse_5_(Haute_Pyrenees) | Stephanorhinus_etruscus | NA |
| 38.50 | 69.20 | 1.6800 | herb | Karamajdan | Gazella_sinensis | NA |
| 38.50 | 69.20 | 1.6800 | herb | Karamajdan | Stephanorhinus_etruscus | NA |
| -26.2100 | 27.6200 | 1.6800 | herb | Swartkrans_-_Member_1 | Equus_capensis | erec |
| -26.2100 | 27.6200 | 1.6800 | herb | Swartkrans_-_Member_1 | Eurygnathohippus_libycum | erec |
| -26.2100 | 27.6200 | 1.6800 | herb | Swartkrans_-_Member_1 | Metridiochoerus_meadowsi | erec |
| -26.21 | 27.62 | 1.6800 | herb | Swartkrans_-_Member_1 | Oreotragus_oreotragus | erec |
| -26.2100 | 27.6200 | 1.6800 | herb | Swartkrans_-_Member_1 | Oreotragus_oreotragus | erec |
| -26.2100 | 27.6200 | 1.6800 | herb | Swartkrans_-_Member_1 | Rabaticeras_porrocornutus | erec |
| -26.21 | 27.62 | 1.6800 | herb | Swartkrans_-_Member_1 | Raphicerus_campestris | erec |
| -26.2100 | 27.6200 | 1.6800 | herb | Swartkrans_-_Member_1 | Raphicerus_campestris | erec |
| 33.5833 | -7.5833 | 1.6845 | herb | Thomas_Quarry_1_Level_L | Loxodonta_atlantica | NA |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Cervavitus_ultimus | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Equus_sanmeniensis | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Muntiacus_nanus | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Rhinoceros_sinensis | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Rusa_unicolor | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Sinomastodon_intermedius | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Sus_peii | erec |
| 31.0897 | 118.0961 | 1.6845 | herb | Renzidong | Tapirus_sanyuanensis | erec |
| 4.2667 | 35.8167 | 1.6845 | herb | West_Turkana_-_Nariokotome_III_(NK3)_HS | Hippopotamus_aethiopicus | erec |
| 4.2667 | 35.8167 | 1.6845 | herb | West_Turkana_-_Nariokotome_III_(NK3)_HS | Hippopotamus_gorgops | erec |
| 4.2667 | 35.8167 | 1.6845 | herb | West_Turkana_-_Nariokotome_III_(NK3)_HS | Kolpochoerus_limnetes | erec |
| 37.45 | -3.34 | 1.6855 | herb | Fonelas_P-1 | Equus_maior | NA |
| 42.85 | 23.03 | 1.6952 | herb | Slivnitsa | Hemitragus_orientalis | NA |
| 42.85 | 23.03 | 1.6952 | herb | Slivnitsa | Megalovis_latifrons | NA |
| 42.85 | 23.03 | 1.6952 | herb | Slivnitsa | Pliotragus_ardeus | NA |
| 42.85 | 23.03 | 1.6952 | herb | Slivnitsa | Rusa_rhenana | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Cervus_stehlini | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Equus_yunnanensis | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Muntiacus_lacustris | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Paracervulus_attenuatus | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Rhinoceros_sinensis | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Rusa_yunnanensis | NA |
| 24.8700 | 100.9400 | 1.7000 | herb | Yuanmou_formation,_fourth_member,_Shangnabang | Stegodon_elaphantoides | NA |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Antidorcas_recki | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Ceratotherium_simum | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Connochaetes_africanus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Connochaetes_gentryi | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Connochaetes_taurinus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Damaliscus_agelaius | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Damaliscus_niro | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Deinotherium_bozasi | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Diceros_bicornis | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Equus_oldowayensis | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Eurygnathohippus_cornelian | erec |

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|---|---|---|---|---|---|---|
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| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Giraffa_jumae | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Giraffa_pygmaea | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Giraffa_stillei | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Hippopotamus_gorgops | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Hippotragus_gigas | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Kobus_kob | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Kobus_sigmoidalis | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Kolpochoerus_heseloni | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Kolpochoerus_majus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Kolpochoerus_olduvaiensis | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Megalotragus_kattwinkeli | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Metridiochoerus_andrewsi | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Metridiochoerus_compactus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Metridiochoerus_hopwoodi | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Metridiochoerus_modestus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Palaeoloxodon_recki | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Parmularius_altidens | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Parmularius_angusticornis | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Parmularius_rugosus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Pelorovis_oldowayensis | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Sivatherium_maurusium | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Syncerus_acoelotus | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Taurotragus_oryx | erec |
| -2.9956 | 35.3525 | 1.7000 | herb | Olduvai_Bed_II | Tragelaphus_strepsiceros | erec |
| 46.16 | 27.91 | 1.7041 | herb | Beresti | Equus_stenonis | NA |
| 46.16 | 27.91 | 1.7041 | herb | Beresti | Hipparion_malustenense | NA |
| 46.16 | 27.91 | 1.7041 | herb | Beresti | Paracamelus_bessarabiensis | NA |
| 46.16 | 27.91 | 1.7041 | herb | Beresti | Pliocervus_kutchurganicus | NA |
| 46.16 | 27.91 | 1.7041 | herb | Beresti | Stephanorhinus_leptorhinus | NA |
| 22.93 | 94.10 | 1.7100 | herb | Irrawaddy_2 | Rhinoceros_sondaicus | NA |
| 44.16 | 16.25 | 1.7150 | herb | Strmica | Croizetoceros_ramosus | NA |
| 44.16 | 16.25 | 1.7150 | herb | Strmica | Eucladoceros_ctenoides | NA |
| 44.16 | 16.25 | 1.7150 | herb | Strmica | Eucladoceros_dicranios | NA |
| 44.16 | 16.25 | 1.7150 | herb | Strmica | Mammuthus_meridionalis | NA |
| 44.16 | 16.25 | 1.7150 | herb | Strmica | Rusa_rhenana | NA |
| 44.16 | 16.25 | 1.7150 | herb | Strmica | Stephanorhinus_etruscus | NA |
| 42.60 | 44.18 | 1.7315 | herb | Palantjukan | Equus_major | NA |
| 42.60 | 44.18 | 1.7315 | herb | Palantjukan | Gazella_borbonica | NA |
| 42.60 | 44.18 | 1.7315 | herb | Palantjukan | Sus_strozzii | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Croizetoceros_ramosus | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Equus_stenonis | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Eucladoceros_ctenoides | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Gazella_borbonica | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Gazellospira_torticornis | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Leptobos_elatus | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Mammuthus_meridionalis | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Pliotragus_ardeus | NA |
| 37.42 | -1.81 | 1.7481 | herb | Huelago | Stephanorhinus_etruscus | NA |
| 42.78 | 12.40 | 1.7664 | herb | Cava_Toppetti_(Todi) | Axis_lyra | NA |
| 42.78 | 12.40 | 1.7664 | herb | Cava_Toppetti_(Todi) | Croizetoceros_ramosus | NA |
| 42.78 | 12.40 | 1.7664 | herb | Cava_Toppetti_(Todi) | Equus_stenonis | NA |
| 42.78 | 12.40 | 1.7664 | herb | Cava_Toppetti_(Todi) | Leptobos_furtivus | NA |
| 42.78 | 12.40 | 1.7664 | herb | Cava_Toppetti_(Todi) | Stephanorhinus_etruscus | NA |
| 40.8000 | 44.8000 | 1.7700 | herb | Dmanisi | Axis_nestii | erec |
| 40.8000 | 44.8000 | 1.7700 | herb | Dmanisi | Eucladoceros_ctenoides | erec |
| 40.80 | 44.80 | 1.7700 | herb | Dmanisi | Mammuthus_meridionalis | erec |
| 40.8000 | 44.8000 | 1.7700 | herb | Dmanisi | Mammuthus_meridionalis | erec |
| 40.80 | 44.80 | 1.7700 | herb | Dmanisi | Stephanorhinus_etruscus | erec |
| 40.8000 | 44.8000 | 1.7700 | herb | Dmanisi | Stephanorhinus_etruscus | erec |
| 38.00 | 22.00 | 1.7766 | herb | Achaia_(N._Peloponnese) | Croizetoceros_ramosus | NA |
| 38.00 | 22.00 | 1.7766 | herb | Achaia_(N._Peloponnese) | Stephanorhinus_etruscus | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Axis_nestii | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Cervus_perrieri | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Dmanisibos_georgicus | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Equus_stenonis | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Eucladoceros_ctenoides | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Gallogoral_meneghinii | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Gazella_borbonica | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Hemitragus_orientalis | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Mammuthus_meridionalis | NA |
| 41.30 | 44.15 | 1.7800 | herb | Dmanisi_A | Stephanorhinus_etruscus | NA |
| 6.0000 | 40.0000 | 1.7800 | herb | Konso_2 | Ancylotherium_hennigi | erec |

| | | | | | | |
|---|---|---|---|---|---|---|
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Ceratotherium_simum | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Connochaetes_gentryi | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Damaliscus_niro | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Diceros_bicornis | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Giraffa_jumae | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Kobus_sigmoidalis | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Kolpochoerus_limnetes | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Kolpochoerus_majus | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Metridiochoerus_compactus | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Metridiochoerus_hopwoodi | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Metridiochoerus_modestus | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Parmularius_angusticornis | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Rabaticeras_lemutai | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Syncerus_acoelotus | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Tragelaphus_scriptus | erec |
| **6.0000** | **40.0000** | **1.7800** | **herb** | Konso_2 | Tragelaphus_strepsiceros | erec |
| **41.73** | **13.20** | **1.7825** | **herb** | Valle_Catenaccio | Axis_lyra | NA |
| **41.73** | **13.20** | **1.7825** | **herb** | Valle_Catenaccio | Equus_stenonis | NA |
| **41.73** | **13.20** | **1.7825** | **herb** | Valle_Catenaccio | Eucladoceros_ctenoides | NA |
| **41.73** | **13.20** | **1.7825** | **herb** | Valle_Catenaccio | Gazella_borbonica | NA |
| **41.73** | **13.20** | **1.7825** | **herb** | Valle_Catenaccio | Mammuthus_meridionalis | NA |
| **51.30** | **77.99** | **1.7876** | **herb** | Podpusk-Lebyazh'e | Antilospira_gracilis | NA |
| **51.30** | **77.99** | **1.7876** | **herb** | Podpusk-Lebyazh'e | Elephas_planifrons | NA |
| **51.30** | **77.99** | **1.7876** | **herb** | Podpusk-Lebyazh'e | Equus_livenzovensis | NA |
| **51.30** | **77.99** | **1.7876** | **herb** | Podpusk-Lebyazh'e | Gazella_sinensis | NA |
| **51.30** | **77.99** | **1.7876** | **herb** | Podpusk-Lebyazh'e | Paracamelus_gigas | NA |
| **38.00** | **23.73** | **1.7985** | **herb** | Tourkovounia_(Attjki) | Rusa_rhenana | NA |
| **38.00** | **23.73** | **1.7985** | **herb** | Tourkovounia_(Attjki) | Stephanorhinus_etruscus | NA |
| **68.11** | **157.70** | **1.8000** | **herb** | Krestovka | Ovibos_pallantis | NA |
| **52.00** | **107.00** | **1.8000** | **herb** | Zasukhino_3 | Cervalces_latifrons | NA |
| **52.00** | **107.00** | **1.8000** | **herb** | Zasukhino_3 | Cervus_elaphus | NA |
| **52.00** | **107.00** | **1.8000** | **herb** | Zasukhino_3 | Equus_hemionus | NA |
| **52.00** | **107.00** | **1.8000** | **herb** | Zasukhino_3 | Spirocerus_wongi | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Axis_flerovi | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Cervalces_gallicus | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Damalops_palaeindicus | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Elaphurus_eleonorae | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Equus_stenonis | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Gazella_sinensis | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Gazellospira_gromovae | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Mammuthus_meridionalis | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Mitilanotherium_martinii | NA |
| **38.30** | **69.66** | **1.8031** | **herb** | Kuruksay | Sinomegaceros_tadzikhisanica | NA |
| **40.90** | **15.75** | **1.8055** | **herb** | Loretello_Cave_near_Venosa | Capreolus_capreolus | NA |
| **40.90** | **15.75** | **1.8055** | **herb** | Loretello_Cave_near_Venosa | Cervus_elaphus | NA |
| **4.20** | **36.11** | **1.8055** | **herb** | East_Turkana_-_Area_10_-_KBS | Aepyceros_melampus | NA |
| **4.20** | **36.11** | **1.8055** | **herb** | East_Turkana_-_Area_10_-_KBS | Kobus_kob | NA |
| **3.82** | **35.99** | **1.8055** | **herb** | East_Turkana_-_Area_101_-_KBS | Aepyceros_melampus | NA |
| **3.82** | **35.99** | **1.8055** | **herb** | East_Turkana_-_Area_101_-_KBS | Kobus_kob | NA |
| **3.82** | **35.99** | **1.8055** | **herb** | East_Turkana_-_Area_101_-_KBS | Tragelaphus_strepsiceros | NA |
| **3.76** | **36.04** | **1.8055** | **herb** | East_Turkana_-_Area_106_-_KBS | Aepyceros_melampus | NA |
| **3.76** | **36.04** | **1.8055** | **herb** | East_Turkana_-_Area_106_-_KBS | Ceratotherium_simum | NA |
| **3.79** | **36.08** | **1.8055** | **herb** | East_Turkana_-_Area_107_-_KBS | Aepyceros_melampus | NA |
| **4.22** | **36.06** | **1.8055** | **herb** | East_Turkana_-_Area_1A_-_KBS | Diceros_bicornis | NA |
| **4.19** | **36.02** | **1.8055** | **herb** | East_Turkana_-_Area_6A_-_KBS | Aepyceros_melampus | NA |
| **4.19** | **36.02** | **1.8055** | **herb** | East_Turkana_-_Area_6A_-_KBS | Ceratotherium_simum | NA |
| **4.19** | **36.02** | **1.8055** | **herb** | East_Turkana_-_Area_6A_-_KBS | Diceros_bicornis | NA |
| **4.19** | **36.02** | **1.8055** | **herb** | East_Turkana_-_Area_6A_-_KBS | Kobus_kob | NA |
| **4.21** | **36.07** | **1.8055** | **herb** | East_Turkana_-_Area_9_-_KBS | Tragelaphus_strepsiceros | NA |
| **3.84** | **36.04** | **1.8055** | **herb** | East_Turkana_-_Area_102_-_KBS | Aepyceros_melampus | erec |
| **3.84** | **36.04** | **1.8055** | **herb** | East_Turkana_-_Area_102_-_KBS | Ceratotherium_simum | erec |
| **3.84** | **36.04** | **1.8055** | **herb** | East_Turkana_-_Area_102_-_KBS | Tragelaphus_strepsiceros | erec |
| **3.80** | **36.03** | **1.8055** | **herb** | East_Turkana_-_Area_103_-_KBS | Aepyceros_melampus | erec |
| **3.80** | **36.03** | **1.8055** | **herb** | East_Turkana_-_Area_103_-_KBS | Ceratotherium_simum | erec |
| **3.80** | **36.03** | **1.8055** | **herb** | East_Turkana_-_Area_103_-_KBS | Kobus_ellipsiprymnus | erec |
| **3.80** | **36.03** | **1.8055** | **herb** | East_Turkana_-_Area_103_-_KBS | Kobus_kob | erec |
| **3.87** | **36.10** | **1.8055** | **herb** | East_Turkana_-_Area_104_-_KBS | Aepyceros_melampus | erec |
| **3.87** | **36.10** | **1.8055** | **herb** | East_Turkana_-_Area_104_-_KBS | Diceros_bicornis | erec |
| **3.87** | **36.10** | **1.8055** | **herb** | East_Turkana_-_Area_104_-_KBS | Kobus_ellipsiprymnus | erec |
| **3.87** | **36.10** | **1.8055** | **herb** | East_Turkana_-_Area_104_-_KBS | Kobus_kob | erec |
| **3.87** | **36.10** | **1.8055** | **herb** | East_Turkana_-_Area_104_-_KBS | Tragelaphus_strepsiceros | erec |
| **4.14** | **36.16** | **1.8055** | **herb** | East_Turkana_-_Area_15_-_KBS | Aepyceros_melampus | erec |

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|---|---|---|---|---|---|---|
| **4.14** | **36.16** | **1.8055** | **herb** | East_Turkana_-_Area_15_-_KBS | Tragelaphus_strepsiceros | erec |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Axis_nestii | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Cervalces_gallicus | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Croizetoceros_ramosus | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Equus_major | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Eucladoceros_ctenoides | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Eucladoceros_dicranios | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Gazellospira_torticornis | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Megalovis_latifrons | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Rusa_rhenana | NA |
| **48.31** | **9.30** | **1.8113** | **herb** | Erpfinger | Stephanorhinus_etruscus | NA |
| **38.26** | **21.83** | **1.8500** | **herb** | Kastritsi | Croizetoceros_ramosus | NA |
| **38.30** | **21.15** | **1.8500** | **herb** | Molikrio | Stephanorhinus_etruscus | NA |
| **40.15** | **21.20** | **1.8500** | **herb** | Q-Profil | Leptobos_etruscus | NA |
| **40.15** | **21.20** | **1.8500** | **herb** | Q-Profil | Mammuthus_meridionalis | NA |
| **36.25** | **27.25** | **1.8648** | **herb** | Kos | Equus_stenonis | NA |
| **36.25** | **27.25** | **1.8648** | **herb** | Kos | Eucladoceros_ctenoides | NA |
| **36.25** | **27.25** | **1.8648** | **herb** | Kos | Leptobos_furtivus | NA |
| **35.41** | **4.13** | **1.8700** | **herb** | Ain_Hanech | Hippopotamus_amphibius | NA |
| **35.41** | **4.13** | **1.8700** | **herb** | Ain_Hanech | Mammuthus_meridionalis | NA |
| **35.41** | **4.13** | **1.8700** | **herb** | Ain_Hanech | Prostrepsiceros_libycus | NA |
| **4.2000** | **36.1100** | **1.8700** | **herb** | East_Turkana_-_Area_10_-_KBS | Aepyceros_melampus | NA |
| **4.2000** | **36.1100** | **1.8700** | **herb** | East_Turkana_-_Area_10_-_KBS | Kobus_kob | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Ceratotherium_simum | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Damaliscus_eppsi | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Diceros_bicornis | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Equus_koobiforensis | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Gazella_praethomsoni | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Giraffa_jumae | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Giraffa_pygmaea | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Giraffa_stillei | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Hippopotamus_karumensis | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Kolpochoerus_limnetes | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Megalotragus_isaaci | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Notochoerus_scotti | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Pelorovis_turkanensis | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Sivatherium_maurusium | NA |
| **4.6200** | **36.2600** | **1.8700** | **herb** | East_Turkana_-_Area_105_-_KBS | Tragelaphus_strepsiceros | NA |
| **4.0667** | **36.3667** | **1.8700** | **herb** | East_Turkana_-_Area_105-_KBS-_FxJj3 | Gazella_praethomsoni | NA |
| **4.0667** | **36.3667** | **1.8700** | **herb** | East_Turkana_-_Area_105-_KBS-_FxJj3 | Hippopotamus_karumensis | NA |
| **4.0667** | **36.3667** | **1.8700** | **herb** | East_Turkana_-_Area_105-_KBS-_FxJj3 | Kobus_ellipsiprymnus | NA |
| **4.0667** | **36.3667** | **1.8700** | **herb** | East_Turkana_-_Area_105-_KBS-_FxJj3 | Palaeoloxodon_recki | NA |
| **4.0300** | **36.2400** | **1.8700** | **herb** | East_Turkana_-_Area_105-KBS-FxJj1 | Giraffa_jumae | NA |
| **4.0300** | **36.2400** | **1.8700** | **herb** | East_Turkana_-_Area_105-KBS-FxJj1 | Hippopotamus_karumensis | NA |
| **4.0300** | **36.2400** | **1.8700** | **herb** | East_Turkana_-_Area_105-KBS-FxJj1 | Kobus_ellipsiprymnus | NA |
| **4.0300** | **36.2400** | **1.8700** | **herb** | East_Turkana_-_Area_105-KBS-FxJj1 | Megalotragus_isaaci | NA |
| **4.2250** | **36.4330** | **1.8700** | **herb** | East_Turkana_-_Area_129_-_KBS | Connochaetes_gentryi | NA |
| **4.2250** | **36.4330** | **1.8700** | **herb** | East_Turkana_-_Area_129_-_KBS | Equus_koobiforensis | NA |
| **4.2250** | **36.4330** | **1.8700** | **herb** | East_Turkana_-_Area_129_-_KBS | Pelorovis_turkanensis | NA |
| **4.2250** | **36.4330** | **1.8700** | **herb** | East_Turkana_-_Area_129_-_KBS | Tragelaphus_strepsiceros | NA |
| **4.2200** | **36.0600** | **1.8700** | **herb** | East_Turkana_-_Area_1A_-_KBS | Diceros_bicornis | NA |
| **4.1900** | **36.0200** | **1.8700** | **herb** | East_Turkana_-_Area_6A_-_KBS | Aepyceros_melampus | NA |
| **4.1900** | **36.0200** | **1.8700** | **herb** | East_Turkana_-_Area_6A_-_KBS | Ceratotherium_simum | NA |
| **4.1900** | **36.0200** | **1.8700** | **herb** | East_Turkana_-_Area_6A_-_KBS | Diceros_bicornis | NA |
| **4.1900** | **36.0200** | **1.8700** | **herb** | East_Turkana_-_Area_6A_-_KBS | Kobus_kob | NA |
| **4.3080** | **36.2830** | **1.8700** | **herb** | East_Turkana_-_Area_9_-_KBS | Tragelaphus_strepsiceros | NA |
| **3.8400** | **36.0400** | **1.8700** | **herb** | East_Turkana_-_Area_102_-_KBS | Aepyceros_melampus | erec |
| **3.8400** | **36.0400** | **1.8700** | **herb** | East_Turkana_-_Area_102_-_KBS | Ceratotherium_simum | erec |
| **3.8400** | **36.0400** | **1.8700** | **herb** | East_Turkana_-_Area_102_-_KBS | Tragelaphus_strepsiceros | erec |
| **3.8000** | **36.0300** | **1.8700** | **herb** | East_Turkana_-_Area_103_-_KBS | Aepyceros_melampus | erec |
| **3.8000** | **36.0300** | **1.8700** | **herb** | East_Turkana_-_Area_103_-_KBS | Ceratotherium_simum | erec |
| **3.8000** | **36.0300** | **1.8700** | **herb** | East_Turkana_-_Area_103_-_KBS | Kobus_ellipsiprymnus | erec |
| **3.8000** | **36.0300** | **1.8700** | **herb** | East_Turkana_-_Area_103_-_KBS | Kobus_kob | erec |
| **3.8700** | **36.1000** | **1.8700** | **herb** | East_Turkana_-_Area_104_-_KBS | Aepyceros_melampus | erec |
| **3.8700** | **36.1000** | **1.8700** | **herb** | East_Turkana_-_Area_104_-_KBS | Diceros_bicornis | erec |
| **3.8700** | **36.1000** | **1.8700** | **herb** | East_Turkana_-_Area_104_-_KBS | Kobus_ellipsiprymnus | erec |
| **3.8700** | **36.1000** | **1.8700** | **herb** | East_Turkana_-_Area_104_-_KBS | Kobus_kob | erec |
| **3.8700** | **36.1000** | **1.8700** | **herb** | East_Turkana_-_Area_104_-_KBS | Tragelaphus_strepsiceros | erec |
| **4.1300** | **36.3100** | **1.8700** | **herb** | East_Turkana_-_Area_130-_KBS-_FxJj38SE | Ceratotherium_simum | erec |
| **4.1300** | **36.3100** | **1.8700** | **herb** | East_Turkana_-_Area_130-_KBS-_FxJj38SE | Gazella_granti | erec |
| **4.1300** | **36.3100** | **1.8700** | **herb** | East_Turkana_-_Area_130-_KBS-_FxJj38SE | Hippopotamus_aethiopicus | erec |
| **4.1300** | **36.3100** | **1.8700** | **herb** | East_Turkana_-_Area_130-_KBS-_FxJj38SE | Tragelaphus_strepsiceros | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Aepyceros_melampus | erec |

| | | | | | | |
|---|---|---|---|---|---|---|
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Anancus_kenyensis | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Ancylotherium_hennigi | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Antidorcas_recki | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Beatragus_antiquus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Ceratotherium_simum | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Connochaetes_taurinus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Damalavus_makapaani | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Deinotherium_bozasi | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Diceros_bicornis | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Equus_oldowayensis | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Eurygnathohippus_cornelianus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Eurygnathohippus_libycum | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Gazella_gazella | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Gazella_granti | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Giraffa_stillei | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Hippotragus_gigas | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Kobus_ellipsiprymnus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Kobus_kob | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Kobus_sigmoidalis | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Kolpochoerus_heseloni | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Kolpochoerus_majus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Megalotragus_kattwinkeli | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Metridiochoerus_andrewsi | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Metridiochoerus_compactus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Palaeoloxodon_recki | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Parmularius_altidens | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Parmularius_angusticornis | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Phacochoerus_modestus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Sivatherium_maurusium | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Syncerus_acoelotus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Tragelaphus_scriptus | erec |
| **-2.9867** | **35.3468** | **1.9000** | **herb** | Olduvai_Bed_I | Tragelaphus_strepsiceros | erec |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Croizetoceros_ramosus | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Equus_stenonis | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Eucladoceros_ctenoides | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Gazella_borbonica | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Gazellospira_torticornis | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Leptobos_etruscus | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Rusa_rhenana | NA |
| **45.25** | **0.78** | **1.9567** | **herb** | Cornillet_(Alpes_de_Haute_Provence) | Stephanorhinus_etruscus | NA |
| **39.16** | **-1.79** | **1.9730** | **herb** | El_Rincón,_Albacete | Equus_stenonis | NA |
| **39.16** | **-1.79** | **1.9730** | **herb** | El_Rincón,_Albacete | Gazella_borbonica | NA |
| **30.7800** | **76.9100** | **1.3150** | **omni** | Pinjor | Melursus_theobaldi | NA |

