

Figure 1 Location of the studied landslide site

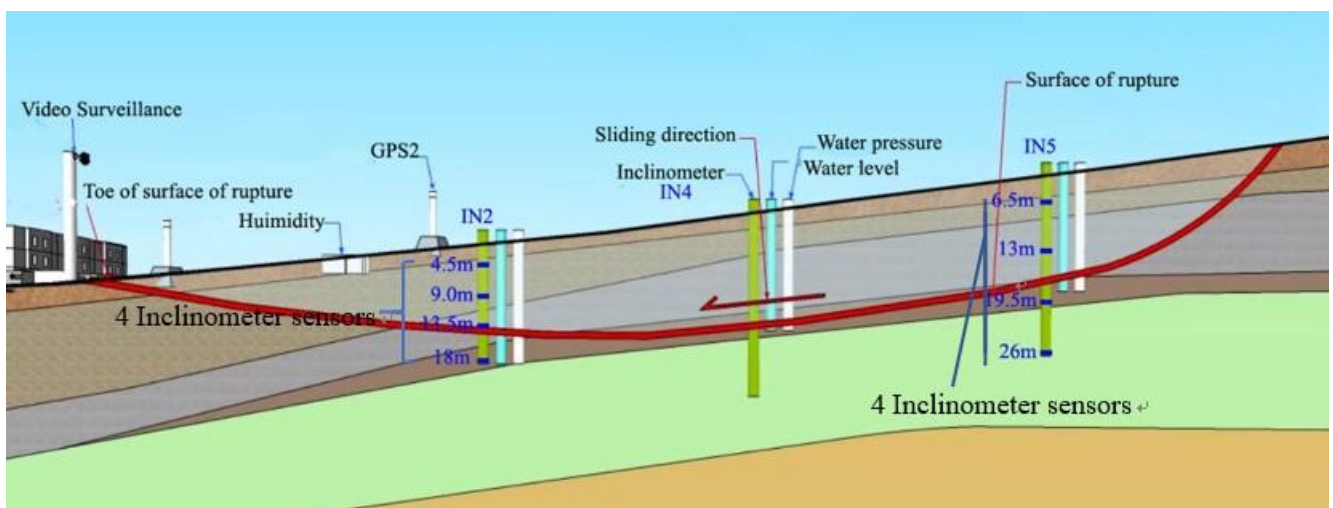
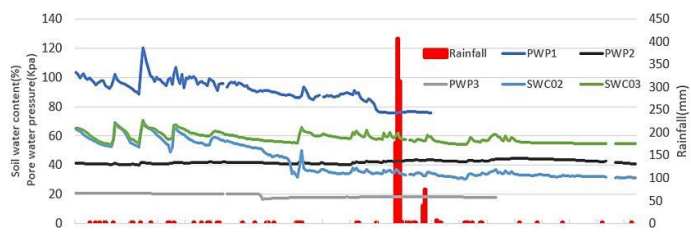


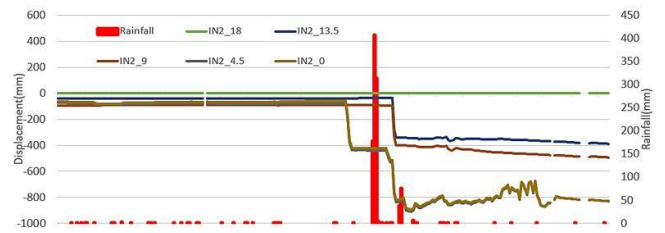
Figure 2 Positions of the monitoring instruments



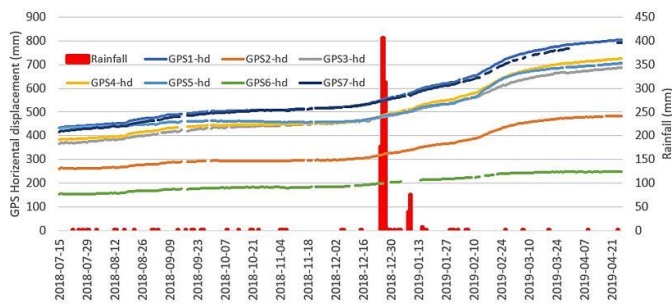
Figure 3 Monitoring instruments on the landslide



