



Monitoring of the Clapiere landslide (French Alps) by continuous GPS

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The Clapiere landslide is a 1 km² landslide, located on a slope in the Mercantour massif (southern French Alps). Previous surveys using laser distance-meters indicate typical displacement of 1-2 cm/day. We present a new monitoring system based on continuously recording GPS stations. Two dual-frequency GPS receivers have been installed outside the landslide and are used as reference. Two single-frequency receivers have been installed within the landslide, the first one is located within a rapidly moving area and the other one is on a block located at the edge of the main area of current sliding. Radiolinks are used to transmit data and RINEX files, directly usable for the analysis are produced in real time. We present preliminary results of two years of measurements and discuss the correlation of changes in the velocity with hydrological and meteorological parameters.