**Appendix: Table 4 - reconstructed climatic variables using ecomorph-based formulas provided in Liu et al. (2013) and Eronen et al. (2010).**

| lat | long | NHYP | N loph | Mean HYP | Mean Longitudinal lophs | PRED WETTEST_QT ERONEN2010 CORR. | PRED DRIEST_QT ERONEN2010 CORR. | PRED_MAP LIU2012 CT_HYP | PRED_MAT LIU2012 | age |
|---|---|---|---|---|---|---|---|---|---|---|
| **19.17** | -3.98 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.0057 |
| **-1.77** | 36.17 | 6 | 6 | 2.5 | 1.833333333 | 97.16 | 14.98 | 121.8333333 | 13.18333333 | 0.396 |
| **-3.67** | 35 | 16 | 16 | 2.5 | 1.625 | 274.4 | 14.98 | 300.9375 | 18.4125 | 0.396 |
| **37** | 22.58 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.396 |
| **37** | 22.58 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.396 |
| **-33.03** | 17.96 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4535 |
| **48.14** | 16.93 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.4535 |
| **43** | 60 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.01 |
| **44.8** | 1.2 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.4535 |
| **31.87** | -8.87 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4535 |
| **51.42** | 51.92 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4535 |
| **50.98** | 11.38 | 6 | 6 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.46 |
| **32.8** | 35.56 | 7 | 7 | 1.714285714 | 1.285714286 | 565.9 | 50.98 | 916.2571429 | 16.08571429 | 0.71 |
| **-3.85** | 33.71 | 6 | 6 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.88 |
| **46.28** | 16.03 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.01 |
| **37** | 22.58 | 3 | 3 | 1.666666667 | 1.333333333 | 222.4 | 50.98 | 894.9333333 | 14.23333333 | 0.88 |
| **37** | 22.58 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.88 |
| **37** | 22.58 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.88 |
| **37** | 22.58 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.88 |
| **4.33** | 35.86 | 8 | 8 | 2 | 1.625 | 565.9 | 50.98 | 506.8875 | 11.5125 | 0.89 |
| **5** | 36 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.89 |
| **10.61** | 40.53 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **36.6** | 10.87 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.89 |
| **-26.08** | 27.76 | 6 | 6 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.89 |
| **24** | 88 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.89 |
| **51.95** | 4.05 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.01 |
| **24** | 80 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.89 |
| **48.41** | 9.78 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.89 |
| **40.66** | 23 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **31.08** | -8 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **33.56** | -7.55 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.89 |
| **36.16** | 6 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **33.56** | -7.55 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.89 |
| **-34.01** | 23.38 | 2 | 2 | 2.5 | 2.5 | 97.16 | 14.98 | -451.3 | -3.55 | 0.89 |
| **-33.64** | 25.54 | 13 | 13 | 2.538461538 | 1.538461538 | 97.16 | 14.98 | 359.4923077 | 21.11538462 | 0.905 |
| **-27.21** | 31.88 | 15 | 15 | 2.533333333 | 1.466666667 | 97.16 | 14.98 | 423.3266667 | 22.84666667 | 0.905 |
| **60.69** | 60.4 | 4 | 4 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.01 |
| **-34.57** | 19.25 | 11 | 11 | 2.545454545 | 1.636363636 | 97.16 | 14.98 | 272.4454545 | 18.75454545 | 0.905 |
| **-28.69** | 23.8 | 9 | 9 | 2.777777778 | 1.666666667 | 97.16 | 14.98 | 150.7 | 21.2 | 0.905 |
| **-33.55** | 21.76 | 13 | 13 | 2.538461538 | 1.538461538 | 97.16 | 14.98 | 359.4923077 | 21.11538462 | 0.905 |
| **0.09** | 29.52 | 3 | 3 | 2.333333333 | 0.666666667 | 97.16 | 14.98 | 1193.466667 | 40.16666667 | 0.905 |
| **0.09** | 29.52 | 10 | 10 | 2.2 | 1.2 | 274.4 | 14.98 | 789.88 | 24.94 | 0.905 |
| **-26.46** | 31.32 | 9 | 9 | 2.888888889 | 2 | 97.16 | 14.98 | -181.6333333 | 14.36666667 | 0.905 |
| **-15.46** | 28.66 | 8 | 8 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **0.09** | 29.52 | 8 | 8 | 2.375 | 1.25 | 97.16 | 14.98 | 674.8125 | 26.1 | 0.905 |
| **0.09** | 29.52 | 11 | 11 | 2.454545455 | 1.454545455 | 97.16 | 14.98 | 466.2 | 22.06363636 | 0.905 |
| **75.3** | 138 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.01 |
| **-34.62** | 19.35 | 13 | 13 | 2.461538462 | 1.384615385 | 542.6 | 14.98 | 523.4384615 | 23.91538462 | 0.905 |
| **-33.01** | 18.04 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **-33.57** | 22.07 | 11 | 11 | 2.454545455 | 1.454545455 | 97.16 | 14.98 | 466.2 | 22.06363636 | 0.905 |
| **1.33** | 29.75 | 11 | 11 | 2.181818182 | 1.272727273 | 274.4 | 14.98 | 734.8454545 | 22.86363636 | 0.905 |
| **-3.92** | 33.6 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **10.57** | 40.47 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.905 |
| **32.1** | 20.49 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **32.83** | 22.12 | 4 | 4 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.905 |
| **-4.38** | 33.68 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **50.17** | 108.5 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.01 |
| **-3.97** | 33.76 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **-3.93** | 33.61 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.905 |
| **-3.93** | 33.86 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.905 |
| **-3.92** | 33.6 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **0.06** | 29.5 | 4 | 4 | 2 | 0.5 | 97.16 | 14.98 | 1474.05 | 39.75 | 0.905 |
| **10.22** | 40.48 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **15.2** | 36.18 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.905 |
| **24.45** | 32.94 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.905 |
| **25.37** | 30.46 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **-14.16** | 32.41 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.905 |
| **43.6** | 16.9 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.0123925 |
| **0.06** | 29.5 | 3 | 3 | 1.333333333 | 0.666666667 | 1397 | 113.8 | 1605.366667 | 26.36666667 | 0.905 |
| **-3.93** | 33.6 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.905 |
| **-33.15** | 18.12 | 4 | 4 | 1.75 | 1.25 | 882.2 | 50.98 | 932.25 | 17.475 | 0.905 |
| **-33.27** | 17.84 | 14 | 14 | 2.785714286 | 1.642857143 | 97.16 | 14.98 | 167.9 | 21.90714286 | 0.9105 |
| **-27.66** | 24.51 | 12 | 12 | 2.333333333 | 1.583333333 | 274.4 | 14.98 | 405.4083333 | 17.15833333 | 0.9105 |
| **-34.87** | 18.57 | 7 | 7 | 2.714285714 | 1.857142857 | 97.16 | 14.98 | 13.1 | 15.54285714 | 0.9105 |
| **-33.03** | 17.89 | 8 | 8 | 2.375 | 1.375 | 97.16 | 14.98 | 567.35 | 22.9625 | 0.9105 |
| **-28.57** | 24.36 | 6 | 6 | 2.5 | 1.333333333 | 97.16 | 14.98 | 551.6833333 | 25.73333333 | 0.9105 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **59.35** | 60 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.0128 |
| **-4.25** | 120.5 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **-33.37** | 18.04 | 6 | 6 | 2.5 | 1.833333333 | 97.16 | 14.98 | 121.8333333 | 13.18333333 | 0.9105 |
| **-27.88** | 23.45 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.9105 |
| **62.2** | 59 | 8 | 8 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 0.01326 |
| **-34.57** | 19.25 | 17 | 17 | 2.470588235 | 1.647058824 | 274.4 | 14.98 | 294.0882353 | 17.45294118 | 0.9105 |
| **-27.7** | 23.73 | 8 | 8 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.9105 |
| **-1.8** | 36.18 | 8 | 8 | 2.375 | 1.625 | 97.16 | 14.98 | 352.425 | 16.6875 | 0.5 |
| **-34.14** | 24.29 | 14 | 14 | 2.357142857 | 1.428571429 | 274.4 | 14.98 | 528.65 | 21.37142857 | 0.9105 |
| **-2.38** | 34.73 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **3.82** | 36.26 | 4 | 4 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.9105 |
| **3.85** | 36.13 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |
| **3.88** | 36.23 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.9105 |
| **4.26** | 36.17 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |
| **49** | 41 | 11 | 11 | 2.090909091 | 1.818181818 | 274.4 | 14.98 | 303.3636364 | 7.918181818 | 0.0155 |
| **4.27** | 36.16 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |
| **24.39** | 32.89 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.9105 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **24.45** | 32.94 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.72** | 32.89 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **24.72** | 32.89 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **44.86** | 13.83 | 9 | 9 | 2.111111111 | 1.777777778 | 274.4 | 14.98 | 329.7777778 | 9.211111111 | 0.01579 |
| **24.72** | 32.89 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **24.72** | 32.89 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **24.72** | 32.89 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **25.2** | 32.44 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **25.2** | 32.44 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **25.2** | 32.44 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **25.29** | 32.44 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **25.29** | 32.44 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **25.29** | 32.44 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **32.7** | 21.54 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **62.2** | 59 | 7 | 7 | 2.714285714 | 1.714285714 | 97.16 | 14.98 | 135.9142857 | 19.12857143 | 0.01613 |
| **45.59** | 11.01 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **-2.38** | 35.86 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |
| **33.57** | -7.62 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **33.57** | -7.62 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **35.4** | 0.29 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **33.07** | 35.54 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **-26.21** | 27.62 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.9105 |
| **4.16** | 35.68 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.9105 |
| **14.78** | 39.78 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **45.42** | 17.88 | 6 | 6 | 2.5 | 1.333333333 | 97.16 | 14.98 | 551.6833333 | 25.73333333 | 0.0175 |
| **0.45** | 35.9 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **-3.02** | 35.21 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **-0.55** | 35.13 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **-3.04** | 35.24 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |
| **-3.04** | 35.23 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |
| **4.19** | 36.15 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **4.19** | 35.68 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **-26.21** | 27.62 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.9105 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **-32.37** | 18.32 | 4 | 4 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 0.9105 |
| **51.01** | 11.29 | 3 | 3 | 1.666666667 | 1.333333333 | 222.4 | 50.98 | 894.9333333 | 14.23333333 | 0.9105 |
| **44.62** | 1.66 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.018388 |
| **-26.21** | 27.62 | 2 | 2 | 3 | 2.5 | 97.16 | 14.98 | -657.25 | 3.35 | 0.9105 |
| **-28.69** | 23.8 | 4 | 4 | 2.75 | 1.75 | 97.16 | 14.98 | 90.5 | 18.725 | 0.9105 |
| **-26.21** | 27.62 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **-33.87** | 18.14 | 3 | 3 | 3 | 1.666666667 | 97.16 | 14.98 | 59.16666667 | 24.26666667 | 0.9105 |
| **-23.62** | 15.31 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **-3.04** | 35.26 | 3 | 3 | 2 | 1.666666667 | 882.2 | 50.98 | 471.0666667 | 10.46666667 | 0.9105 |
| **-3.04** | 35.24 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **-3.04** | 35.24 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **-3.04** | 35.24 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **40.36** | 20 | 5 | 5 | 2.8 | 1.6 | 97.16 | 14.98 | 198.86 | 23.18 | 0.02 |
| **-3.01** | 35.18 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **4.11** | 35.68 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **4.13** | 35.67 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **4.18** | 36.33 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **4.2** | 35.68 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **4.24** | 36.13 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **5.2** | 37.41 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **33.48** | 108.9 | 3 | 3 | 1.666666667 | 1.666666667 | 222.4 | 50.98 | 608.3666667 | 5.866666667 | 0.94 |
| **43.22** | 5.71 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.968 |
| **42.32** | 42.61 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **14.83** | 39.83 | 3 | 3 | 3 | 2.333333333 | 97.16 | 14.98 | -513.9666667 | 7.533333333 | 1.18 |
| **4.03** | 36.24 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.2955 |
| **4.1** | 36.31 | 3 | 3 | 2 | 1.666666667 | 882.2 | 50.98 | 471.0666667 | 10.46666667 | 1.2955 |
| **4.02** | 36.26 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.2955 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **4.13** | 36.33 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 1.2955 |
| **-26.21** | 27.62 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.67 |
| **4.1** | 36.31 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 1.2955 |
| **4.13** | 36.31 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 1.2955 |
| **4.62** | 36.26 | 3 | 3 | 2 | 1.666666667 | 882.2 | 50.98 | 471.0666667 | 10.46666667 | 1.2955 |
| **-2.38** | 35.86 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 1.3005 |
| **54** | 93 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.02 |
| **5.2** | 37.41 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 1.3005 |
| **-2.38** | 35.86 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.3005 |
| **-2.38** | 35.86 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.3005 |
| **4.14** | 35.64 | 3 | 3 | 2.333333333 | 2 | 882.2 | 50.98 | 47.2 | 6.7 | 1.3005 |
| **5.2** | 37.41 | 3 | 3 | 2 | 1.666666667 | 882.2 | 50.98 | 471.0666667 | 10.46666667 | 1.3005 |
| **5.2** | 37.41 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 1.3005 |
| **5.2** | 37.41 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.3005 |
| **3.76** | 36.04 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.8055 |
| **3.79** | 36.08 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.8055 |
| **3.8** | 36.03 | 4 | 4 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.8055 |
| **57.01** | 91.77 | 5 | 5 | 2 | 2 | 882.2 | 14.98 | 184.5 | 2.1 | 0.02 |
| **3.82** | 35.99 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 1.8055 |
| **3.84** | 36.04 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 1.8055 |
| **3.87** | 36.1 | 5 | 5 | 2.4 | 1.8 | 97.16 | 14.98 | 191.68 | 12.64 | 1.8055 |
| **4.14** | 36.16 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 1.8055 |
| **4.19** | 36.02 | 4 | 4 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 1.8055 |
| **4.2** | 36.11 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.8055 |
| **4.21** | 36.07 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.8055 |
| **44.88** | 13.9 | 11 | 11 | 2.090909091 | 1.818181818 | 274.4 | 14.98 | 303.3636364 | 7.918181818 | 0.02 |
| **46.16** | 27.91 | 4 | 4 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 1.704071523 |
| **75** | 100 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **51.22** | 109.3 | 11 | 11 | 2.727272727 | 1.818181818 | 97.16 | 14.98 | 41.24545455 | 16.7 | 0.02 |
| **51** | 85.05 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **52.02** | 113.4 | 13 | 13 | 2.461538462 | 2 | 542.6 | 14.98 | -5.607692308 | 8.469230769 | 0.02 |
| **44.2** | 8.32 | 6 | 6 | 1.833333333 | 1.333333333 | 565.9 | 50.98 | 826.2833333 | 16.53333333 | 0.02047 |
| **39.42** | 20.5 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.0208 |
| **38.2** | 69.57 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.777986177 |
| **44.89** | 4.84 | 11 | 11 | 2.272727273 | 1.727272727 | 274.4 | 14.98 | 306.6272727 | 12.70909091 | 0.021442 |
| **52.45** | 1.71 | 10 | 10 | 1.9 | 1.1 | 565.9 | 50.98 | 999.42 | 23.31 | 0.094408242 |
| **42.33** | -3.5 | 4 | 4 | 1.25 | 1.25 | 587.9 | 113.8 | 1138.2 | 10.575 | 0.72 |
| **37.81** | -2.7 | 6 | 6 | 2.333333333 | 1.5 | 97.16 | 14.98 | 477.05 | 19.25 | 0.790849203 |
| **43.42** | -4.84 | 8 | 8 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.021765 |
| **42.33** | -3.5 | 5 | 5 | 1.6 | 1.4 | 799.4 | 50.98 | 865.08 | 11.64 | 0.88 |
| **41.21** | 43.3 | 7 | 7 | 2.285714286 | 1.285714286 | 97.16 | 14.98 | 680.8857143 | 23.97142857 | 0.88 |
| **42.37** | 13.25 | 4 | 4 | 2 | 1.25 | 882.2 | 50.98 | 829.275 | 20.925 | 0.977796218 |
| **42.95** | 12.92 | 4 | 4 | 2 | 1.25 | 882.2 | 50.98 | 829.275 | 20.925 | 1.1 |
| **45.11** | 3.9 | 4 | 4 | 1.75 | 1.75 | 882.2 | 50.98 | 502.4 | 4.925 | 1.2 |
| **44.55** | 10.42 | 5 | 5 | 1.8 | 1 | 882.2 | 50.98 | 1126.58 | 24.44 | 1.241868885 |
| **41.73** | 13.2 | 6 | 6 | 1.833333333 | 1.166666667 | 565.9 | 50.98 | 969.5666667 | 20.71666667 | 1.277662222 |
| **42.87** | 12.38 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 1.511126138 |
| **44.16** | 16.25 | 5 | 5 | 1.4 | 1.4 | 799.4 | 50.98 | 947.46 | 8.88 | 1.715031346 |
| **38** | 23.73 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.798457255 |
| **51.6** | 32.5 | 6 | 6 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.02205 |
| **51.44** | 0.31 | 10 | 10 | 2.1 | 1.4 | 565.9 | 14.98 | 659.13 | 18.54 | 0.39 |
| **47.28** | 16.6 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.06 |
| **42.1** | 12.52 | 4 | 4 | 2 | 1.25 | 882.2 | 50.98 | 829.275 | 20.925 | 0.062250678 |
| **40.8** | -4.37 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.062644444 |
| **52.45** | 1.71 | 9 | 9 | 1.777777778 | 1.222222222 | 565.9 | 50.98 | 944.6888889 | 18.55555556 | 0.081938983 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **52.93** | 1.23 | 8 | 8 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.094802008 |
| **50.85** | -0.71 | 7 | 7 | 1.571428571 | 1.571428571 | 799.4 | 50.98 | 729.4714286 | 6.942857143 | 0.125778274 |
| **50.15** | 14.58 | 6 | 6 | 2.166666667 | 1.5 | 97.16 | 14.98 | 545.7 | 16.95 | 0.77 |
| **43.22** | 11.9 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.227763692 |
| **51.4** | 11.31 | 9 | 9 | 2 | 1.444444444 | 565.9 | 50.98 | 662.1111111 | 16.04444444 | 0.230388799 |
| **45.04** | -0.49 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.0222 |
| **42.19** | 13.17 | 6 | 6 | 1.833333333 | 1.5 | 882.2 | 50.98 | 683 | 12.35 | 0.231963864 |
| **50.4** | 8.16 | 6 | 6 | 1.833333333 | 1.5 | 882.2 | 50.98 | 683 | 12.35 | 0.269240387 |
| **25.7** | 101.9 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.39 |
| **37.6** | -2.57 | 5 | 5 | 2.4 | 1.4 | 97.16 | 14.98 | 535.56 | 22.68 | 0.453785429 |
| **46.41** | 23.86 | 7 | 7 | 2 | 1.571428571 | 274.4 | 14.98 | 552.9428571 | 12.85714286 | 0.520331898 |
| **48.03** | 20.51 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.767223238 |
| **45.81** | 25.55 | 4 | 4 | 2 | 1.25 | 97.16 | 14.98 | 829.275 | 20.925 | 0.814606424 |
| **49.41** | 16.75 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.022603 |
| **34.35** | 109.5 | 4 | 4 | 1.25 | 0.5 | 587.9 | 113.8 | 1782.975 | 29.4 | 0.88 |
| **52.45** | 1.73 | 8 | 8 | 1.625 | 1.125 | 565.9 | 50.98 | 1091.2 | 18.8875 | 0.89 |
| **43.46** | 11.03 | 2 | 2 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.89 |
| **45** | 8 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.89 |
| **45.86** | 18.45 | 2 | 2 | 1 | 1.5 | 222.4 | 113.8 | 1026.25 | 0.85 | 1.047807829 |
| **37.3** | 22.3 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.13 |
| **39.68** | 115.9 | 2 | 2 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 1.47 |
| **39.68** | 115.9 | 3 | 3 | 2 | 1.666666667 | 882.2 | 50.98 | 471.0666667 | 10.46666667 | 1.47 |
| **49.45** | 31.28 | 8 | 8 | 2.125 | 1.5 | 274.4 | 14.98 | 562.8625 | 16.375 | 0.023 |
| **34.96** | 110.1 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.47 |
| **51.95** | 4.05 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.54 |
| **38** | 22 | 2 | 2 | 1 | 1.5 | 222.4 | 113.8 | 1026.25 | 0.85 | 1.776642614 |
| **38.26** | 21.83 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.85 |
| **49** | 32 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **55.48** | 64.23 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0 |
| **56.32** | 57.65 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0 |
| **56.92** | 62.73 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0 |
| **57.37** | 60.17 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0 |
| **49.33** | 16.75 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.023 |
| **60.24** | 60.03 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.00493 |
| **47** | 28 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.005 |
| **50.5** | 40 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.005 |
| **50.5** | 30.5 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.005 |
| **43.5** | 40.17 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.005 |
| **47.4** | 30 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.005 |
| **48.07** | 9.14 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.005 |
| **43.9** | 42.72 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.005 |
| **47.1** | 28.1 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.005 |
| **49.25** | 16.67 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.023 |
| **40.31** | 44.42 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.005 |
| **40.15** | 17.96 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.023151 |
| **52.45** | 4.63 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.0055 |
| **-8.63** | 116.2 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.0055 |
| **20.13** | 110 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.0055 |
| **60.25** | 60.05 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.006193 |
| **48.47** | 8.93 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.00854 |
| **43.31** | 2.34 | 5 | 5 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 0.024025 |
| **48.05** | 8.98 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.00861665 |
| **50.4** | 30.5 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.01 |
| **53.08** | 91.42 | 3 | 3 | 1.666666667 | 2 | 222.4 | 50.98 | 321.8 | -2.5 | 0.01 |
| **55.97** | 92.82 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.01 |
| **56.01** | 92.79 | 3 | 3 | 1 | 2 | 587.9 | 113.8 | 596.4 | -11.7 | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **56.01** | 92.8 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **59.28** | 60.04 | 3 | 3 | 1.666666667 | 2 | 222.4 | 50.98 | 321.8 | -2.5 | 0.01 |
| **44.93** | 1 | 9 | 9 | 2.222222222 | 1.555555556 | 274.4 | 14.98 | 475.0555556 | 16.32222222 | 0.024045 |
| **65.07** | 57.06 | 3 | 3 | 1 | 2 | 587.9 | 113.8 | 596.4 | -11.7 | 0.01 |
| **42** | 42 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.01 |
| **38** | 23.5 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.01 |
| **43.5** | 40.16 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.01 |
| **48.07** | 9.13 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.01 |
| **50.21** | 108.6 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.01 |
| **52.87** | 103.4 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.01 |
| **55.97** | 92.82 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.01 |
| **56.01** | 92.8 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **56.01** | 92.8 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.01 |
| **38.89** | -9.19 | 7 | 7 | 2.142857143 | 1.571428571 | 97.16 | 14.98 | 494.1 | 14.82857143 | 0.02482 |
