

FLORE Repository istituzionale dell'Università degli Studi di Firenze

dynamics
Questa è la Versione finale referata (Post print/Accepted manuscript) della seguente pubblicazione:
Original Citation: PS-InSAR time series analysis as a tool for measuring landslide dynamics / Pancioli V.; Lu P.; Catani F.; Cigna F In: GEOPHYSICAL RESEARCH ABSTRACTS ISSN 1607-7962 ELETTRONICO 11:(2009), pp. 13900-13900.
Availability: This version is available at: 2158/406293 since:
Terms of use: Open Access
La pubblicazione è resa disponibile sotto le norme e i termini della licenza di deposito, secondo quanto stabilito dalla Policy per l'accesso aperto dell'Università degli Studi di Firenze (https://www.sba.unifi.it/upload/policy-oa-2016-1.pdf)
Publisher copyright claim:

(Article begins on next page)

Geophysical Research Abstracts, Vol. 11, EGU2009-13900, 2009 EGU General Assembly 2009 © Author(s) 2009



PS-InSAR time series analysis as a tool for measuring landslide dynamics

V Pancioli, P Lu, F Catani, and F Cigna

University of Firenze, Earth Sciences Department, Firenze, Italy (valeria.pancioli@unifi.it)

PS-InSAR analysis is today a widely accepted methodology for the accurate measurement of ground displacements related to processes with slow kinematics, such as ground settlement, subsidence, uplift and slow moving landslides.

The advanced use of PS-InSAR information has, however, very promising potential also for the understanding of the landslide behavior in time and to study the correlations between such dynamics and the possible causative factors.

We offer here some examples of PS-InSAR based analysis of displacement time series relative to deep-seated landslides and we discuss the advantages and the possible add-ons offered by the use of techniques based on the automated or semi-automated recognition of deviations from regular, expected trends. We also discuss the new perspectives that will be offered in the next years with the availability of shorter rivisting time space-borne SAR platforms as e.g. TerraSAR-X and COSMO.