SOLAR POLAR X-RAY JETS AND MULTIPLE BRIGHT POINTS: EVIDENCE FOR SYMPATHETIC ACTIVITY

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We present an analysis of X-ray bright points (BPs) and X-ray jets observed by *Hinode/X-Ray* Telescope on 2007 November 2–4, within the solar northern polar coronal hole. After selecting small subregions that include several BPs, we followed their brightness evolution over a time interval of a few hours, when several jets were observed. We find that most of the jets occurred in close temporal association with brightness maxima in multiple BPs: more precisely, most jets are closely correlated with the brightening of at least two BPs. We suggest that the jets result from magnetic connectivity changes that also induce the BP variability. We surmise that the jets and implied magnetic connectivity we describe are small-scale versions of the active-region-scale phenomenon, whereby flares and eruptions are triggered by interacting bipoles.

Key words: Sun: activity - Sun: corona

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