| **56.01** | 92.8 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **56.01** | 92.79 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **43.13** | 23.02 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.01 |
| **43.5** | 132 | 5 | 5 | 1.4 | 1.6 | 799.4 | 113.8 | 775.52 | 3.86 | 0.01 |
| **44.2** | 40.85 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.01 |
| **55.97** | 92.81 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **56.01** | 92.8 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **56.01** | 92.79 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **56.18** | 95.92 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.01 |
| **40.3** | 44.4 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.01 |
| **50.96** | 39.7 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.02485 |
| **52** | 37 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.01 |
| **38.55** | 34.54 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.01 |
| **47.63** | 18.91 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **48.4** | 35.4 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.01 |
| **55.15** | 58.47 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.01 |
| **57.5** | 60.2 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.01 |
| **70.43** | 144 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.01 |
| **48.55** | 27.08 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **54** | -7.5 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.01 |
| **48.27** | 27.28 | 9 | 9 | 2.222222222 | 1.777777778 | 274.4 | 14.98 | 284.0111111 | 10.74444444 | 0.024854 |
| **50.08** | 19.92 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.012 |
| **43.11** | -2.05 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.01627 |
| **45.32** | 14.5 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.01678 |
| **37.92** | 23.9 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.0169325 |
| **43.18** | -2.1 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.01705 |
| **48.19** | 27.21 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.0172 |
| **45.33** | 14.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0175 |
| **43.18** | -2.1 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.01795 |
| **47.67** | 18.9 | 9 | 9 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.025 |
| **43.83** | 16.17 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.018388 |
| **50.05** | 19.92 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.018427 |
| **50.53** | 19.5 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.01925 |
| **48.14** | 15.53 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.01938 |
| **43.56** | 39.92 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.02 |
| **52.3** | 104.3 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.02 |
| **52.6** | 103.5 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.02 |
| **59.9** | 108 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.02 |
| **42.26** | 16.66 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.02 |
| **46.7** | 0.86 | 4 | 4 | 2.75 | 1.5 | 97.16 | 14.98 | 305.425 | 25 | 0.026728 |
| **50.97** | 4.4 | 3 | 3 | 2.666666667 | 1.333333333 | 97.16 | 14.98 | 483.0333333 | 28.03333333 | 0.02 |
| **52.12** | 109.9 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.02 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **58.3** | 100.3 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.02 |
| **58.3** | 100.3 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.02 |
| **71.79** | 129.4 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.02 |
| **48.24** | 15.88 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.021591 |
| **48.24** | 27.04 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.0221 |
| **48.61** | 17.89 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.02263 |
| **45.84** | 15.87 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.023 |
| **50.99** | 4.5 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.023 |
| **41.23** | 13.08 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.02675 |
| **47.98** | 27.5 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.023 |
| **49.25** | 16.67 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.023 |
| **50.42** | 8.13 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.0233 |
| **46.3** | 4.73 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.0244 |
| **47.7** | 0.85 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.025114 |
| **47.61** | 6.14 | 3 | 3 | 1.666666667 | 1.333333333 | 882.2 | 113.8 | 894.9333333 | 14.23333333 | 0.025677 |
| **56.13** | 40.48 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.025848 |
| **48.84** | 14.97 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.026235 |
| **48.87** | 16.69 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.02673 |
| **50.48** | 4.67 | 9 | 9 | 2.333333333 | 1.555555556 | 97.16 | 14.98 | 429.2888889 | 17.85555556 | 0.026775 |
| **50.47** | 3.99 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.026885 |
| **48.87** | 16.64 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.027734 |
| **53.23** | -3.48 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.027815 |
| **48.55** | 10.15 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.027876 |
| **47.53** | 4.28 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.02824 |
| **46.38** | 0.72 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.028313 |
| **50.13** | -3.66 | 3 | 3 | 1.666666667 | 1.333333333 | 222.4 | 50.98 | 894.9333333 | 14.23333333 | 0.0685 |
| **48.27** | 27.28 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.03 |
| **41.68** | 15.58 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.027952 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **52.5** | 4.5 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.03 |
| **50.46** | -3.5 | 5 | 5 | 1.8 | 2 | 882.2 | 50.98 | 266.88 | -0.66 | 0.030185 |
| **53.27** | -1.19 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.03024 |
| **48.84** | 16.73 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.030939 |
| **50.59** | 5.72 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.031333 |
| **46.18** | 15.89 | 5 | 5 | 1.6 | 1.4 | 882.2 | 113.8 | 865.08 | 11.64 | 0.032461 |
| **50.42** | 5.29 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.03256 |
| **45.5** | 0.3 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.032659 |
| **45.06** | 3.87 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.032903 |
| **46.29** | 16.04 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.03385 |
| **43.93** | 4.31 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.028073 |
| **48.55** | 10.17 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.034365 |
| **45.75** | -0.51 | 7 | 7 | 2 | 1.428571429 | 274.4 | 14.98 | 675.7571429 | 16.44285714 | 0.0347 |
| **47.7** | 0.85 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.034999 |
| **47.63** | 18.35 | 7 | 7 | 2.428571429 | 1.428571429 | 97.16 | 14.98 | 499.2285714 | 22.35714286 | 0.03594 |
| **50.7** | 6.8 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.036163 |
| **44.88** | 1.26 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.036366 |
| **43.48** | -7.31 | 5 | 5 | 1.8 | 1.4 | 882.2 | 50.98 | 782.7 | 14.4 | 0.0367 |
| **41.77** | 15.65 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.04 |
| **54.1** | 30 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.04 |
| **73.6** | 101.1 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.04 |
| **49.43** | 17.44 | 10 | 10 | 2.3 | 1.8 | 542.6 | 14.98 | 232.87 | 11.26 | 0.028366 |
| **52.22** | -8.58 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.041631 |
| **42.5** | 43.5 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.04415 |
| **51** | 11.33 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.05 |
| **52.17** | 10.32 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.051 |
| **59.85** | 57.57 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.051356483 |
| **60.8** | 56 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.051356483 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **48.93** | 11.83 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.05201276 |
| **61.83** | 58.6 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.053456569 |
| **45.06** | 1.17 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.053978 |
| **61.27** | 60.5 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.054769122 |
| **44.72** | 1.85 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.0284 |
| **60.24** | 60.03 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0548 |
| **61.8** | 58.21 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.055294144 |
| **53.64** | -0.21 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.05568791 |
| **51.46** | -0.03 | 4 | 4 | 2.75 | 1.5 | 97.16 | 14.98 | 305.425 | 25 | 0.056475442 |
| **49.27** | 16.67 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.05739423 |
| **50.87** | 20.57 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.0574 |
| **48.41** | 9.77 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.058181762 |
| **51.04** | 4.1 | 5 | 5 | 2.2 | 1.6 | 882.2 | 14.98 | 446 | 14.9 | 0.058706783 |
| **45.63** | 0.15 | 4 | 4 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.05936306 |
| **44.93** | 1 | 9 | 9 | 2.222222222 | 1.777777778 | 274.4 | 14.98 | 284.0111111 | 10.74444444 | 0.028516 |
| **43.4** | -4.1 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.05936306 |
| **50.23** | 6.65 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.05936306 |
| **48.55** | 10.15 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.059888082 |
| **54** | 105 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.06 |
| **52.1** | -7.63 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.060019337 |
| **45.63** | 0.15 | 5 | 5 | 1.8 | 1.6 | 799.4 | 14.98 | 610.76 | 9.38 | 0.060150592 |
| **50.83** | 5.68 | 4 | 4 | 1.75 | 1.75 | 882.2 | 113.8 | 502.4 | 4.925 | 0.060281848 |
| **50.53** | 7.3 | 4 | 4 | 2.75 | 1.5 | 97.16 | 14.98 | 305.425 | 25 | 0.060281848 |
| **43.08** | -1.34 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.060413103 |
| **44.98** | 1.06 | 8 | 8 | 2.625 | 2 | 97.16 | 14.98 | -72.9375 | 10.725 | 0.0295 |
| **50.59** | 5.21 | 7 | 7 | 2.142857143 | 1.428571429 | 97.16 | 14.98 | 616.9142857 | 18.41428571 | 0.060675614 |
| **43.18** | -2.1 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.060806869 |
| **49.27** | 16.7 | 7 | 7 | 2.285714286 | 1.428571429 | 97.16 | 14.98 | 558.0714286 | 20.38571429 | 0.061200635 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **48.5** | 20.3 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.061331891 |
| **51.47** | 10.02 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.061594401 |
| **45.42** | 11.25 | 7 | 7 | 1.714285714 | 1.285714286 | 565.9 | 50.98 | 916.2571429 | 16.08571429 | 0.061725657 |
| **45.67** | 13.75 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.061856912 |
| **44.82** | 0.09 | 5 | 5 | 1.8 | 1.6 | 882.2 | 50.98 | 610.76 | 9.38 | 0.061856912 |
| **41.05** | 22.5 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.061856912 |
| **42** | 0.83 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.062250678 |
| **36.13** | -5.3 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.029544 |
| **44.82** | 0.09 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.062250678 |
| **46.71** | 0.87 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.062250678 |
| **44.85** | 1.27 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.062250678 |
| **50.23** | 16.9 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.0625 |
| **50.99** | 4.5 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.0625 |
| **42.45** | 11.25 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.062644444 |
| **51.43** | 0.3 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.062644444 |
| **40.9** | -0.71 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.062644444 |
| **40.91** | -3.81 | 5 | 5 | 1.8 | 1.4 | 882.2 | 50.98 | 782.7 | 14.4 | 0.0627757 |
| **43.47** | 11.62 | 6 | 6 | 1.833333333 | 1 | 565.9 | 50.98 | 1112.85 | 24.9 | 0.0627757 |
| **44.93** | 1 | 9 | 9 | 2.444444444 | 1.777777778 | 97.16 | 14.98 | 192.4777778 | 13.81111111 | 0.0299 |
| **41** | -3.25 | 6 | 6 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.062906955 |
| **43.3** | 47 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.06303821 |
| **45.6** | 43 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.06303821 |
| **49** | 32 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.063169466 |
| **41.45** | 13.7 | 5 | 5 | 2.2 | 1.2 | 882.2 | 14.98 | 789.88 | 24.94 | 0.063300721 |
| **43.21** | 0.63 | 4 | 4 | 2 | 1.25 | 882.2 | 50.98 | 829.275 | 20.925 | 0.064088253 |
| **45.05** | 1.5 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.03 |
| **41.92** | 12.57 | 7 | 7 | 1.714285714 | 1.142857143 | 799.4 | 50.98 | 1039.071429 | 19.67142857 | 0.064482019 |
| **23** | 120 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0685 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **33.13** | 110.2 | 6 | 6 | 1 | 1.666666667 | 799.4 | 206.2 | 882.9666667 | -3.333333333 | 0.0685 |
| **54.02** | 105.8 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.03 |
| **60.24** | 60.03 | 5 | 5 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 0.03014 |
| **68.75** | 160 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.0685 |
| **45.65** | 0.15 | 2 | 2 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0685 |
| **45.65** | 0.15 | 3 | 3 | 1 | 1.333333333 | 587.9 | 113.8 | 1169.533333 | 5.033333333 | 0.0685 |
| **39.3** | -9.19 | 6 | 6 | 2.333333333 | 1.833333333 | 97.16 | 14.98 | 190.4833333 | 10.88333333 | 0.03066 |
| **32.72** | 35.05 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.0685 |
| **38.58** | 68.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **40.66** | 110 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **40.66** | 110 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **40.66** | 110 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **50.53** | 7.3 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **-8.14** | 111 | 5 | 5 | 1.4 | 0.6 | 799.4 | 50.98 | 1635.22 | 28.96 | 0.0685 |
| **36.95** | -4.13 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.0313 |
| **45.65** | 0.15 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0685 |
| **45.65** | 0.15 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0685 |
| **45.65** | 0.15 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0685 |
| **60.53** | 4.88 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.0685 |
| **38.66** | 68.66 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.07 |
| **44.39** | 4.42 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.031679 |
| **50.98** | 4.39 | 5 | 5 | 2.2 | 1.6 | 882.2 | 14.98 | 446 | 14.9 | 0.07 |
| **52.7** | 51 | 2 | 2 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.07 |
| **40.6** | 23.5 | 9 | 9 | 2.333333333 | 1.222222222 | 97.16 | 14.98 | 715.8555556 | 26.22222222 | 0.075376215 |
| **50.83** | 5.68 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.0755 |
| **45.25** | 11.15 | 5 | 5 | 1.4 | 1.6 | 799.4 | 113.8 | 775.52 | 3.86 | 0.076163747 |
| **47.53** | 4.28 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.0785 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **47.63** | 18.92 | 4 | 4 | 1.5 | 1.5 | 882.2 | 113.8 | 820.3 | 7.75 | 0.08 |
| **43.78** | 7.5 | 4 | 4 | 1.75 | 0.75 | 882.2 | 50.98 | 1362.1 | 30.025 | 0.08 |
| **44.6** | 39.6 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.09 |
| **39.32** | 45.37 | 5 | 5 | 2.2 | 1.4 | 882.2 | 14.98 | 617.94 | 19.92 | 0.09 |
| **51.55** | -4.24 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.031717 |
| **44.87** | -0.6 | 5 | 5 | 1.8 | 1 | 882.2 | 50.98 | 1126.58 | 24.44 | 0.094145732 |
| **53.61** | 76.2 | 3 | 3 | 2.333333333 | 1.333333333 | 882.2 | 50.98 | 620.3333333 | 23.43333333 | 0.1 |
| **45.4** | 11.25 | 4 | 4 | 2.75 | 1 | 97.16 | 14.98 | 735.275 | 37.55 | 0.100445989 |
| **40.88** | 17.1 | 4 | 4 | 2 | 1.25 | 97.16 | 14.98 | 829.275 | 20.925 | 0.103989884 |
| **51.47** | 12.28 | 4 | 4 | 2 | 1.25 | 882.2 | 50.98 | 829.275 | 20.925 | 0.12 |
| **50.48** | -3.77 | 7 | 7 | 1.714285714 | 1 | 565.9 | 50.98 | 1161.885714 | 23.25714286 | 0.12 |
| **51.5** | 0.27 | 4 | 4 | 2.75 | 1 | 97.16 | 14.98 | 735.275 | 37.55 | 0.12 |
| **51.82** | -0.64 | 4 | 4 | 1.75 | 1.25 | 882.2 | 113.8 | 932.25 | 17.475 | 0.12 |
| **54.08** | -2.27 | 4 | 4 | 2 | 0.75 | 882.2 | 50.98 | 1259.125 | 33.475 | 0.12 |
| **38.49** | -8.97 | 6 | 6 | 2.666666667 | 1.5 | 97.16 | 14.98 | 339.75 | 23.85 | 0.032878 |
| **48.9** | 2.3 | 9 | 9 | 2.333333333 | 1.222222222 | 97.16 | 14.98 | 715.8555556 | 26.22222222 | 0.125778274 |
| **49.5** | 11.58 | 3 | 3 | 1.666666667 | 1.666666667 | 882.2 | 113.8 | 608.3666667 | 5.866666667 | 0.13 |
| **50.48** | 7.45 | 4 | 4 | 1.75 | 1.25 | 882.2 | 50.98 | 932.25 | 17.475 | 0.15504822 |
| **39** | 121.8 | 4 | 4 | 1.75 | 1.25 | 882.2 | 113.8 | 932.25 | 17.475 | 0.19 |
| **42.66** | -3.5 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.24 |
| **42.33** | -3.5 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.2465 |
| **44.29** | 20.59 | 6 | 6 | 2.5 | 1.333333333 | 97.16 | 14.98 | 551.6833333 | 25.73333333 | 0.0338 |
| **42.33** | -3.5 | 4 | 4 | 1.5 | 1.25 | 882.2 | 113.8 | 1035.225 | 14.025 | 0.3 |
| **43.33** | -5 | 4 | 4 | 1.75 | 1.75 | 882.2 | 50.98 | 502.4 | 4.925 | 0.306123144 |
| **39.32** | 45.37 | 7 | 7 | 2 | 1.571428571 | 882.2 | 50.98 | 552.9428571 | 12.85714286 | 0.364 |
| **47.61** | 19.05 | 4 | 4 | 2 | 1.75 | 882.2 | 50.98 | 399.425 | 8.375 | 0.9105 |
| **52.13** | 6.61 | 2 | 2 | 2 | 1.5 | 882.2 | 113.8 | 614.35 | 14.65 | 0.39 |
| **45.98** | 0.15 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.396 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **45.65** | 0.15 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.396 |
| **60.42** | 60.22 | 8 | 8 | 2.625 | 1.75 | 97.16 | 14.98 | 141.9875 | 17 | 0.03431 |
| **45.42** | 11.25 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **45.42** | 11.25 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.4535 |
| **45.42** | 11.25 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.4535 |
| **48.53** | 9.52 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.4535 |
| **50.48** | 7.45 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.4535 |
| **52.94** | 1.25 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 0.4535 |
| **45.33** | 11.43 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.4535 |
| **45.42** | 11.25 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.4535 |
| **44.93** | 1 | 9 | 9 | 2.222222222 | 1.555555556 | 274.4 | 14.98 | 475.0555556 | 16.32222222 | 0.03448 |
| **45.74** | 13.75 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.4535 |
| **45.78** | 13.65 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **45.83** | 25.55 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **45.83** | 25.55 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **46.42** | 23.87 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **43.22** | 0.63 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.4535 |
| **50.07** | 8.27 | 3 | 3 | 1.333333333 | 0.666666667 | 1397 | 113.8 | 1605.366667 | 26.36666667 | 0.4535 |
| **52.46** | 1.73 | 3 | 3 | 1.333333333 | 0.666666667 | 1397 | 113.8 | 1605.366667 | 26.36666667 | 0.4535 |
| **40.52** | -3.77 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.4535 |
| **41.17** | -2.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.4535 |
| **49.39** | 16.72 | 8 | 8 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.0354 |
| **42.03** | 12.73 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.4535 |
| **43.65** | 10.67 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.4535 |
| **50** | 1.89 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.4535 |
| **52.46** | 1.73 | 3 | 3 | 1.333333333 | 0.666666667 | 1397 | 113.8 | 1605.366667 | 26.36666667 | 0.4535 |
| **24.67** | 113.6 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.4535 |
| **50.53** | 7.3 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **51.35** | 11.1 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **51.92** | 10.15 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **68.43** | 161 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.4535 |
| **46.85** | 35.3 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.52 |
| **51.29** | -2.88 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.036197 |
| **44.78** | 1.22 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.7 |
| **37.4** | 31.83 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.89 |
| **40** | 9 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.89 |
| **42.33** | -3.5 | 3 | 3 | 1.333333333 | 1 | 1397 | 113.8 | 1318.8 | 18 | 0.89 |
| **46.33** | 2.16 | 2 | 2 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.89 |
| **51.48** | 0.22 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.89 |
| **51.79** | 1.14 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.89 |
| **50.06** | 19.98 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.89 |
| **43.93** | 4.33 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.036448 |
| **51.74** | 0.04 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.89 |
| **45.77** | 8.81 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 0.905 |
| **32.66** | 34.97 | 3 | 3 | 1.666666667 | 1.333333333 | 222.4 | 50.98 | 894.9333333 | 14.23333333 | 0.9105 |
| **50.51** | 5.5 | 3 | 3 | 1.333333333 | 2 | 1397 | 113.8 | 459.1 | -7.1 | 0.9105 |
| **40.82** | -4.46 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.9105 |
| **45.5** | 0.3 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.036543 |
| **40.82** | -4.46 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **43.46** | 10.69 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **50.49** | 7.37 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.9105 |
| **50.05** | 8.26 | 4 | 4 | 1.5 | 1.25 | 587.9 | 50.98 | 1035.225 | 14.025 | 1.06 |
| **43.36** | -5.11 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.968 |
| **51.69** | -1.39 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.968 |
| **52** | 5 | 4 | 4 | 2 | 0.75 | 97.16 | 14.98 | 1259.125 | 33.475 | 1.03 |
| **44.43** | 0.62 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.2955 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44.79** | -0.27 | 10 | 10 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.036986 |
| **51** | 11.25 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 1.2955 |
| **51.01** | 11.21 | 3 | 3 | 1.333333333 | 1.333333333 | 1397 | 113.8 | 1032.233333 | 9.633333333 | 1.2955 |
| **52.52** | 1.43 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.2955 |
| **50.09** | 8.17 | 3 | 3 | 1.333333333 | 0.666666667 | 1397 | 113.8 | 1605.366667 | 26.36666667 | 1.2955 |
| **-7.43** | 111.8 | 4 | 4 | 1 | 1.25 | 587.9 | 113.8 | 1241.175 | 7.125 | 1.2955 |
| **-7.39** | 111.5 | 2 | 2 | 1 | 1.5 | 222.4 | 113.8 | 1026.25 | 0.85 | 0.6 |
| **51** | 11.25 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.2955 |
| **51** | 11.25 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.2955 |
| **-6.86** | 107.4 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.47 |
| **48.55** | 17.93 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.0384 |
| **40.9** | 15.75 | 2 | 2 | 1.5 | 2 | 882.2 | 113.8 | 390.45 | -4.8 | 1.8055 |
| **31.42** | 35.12 | 4 | 4 | 1.5 | 0.75 | 587.9 | 50.98 | 1465.075 | 26.575 | 1.437741264 |
| **6** | 37 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.89 |
| **37.17** | -8.3 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.4535 |
| **47.6** | 19.02 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.4535 |
