



MULTIPLE PARAMETER MONITORING SYSTEM FOR LANDSLIDE

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Abstract- China has complex terrain where landslide happens very frequently, thus leading to serious damages sometimes. So in China much attention is paid to the monitoring of landslide. There are various methods in landslide monitoring all over the world. Based on the analysis on previous landslide monitoring instruments, this paper designs a new kind landslide monitoring system, which

can monitor three parameters of different depth at a time: internal displacement, internal geotechnical pressure and pore water pressure. The system consists of three parts: mechanical structure, monitoring system and PC software. In this system the data collected by sensors are firstly stored in the SD card, and the user will be able to read the monitoring data at regular intervals instead of monitoring data changing timely, which can save labor, especially at the initial stage of landslide. At last laboratory testing has been done to verify the accuracy of this measuring system and the result satisfies the design requirements.

Index terms: Landslide, monitoring, internal geotechnical pressure, pore water pressure, internal displacement.