| **43.51** | 10.46 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **45.74** | 14.19 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.9105 |
| **42.94** | 12.91 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.968 |
| **41.2** | -2.2 | 4 | 4 | 2.25 | 1.25 | 97.16 | 14.98 | 726.3 | 24.375 | 1.272897653 |
| **73.36** | 141.3 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.04 |
| **37.22** | -4.12 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.2955 |
| **37.74** | -2.55 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.2955 |
| **41.37** | 1.96 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.2955 |
| **45.09** | 3.77 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.2955 |
| **52.2** | 0.13 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **-33.67** | 18.43 | 3 | 3 | 1.666666667 | 0.333333333 | 222.4 | 50.98 | 1754.633333 | 39.33333333 | 0.0685 |
| **50.35** | -4 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **50.8** | -3.19 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **50.82** | -0.13 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.21** | -2.65 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **54.45** | 89.47 | 11 | 11 | 2.545454545 | 1.818181818 | 97.16 | 14.98 | 116.1363636 | 14.19090909 | 0.04 |
| **51.37** | 1.04 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.48** | 0.33 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.49** | -0.31 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.51** | -0.13 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.55** | -4.19 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.74** | 0.47 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.75** | 1.26 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.79** | 0.98 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **51.87** | 1.29 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.04** | -0.64 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **48.59** | 7.63 | 10 | 10 | 2.2 | 1.4 | 274.4 | 14.98 | 617.94 | 19.92 | 0.0401 |
| **52.1** | -2 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.11** | 0.8 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.11** | -2.04 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.14** | -0.47 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.47** | -2.62 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.5** | 0.92 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.72** | 0.92 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.88** | -1.41 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.98** | -3.08 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **53.09** | -1.86 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **50.49** | 5.05 | 13 | 13 | 2.384615385 | 1.692307692 | 274.4 | 14.98 | 290.6 | 15.13076923 | 0.041569 |
| **53.26** | -1.2 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **53.8** | -1.55 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **53.91** | -2.07 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **54.1** | -0.17 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **54.57** | -1.31 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **52.71** | 0.98 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.12 |
| **33** | 35.6 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.3905 |
| **42.35** | -3.52 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **43.93** | 3.95 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **-1** | 33.08 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **44.81** | 1.22 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.0419 |
| **11** | 42.83 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **-4.03** | 33.83 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **0.06** | 29.5 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **15.2** | 36.18 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **15.2** | 36.18 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **15.2** | 36.18 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **24.45** | 32.94 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **-1.62** | 36.36 | 3 | 3 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.9105 |
| **0.45** | 35.9 | 4 | 4 | 2 | 0.5 | 97.16 | 14.98 | 1474.05 | 39.75 | 0.9105 |
| **-2.38** | 34.73 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.9105 |
| **45.47** | 11.57 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.042224 |
| **41.97** | 44.25 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.9105 |
| **40.3** | 23.3 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.13 |
| **37.73** | -2.38 | 3 | 3 | 1.666666667 | 0.333333333 | 222.4 | 50.98 | 1754.633333 | 39.33333333 | 1.13 |
| **40.53** | 23.43 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.2955 |
| **45.14** | 3.76 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.2955 |
| **47.5** | 18.8 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.32 |
| **37.91** | 21.72 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.6055 |
| **41.14** | 123.2 | 2 | 2 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.9105 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **5** | 36 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.89 |
| **5** | 36 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.89 |
| **43.28** | -3.95 | 8 | 8 | 2.25 | 1.375 | 97.16 | 14.98 | 618.8375 | 21.2375 | 0.042947 |
| **30.78** | 76.91 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.32 |
| **-27.62** | 24.63 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.0055 |
| **-27.62** | 24.63 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.0055 |
| **45.55** | 11.55 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0055 |
| **42.1** | 12.6 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.01 |
| **52** | 44 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.01 |
| **45.07** | 1.52 | 4 | 4 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.031109 |
| **28.32** | 109.7 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **42.16** | -2.75 | 10 | 10 | 2.3 | 1.8 | 542.6 | 14.98 | 232.87 | 11.26 | 0.043047 |
| **28.32** | 109.7 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.0685 |
| **27.43** | 101.5 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.3 |
| **23.06** | 102.8 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.3 |
| **26.6** | 100.6 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.3 |
| **22.77** | 111.6 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.396 |
| **41.02** | 28.96 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **45.77** | 13.66 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **51.4** | 11.32 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **23** | 111.7 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **44.89** | 4.84 | 13 | 13 | 2.230769231 | 1.692307692 | 274.4 | 14.98 | 353.9692308 | 13.00769231 | 0.0449 |
| **52.45** | 1.74 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **51.96** | 4.05 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **23.17** | 108.3 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **45.42** | 11.25 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **41.6** | 14.23 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **45.74** | 13.75 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **51.92** | 1.22 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **52.91** | 1.36 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.4535 |
| **16.35** | 101.8 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.88 |
| **20.25** | 105.2 | 3 | 3 | 1 | 0.333333333 | 587.9 | 113.8 | 2029.233333 | 30.13333333 | 0.88 |
| **41.54** | -1.68 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.045437 |
| **21.95** | 106.5 | 3 | 3 | 1 | 0.333333333 | 587.9 | 113.8 | 2029.233333 | 30.13333333 | 0.88 |
| **22** | 106.5 | 3 | 3 | 1 | 0.333333333 | 587.9 | 113.8 | 2029.233333 | 30.13333333 | 0.88 |
| **23.6** | 107.1 | 4 | 4 | 1.5 | 0.25 | 587.9 | 50.98 | 1894.925 | 39.125 | 0.88 |
| **27.03** | 106 | 3 | 3 | 1 | 0.333333333 | 587.9 | 113.8 | 2029.233333 | 30.13333333 | 0.88 |
| **28.13** | 106.8 | 3 | 3 | 1 | 0.333333333 | 587.9 | 113.8 | 2029.233333 | 30.13333333 | 0.88 |
| **21.98** | 106.5 | 2 | 2 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.88 |
| **0.33** | 34.48 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **0.41** | 35 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **1.66** | 31.66 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.89 |
| **33.56** | -7.55 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.89 |
| **47.97** | 20.47 | 10 | 10 | 2.6 | 1.8 | 97.16 | 14.98 | 109.3 | 15.4 | 0.05 |
| **22.91** | 94.1 | 2 | 2 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **20.62** | 105.3 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **10.67** | 40.43 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **10.85** | 40.41 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **-3.95** | 33.65 | 2 | 2 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **-4.38** | 33.67 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **-3.97** | 33.76 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **-3.97** | 33.71 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **-3.95** | 33.63 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **-3.92** | 33.61 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.905 |
| **53.26** | -1.2 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.0516 |
| **47.87** | 18.39 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **35.73** | 5.88 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **35.73** | 5.88 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.905 |
| **-5.49** | 120.9 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.9105 |
| **-27.66** | 24.53 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.9105 |
| **22.89** | 28.62 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.9105 |
| **42.37** | -3.61 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.9105 |
| **24.76** | 100.9 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.9105 |
| **26.01** | 115.3 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.9105 |
| **28.68** | 109.5 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.2955 |
| **51.84** | -2.66 | 3 | 3 | 2.666666667 | 1.333333333 | 97.16 | 14.98 | 483.0333333 | 28.03333333 | 0.051618994 |
| **21.83** | 104.8 | 4 | 4 | 1 | 0.25 | 587.9 | 113.8 | 2100.875 | 32.225 | 1.47 |
| **21.83** | 104.8 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.47 |
| **41.23** | 13.1 | 4 | 4 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.0542 |
| **42.02** | -0.4 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.05474 |
| **50.43** | 5 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.055162888 |
| **41.23** | 13.05 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.056344187 |
| **43.94** | 3.9 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0572 |
| **50.43** | 5 | 9 | 9 | 2.222222222 | 1.777777778 | 274.4 | 14.98 | 284.0111111 | 10.74444444 | 0.057787996 |
| **37.45** | -3.34 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.6855 |
| **44.42** | 28.52 | 9 | 9 | 2.555555556 | 1.777777778 | 97.16 | 14.98 | 146.7111111 | 15.34444444 | 0.058706783 |
| **47.2** | 38.9 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.809356209 |
| **32.4** | 51.55 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **44.75** | 23.91 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 1.381642722 |
| **-33.38** | 18.83 | 1 | 1 | 3 | 3 | 97.16 | 14.98 | -1087.1 | -9.2 | 0.0055 |
| **-26.62** | 24.87 | 1 | 1 | 3 | 3 | 97.16 | 14.98 | -1087.1 | -9.2 | 0.0055 |
| **51.09** | 4.07 | 10 | 10 | 2.2 | 1.6 | 274.4 | 14.98 | 446 | 14.9 | 0.058969294 |
| **22.83** | 77.97 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **22.84** | 77.87 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **22.85** | 77.86 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **41.22** | 13.51 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.059100549 |
| **23.01** | 79.12 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **23.01** | 79.12 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **23.01** | 79.11 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **23.03** | 79.02 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **45.73** | 13.67 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.059231805 |
| **39.68** | 115.9 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.3 |
| **31.4** | 100.6 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.3 |
| **50.18** | 14.58 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4535 |
| **51.28** | 2.75 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.059494315 |
| **-1.63** | 36.36 | 1 | 1 | 3 | 3 | 97.16 | 14.98 | -1087.1 | -9.2 | 0.9105 |
| **44.69** | 23.85 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.2955 |
| **-3.5** | 35 | 1 | 1 | 2 | 1 | 882.2 | 113.8 | 1044.2 | 27.2 | 0.12 |
| **49.4** | 16.8 | 2 | 2 | 2 | 0.5 | 97.16 | 14.98 | 1474.05 | 39.75 | 0.331192919 |
| **50.98** | 11.38 | 2 | 2 | 2 | 0.5 | 97.16 | 14.98 | 1474.05 | 39.75 | 0.7 |
| **51.29** | -2.88 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.059494315 |
| **42.31** | 78.75 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.88 |
| **41.2** | 24.33 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.89 |
| **42.33** | -3.5 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.89 |
| **47.13** | 4.94 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.89 |
| **49.33** | 8.5 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.89 |
| **54.3** | 27 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.61 |
| **40.8** | 44.8 | 2 | 2 | 2 | 0.5 | 97.16 | 14.98 | 1474.05 | 39.75 | 1.77 |
| **38.3** | 21.15 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.85 |
| **-8.1** | 112.7 | 2 | 2 | 1 | 0.5 | 222.4 | 113.8 | 1885.95 | 25.95 | 0.01 |
| **71.25** | 179.7 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **48.55** | 10.15 | 8 | 8 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 0.059756826 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **52.5** | 31 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.0234 |
| **54.58** | 86.37 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.03 |
| **70.43** | 144 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.03 |
| **55.97** | 92.82 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.06 |
| **49.5** | 11.58 | 1 | 1 | 2 | 1 | 882.2 | 113.8 | 1044.2 | 27.2 | 0.09 |
| **51** | 11.33 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.13 |
| **54.2** | 30.35 | 1 | 1 | 2 | 1 | 882.2 | 113.8 | 1044.2 | 27.2 | 0.18 |
| **55.05** | 49 | 2 | 2 | 2.5 | 0.5 | 97.16 | 14.98 | 1268.1 | 46.65 | 0.27 |
| **42.33** | -3.5 | 1 | 1 | 2 | 1 | 882.2 | 113.8 | 1044.2 | 27.2 | 0.3 |
| **59.8** | 109 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4 |
| **42.5** | 12 | 7 | 7 | 1.571428571 | 1.285714286 | 799.4 | 50.98 | 975.1 | 14.11428571 | 0.06 |
| **67.5** | 161 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4 |
| **68** | 160 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.45 |
| **70** | 133 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.45 |
| **33.58** | -7.58 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4535 |
| **6** | 37 | 2 | 2 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.89 |
| **34.28** | -6.65 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.89 |
| **0.38** | 35 | 2 | 2 | 2 | 0.5 | 97.16 | 14.98 | 1474.05 | 39.75 | 0.89 |
| **42.33** | -3.5 | 1 | 1 | 2 | 1 | 882.2 | 113.8 | 1044.2 | 27.2 | 0.89 |
| **51** | 11 | 2 | 2 | 2 | 1 | 882.2 | 113.8 | 1044.2 | 27.2 | 0.89 |
| **-3.04** | 35.23 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **48.8** | 9.22 | 11 | 11 | 2.454545455 | 1.818181818 | 97.16 | 14.98 | 153.5818182 | 12.93636364 | 0.060150592 |
| **-3.04** | 35.24 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **-3.03** | 32.27 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **-3.03** | 34.21 | 2 | 2 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.9105 |
| **-3.03** | 34.21 | 2 | 2 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.9105 |
| **4.2** | 35.68 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **22.86** | 28.52 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **22.89** | 28.64 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **4.18** | 35.68 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.9105 |
| **5.35** | 35.89 | 2 | 2 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 1.2955 |
| **5.2** | 37.41 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.3005 |
| **50.43** | 5 | 11 | 11 | 2.363636364 | 1.636363636 | 542.6 | 14.98 | 347.3363636 | 16.24545455 | 0.060150592 |
| **-7.36** | 111.4 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.47 |
| **22.93** | 94.1 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.71 |
| **4.22** | 36.06 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 1.8055 |
| **45.72** | 13.7 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.060544358 |
| **19.75** | 103.2 | 2 | 2 | 1 | 0.5 | 222.4 | 113.8 | 1885.95 | 25.95 | 0.88 |
| **45.32** | 11.33 | 8 | 8 | 2 | 1.75 | 565.9 | 50.98 | 399.425 | 8.375 | 0.060544358 |
| **25.18** | 102.5 | 1 | 1 | 1 | 1 | 222.4 | 113.8 | 1456.1 | 13.4 | 0.88 |
| **-7.16** | 111.3 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.3 |
| **46.58** | 4.81 | 7 | 7 | 2 | 1.428571429 | 274.4 | 14.98 | 675.7571429 | 16.44285714 | 0.060675614 |
| **54.35** | 86.21 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.36 |
| **47.2** | 34.3 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.52 |
| **45.18** | 3.8 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.13 |
| **41** | 46.4 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.38 |
| **43.3** | 45.7 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.38 |
| **46.86** | 36.7 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.49 |
| **59.13** | 37.9 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0 |
| **45.71** | 13.71 | 7 | 7 | 2.142857143 | 2 | 97.16 | 14.98 | 125.6571429 | 4.071428571 | 0.060806869 |
| **71.25** | 179.7 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0 |
| **47.5** | 7.1 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **49** | 5 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **58.58** | 26.28 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **59.1** | 37.85 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **65** | 66.5 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **70** | 68.3 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **71** | 68.5 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **71.5** | 54 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **73.6** | 101.1 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **43.93** | 10.33 | 5 | 5 | 2.2 | 1.6 | 97.16 | 14.98 | 446 | 14.9 | 0.060938124 |
| **75** | 100 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.01 |
| **54** | -7.5 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.02 |
| **52.5** | 86.7 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.02 |
| **68** | 125 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.02 |
| **63.7** | 125 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.04 |
| **53.6** | 76 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.12 |
| **41.01** | -3.01 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.0611 |
| **25.18** | 102.5 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.88 |
| **23.09** | 120.3 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.2955 |
| **30.36** | 77.05 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.2955 |
| **47.34** | 0.43 | 9 | 9 | 2.333333333 | 1.777777778 | 97.16 | 14.98 | 238.2444444 | 12.27777778 | 0.061200635 |
| **52.31** | 1.54 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.89 |
| **44.42** | 28.52 | 8 | 8 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 0.061331891 |
| **39.36** | -9.37 | 3 | 3 | 2.333333333 | 1.666666667 | 882.2 | 50.98 | 333.7666667 | 15.06666667 | 0.061331891 |
| **40.22** | 18.22 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.061331891 |
| **41.77** | 15.65 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.061331891 |
| **45.27** | 11 | 10 | 10 | 2.2 | 1.8 | 274.4 | 14.98 | 274.06 | 9.88 | 0.061331891 |
| **45.61** | 10.95 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.061331891 |
| **44.08** | 1.51 | 12 | 12 | 2.166666667 | 1.666666667 | 274.4 | 14.98 | 402.4166667 | 12.76666667 | 0.061331891 |
| **41.4** | 24.2 | 10 | 10 | 2 | 1.6 | 565.9 | 50.98 | 528.38 | 12.14 | 0.061463146 |
| **50.9** | 1.9 | 10 | 10 | 2 | 1.6 | 565.9 | 50.98 | 528.38 | 12.14 | 0.061463146 |
| **43.28** | -3.95 | 7 | 7 | 2.428571429 | 1.857142857 | 97.16 | 14.98 | 130.7857143 | 11.6 | 0.061594401 |
| **45.73** | 13.73 | 7 | 7 | 2 | 1.714285714 | 274.4 | 14.98 | 430.1285714 | 9.271428571 | 0.061594401 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44.01** | 0.5 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0617 |
| **47.02** | 47.44 | 10 | 10 | 2.7 | 1.7 | 97.16 | 14.98 | 154.08 | 19.29 | 0.061856912 |
| **41.93** | 12.5 | 6 | 6 | 2 | 1.166666667 | 882.2 | 50.98 | 900.9166667 | 23.01666667 | 0.061856912 |
| **45.63** | 0.15 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.061988167 |
| **45.73** | 13.73 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.061988167 |
| **48.79** | 9.18 | 7 | 7 | 2.142857143 | 1.142857143 | 97.16 | 14.98 | 862.5428571 | 25.58571429 | 0.061988167 |
| **44.81** | 1.22 | 8 | 8 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.062 |
| **40.11** | 18.3 | 9 | 9 | 2.111111111 | 1.666666667 | 274.4 | 14.98 | 425.3 | 12 | 0.062250678 |
| **40.87** | -3.33 | 6 | 6 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.062250678 |
| **41.78** | 12.4 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.062250678 |
| **41.92** | 12.2 | 7 | 7 | 2.285714286 | 1.285714286 | 97.16 | 14.98 | 680.8857143 | 23.97142857 | 0.062250678 |
| **45.28** | 11.36 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.062250678 |
| **49.3** | 1.03 | 4 | 4 | 2.5 | 1.25 | 97.16 | 14.98 | 623.325 | 27.825 | 0.062250678 |
| **45.84** | 15.87 | 5 | 5 | 1.8 | 2 | 882.2 | 50.98 | 266.88 | -0.66 | 0.0625 |
| **25.11** | 99.15 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 0.3 |
| **30.65** | 110.1 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.47 |
| **30.65** | 110.1 | 1 | 1 | 1 | 0 | 222.4 | 113.8 | 2315.8 | 38.5 | 1.47 |
| **0.65** | 36.2 | 1 | 2 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.3 |
| **40.2** | 114.7 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.1 |
| **41.92** | 12.5 | 6 | 6 | 2.333333333 | 1.5 | 97.16 | 14.98 | 477.05 | 19.25 | 0.062513189 |
| **3.942** | 36.25 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.56 |
| **4.292** | 36.29 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.3 |
| **4.1333** | 36.38 | 3 | 7 | 2.333333333 | 1.142857143 | 97.16 | 14.98 | 784.0857143 | 28.21428571 | 1.56 |
| **4.308** | 36.22 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.56 |
| **4.275** | 36.24 | 3 | 4 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.56 |
| **41.15** | -2.5 | 6 | 6 | 2.333333333 | 1.5 | 97.16 | 14.98 | 477.05 | 19.25 | 0.062906955 |
| **4.267** | 36.29 | 1 | 2 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.56 |
| **4.2586** | 36.28 | 2 | 2 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.56 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **4.2419** | 36.28 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.56 |
| **35.38** | 1.2 | 4 | 5 | 3 | 1.2 | 97.16 | 14.98 | 460.36 | 35.98 | 1.2 |
| **5.25** | 37.5 | 1 | 1 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 0.87 |
| **30.65** | 110.1 | 7 | 8 | 1.428571429 | 1.125 | 799.4 | 50.98 | 1172.108929 | 16.17678571 | 1.5 |
| **30.65** | 110.1 | 3 | 4 | 1.333333333 | 1.25 | 1397 | 113.8 | 1103.875 | 11.725 | 1.5 |
| **30.4** | 109.1 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.1 |
| **-7.46** | 112.4 | 1 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 1.47 |
| **42.22** | 12.73 | 8 | 8 | 2.25 | 1.375 | 97.16 | 14.98 | 618.8375 | 21.2375 | 0.062906955 |
| **-2.987** | 35.35 | 28 | 30 | 2.535714286 | 1.566666667 | 542.6 | 14.98 | 336.3759524 | 20.36952381 | 1.9 |
| **-2.996** | 35.35 | 29 | 34 | 2.620689655 | 1.441176471 | 542.6 | 14.98 | 409.2585193 | 24.69198783 | 1.7 |
| **-1.569** | 36.44 | 2 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 1.2 |
| **-1.575** | 36.43 | 1 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.9 |
| **31.09** | 118.1 | 5 | 6 | 1.6 | 1.666666667 | 799.4 | 50.98 | 635.8266667 | 4.946666667 | 1.6845 |
| **43.79** | 7.37 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.2955 |
| **4.667** | 35.75 | 1 | 3 | 3 | 0 | 97.16 | 14.98 | 1492 | 66.1 | 1.2935 |
| **55** | 3 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.063 |
| **4.4083** | 35.83 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 1.57 |
| **40.2** | 114.7 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.5 |
| **34.7** | 110.7 | 5 | 6 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 1.27 |
| **24.87** | 100.9 | 4 | 6 | 1.5 | 1.833333333 | 587.9 | 50.98 | 533.7333333 | -0.616666667 | 1.7 |
| **39.68** | 115.9 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.35 |
| **30.357** | 109.1 | 5 | 6 | 1.6 | 1.666666667 | 799.4 | 50.98 | 635.8266667 | 4.946666667 | 1.6 |
| **-14.42** | 28.55 | 13 | 13 | 2.538461538 | 1.692307692 | 97.16 | 14.98 | 227.2307692 | 17.25384615 | 0.6 |
| **49.333** | 8.5 | 10 | 10 | 1.8 | 1.2 | 565.9 | 50.98 | 954.64 | 19.42 | 0.5 |
| **40.667** | 23 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.3 |
| **-33.17** | 19.33 | 20 | 21 | 2.55 | 1.619047619 | 542.6 | 14.98 | 285.4597619 | 19.25190476 | 0.6 |
| **36.22** | -5.5 | 5 | 5 | 2.4 | 1.2 | 97.16 | 14.98 | 707.5 | 27.7 | 0.06303821 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **33.567** | -7.55 | 5 | 9 | 3 | 1.111111111 | 97.16 | 14.98 | 536.7777778 | 38.21111111 | 0.5 |
| **33.56** | -7.55 | 4 | 5 | 3 | 1.6 | 97.16 | 14.98 | 116.48 | 25.94 | 0.89 |
| **33.56** | -7.55 | 4 | 5 | 3 | 1.6 | 97.16 | 14.98 | 116.48 | 25.94 | 0.89 |
| **31.083** | -8 | 11 | 14 | 2.636363636 | 1.571428571 | 97.16 | 14.98 | 290.8246753 | 21.63896104 | 0.6 |
| **22.821** | 77.85 | 15 | 19 | 2.533333333 | 1.052631579 | 542.6 | 14.98 | 779.2726316 | 33.23894737 | 0.25 |
| **39.619** | 46.99 | 17 | 17 | 2.411764706 | 1.411764706 | 274.4 | 14.98 | 520.6 | 22.54705882 | 0.3 |
| **44.334** | 4.413 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.308 |
| **43.694** | 7.289 | 7 | 7 | 2.285714286 | 1.857142857 | 97.16 | 14.98 | 189.6285714 | 9.628571429 | 0.19 |
| **50.85** | 0.717 | 7 | 7 | 1.571428571 | 1.571428571 | 799.4 | 50.98 | 729.4714286 | 6.942857143 | 0.5 |
| **42.839** | 2.755 | 8 | 8 | 2.5 | 1.875 | 97.16 | 14.98 | 86.0125 | 12.1375 | 0.4 |
| **41.98** | 12.1 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.06303821 |
| **47.683** | 18.33 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.35 |
| **51.281** | 11.07 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.35 |
| **32.85** | 35.5 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.35 |
| **51** | 11.25 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 1.2955 |
| **51** | 11.25 | 10 | 10 | 2 | 1.4 | 565.9 | 50.98 | 700.32 | 17.16 | 1.2955 |
| **51.446** | 0.299 | 12 | 12 | 2.083333333 | 1.416666667 | 565.9 | 50.98 | 651.6666667 | 17.89166667 | 0.35 |
| **0.7833** | 36.08 | 2 | 2 | 1.5 | 1 | 882.2 | 113.8 | 1250.15 | 20.3 | 0.5 |
| **40.578** | 122.4 | 7 | 7 | 2.285714286 | 1.285714286 | 97.16 | 14.98 | 680.8857143 | 23.97142857 | 0.237 |
| **32.84** | 110.6 | 9 | 10 | 1.777777778 | 1.2 | 565.9 | 50.98 | 963.7933333 | 19.11333333 | 0.5 |
| **43.217** | 0.6 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.4 |
| **45.91** | 3.05 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.063300721 |
| **10.625** | 40.54 | 6 | 6 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.6 |
| **34.866** | 109.7 | 3 | 4 | 2.666666667 | 1.25 | 97.16 | 14.98 | 554.675 | 30.125 | 0.27 |
| **50.95** | 11.38 | 11 | 11 | 2.181818182 | 1.545454545 | 274.4 | 14.98 | 500.3818182 | 16.01818182 | 0.116 |
| **45.583** | 10.9 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.042 |
| **44.883** | 4.848 | 11 | 11 | 2.272727273 | 1.727272727 | 274.4 | 14.98 | 306.6272727 | 12.70909091 | 0.1 |
| **41.95** | 12.53 | 7 | 7 | 2.571428571 | 1.571428571 | 97.16 | 14.98 | 317.5714286 | 20.74285714 | 0.12 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **46.167** | 15.87 | 9 | 9 | 1.777777778 | 1.666666667 | 565.9 | 50.98 | 562.6 | 7.4 | 0.13 |
| **45.67** | 0.447 | 11 | 11 | 2.090909091 | 1.636363636 | 274.4 | 14.98 | 459.6727273 | 12.48181818 | 0.135 |
| **45.5** | 0.283 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.065 |
| **44.95** | 0.933 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.055 |
| **42** | 12.62 | 9 | 9 | 2.111111111 | 1.222222222 | 274.4 | 14.98 | 807.3888889 | 23.15555556 | 0.063431976 |
| **41.233** | 13.08 | 7 | 7 | 2.142857143 | 1.285714286 | 97.16 | 14.98 | 739.7285714 | 22 | 0.052 |
| **44.983** | 1.717 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.05 |
| **49.417** | 16.67 | 6 | 6 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.045 |
| **50.473** | 4.681 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.036 |
| **45.749** | 0.503 | 10 | 10 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.036 |
| **36.833** | 44.22 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.06 |
| **32.867** | 35.5 | 7 | 7 | 1.857142857 | 1.714285714 | 565.9 | 50.98 | 488.9714286 | 7.3 | 0.06 |
| **44.858** | 1.254 | 10 | 10 | 2.2 | 1.8 | 274.4 | 14.98 | 274.06 | 9.88 | 0.103 |
| **36.951** | -4.13 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.035 |
| **40.156** | 17.96 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.031 |
| **44** | 10.16 | 9 | 9 | 1.888888889 | 1.222222222 | 565.9 | 50.98 | 898.9222222 | 20.08888889 | 0.063431976 |
| **41.667** | 13.62 | 6 | 6 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.034 |
| **44.983** | 1.06 | 8 | 8 | 2.375 | 1.75 | 97.16 | 14.98 | 244.9625 | 13.55 | 0.055 |
| **36.783** | 22.58 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.038 |
| **46.283** | 16.1 | 7 | 7 | 2.142857143 | 2 | 97.16 | 14.98 | 125.6571429 | 4.071428571 | 0.031 |
| **44.8** | 1.217 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.034 |
| **44.983** | 5.317 | 9 | 9 | 2 | 1.666666667 | 565.9 | 50.98 | 471.0666667 | 10.46666667 | 0.169 |
| **42.1** | 2.75 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.066 |
| **32.574** | 34.97 | 5 | 5 | 1.8 | 2 | 882.2 | 50.98 | 266.88 | -0.66 | 0.06 |
| **42.542** | -0.09 | 7 | 7 | 2.142857143 | 1.571428571 | 97.16 | 14.98 | 494.1 | 14.82857143 | 0.073 |
| **45.667** | 0.483 | 4 | 4 | 2.25 | 1.25 | 97.16 | 14.98 | 726.3 | 24.375 | 0.15 |
| **41.92** | 12.2 | 9 | 9 | 1.888888889 | 1.222222222 | 565.9 | 50.98 | 898.9222222 | 20.08888889 | 0.063563232 |
| **45.741** | 0.433 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.057 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **37.8** | -0.9 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.034 |
| **38.139** | 15.66 | 4 | 4 | 2.5 | 1.25 | 97.16 | 14.98 | 623.325 | 27.825 | 0.04 |
| **44.906** | 0.979 | 8 | 8 | 2.125 | 1.75 | 274.4 | 14.98 | 347.9375 | 10.1 | 0.065 |
| **47.583** | 3.75 | 5 | 5 | 2 | 1.2 | 882.2 | 14.98 | 872.26 | 22.18 | 0.034 |
| **45.517** | 23.12 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.04 |
| **48.549** | 10.17 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.032 |
| **49.505** | 11.54 | 6 | 6 | 1.666666667 | 1.833333333 | 565.9 | 50.98 | 465.0833333 | 1.683333333 | 0.076 |
| **49.583** | 18.17 | 6 | 6 | 2.833333333 | 1.666666667 | 97.16 | 14.98 | 127.8166667 | 21.96666667 | 0.039 |
| **38.445** | -9.1 | 6 | 6 | 2.666666667 | 1.5 | 97.16 | 14.98 | 339.75 | 23.85 | 0.03 |
| **41.9** | 12.25 | 4 | 4 | 2.75 | 1.5 | 97.16 | 14.98 | 305.425 | 25 | 0.063825742 |
| **36.146** | -5.34 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.05 |
| **41.88** | 12.18 | 9 | 9 | 1.888888889 | 1.222222222 | 565.9 | 50.98 | 898.9222222 | 20.08888889 | 0.063956998 |
| **44.87** | 1.25 | 8 | 8 | 2 | 1.625 | 565.9 | 50.98 | 506.8875 | 11.5125 | 0.063956998 |
| **51.3** | 11.07 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.064219509 |
| **37.57** | -2.91 | 11 | 11 | 2.454545455 | 1.363636364 | 97.16 | 14.98 | 544.3545455 | 24.34545455 | 0.065138296 |
| **42.8** | 2.75 | 7 | 7 | 2.142857143 | 1.857142857 | 97.16 | 14.98 | 248.4714286 | 7.657142857 | 0.065663318 |
| **43.33** | 2.71 | 4 | 4 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.068 |
| **51.96** | 4.05 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.0685 |
| **45.55** | 11.55 | 6 | 6 | 2 | 1.666666667 | 542.6 | 14.98 | 471.0666667 | 10.46666667 | 0.0685 |
| **40.91** | 14.37 | 7 | 7 | 2.142857143 | 0.714285714 | 97.16 | 14.98 | 1230.985714 | 36.34285714 | 0.070519766 |
| **40.1** | 18.43 | 9 | 9 | 1.888888889 | 1.222222222 | 565.9 | 50.98 | 898.9222222 | 20.08888889 | 0.071044787 |
| **43.99** | 3.26 | 8 | 8 | 2.25 | 1.625 | 97.16 | 14.98 | 403.9125 | 14.9625 | 0.0735 |
| **37.4** | 22.13 | 10 | 10 | 2.2 | 1.2 | 882.2 | 14.98 | 789.88 | 24.94 | 0.074457427 |
| **45.83** | 18.43 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.0749 |
| **45** | 34.6 | 10 | 10 | 2.6 | 1.8 | 97.16 | 14.98 | 109.3 | 15.4 | 0.0755 |
| **43.66** | 4.07 | 8 | 8 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.075901236 |
| **44.87** | 1.25 | 8 | 8 | 2 | 1.625 | 565.9 | 50.98 | 506.8875 | 11.5125 | 0.079 |
| **39.38** | 22.25 | 7 | 7 | 2.428571429 | 1.571428571 | 97.16 | 14.98 | 376.4142857 | 18.77142857 | 0.08088894 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44.15** | 8.3 | 6 | 6 | 2 | 1.166666667 | 882.2 | 50.98 | 900.9166667 | 23.01666667 | 0.08088894 |
| **44.3** | 4.43 | 9 | 9 | 2.333333333 | 1.444444444 | 97.16 | 14.98 | 524.8111111 | 20.64444444 | 0.081151451 |
| **41.93** | 12.52 | 5 | 5 | 2.4 | 1.4 | 97.16 | 14.98 | 535.56 | 22.68 | 0.820644171 |
| **41.58** | 12.65 | 12 | 12 | 2.083333333 | 1.333333333 | 274.4 | 14.98 | 723.3083333 | 19.98333333 | 0.083514047 |
| **45.77** | 13.63 | 7 | 7 | 2 | 1.857142857 | 274.4 | 14.98 | 307.3142857 | 5.685714286 | 0.083645302 |
| **43.2** | 11.53 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.084170324 |
| **40.95** | 15.82 | 6 | 6 | 2.166666667 | 1.333333333 | 97.16 | 14.98 | 688.9833333 | 21.13333333 | 0.084432835 |
| **47.15** | -0.3 | 5 | 5 | 2.2 | 1.8 | 882.2 | 14.98 | 274.06 | 9.88 | 0.087451708 |
| **44.97** | 34.42 | 9 | 9 | 2.333333333 | 1.555555556 | 97.16 | 14.98 | 429.2888889 | 17.85555556 | 0.097 |
| **44** | 41 | 5 | 5 | 2.4 | 1.8 | 97.16 | 14.98 | 191.68 | 12.64 | 0.101233521 |
| **48.13** | 16.93 | 6 | 6 | 1.833333333 | 1.5 | 565.9 | 50.98 | 683 | 12.35 | 0.102939841 |
| **50.47** | 5.6 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.106877502 |
| **42.33** | 12.73 | 7 | 7 | 2 | 1.857142857 | 882.2 | 50.98 | 307.3142857 | 5.685714286 | 0.107402523 |
| **47** | 39.01 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 1.1 |
| **49.01** | 8.44 | 8 | 8 | 2.25 | 1.25 | 97.16 | 14.98 | 726.3 | 24.375 | 0.12 |
| **49.85** | 8.4 | 8 | 8 | 2.25 | 1.125 | 97.16 | 14.98 | 833.7625 | 27.5125 | 0.12 |
| **51.45** | 0.18 | 9 | 9 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.12 |
| **52.12** | 0.03 | 8 | 8 | 2.125 | 1.375 | 882.2 | 50.98 | 670.325 | 19.5125 | 0.12 |
| **45.84** | 15.87 | 7 | 7 | 1.714285714 | 1.571428571 | 565.9 | 50.98 | 670.6285714 | 8.914285714 | 0.12 |
| **48.75** | 9.23 | 8 | 8 | 2.125 | 1.375 | 882.2 | 50.98 | 670.325 | 19.5125 | 0.12 |
| **51.33** | 11.87 | 5 | 5 | 2.2 | 1.4 | 882.2 | 14.98 | 617.94 | 19.92 | 0.12 |
| **51.5** | -0.17 | 5 | 5 | 2 | 1.2 | 882.2 | 14.98 | 872.26 | 22.18 | 0.12 |
| **52.87** | 9.39 | 8 | 8 | 2.125 | 1.625 | 882.2 | 50.98 | 455.4 | 13.2375 | 0.12 |
| **49.38** | 8.5 | 11 | 11 | 1.909090909 | 1.272727273 | 565.9 | 50.98 | 847.1818182 | 19.1 | 0.12 |
| **41.78** | 15.45 | 7 | 7 | 2.142857143 | 1.285714286 | 97.16 | 14.98 | 739.7285714 | 22 | 1.163785069 |
| **49.7** | 8.46 | 12 | 12 | 2.083333333 | 1.25 | 274.4 | 14.98 | 794.95 | 22.075 | 0.12 |
| **49.75** | 8.43 | 12 | 12 | 2 | 1.5 | 565.9 | 50.98 | 614.35 | 14.65 | 0.12 |
| **49.82** | 8.53 | 11 | 11 | 2 | 1.363636364 | 565.9 | 50.98 | 731.5818182 | 18.07272727 | 0.12 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **49.87** | 8.51 | 10 | 10 | 2.1 | 1.5 | 565.9 | 14.98 | 573.16 | 16.03 | 0.12 |
| **50.95** | 11.37 | 16 | 16 | 2.125 | 1.5 | 274.4 | 14.98 | 562.8625 | 16.375 | 0.12 |
| **51.43** | 12.18 | 9 | 9 | 2 | 1.444444444 | 565.9 | 50.98 | 662.1111111 | 16.04444444 | 0.12 |
| **46** | 11 | 6 | 6 | 1.666666667 | 1.5 | 565.9 | 50.98 | 751.65 | 10.05 | 0.12 |
| **46.1** | 11.5 | 12 | 12 | 2.083333333 | 1.25 | 274.4 | 14.98 | 794.95 | 22.075 | 0.125121997 |
| **49.33** | 8.81 | 10 | 10 | 1.8 | 1.2 | 565.9 | 50.98 | 954.64 | 19.42 | 0.125778274 |
| **50.99** | 4.39 | 8 | 8 | 2 | 1.5 | 565.9 | 50.98 | 614.35 | 14.65 | 0.1262 |
| **44.49** | 39.12 | 6 | 6 | 1.833333333 | 1.166666667 | 565.9 | 50.98 | 969.5666667 | 20.71666667 | 1.479926738 |
| **39.37** | 23 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.131816021 |
| **44.8** | 1.2 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.137853768 |
| **45.81** | 18.38 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.150191772 |
| **38.96** | -0.47 | 10 | 10 | 2.3 | 1.4 | 97.16 | 14.98 | 576.75 | 21.3 | 0.1575 |
| **43.6** | 0.6 | 5 | 5 | 1.8 | 1.8 | 882.2 | 50.98 | 438.82 | 4.36 | 0.160692201 |
| **54** | 48.5 | 14 | 14 | 2.214285714 | 1.642857143 | 274.4 | 14.98 | 403.2714286 | 14.02142857 | 0.1785 |
| **40.95** | 15.82 | 7 | 7 | 2.571428571 | 1.571428571 | 97.16 | 14.98 | 317.5714286 | 20.74285714 | 0.178805441 |
| **49.85** | 9.97 | 8 | 8 | 2.375 | 1.375 | 97.16 | 14.98 | 567.35 | 22.9625 | 0.17998674 |
| **46** | 129 | 4 | 4 | 2 | 1.25 | 882.2 | 50.98 | 829.275 | 20.925 | 0.19 |
| **49.82** | 9.95 | 8 | 8 | 2 | 1.625 | 542.6 | 14.98 | 506.8875 | 11.5125 | 0.196524915 |
| **44.04** | 6.01 | 3 | 3 | 2.333333333 | 1.666666667 | 882.2 | 50.98 | 333.7666667 | 15.06666667 | 0.199150023 |
| **40.55** | 14.23 | 5 | 5 | 2.2 | 1 | 882.2 | 14.98 | 961.82 | 29.96 | 0.21 |
| **44** | 43 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.21 |
| **48.9** | 16.65 | 6 | 6 | 2.666666667 | 1.5 | 97.16 | 14.98 | 339.75 | 23.85 | 0.21621322 |
| **45.11** | 3.88 | 11 | 11 | 2.363636364 | 1.545454545 | 97.16 | 14.98 | 425.4909091 | 18.52727273 | 0.226188628 |
| **48.05** | 46.05 | 11 | 11 | 2.363636364 | 1.909090909 | 97.16 | 14.98 | 112.8727273 | 9.4 | 0.2435 |
| **42.33** | -3.5 | 6 | 6 | 2.333333333 | 1.833333333 | 97.16 | 14.98 | 190.4833333 | 10.88333333 | 0.2465 |
| **44** | 11 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.26 |
| **44.17** | 11.09 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.26 |
| **49.29** | 8.57 | 10 | 10 | 2.2 | 1 | 882.2 | 14.98 | 961.82 | 29.96 | 0.27 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **50** | 1.88 | 13 | 13 | 2.230769231 | 1.461538462 | 274.4 | 14.98 | 552.3615385 | 18.8 | 0.270027919 |
| **32.91** | 101.7 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.3 |
| **40.1** | 114 | 6 | 6 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.3 |
| **42** | 130 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.3 |
| **44.72** | 123.7 | 5 | 5 | 3 | 1.6 | 97.16 | 14.98 | 116.48 | 25.94 | 0.3 |
| **24.18** | 109.4 | 5 | 5 | 1 | 1 | 799.4 | 113.8 | 1456.1 | 13.4 | 0.3 |
| **44** | 41.2 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.32 |
| **44** | 41 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.338 |
| **51.39** | 84.67 | 11 | 11 | 2.363636364 | 1.818181818 | 542.6 | 14.98 | 191.0272727 | 11.68181818 | 0.36 |
| **43.7** | 7.2 | 6 | 6 | 2.333333333 | 1.166666667 | 97.16 | 14.98 | 763.6166667 | 27.61666667 | 0.38 |
| **49.74** | 84.27 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.396 |
| **45.45** | 11 | 5 | 5 | 2.2 | 2 | 97.16 | 14.98 | 102.12 | 4.86 | 0.396 |
| **45.73** | 13.73 | 3 | 3 | 1.666666667 | 2 | 222.4 | 50.98 | 321.8 | -2.5 | 0.396 |
| **38.97** | -3.93 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.400101985 |
| **44** | 41 | 4 | 4 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.406 |
| **44** | 41.2 | 4 | 4 | 1.75 | 1.75 | 882.2 | 50.98 | 502.4 | 4.925 | 0.41 |
| **44.35** | 11.7 | 6 | 6 | 2.333333333 | 1.5 | 97.16 | 14.98 | 477.05 | 19.25 | 0.444991319 |
| **35.15** | 38.82 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.4535 |
| **41.17** | -2.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.4535 |
| **41.17** | -2.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.4535 |
| **41.17** | -2.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.4535 |
| **41.17** | -2.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.4535 |
| **41.85** | 12.2 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.4535 |
| **41.88** | 12.3 | 4 | 4 | 1.75 | 1 | 882.2 | 50.98 | 1147.175 | 23.75 | 0.4535 |
| **45.74** | 13.75 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.4535 |
| **46.02** | 11.1 | 4 | 4 | 1.5 | 1 | 587.9 | 50.98 | 1250.15 | 20.3 | 0.4535 |
| **41.73** | 13.2 | 8 | 8 | 1.875 | 1.125 | 565.9 | 50.98 | 988.225 | 22.3375 | 0.458 |
| **50.05** | 8.26 | 6 | 6 | 2.166666667 | 1.166666667 | 97.16 | 14.98 | 832.2666667 | 25.31666667 | 0.46 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **46.83** | 29.6 | 8 | 8 | 2.125 | 1.5 | 882.2 | 50.98 | 562.8625 | 16.375 | 0.421 |
| **46.96** | 22.03 | 5 | 5 | 1.8 | 1.8 | 799.4 | 14.98 | 438.82 | 4.36 | 0.520331898 |
| **46.96** | 22.03 | 5 | 5 | 2.2 | 1.4 | 97.16 | 14.98 | 617.94 | 19.92 | 0.520331898 |
| **44** | 41 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.583 |
| **32.67** | 35.57 | 9 | 9 | 2.333333333 | 1.222222222 | 97.16 | 14.98 | 715.8555556 | 26.22222222 | 0.3 |
| **62.5** | 132.5 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.6 |
| **41.6** | 14.23 | 10 | 10 | 1.9 | 1.5 | 565.9 | 50.98 | 655.54 | 13.27 | 0.605 |
| **48.45** | 1.5 | 7 | 7 | 2.142857143 | 1.571428571 | 97.16 | 14.98 | 494.1 | 14.82857143 | 0.81867534 |
| **45.66** | 3.9 | 5 | 5 | 2.4 | 1.4 | 97.16 | 14.98 | 535.56 | 22.68 | 0.875771424 |
| **38.29** | 69.89 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.88 |
| **34.2** | 109.5 | 4 | 4 | 1.5 | 1.25 | 587.9 | 50.98 | 1035.225 | 14.025 | 0.88 |
| **19.36** | 98.96 | 4 | 4 | 1.25 | 1.5 | 587.9 | 113.8 | 923.275 | 4.3 | 0.88 |
| **24.31** | 109.4 | 5 | 5 | 1 | 1 | 799.4 | 113.8 | 1456.1 | 13.4 | 0.88 |
| **25.62** | 104.7 | 4 | 4 | 1 | 0.75 | 587.9 | 113.8 | 1671.025 | 19.675 | 0.88 |
| **30.81** | 108.4 | 6 | 6 | 1 | 1.166666667 | 799.4 | 206.2 | 1312.816667 | 9.216666667 | 0.88 |
| **-26.08** | 27.76 | 8 | 8 | 2.625 | 1.75 | 97.16 | 14.98 | 141.9875 | 17 | 0.89 |
| **0.38** | 35 | 5 | 5 | 1.8 | 1 | 799.4 | 14.98 | 1126.58 | 24.44 | 0.89 |
| **9.5** | 40 | 1 | 1 | 1 | 2 | 222.4 | 113.8 | 596.4 | -11.7 | 0.89 |
| **11** | 43 | 4 | 4 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.89 |
| **3** | 36 | 6 | 6 | 2.5 | 2.166666667 | 97.16 | 14.98 | -164.7333333 | 4.816666667 | 0.89 |
| **3.83** | 35.83 | 11 | 11 | 2.181818182 | 1.636363636 | 274.4 | 14.98 | 422.2272727 | 13.73636364 | 0.89 |
| **-26.08** | 27.76 | 12 | 12 | 2.5 | 1.833333333 | 97.16 | 14.98 | 121.8333333 | 13.18333333 | 0.89 |
| **-26.08** | 27.76 | 9 | 9 | 2.444444444 | 1.777777778 | 97.16 | 14.98 | 192.4777778 | 13.81111111 | 0.89 |
| **43** | 13 | 6 | 6 | 2.166666667 | 1.166666667 | 97.16 | 14.98 | 832.2666667 | 25.31666667 | 0.89 |
| **41.5** | 14.5 | 14 | 14 | 2.071428571 | 1.214285714 | 565.9 | 50.98 | 830.5571429 | 22.80714286 | 0.89 |
| **42.33** | 12.5 | 11 | 11 | 2 | 1 | 565.9 | 50.98 | 1044.2 | 27.2 | 0.89 |
| **45.66** | 13.66 | 11 | 11 | 2.090909091 | 0.818181818 | 565.9 | 50.98 | 1163.063636 | 33.01818182 | 0.89 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44** | 4 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **35.5** | 36.33 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.89 |
| **42.16** | 14 | 11 | 11 | 1.818181818 | 1.181818182 | 565.9 | 50.98 | 962.7818182 | 20.12727273 | 0.89 |
| **43.47** | 11.61 | 7 | 7 | 2 | 1.428571429 | 274.4 | 14.98 | 675.7571429 | 16.44285714 | 0.89 |
| **38.37** | 31.76 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.89 |
| **41.54** | 12.28 | 7 | 7 | 2 | 1 | 274.4 | 14.98 | 1044.2 | 27.2 | 0.89 |
| **41.81** | 12.35 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.89 |
| **39.82** | 30.42 | 3 | 3 | 2.333333333 | 0.666666667 | 97.16 | 14.98 | 1193.466667 | 40.16666667 | 0.89 |
| **4.33** | 35.9 | 6 | 6 | 2.666666667 | 2.166666667 | 97.16 | 14.98 | -233.3833333 | 7.116666667 | 0.89 |
| **6** | 40 | 5 | 5 | 2.2 | 1.8 | 882.2 | 14.98 | 274.06 | 9.88 | 0.89 |
| **42.5** | 11 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **43.33** | 11.08 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **43.33** | 11.08 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **43.5** | 12 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **45.5** | 12 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **42.98** | 12.25 | 4 | 4 | 2.25 | 1.25 | 97.16 | 14.98 | 726.3 | 24.375 | 1.135696421 |
| **43** | 11.66 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **44.58** | 10.16 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.89 |
| **24.45** | 32.94 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.905 |
| **35.73** | 5.88 | 5 | 5 | 2.2 | 0.8 | 97.16 | 14.98 | 1133.76 | 34.98 | 0.905 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.905 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.905 |
| **24.45** | 32.94 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.905 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.905 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.905 |
| **24.45** | 32.94 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.9105 |
| **37.37** | 14.62 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.9105 |
| **40.35** | 18.15 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **39.66** | -7.64 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.056475442 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.9105 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **24.45** | 32.94 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.9105 |
| **24.45** | 32.94 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.9105 |
| **24.45** | 32.94 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.9105 |
| **41.05** | 22.87 | 8 | 8 | 1.875 | 1.875 | 565.9 | 50.98 | 343.45 | 3.5125 | 0.059756826 |
| **24.72** | 32.89 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.9105 |
| **34.43** | -6.85 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.9105 |
| **40.75** | 23.3 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.13 |
| **37.15** | 22.15 | 5 | 5 | 2 | 1 | 882.2 | 14.98 | 1044.2 | 27.2 | 1.13 |
| **44** | 11.25 | 6 | 6 | 1.833333333 | 1.166666667 | 565.9 | 50.98 | 969.5666667 | 20.71666667 | 1.130393704 |
| **43.91** | 3.95 | 4 | 4 | 2.25 | 1.25 | 97.16 | 14.98 | 726.3 | 24.375 | 1.148218182 |
| **41.9** | 12.25 | 4 | 4 | 2.25 | 1.25 | 97.16 | 14.98 | 726.3 | 24.375 | 1.222154329 |
| **39.2** | 22.8 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.243863966 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **40.57** | 23.47 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 1.252579322 |
| **38** | 21.8 | 3 | 3 | 2.333333333 | 2 | 882.2 | 50.98 | 47.2 | 6.7 | 1.256503858 |
| **40.3** | 21.36 | 8 | 8 | 2 | 1.75 | 565.9 | 50.98 | 399.425 | 8.375 | 0.060675614 |
| **45** | 79 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.267253672 |
| **37.4** | -3.16 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 1.272897653 |
| **51** | 11.25 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.2955 |
| **50.98** | 11.28 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 1.2955 |
| **51** | 11.25 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 1.2955 |
| **33** | 35.11 | 3 | 3 | 2.333333333 | 2 | 882.2 | 50.98 | 47.2 | 6.7 | 1.32 |
| **42.25** | 11.75 | 7 | 7 | 2 | 1.285714286 | 274.4 | 14.98 | 798.5714286 | 20.02857143 | 1.321317756 |
| **43.53** | 11.58 | 9 | 9 | 2.222222222 | 1.444444444 | 274.4 | 14.98 | 570.5777778 | 19.11111111 | 1.331818185 |
| **43.68** | 12.48 | 6 | 6 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 1.335335829 |
| **43.47** | 12.4 | 6 | 6 | 2 | 1.166666667 | 542.6 | 14.98 | 900.9166667 | 23.01666667 | 1.373938032 |
| **43.8** | 5.3 | 8 | 8 | 2 | 1.75 | 565.9 | 50.98 | 399.425 | 8.375 | 0.0607 |
| **43.93** | 4.57 | 3 | 3 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 1.387024192 |
| **44.2** | 10.62 | 4 | 4 | 2.75 | 1.5 | 97.16 | 14.98 | 305.425 | 25 | 1.39444012 |
| **43.73** | 10.8 | 4 | 4 | 2 | 1.25 | 97.16 | 14.98 | 829.275 | 20.925 | 1.408865084 |
| **42.65** | 12.48 | 6 | 6 | 2 | 1.166666667 | 542.6 | 14.98 | 900.9166667 | 23.01666667 | 1.424602602 |
| **43.22** | 11.85 | 6 | 6 | 2.5 | 1.333333333 | 97.16 | 14.98 | 551.6833333 | 25.73333333 | 1.4268 |
| **43.62** | 11.47 | 5 | 5 | 2.2 | 1.2 | 97.16 | 14.98 | 789.88 | 24.94 | 1.433383586 |
| **44.65** | 23.93 | 6 | 6 | 2.333333333 | 1.166666667 | 97.16 | 14.98 | 763.6166667 | 27.61666667 | 1.443700258 |
| **43.61** | 11.45 | 6 | 6 | 2 | 1.166666667 | 542.6 | 14.98 | 900.9166667 | 23.01666667 | 1.449344238 |
| **43.62** | 11.47 | 6 | 6 | 2 | 1.166666667 | 542.6 | 14.98 | 900.9166667 | 23.01666667 | 1.454712583 |
| **45.83** | 18.43 | 3 | 3 | 2 | 1.666666667 | 882.2 | 50.98 | 471.0666667 | 10.46666667 | 1.4592 |
| **43.8** | 5.3 | 8 | 8 | 1.75 | 1.75 | 565.9 | 50.98 | 502.4 | 4.925 | 0.0607 |
| **35.88** | 107.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.47 |
| **36.57** | 107.3 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 1.47 |
| **42** | 112 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.47 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **40.7** | 23.15 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 1.484271291 |
| **44.22** | 10.02 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 1.485767602 |
| **43.53** | 11.58 | 9 | 9 | 2.222222222 | 1.444444444 | 274.4 | 14.98 | 570.5777778 | 19.11111111 | 1.490151531 |
| **44.18** | 24 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 1.526404262 |
| **45.16** | 3.42 | 6 | 6 | 2.333333333 | 1.5 | 97.16 | 14.98 | 477.05 | 19.25 | 1.645255995 |
| **40** | 114 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 1.65 |
| **43.11** | 0.37 | 3 | 3 | 1.333333333 | 1.666666667 | 1397 | 113.8 | 745.6666667 | 1.266666667 | 1.676665403 |
| **48.58** | 9.16 | 9 | 9 | 2.111111111 | 1.333333333 | 882.2 | 50.98 | 711.8666667 | 20.36666667 | 0.061200635 |
| **38.5** | 69.2 | 2 | 2 | 1.5 | 1.5 | 882.2 | 113.8 | 820.3 | 7.75 | 1.68 |
| **42.85** | 23.03 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 1.695159284 |
| **42.6** | 44.18 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 1.731503894 |
| **37.42** | -1.81 | 9 | 9 | 2.222222222 | 1.666666667 | 274.4 | 14.98 | 379.5333333 | 13.53333333 | 1.748147074 |
| **42.78** | 12.4 | 4 | 4 | 2 | 1.75 | 97.16 | 14.98 | 399.425 | 8.375 | 1.766444072 |
| **41.3** | 44.15 | 9 | 9 | 2.333333333 | 1.666666667 | 542.6 | 14.98 | 333.7666667 | 15.06666667 | 1.78 |
| **41.73** | 13.2 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 1.782509729 |
| **51.3** | 77.99 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 1.787641813 |
| **68.11** | 157.7 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.8 |
| **52** | 107 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 1.8 |
| **41.31** | 24 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.062250678 |
| **38.3** | 69.66 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 1.803064319 |
| **48.31** | 9.3 | 8 | 8 | 1.75 | 1.875 | 799.4 | 50.98 | 394.9375 | 1.7875 | 1.811346532 |
| **40.15** | 21.2 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 1.85 |
| **36.25** | 27.25 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 1.864846218 |
| **35.41** | 4.13 | 3 | 3 | 2 | 0.666666667 | 882.2 | 50.98 | 1330.766667 | 35.56666667 | 1.87 |
| **45.25** | 0.78 | 7 | 7 | 2.142857143 | 1.857142857 | 542.6 | 14.98 | 248.4714286 | 7.657142857 | 1.956698722 |
| **39.16** | -1.79 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 1.973 |
| **74.5** | 112 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0 |
| **12.26** | 13.2 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.00119 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **18.5** | -9.5 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.001325 |
| **42.8** | 2.75 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.062250678 |
| **18.5** | -9.5 | 5 | 5 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.001325 |
| **12.26** | 13.2 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00141 |
| **15.13** | -2.93 | 5 | 5 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 0.001595 |
| **19.2** | -14.8 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0016 |
| **17.45** | 6.26 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0016 |
| **18.5** | -9.5 | 4 | 4 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.001825 |
| **20.12** | -15.9 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.001825 |
| **20.12** | -15.9 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.001825 |
| **15.13** | -2.93 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.002 |
| **15.13** | -2.93 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.002 |
| **42.8** | 2.75 | 9 | 9 | 2.333333333 | 1.888888889 | 97.16 | 14.98 | 142.7222222 | 9.488888889 | 0.062644444 |
| **16.86** | 0.2 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.002025 |
| **14.7** | -0.46 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.002095 |
| **16.73** | -7.26 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00216 |
| **18.5** | -9.5 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0022 |
| **18.5** | -9.5 | 5 | 5 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.002275 |
| **19.99** | -0.04 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.002975 |
| **16.97** | 9.83 | 2 | 2 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.00385 |
| **22.5** | 16.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.004 |
| **25.1** | 3.83 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.004175 |
| **20.92** | -0.54 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0047 |
| **20.92** | -0.54 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.0047 |
| **41.8** | 42.5 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.005 |
| **42.45** | 43.95 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.005 |
| **45.84** | 15.87 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.005 |
| **46.29** | 16.04 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.005 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **21.18** | 17.5 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00505 |
| **-29.67** | 27.42 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **-28.21** | 23.33 | 12 | 12 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0055 |
| **-30.42** | 25.92 | 6 | 6 | 3 | 1.833333333 | 97.16 | 14.98 | -84.11666667 | 20.08333333 | 0.0055 |
| **-30.2** | 25.85 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.0055 |
| **-29.67** | 27.42 | 8 | 8 | 2.875 | 1.75 | 97.16 | 14.98 | 39.0125 | 20.45 | 0.0055 |
| **-29.67** | 27.42 | 6 | 6 | 2.833333333 | 1.666666667 | 97.16 | 14.98 | 127.8166667 | 21.96666667 | 0.0055 |
| **-28.8** | 23.72 | 7 | 7 | 2.857142857 | 2.142857143 | 97.16 | 14.98 | -291.3714286 | 10.34285714 | 0.0055 |
| **-28.67** | 25.55 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.0055 |
| **-28.37** | 25.17 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **-27.62** | 24.63 | 8 | 8 | 3 | 1.875 | 97.16 | 14.98 | -119.9375 | 19.0375 | 0.0055 |
| **1.23** | 29.82 | 8 | 8 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.0055 |
| **-30.67** | 25.5 | 6 | 6 | 3 | 2.166666667 | 97.16 | 14.98 | -370.6833333 | 11.71666667 | 0.0055 |
| **-30.23** | 25.87 | 6 | 6 | 3 | 1.833333333 | 97.16 | 14.98 | -84.11666667 | 20.08333333 | 0.0055 |
| **-29.83** | 27.63 | 8 | 8 | 3 | 1.875 | 97.16 | 14.98 | -119.9375 | 19.0375 | 0.0055 |
| **-27.67** | 24.33 | 5 | 5 | 3 | 1.8 | 97.16 | 14.98 | -55.46 | 20.92 | 0.0055 |
| **-26.75** | 31.83 | 10 | 10 | 2.5 | 1.8 | 97.16 | 14.98 | 150.49 | 14.02 | 0.0055 |
| **-26.75** | 31.83 | 9 | 9 | 2.444444444 | 1.777777778 | 97.16 | 14.98 | 192.4777778 | 13.81111111 | 0.0055 |
| **16.25** | 33.75 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.0055 |
| **16.25** | 33.75 | 6 | 6 | 2.666666667 | 1.333333333 | 97.16 | 14.98 | 483.0333333 | 28.03333333 | 0.0055 |
| **-34.1** | 24.4 | 5 | 5 | 1.8 | 1.2 | 882.2 | 50.98 | 954.64 | 19.42 | 0.0055 |
| **-33.73** | 25.72 | 8 | 8 | 2.375 | 1.5 | 97.16 | 14.98 | 459.8875 | 19.825 | 0.0055 |
| **-34.1** | 24.4 | 6 | 6 | 2.166666667 | 1.333333333 | 97.16 | 14.98 | 688.9833333 | 21.13333333 | 0.0055 |
| **-13.82** | 32.47 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.0055 |
| **-2.42** | 35 | 16 | 16 | 2.5 | 1.5625 | 274.4 | 14.98 | 354.66875 | 19.98125 | 0.0055 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **-34.1** | 23.4 | 4 | 4 | 1.75 | 1 | 882.2 | 50.98 | 1147.175 | 23.75 | 0.0055 |
| **-0.72** | 36.42 | 7 | 7 | 2.857142857 | 1.714285714 | 97.16 | 14.98 | 77.07142857 | 21.1 | 0.0055 |
| **6.22** | -5.33 | 7 | 7 | 2.428571429 | 0.857142857 | 97.16 | 14.98 | 990.4857143 | 36.7 | 0.0055 |
| **-1.22** | 36.33 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **0.13** | 29.58 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **0.15** | 29.58 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **-24.6** | 28.67 | 7 | 7 | 2.428571429 | 1.428571429 | 97.16 | 14.98 | 499.2285714 | 22.35714286 | 0.0055 |
| **-14.4** | 31.93 | 9 | 9 | 2.555555556 | 1.555555556 | 97.16 | 14.98 | 337.7555556 | 20.92222222 | 0.0055 |
| **-0.42** | 36.1 | 8 | 8 | 2.625 | 1.5 | 97.16 | 14.98 | 356.9125 | 23.275 | 0.0055 |
| **-34.15** | 18.87 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **-33.38** | 18.83 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **-1** | 36.25 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **-0.75** | 36.38 | 5 | 5 | 2.2 | 1.2 | 97.16 | 14.98 | 789.88 | 24.94 | 0.0055 |
| **-0.75** | 36.38 | 8 | 8 | 2.125 | 1.25 | 274.4 | 14.98 | 777.7875 | 22.65 | 0.0055 |
| **0.5** | 36 | 4 | 4 | 2.5 | 1 | 97.16 | 14.98 | 838.25 | 34.1 | 0.0055 |
| **25.83** | 29 | 6 | 6 | 2.666666667 | 1 | 97.16 | 14.98 | 769.6 | 36.4 | 0.89 |
| **-1.54** | 38.85 | 5 | 5 | 2.2 | 1.4 | 97.16 | 14.98 | 617.94 | 19.92 | 0.0055 |
| **15.25** | 36.25 | 8 | 8 | 2.125 | 1.5 | 882.2 | 50.98 | 562.8625 | 16.375 | 0.0055 |
| **0.17** | 29.55 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **16.25** | 33.75 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.0055 |
| **-27.67** | 24.33 | 5 | 5 | 2.6 | 1.8 | 97.16 | 14.98 | 109.3 | 15.4 | 0.0055 |
| **-29.42** | 25.12 | 3 | 3 | 2.666666667 | 1.333333333 | 97.16 | 14.98 | 483.0333333 | 28.03333333 | 0.0055 |
| **-1.25** | 36.25 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0055 |
| **21.24** | -16.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.005625 |
| **22.5** | 16.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0058 |
| **29.42** | -2.05 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00605 |
| **29.42** | -2.05 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.006625 |
| **16.97** | 9.83 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.00695 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **16.97** | 9.83 | 6 | 6 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.00695 |
| **21.16** | 17.5 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.007 |
| **25.83** | 12.67 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.007075 |
| **23.86** | 10.32 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.007075 |
| **51.35** | 11.1 | 8 | 8 | 2.75 | 1.75 | 97.16 | 14.98 | 90.5 | 18.725 | 0.0697 |
| **22.95** | 5.17 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00785 |
| **22.95** | 5.17 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00785 |
| **25.63** | 10.83 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00825 |
| **25.63** | 10.83 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.00825 |
| **20.33** | 9.3 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.00838 |
| **20.17** | 9.19 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.008505 |
| **47.75** | 16 | 8 | 8 | 2.375 | 1.75 | 97.16 | 14.98 | 244.9625 | 13.55 | 0.0087 |
| **43.93** | 4.41 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.009568 |
| **42** | 43.24 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.01 |
| **42.32** | 42.61 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.01 |
| **43** | 2.95 | 7 | 7 | 1.714285714 | 1.714285714 | 799.4 | 50.98 | 547.8142857 | 5.328571429 | 0.074588682 |
| **42.45** | 43 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.01 |
| **42.5** | 43.5 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.01 |
| **42.3** | 46 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.01 |
| **54.03** | 105.8 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.01 |
| **72.5** | 109 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.01 |
| **48** | 26.9 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.01 |
| **50.53** | 106.3 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.01 |
| **51.8** | 37 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.01 |
| **52.37** | 104.3 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.01 |
| **52.97** | 91.44 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.01 |
| **49.93** | 14.83 | 7 | 7 | 2.285714286 | 1.428571429 | 97.16 | 14.98 | 558.0714286 | 20.38571429 | 0.116459143 |
| **54.6** | 91.02 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **54.61** | 91.01 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.01 |
| **54.61** | 91.01 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.01 |
| **54.65** | 80.25 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.01 |
| **55.05** | 91.05 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.01 |
| **60.35** | 134.5 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.01 |
| **56.17** | 160 | 3 | 3 | 1.666666667 | 2 | 222.4 | 50.98 | 321.8 | -2.5 | 0.01 |
| **58.3** | 100.3 | 4 | 4 | 2 | 1.5 | 97.16 | 14.98 | 614.35 | 14.65 | 0.01 |
| **-7.37** | 110.3 | 7 | 7 | 1.571428571 | 0.714285714 | 799.4 | 50.98 | 1466.357143 | 28.45714286 | 0.01 |
| **4** | 118 | 4 | 4 | 1.5 | 1.25 | 587.9 | 50.98 | 1035.225 | 14.025 | 0.01 |
| **50.4** | 8.16 | 12 | 12 | 2.083333333 | 1.166666667 | 542.6 | 14.98 | 866.5916667 | 24.16666667 | 0.13522866 |
| **42.5** | 43.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.01 |
| **44** | 41.2 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.01 |
| **42.2** | 46 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.01 |
| **40.4** | 49.8 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.01 |
| **40.2** | 44.5 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.01 |
| **56.32** | 66.37 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.01 |
| **43.91** | 5.08 | 10 | 10 | 2.2 | 1.6 | 274.4 | 14.98 | 446 | 14.9 | 0.012 |
| **41.82** | 12.3 | 9 | 9 | 2.333333333 | 1.444444444 | 97.16 | 14.98 | 524.8111111 | 20.64444444 | 0.148485452 |
| **50.1** | 33 | 4 | 4 | 2 | 1 | 97.16 | 14.98 | 1044.2 | 27.2 | 0.014365 |
| **52.4** | 32 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.0147 |
| **52** | 33.15 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.015 |
| **40.17** | 20.1 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.015 |
| **49.65** | 31.5 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.01595 |
| **50.06** | 19.8 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.01599 |
| **67** | 33 | 11 | 11 | 2.545454545 | 1.818181818 | 97.16 | 14.98 | 116.1363636 | 14.19090909 | 0.016 |
| **45.2** | 17.58 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0175 |
| **44.1** | 39 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.01804 |
| **45.23** | 0.88 | 8 | 8 | 2.625 | 1.75 | 97.16 | 14.98 | 141.9875 | 17 | 0.0185 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **60.42** | 60.22 | 5 | 5 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 0.01914 |
| **42** | 42.5 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.023 |
| **51.5** | 75 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.02 |
| **42.1** | 42.1 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **43.02** | 41.26 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.02 |
| **50.18** | 108.6 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **52.02** | 113.4 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.02 |
| **52.5** | 4.5 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.02 |
| **52.61** | 102.5 | 4 | 4 | 3 | 1.5 | 97.16 | 14.98 | 202.45 | 28.45 | 0.02 |
| **52.83** | 103.5 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.02 |
| **52.87** | 103.4 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.02 |
| **54.42** | 89.45 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.02 |
| **54.58** | 91.07 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.02 |
| **54.97** | 90.95 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.02 |
| **55.9** | 87.95 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.02 |
| **57.5** | 57 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.02 |
| **57.73** | 83.55 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.02 |
| **54.13** | 90.95 | 7 | 7 | 2.285714286 | 2 | 97.16 | 14.98 | 66.81428571 | 6.042857143 | 0.02 |
| **55.22** | 91.95 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.02 |
| **51.24** | -2.71 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.183793145 |
| **45.84** | 15.87 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.02 |
| **48** | 26.9 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.02 |
| **51.38** | 84.68 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.02 |
| **51.7** | 87 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.02 |
| **52** | 116 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **52.5** | 86.7 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **52.97** | 91.43 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.02 |
| **54.97** | 90.95 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.02 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **54.97** | 90.95 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.02 |
| **56** | 77 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **52.47** | 4.62 | 8 | 8 | 2.375 | 1.375 | 97.16 | 14.98 | 567.35 | 22.9625 | 0.230388799 |
| **59.65** | 133.1 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.02 |
| **51.2** | 86.07 | 3 | 3 | 1.666666667 | 2 | 222.4 | 50.98 | 321.8 | -2.5 | 0.02 |
| **52.37** | 104.3 | 5 | 5 | 1.6 | 2 | 799.4 | 50.98 | 349.26 | -3.42 | 0.02 |
| **42.3** | 41.5 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.02 |
| **45.13** | 23.02 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **45.13** | 23.02 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.02 |
| **47.2** | 22.37 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.02 |
| **48.55** | 27.08 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.02 |
| **51.5** | 17 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.02 |
| **57.05** | 91.65 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.02 |
| **43.9** | 42.72 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.02 |
| **48.07** | 9.13 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.02 |
| **60.9** | 68.51 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.02 |
| **45.84** | 15.87 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.02 |
| **57.1** | 91.6 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.02 |
| **44.8** | 1.37 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.020167 |
| **54.77** | 38.88 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.02045 |
| **51.29** | 39 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.0213075 |
| **48.02** | 20.53 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.021344 |
| **46.38** | 5.43 | 4 | 4 | 3 | 1.5 | 97.16 | 14.98 | 202.45 | 28.45 | 0.021379 |
| **44.97** | 0.95 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.021466 |
| **43.36** | -3.84 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.0215 |
| **44.35** | 4.47 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.0215 |
| **45.54** | 25.48 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.022 |
| **43.11** | -0.6 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.022166 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44.97** | 0.95 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.022207 |
| **43.16** | -2.26 | 4 | 4 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.02222 |
| **43.42** | -4.84 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.02228 |
| **45.21** | 4.01 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.022383 |
| **47.5** | 28.5 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.0226 |
| **46.4** | 0.72 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.022696 |
| **43.06** | 1.2 | 7 | 7 | 2 | 1.714285714 | 274.4 | 14.98 | 430.1285714 | 9.271428571 | 0.022827 |
| **48.5** | 35.5 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.023 |
| **50.05** | 27.9 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.023 |
| **41.7** | 42.5 | 10 | 10 | 2.2 | 1.8 | 274.4 | 14.98 | 274.06 | 9.88 | 0.023 |
| **50** | 36.2 | 6 | 6 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.023 |
| **52** | 31.6 | 8 | 8 | 2 | 1.5 | 565.9 | 50.98 | 614.35 | 14.65 | 0.023 |
| **45.84** | 15.87 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.023 |
| **50.43** | 5.02 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.023 |
| **50.5** | 32.5 | 5 | 5 | 2 | 1.2 | 882.2 | 14.98 | 872.26 | 22.18 | 0.023 |
| **51.1** | 36 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.023 |
| **53.34** | 34.12 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.02366 |
| **44.96** | 0.94 | 9 | 9 | 2.111111111 | 1.777777778 | 274.4 | 14.98 | 329.7777778 | 9.211111111 | 0.023662 |
| **44.33** | 4.54 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.0242 |
| **43.5** | 40.17 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.0245 |
| **50.48** | 4.97 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.0247 |
| **43.27** | -1.9 | 5 | 5 | 2 | 2 | 882.2 | 14.98 | 184.5 | 2.1 | 0.0255 |
| **54.3** | 27 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.02555 |
| **43.01** | 1.63 | 8 | 8 | 2.125 | 1.75 | 274.4 | 14.98 | 347.9375 | 10.1 | 0.025695 |
| **44.85** | 1.08 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.025752 |
| **44.23** | 16.83 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.386713938 |
| **44.41** | 4.21 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.0265 |
| **44.77** | 1.33 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.0268 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44.8** | 1.37 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.027088 |
| **44.8** | 1.37 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.027088 |
| **60.24** | 60.03 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.02735 |
| **52.02** | -2.04 | 6 | 6 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.02765 |
| **42.16** | -2.75 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.027712 |
| **44.85** | 1.08 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.02787 |
| **43.11** | -0.16 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.027931 |
| **51.39** | 39.04 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.028143 |
| **43.42** | -4.84 | 7 | 7 | 2.285714286 | 1.428571429 | 97.16 | 14.98 | 558.0714286 | 20.38571429 | 0.028147 |
| **46.26** | 16.16 | 6 | 6 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.0285 |
| **44.96** | 0.94 | 8 | 8 | 2.125 | 1.75 | 274.4 | 14.98 | 347.9375 | 10.1 | 0.028545 |
| **44.85** | 1.08 | 7 | 7 | 2 | 1.714285714 | 274.4 | 14.98 | 430.1285714 | 9.271428571 | 0.028595 |
| **44.77** | 1.33 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.0286 |
| **43.23** | -2.01 | 7 | 7 | 2 | 1.714285714 | 274.4 | 14.98 | 430.1285714 | 9.271428571 | 0.028936 |
| **39.64** | -8.46 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.029358 |
| **71.81** | 129.4 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.03 |
| **73.3** | 97 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.03 |
| **51.09** | 4.07 | 8 | 8 | 1.875 | 1.125 | 565.9 | 50.98 | 988.225 | 22.3375 | 0.520331898 |
| **51.17** | 83.02 | 8 | 8 | 2.375 | 1.75 | 97.16 | 14.98 | 244.9625 | 13.55 | 0.03 |
| **54.35** | 86.21 | 8 | 8 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.03 |
| **46.28** | 16.03 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.03 |
| **43.53** | 20.36 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.03 |
| **54.42** | 89.45 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.03 |
| **38.9** | -9.22 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.0301 |
| **43.95** | 4.54 | 4 | 4 | 2 | 1.75 | 882.2 | 50.98 | 399.425 | 8.375 | 0.030119 |
| **48.13** | 21.39 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.030677 |
| **43.11** | -0.16 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.030778 |
| **37.61** | -0.87 | 6 | 6 | 2.333333333 | 1.5 | 97.16 | 14.98 | 477.05 | 19.25 | 0.559183486 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **44.96** | 0.94 | 9 | 9 | 2.111111111 | 1.777777778 | 274.4 | 14.98 | 329.7777778 | 9.211111111 | 0.030782 |
| **42.94** | 25.42 | 5 | 5 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 0.030901 |
| **44.77** | 1.33 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.0313 |
| **46.68** | 7.44 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.0313 |
| **46.48** | 5.48 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.0314 |
| **48.28** | 15.58 | 8 | 8 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.032 |
| **48.56** | 10.2 | 6 | 6 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.032122 |
| **48.32** | 15.4 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.0322 |
| **52** | 5 | 5 | 5 | 1.8 | 1.6 | 799.4 | 14.98 | 610.76 | 9.38 | 0.0325 |
| **47.7** | 0.85 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.032979 |
| **37.7** | -2.44 | 5 | 5 | 2.2 | 1.8 | 882.2 | 14.98 | 274.06 | 9.88 | 0.724827755 |
| **45** | 1.47 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.0338 |
| **47.6** | 3.77 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.033825 |
| **45.57** | 10.9 | 6 | 6 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.034276 |
| **44.77** | 1.33 | 6 | 6 | 2.166666667 | 2 | 97.16 | 14.98 | 115.85 | 4.4 | 0.0345 |
| **40.5** | 15.24 | 7 | 7 | 2 | 1.714285714 | 274.4 | 14.98 | 430.1285714 | 9.271428571 | 0.03454 |
| **45.57** | 10.9 | 6 | 6 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.034939 |
| **48.12** | 20.63 | 8 | 8 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 0.035127 |
| **43.34** | 2.88 | 10 | 10 | 2.4 | 1.8 | 97.16 | 14.98 | 191.68 | 12.64 | 0.0359 |
| **42.27** | 2.61 | 3 | 3 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.035968 |
| **48.4** | 9.77 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.036169 |
| **50.21** | 4.97 | 6 | 6 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.036176 |
| **42.94** | 25.42 | 5 | 5 | 2.6 | 1.8 | 97.16 | 14.98 | 109.3 | 15.4 | 0.036184 |
| **42.16** | -2.75 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.03626 |
| **45.57** | 10.9 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.0365 |
| **48.41** | 15.59 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.037404 |
| **45.01** | 1.1 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.037716 |
| **44.88** | 1.26 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.037894 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **42.85** | 2.06 | 5 | 5 | 2 | 2 | 882.2 | 14.98 | 184.5 | 2.1 | 0.037905 |
| **43.37** | -1.2 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.038896 |
| **45** | 37.8 | 8 | 8 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.039 |
| **48.4** | 9.77 | 6 | 6 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.039059 |
| **44** | 4 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.04 |
| **71.79** | 129.4 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.04 |
| **45.13** | 23.02 | 5 | 5 | 2 | 1.4 | 882.2 | 50.98 | 700.32 | 17.16 | 0.04 |
| **45.13** | 23.02 | 5 | 5 | 1.8 | 1.6 | 882.2 | 50.98 | 610.76 | 9.38 | 0.04 |
| **45** | 34 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.04 |
| **47.72** | 18.66 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.0406 |
| **45.42** | 11.49 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.040843 |
| **51.76** | -4.5 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.041954 |
| **51.32** | -2.87 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.043244 |
| **43.79** | 7.45 | 8 | 8 | 2.375 | 1.375 | 97.16 | 14.98 | 567.35 | 22.9625 | 0.95 |
| **42.78** | 18.5 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.04373 |
| **51.32** | -3.02 | 5 | 5 | 2.4 | 1.6 | 97.16 | 14.98 | 363.62 | 17.66 | 0.04373 |
| **50.21** | 4.97 | 7 | 7 | 2.428571429 | 1.428571429 | 97.16 | 14.98 | 499.2285714 | 22.35714286 | 0.04376 |
| **52.3** | 13.33 | 4 | 4 | 3 | 1.5 | 97.16 | 14.98 | 202.45 | 28.45 | 0.045 |
| **40.5** | 44.51 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.0478 |
| **45.13** | 23.02 | 7 | 7 | 1.714285714 | 1.571428571 | 565.9 | 50.98 | 670.6285714 | 8.914285714 | 0.04835 |
| **51.28** | -2.77 | 6 | 6 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.048554 |
| **71.78** | 129.4 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.05 |
| **59.35** | 60 | 8 | 8 | 2.375 | 1.75 | 97.16 | 14.98 | 244.9625 | 13.55 | 0.051356483 |
| **47.39** | 18.89 | 7 | 7 | 2.428571429 | 1.428571429 | 97.16 | 14.98 | 499.2285714 | 22.35714286 | 0.0514 |
| **37.73** | -2.7 | 7 | 7 | 2 | 1.285714286 | 274.4 | 14.98 | 798.5714286 | 20.02857143 | 0.983 |
| **45** | 1.73 | 11 | 11 | 2.545454545 | 1.636363636 | 97.16 | 14.98 | 272.4454545 | 18.75454545 | 0.0515 |
| **48.07** | 20.41 | 8 | 8 | 2.125 | 1.5 | 274.4 | 14.98 | 562.8625 | 16.375 | 0.052 |
| **48.41** | 9.8 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.05201276 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **49.6** | 41.9 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.052669037 |
| **48.4** | 9.77 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.0527 |
| **44.84** | 1.56 | 5 | 5 | 2.6 | 2 | 97.16 | 14.98 | -62.64 | 10.38 | 0.052931547 |
| **49.41** | 16.75 | 6 | 6 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.054143 |
| **52.31** | -2.1 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.054244101 |
| **43.92** | 12.65 | 4 | 4 | 2.75 | 1.25 | 97.16 | 14.98 | 520.35 | 31.275 | 0.054375356 |
| **47.5** | 28.5 | 3 | 3 | 2.333333333 | 1.333333333 | 97.16 | 14.98 | 620.3333333 | 23.43333333 | 0.055031633 |
| **50.51** | 10.42 | 5 | 5 | 1.4 | 1.4 | 799.4 | 50.98 | 947.46 | 8.88 | 1.1 |
| **46.91** | 22.54 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.055031633 |
| **50.62** | 11.4 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.055031633 |
| **45** | 1.07 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.0558 |
| **59.23** | 62 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.055819165 |
| **48.41** | 9.77 | 6 | 6 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.055819165 |
| **50.62** | 11.4 | 5 | 5 | 2.2 | 1.6 | 97.16 | 14.98 | 446 | 14.9 | 0.055950421 |
| **44.67** | 33.85 | 10 | 10 | 2.4 | 1.8 | 97.16 | 14.98 | 191.68 | 12.64 | 0.056 |
| **52.57** | 0.48 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.056212931 |
| **40.7** | 23.15 | 5 | 5 | 2.2 | 1.6 | 882.2 | 14.98 | 446 | 14.9 | 1.450328654 |
| **44.59** | 22.26 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.056344187 |
| **45.37** | 13.67 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.056344187 |
| **45.34** | 0.61 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.0564 |
| **50.62** | 11.4 | 3 | 3 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.056737953 |
| **47.7** | 8.63 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.056869208 |
| **47.75** | 19.05 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.05765674 |
| **44.97** | 1.02 | 5 | 5 | 2.2 | 2 | 97.16 | 14.98 | 102.12 | 4.86 | 0.05765674 |
| **45** | 39 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.058181762 |
| **48.82** | 10.45 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.058313017 |
| **47.5** | 8.37 | 11 | 11 | 2.181818182 | 1.727272727 | 274.4 | 14.98 | 344.0727273 | 11.45454545 | 0.058313017 |
| **52.5** | 4.5 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **45.09** | 5.43 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.058444273 |
| **50.5** | 5.03 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.058444273 |
| **44.42** | 28.52 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.058575528 |
| **48.77** | 11.05 | 6 | 6 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.058706783 |
| **47.72** | 18.72 | 8 | 8 | 2.25 | 1.75 | 97.16 | 14.98 | 296.45 | 11.825 | 0.058838039 |
| **42.86** | 1.59 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.058838039 |
| **48.82** | 10.45 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.059100549 |
| **50.96** | 4.72 | 6 | 6 | 2.333333333 | 1.666666667 | 97.16 | 14.98 | 333.7666667 | 15.06666667 | 0.05936306 |
| **43.19** | 12.44 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.05936306 |
| **44.84** | 1.08 | 7 | 7 | 2.285714286 | 2 | 97.16 | 14.98 | 66.81428571 | 6.042857143 | 0.05936306 |
| **71.8** | 129.4 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0 |
| **45.07** | 5.25 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.0594 |
| **44.6** | 1.87 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.059494315 |
| **48.93** | 11.83 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.059625571 |
| **48.37** | 9.72 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.059756826 |
| **48.58** | 9.16 | 6 | 6 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.059888082 |
| **51.48** | 0.05 | 8 | 8 | 2.375 | 1.125 | 97.16 | 14.98 | 782.275 | 29.2375 | 0.059888082 |
| **44.9** | 40 | 6 | 6 | 2.666666667 | 1.666666667 | 97.16 | 14.98 | 196.4666667 | 19.66666667 | 0.06 |
| **48.4** | 44.3 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.06 |
| **51.17** | 83.02 | 5 | 5 | 2.8 | 2 | 97.16 | 14.98 | -145.02 | 13.14 | 0.06 |
| **48.4** | 9.76 | 8 | 8 | 2.625 | 1.75 | 97.16 | 14.98 | 141.9875 | 17 | 0.0625 |
| **15.37** | -5.33 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.00132 |
| **55.22** | 91.65 | 3 | 3 | 3 | 1.333333333 | 97.16 | 14.98 | 345.7333333 | 32.63333333 | 0.06 |
| **44.2** | 40.85 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.06 |
| **50.43** | 5.01 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.06 |
| **49.4** | 16.66 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.06 |
| **55.97** | 92.81 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.06 |
| **45.25** | 33.87 | 7 | 7 | 2.285714286 | 2 | 97.16 | 14.98 | 66.81428571 | 6.042857143 | 0.06 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **43.8** | 70.3 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.06 |
| **43.44** | 6.24 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.060019337 |
| **48.55** | 10.15 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.060019337 |
| **45.83** | 5.11 | 7 | 7 | 2.714285714 | 1.714285714 | 97.16 | 14.98 | 135.9142857 | 19.12857143 | 0.060150592 |
| **15.36** | -5.48 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.00159 |
| **51.26** | 0.18 | 5 | 5 | 2.2 | 1.4 | 882.2 | 14.98 | 617.94 | 19.92 | 0.060150592 |
| **44.08** | 1.72 | 6 | 6 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.060150592 |
| **48.12** | 20.65 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.060413103 |
| **44.82** | 1.18 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.060544358 |
| **47.7** | 8.63 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.060544358 |
| **45.04** | 5.07 | 7 | 7 | 2 | 1.571428571 | 882.2 | 50.98 | 552.9428571 | 12.85714286 | 0.060675614 |
| **50.21** | 4.97 | 9 | 9 | 2 | 1.777777778 | 274.4 | 14.98 | 375.5444444 | 7.677777778 | 0.060675614 |
| **45.37** | 11.2 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.060675614 |
| **40.5** | 15.24 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.060675614 |
| **42.94** | 25.42 | 7 | 7 | 2.428571429 | 2 | 97.16 | 14.98 | 7.971428571 | 8.014285714 | 0.060675614 |
| **18.5** | -2.5 | 6 | 6 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.00177 |
| **44.42** | 24.71 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.060675614 |
| **50.64** | 11.42 | 10 | 10 | 2 | 1.5 | 565.9 | 14.98 | 614.35 | 14.65 | 0.060675614 |
| **40.19** | 21.52 | 9 | 9 | 2 | 1.888888889 | 565.9 | 50.98 | 280.0222222 | 4.888888889 | 0.060938124 |
| **45.61** | 10.95 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.06106938 |
| **45.65** | 11.2 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.06106938 |
| **45.31** | 10.59 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.061200635 |
| **42.05** | -3.47 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.061331891 |
| **44.08** | 1.72 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.061331891 |
| **45.07** | 5.23 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.061331891 |
| **45.03** | 0.5 | 6 | 6 | 2.166666667 | 1.666666667 | 97.16 | 14.98 | 402.4166667 | 12.76666667 | 0.061331891 |
| **19.21** | -3.4 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.003795 |
| **57.09** | 84.5 | 4 | 4 | 2.75 | 1.25 | 97.16 | 14.98 | 520.35 | 31.275 | 0.061594401 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **43.8** | 3.87 | 6 | 6 | 2 | 1.833333333 | 882.2 | 50.98 | 327.7833333 | 6.283333333 | 0.061594401 |
| **46.2** | 11.16 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.061594401 |
| **45.42** | 11.25 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.061725657 |
| **45.3** | 10.59 | 5 | 5 | 2 | 1.6 | 882.2 | 14.98 | 528.38 | 12.14 | 0.061725657 |
| **45.9** | 13.7 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.061856912 |
| **40.95** | -2.28 | 7 | 7 | 2.142857143 | 1.571428571 | 97.16 | 14.98 | 494.1 | 14.82857143 | 0.061988167 |
| **43.11** | 0.37 | 5 | 5 | 2.2 | 1.8 | 882.2 | 14.98 | 274.06 | 9.88 | 0.061988167 |
| **45** | 39 | 5 | 5 | 2 | 2 | 882.2 | 14.98 | 184.5 | 2.1 | 0.061988167 |
| **40.37** | 23.15 | 6 | 6 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.062250678 |
| **40.3** | 45.18 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.005 |
| **47.25** | 6 | 6 | 6 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.062250678 |
| **45** | 39 | 4 | 4 | 2.75 | 2 | 97.16 | 14.98 | -124.425 | 12.45 | 0.062513189 |
| **37** | 22.58 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.06303821 |
| **37** | 22.58 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.06303821 |
| **45** | 39 | 4 | 4 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.064088253 |
| **48.53** | 9.51 | 6 | 6 | 2 | 1.5 | 882.2 | 50.98 | 614.35 | 14.65 | 0.064088253 |
| **52.5** | 0.67 | 5 | 5 | 2.6 | 1.6 | 97.16 | 14.98 | 281.24 | 20.42 | 0.0655 |
| **48.58** | 9.16 | 5 | 5 | 2.6 | 1.4 | 97.16 | 14.98 | 453.18 | 25.44 | 0.065925828 |
| **-29.21** | 16.93 | 6 | 6 | 2.666666667 | 1.833333333 | 97.16 | 14.98 | 53.18333333 | 15.48333333 | 0.0685 |
| **46.5** | 30.8 | 7 | 7 | 2.285714286 | 1.714285714 | 97.16 | 14.98 | 312.4428571 | 13.21428571 | 0.005 |
| **-34.05** | 22.4 | 4 | 4 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **47.1** | 32.05 | 8 | 8 | 2.375 | 1.75 | 97.16 | 14.98 | 244.9625 | 13.55 | 0.005 |
| **48** | 41 | 11 | 11 | 2.363636364 | 1.818181818 | 542.6 | 14.98 | 191.0272727 | 11.68181818 | 0.005 |
| **-34.42** | 21.22 | 11 | 11 | 2.545454545 | 1.545454545 | 97.16 | 14.98 | 350.6 | 21.03636364 | 0.0685 |
| **-32.32** | 18.32 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0685 |
| **-34.1** | 23.4 | 5 | 5 | 2.4 | 1.2 | 97.16 | 14.98 | 707.5 | 27.7 | 0.0685 |
| **-1.47** | 37.05 | 6 | 6 | 3 | 2.166666667 | 97.16 | 14.98 | -370.6833333 | 11.71666667 | 0.0685 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **50** | 36.1 | 7 | 7 | 2 | 1.714285714 | 274.4 | 14.98 | 430.1285714 | 9.271428571 | 0.005 |
| **-1.47** | 37.05 | 5 | 5 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **-1.47** | 37.05 | 8 | 8 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.0685 |
| **-1.47** | 37.05 | 10 | 10 | 2.7 | 1.7 | 97.16 | 14.98 | 154.08 | 19.29 | 0.0685 |
| **-1.47** | 37.05 | 6 | 6 | 3 | 1.666666667 | 97.16 | 14.98 | 59.16666667 | 24.26666667 | 0.0685 |
| **-1.47** | 37.05 | 9 | 9 | 2.777777778 | 1.777777778 | 97.16 | 14.98 | 55.17777778 | 18.41111111 | 0.0685 |
| **-1.47** | 37.05 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **-1.47** | 37.05 | 3 | 3 | 3 | 2.333333333 | 97.16 | 14.98 | -513.9666667 | 7.533333333 | 0.0685 |
| **36.13** | -5.34 | 3 | 3 | 2 | 1.333333333 | 882.2 | 50.98 | 757.6333333 | 18.83333333 | 0.0685 |
| **-1.47** | 37.05 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **50.41** | 30.51 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.005 |
| **51.98** | 4.07 | 4 | 4 | 1.75 | 2 | 882.2 | 50.98 | 287.475 | -1.35 | 0.0685 |
| **50.95** | 84.75 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **-30.04** | 17.25 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0685 |
| **69** | 161 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.0685 |
| **3.37** | 35.95 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **59.5** | 29.4 | 6 | 6 | 1.833333333 | 1.666666667 | 565.9 | 50.98 | 539.7166667 | 8.166666667 | 0.005 |
| **4.67** | 36.37 | 1 | 1 | 2 | 2 | 882.2 | 113.8 | 184.5 | 2.1 | 0.0685 |
| **39.53** | -8.59 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.07 |
| **45** | 33.77 | 9 | 9 | 2.555555556 | 1.777777778 | 97.16 | 14.98 | 146.7111111 | 15.34444444 | 0.07 |
| **74** | 100 | 5 | 5 | 2.2 | 1.6 | 97.16 | 14.98 | 446 | 14.9 | 0.07 |
| **55.98** | 92.82 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.07 |
| **50.22** | 19.77 | 2 | 2 | 2 | 2 | 97.16 | 14.98 | 184.5 | 2.1 | 0.0706 |
| **48.5** | 35.4 | 7 | 7 | 2.428571429 | 1.714285714 | 97.16 | 14.98 | 253.6 | 15.18571429 | 0.0755 |
| **52.47** | 4.62 | 7 | 7 | 2.571428571 | 1.714285714 | 97.16 | 14.98 | 194.7571429 | 17.15714286 | 0.0755 |
| **48** | 26.9 | 6 | 6 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.0755 |
| **50.43** | 5.02 | 8 | 8 | 2.625 | 1.75 | 97.16 | 14.98 | 141.9875 | 17 | 0.0755 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **16.25** | 33.75 | 4 | 4 | 2.5 | 1.5 | 97.16 | 14.98 | 408.4 | 21.55 | 0.0055 |
| **43.5** | 40.17 | 5 | 5 | 2.2 | 1.6 | 882.2 | 14.98 | 446 | 14.9 | 0.0759285 |
| **44.95** | 34.4 | 8 | 8 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.0775 |
| **49.5** | 11.58 | 4 | 4 | 2 | 1.75 | 882.2 | 50.98 | 399.425 | 8.375 | 0.08 |
| **50.83** | 20.5 | 5 | 5 | 2 | 2 | 882.2 | 14.98 | 184.5 | 2.1 | 0.08 |
| **49.5** | 11.55 | 5 | 5 | 1.8 | 1.8 | 882.2 | 50.98 | 438.82 | 4.36 | 0.0885 |
| **44.95** | 34.4 | 8 | 8 | 2.25 | 1.5 | 97.16 | 14.98 | 511.375 | 18.1 | 0.09 |
| **51.4** | 84.67 | 9 | 9 | 2.666666667 | 1.777777778 | 97.16 | 14.98 | 100.9444444 | 16.87777778 | 0.09 |
| **50.98** | 11.33 | 7 | 7 | 2.142857143 | 1.285714286 | 97.16 | 14.98 | 739.7285714 | 22 | 0.09 |
| **50.42** | 8.13 | 3 | 3 | 2.666666667 | 2 | 97.16 | 14.98 | -90.1 | 11.3 | 0.0625 |
| **40.5** | 49.5 | 4 | 4 | 2.5 | 1.75 | 97.16 | 14.98 | 193.475 | 15.275 | 0.098 |
| **23** | 25.5 | 4 | 4 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.0055 |
| **56.01** | 92.8 | 5 | 5 | 2 | 2 | 882.2 | 14.98 | 184.5 | 2.1 | 0.1 |
| **47.5** | 46.8 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.107 |
| **52** | 107 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.12 |
| **48.33** | 20.53 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.12 |
| **50** | 40.8 | 5 | 5 | 3 | 1.2 | 97.16 | 14.98 | 460.36 | 35.98 | 0.12 |
| **51.13** | 10.62 | 11 | 11 | 2.272727273 | 1.454545455 | 97.16 | 14.98 | 541.0909091 | 19.55454545 | 0.12 |
| **54.27** | -0.92 | 9 | 9 | 2 | 1.222222222 | 565.9 | 50.98 | 853.1555556 | 21.62222222 | 0.12 |
| **55.48** | 9.45 | 4 | 4 | 2 | 1.75 | 882.2 | 50.98 | 399.425 | 8.375 | 0.12 |
| **46.29** | 16.04 | 3 | 3 | 1.666666667 | 2 | 222.4 | 50.98 | 321.8 | -2.5 | 0.12 |
| **48.17** | 20.58 | 10 | 10 | 2 | 1.6 | 565.9 | 14.98 | 528.38 | 12.14 | 0.12 |
| **50.3** | 2.95 | 4 | 4 | 1.75 | 1.5 | 882.2 | 50.98 | 717.325 | 11.2 | 0.0055 |
| **52.42** | 6.45 | 10 | 10 | 2 | 1.6 | 565.9 | 14.98 | 528.38 | 12.14 | 0.12 |
| **45** | 34 | 3 | 3 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.1225 |
| **42** | -1 | 6 | 6 | 2.333333333 | 2 | 97.16 | 14.98 | 47.2 | 6.7 | 0.15 |
| **50** | 106 | 2 | 2 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.15 |
| **43.7** | 7.3 | 10 | 10 | 2.1 | 1.7 | 565.9 | 14.98 | 401.22 | 11.01 | 0.17 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **50.98** | 11.31 | 10 | 10 | 1.9 | 1.5 | 565.9 | 50.98 | 655.54 | 13.27 | 0.192 |
| **49.5** | 11.55 | 5 | 5 | 1.8 | 1.8 | 882.2 | 50.98 | 438.82 | 4.36 | 0.215 |
| **49.16** | 8.3 | 10 | 10 | 2 | 1.3 | 565.9 | 14.98 | 786.29 | 19.67 | 0.229863778 |
| **51.96** | 4.05 | 5 | 5 | 1.6 | 1.6 | 799.4 | 50.98 | 693.14 | 6.62 | 0.0055 |
| **50.98** | 11.31 | 10 | 10 | 1.8 | 1.4 | 565.9 | 50.98 | 782.7 | 14.4 | 0.235 |
| **42.33** | -3.5 | 4 | 4 | 2.25 | 2 | 97.16 | 14.98 | 81.525 | 5.55 | 0.2465 |
| **42.33** | -3.5 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.24 |
| **42.33** | -3.5 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.24 |
| **42.33** | -3.5 | 4 | 4 | 2 | 1.75 | 882.2 | 50.98 | 399.425 | 8.375 | 0.24 |
| **42.33** | -3.5 | 4 | 4 | 2 | 1.75 | 882.2 | 50.98 | 399.425 | 8.375 | 0.24 |
| **42.33** | -3.5 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.24 |
| **42.33** | -3.5 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.24 |
| **42.33** | -3.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.24 |
| **42.33** | -3.5 | 2 | 2 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.24 |
| **19.17** | -3.98 | 4 | 4 | 2.5 | 2 | 97.16 | 14.98 | -21.45 | 9 | 0.0057 |
| **42.33** | -3.5 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.24 |
| **39.5** | -8.61 | 5 | 5 | 2.2 | 1.8 | 882.2 | 14.98 | 274.06 | 9.88 | 0.241 |
| **50** | 33 | 6 | 6 | 2.5 | 1.666666667 | 97.16 | 14.98 | 265.1166667 | 17.36666667 | 0.2715 |
| **19.17** | -3.98 | 5 | 5 | 2.4 | 2 | 97.16 | 14.98 | 19.74 | 7.62 | 0.0057 |
| **52.51** | 77.33 | 2 | 2 | 3 | 1 | 97.16 | 14.98 | 632.3 | 41 | 0.3 |
| **39.9** | 115.6 | 1 | 1 | 3 | 2 | 97.16 | 14.98 | -227.4 | 15.9 | 0.3 |
| **47.8** | 46.4 | 7 | 7 | 2.285714286 | 1.571428571 | 97.16 | 14.98 | 435.2571429 | 16.8 | 0.364 |
| **48.4** | 44.95 | 8 | 8 | 2.75 | 1.625 | 97.16 | 14.98 | 197.9625 | 21.8625 | 0.364 |
| **42** | 43.24 | 3 | 3 | 2 | 2 | 882.2 | 50.98 | 184.5 | 2.1 | 0.364 |
| **-1.77** | **36.17** | **7** | **7** | **2.285714286** | **1.857142857** | **97.16** | **14.98** | **189.6285714** | **9.628571429** | **0.396** |

**Appendix: Table 5 – The bootstrap resampling results of *Homo erectus* and *Homo heidelbergensis* climatic variables**

Single variables

| *Homo erectus* | | |
|---|---|---|
| Variable name | Africa | Eurasia |
| wett_mean | 168.97637 | 325.5878 |
| simulated_wett | 170.56242 | 316.0821 |
| left_wett | 0.29 | 0.744 |
| rigth_wett | 0.709 | 0.255 |
| wett_05CI | 166.19247 | 293.3173 |
| wett_95CI | 174.93238 | 338.8469 |
| dry_mean | 24.98326 | 61.94373 |
| simulated_dry | 24.27669 | 55.59386 |
| left_dry | 0.96 | 0.92 |
| rigth_dry | 0.039 | 0.079 |
| dry_05CI | 23.62977 | 48.20091 |
| dry_95CI | 24.92362 | 62.98681 |
| map_mean | 404.87345 | 875.0062 |
| simulated_map | 486.06363 | 858.3133 |
| left_map | 0.007 | 0.615 |
| rigth_map | 0.992 | 0.384 |
| map_05CI | 429.2053 | 753.7737 |
| map_95CI | 542.92196 | 962.8529 |
| mat_mean | 21.07906 | 20.59592 |
| simulated_mat | 22.31867 | 19.27554 |
| left_mat | 0.01 | 0.962 |
| rigth_mat | 0.989 | 0.037 |
| mat_05CI | 21.38137 | 18.05312 |
| mat_95CI | 23.25598 | 20.49797 |

| *Homo heidelbergensis* | | |
|---|---|---|
| Variable name | Africa | Eurasia |
| wett_mean | 238.85704 | 354.5912 |
| simulated_wett | 234.23071 | 331.7547 |
| left_wett | 0.798 | 0.869 |
| rigth_wett | 0.201 | 0.13 |
| wett_05CI | 225.19131 | 299.2039 |
| wett_95CI | 243.27011 | 364.3055 |
| dry_mean | 37.81202 | 50.13861 |
| simulated_dry | 37.35016 | 49.61886 |
| left_dry | 0.653 | 0.576 |
| rigth_dry | 0.346 | 0.423 |
| dry_05CI | 35.48851 | 45.30739 |
| dry_95CI | 39.2118 | 53.93034 |
| map_mean | 429.77095 | 790.4967 |
| simulated_map | 430.87409 | 766.6883 |
| left_map | 0.471 | 0.654 |
| rigth_map | 0.528 | 0.345 |
| map_05CI | 335.47784 | 646.3089 |
| map_95CI | 526.27035 | 887.0676 |
| mat_mean | 17.17883 | 18.09021 |
| simulated_mat | 17.31731 | 18.0909 |
| left_mat | 0.28 | 0.521 |
| rigth_mat | 0.719 | 0.478 |
| mat_05CI | 16.90294 | 16.58481 |
| mat_95CI | 17.73168 | 19.59698 |

Multivariate variance

| *Homo erectus* | | | | | |
|---|---|---|---|---|---|
| africa | | | | | |
| real_varaince | simulated | p_left | p_rigth | conf_left | conf_rigth |
| 20401.01 | 52735.47 | 0.009 | 0.99 | 28350.54 | 77120.41 |
| eurasia | | | | | |
| real_varaince | simulated | p_left | p_rigth | conf_left | conf_rigth |
| 64093.6 | 118084.4 | 0.048 | 0.941 | 67914.08 | 178254.7 |

| *Homo heidelbergensis* | | | | | |
|---|---|---|---|---|---|
| africa | | | | | |
| real_varaince | simulated | p_left | p_rigth | conf_left | conf_rigth |
| 36300.03 | 31892.81 | 0.671 | 0.328 | 14016.5 | 49769.13 |
| euraisa | | | | | |
| real_varaince | simulated | p_left | p_rigth | conf_left | conf_rigth |
| 46807.42 | 117604.9 | 0.055 | 0.944 | 46313.08 | 197123.8 |

**REPORT ON THE PH. D. TESIS "THE ECOLOGY OF DISPERSAL IN EARLY HOMO SPECIES**

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**Tarragona, Spain.**

The main contribution of the present work is centered in two points. One the one hand, it is a fruitful updated synthesis of the state of the art on the dynamics of early *Homo* dispersals from Africa to Eurasia. On the other hand, it is characterized by a innovative methodology that was not previously used in the analysis of that topic.

The first chapter deals with biogeographical aspects of the dispersal out of Africa by *Homo erectus* and how faunal or physiographic factors could have influenced such dispersal. After analysing a very complete data-base, the author arrives to a surprising conclusion, in which *Homo erectus* would have avoided the contact with predators. This would also explain the preference of *Homo erectus* for high-lands, where the presence of large predators is thought to be more limitated. This conclusion contradicts previous scenarios which proposed the association of early *Homo* with large predators and, more specifically, with sabertooths. This association was established on the basis of the supossed carrion diet of these early *Homo*. Quite surprinsingly the work by N. Tsikaridze arrives to the opposite conclusion. No doubt this part of the thesis will be a very important reference in the discussion on the hominin-carnivore interactions in relation to out of Africa.

The second chapter deals with the climatic constraints to the distribution of *Homo erectus* confronted with *Homo heidelbergensis*. Again this is a very interesting point in relation with hominin dispersal, since both species originated in Africa and dispersed into Eurasia at differents times (1.8 Ma in the case of *Homo erectus*, 0.6 Ma in the case of *H. heidelbergensis*). The bootstrap resampling of the climatic variables considered separately showed than in Africa *H. erectus* did prefer drier yet more seasonal conditions than expected by chance. Overall, *H. erectus* in Africa showed narrover climatic tolerance than expected by chance. In contrast, *H. heidelbergensis* in Africa does not show any significance preference for any of the climatic variables considered, whereas in Eurasia it had a climatic niche breadth narrower than expected by chance. This is a very interesting result which could explain why *H. heidelbergensis* reached higher latitudes than *H. erectus*. One main conclusion of this chapter, which can be extended also to the previous one, is that

culture, in the form of the technical innovation of Mode 2, played a minor role as cause for dispersal out of Africa, which seems in both cases constrained by climatic and biological factors.

The third chapter follows the second one in trying to reconstruct the breadht climatic niche of Neandertals with respect Modern humans, in order to explain the demise and extinction of the first ones. This chapter is a good syntehsis of the state of the art of the question, and the authors proposes a similar methodology to the one used in the second chapter, although for the moment no result is advanced.

To sum up, this thesis proposes an innovative point of view and methodology, in order to analyze the ecology of *Homo erectus, H. heidelbergensis* and *H. neanderthalensis*. It is expected that in the future this kind of analysis could be applied to other hominid species. The research line of this thesis is a very innovative one and certainly will be a very valuable contribution to the debate on hominid dispersals. Moreover, some of the results are unexpected and will enhance discussion on the biotic and abiotic factors constraining such dispersals. No doubt the results of this thesis should merit publication in highly cited journals such as *Journal of Human Evolution* or *Quaternary Science Reviews.*

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Dear Professor Rook,

Below I outline a brief report on the Doctoral Thesis of Nikoloz Tsikaridze.

*Contributions of the Doctoral Thesis*

The thesis is a very broad attempt at investigating the environmental and geographic constraints of the Pleistocene hominoids, encompassing roughly the last 2 million years. The geographic extent of the research is large scale, too, encompassing the African as well as the whole Eurasian continents.

The data for the research questions comes from multiple international databases. Although most of the data is readidily available, this should not be understood that no data gathering or compilation took place. Quite contrarily, the harmonizing of the data from multiple databases to uniform format that can be used to consistently investigate all the data is a major undertaking, comparable to establishing a totally new dataset from primary data.

In addition to major data processing and analysis, the thesis takes on to apply new methodology, mainly used in contemporary biology, to investigate the differences between hominin species and their environmental preferences. A major hurdle in this regard is the lack of data in comparison to ecology. This has been a sticking point for multitude of researchers before, who have abandoned these kind of methodoligies due to the lack of data. In this thesis the issue is circumvented by applying randomization procedures to the data, and using probabilistic methodology to draw conclusions from limited fossil data.

The origins of humans, and the multiple different taxonomical disagreements about hominin fossils is an additional issue that many times makes these kinds of investigations hard. Here the candidate has wisely concentrated only on broad groups, and simplifying the underlying complexity to the level that can be statistically tested (enough samples), and can produce results that are informative for general discussions about the human evolution.

*Possibility of continuing or extending the research*

The analysis that the candidate has performed, together with the compilation and harmonization of the datasets provides a good foundation to build a further research. The possibilities range from understanding the faunal interactions during the Pleistocene to the more detailed taxonomic investigation of relationship between early hominins, their connection to beginnings of culture, to the effect of environment to culture, and analysing the differences between African and Eurasian continent. There is also possibility to continue data compilation to include earlier temporal sequences (e.g. Late Miocene, Early Pliocene).

*The value of the research line(s) and the value of the eventual new research lines*

The main impact from the thesis will undoubtedly be to bring in the modern biological and ecological research methods (like SDM analysis, probabilistic methods etc.) to the investigations of human origins. There are few other research groups that are aiming towards similar goals, whilst the existing main stream research is still deeply embedded in taxonomic issues and individual site analysis. This thesis will add to the ongoing change in the paleontological and paleoanthropology towards more computational studies and understanding large-scale patterns. This is a recent phenomen, made possible by availability of new methodologies and large, free, public databases.

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*Importance of the results*

The main results from the thesis are more complete understanding how *Homo erectus*, *H. heidelbergensis*, *H. neanderthalensis*, and to a degree *H. sapies* are related to carnivore and herbivore faunas with whom they were concurrent. Further, the results show how the early human species differed in their environmental preferences. These are important results for the field of paleoanthropology and paleontology, as they give quantitative estimates of large-scale differences between the preferences between the species. They also are interesting enough to warrant more research in this topics, and a possibility to a breakthrough in the ecological context of early humans in the future, once the ideas are more mature and the analysis introduced in the chapter 3 are complete.

*Strong and weak points*

The strong points are already outlined above, but can be summarized as following: The thesis applies the new methods, used in ecology and biology, to fossil material in novel ways. This allows to draw quantitative estimates of ecological differences between early human species, as well as their preferences in environmental conditions. The data compilation, quantitative methodology, and mapping tehcniques move the research field forward, and are to be applauded.

The data availability is still a weak point, as many of the methods are just on the margins of usability for quantitative results. For example, the altitudinal differences between mean value and statitically significant difference are just a few tens of meters. Same with precipitation and temperature estimates. This makes the results susceptible to doubt and fairly hard to interpret, although they are statistically significant. Also the introductory chapter is written in a way that makes it hard to follow (I suspect this is the result of writing in a hurry, as the following chapters are better written). The concluding remarks are almost non-existent, with just few summary statements of the results. I would have expected more hypothezation and introducing new interpretations based on the results, as this is perhaps the easiest place to say what one really thinks (given the restrictions placed by data in the submitted papers), and given that the candidate has spent a lot of time with this thesis, one would imagine that he has developd some insights and gut-feeling what the further results and implications might be.

Overall this is a good thesis, with a lot of promise for the follow-up work.

15.2.2015 Frankfurt am Main, Germany

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