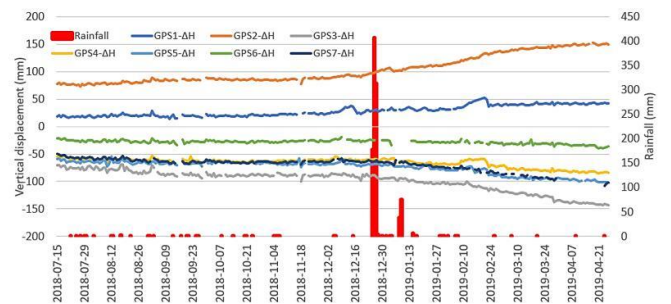
(a) Soil water content, pore water pressure and rainfall



(b) Inclinometer and rainfall



(c) GPS horizontal displacement and rainfall



(d) GPS vertical displacement and rainfall

Figure 4 Relationship between rainfall and the other monitoring data



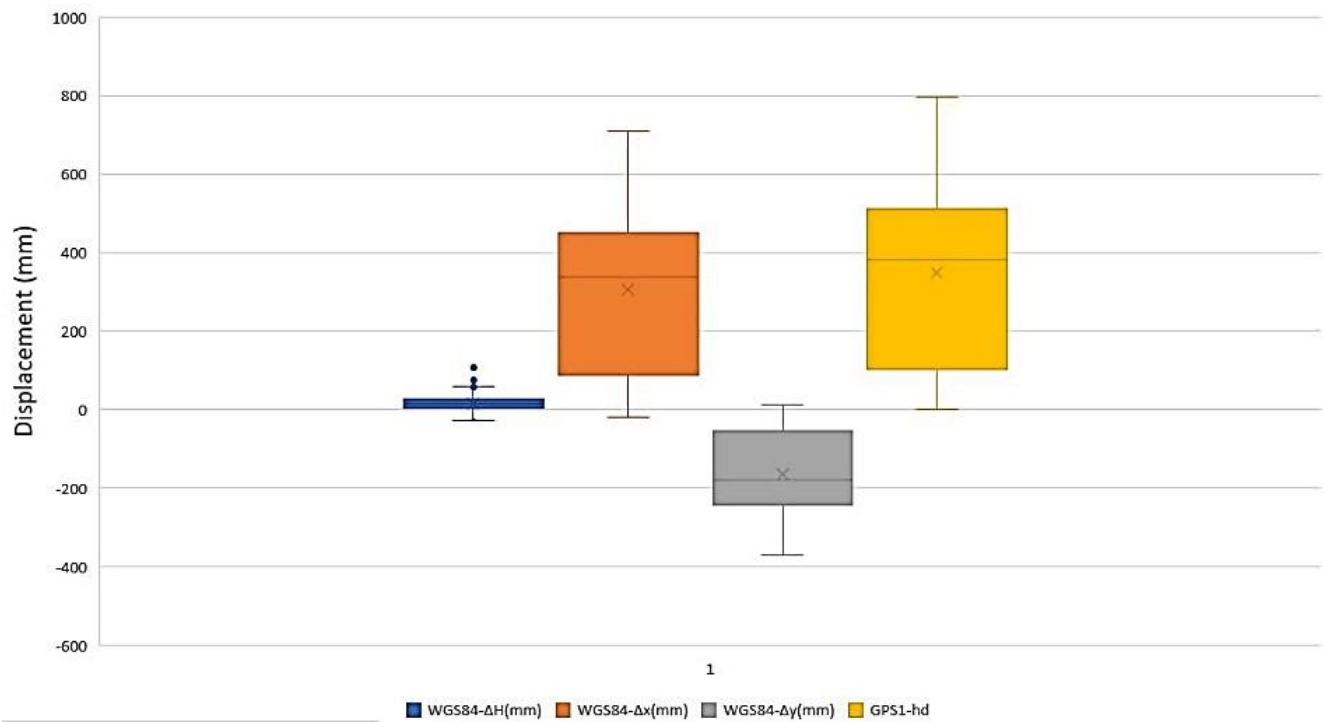


Figure 5 Box plots of GPS

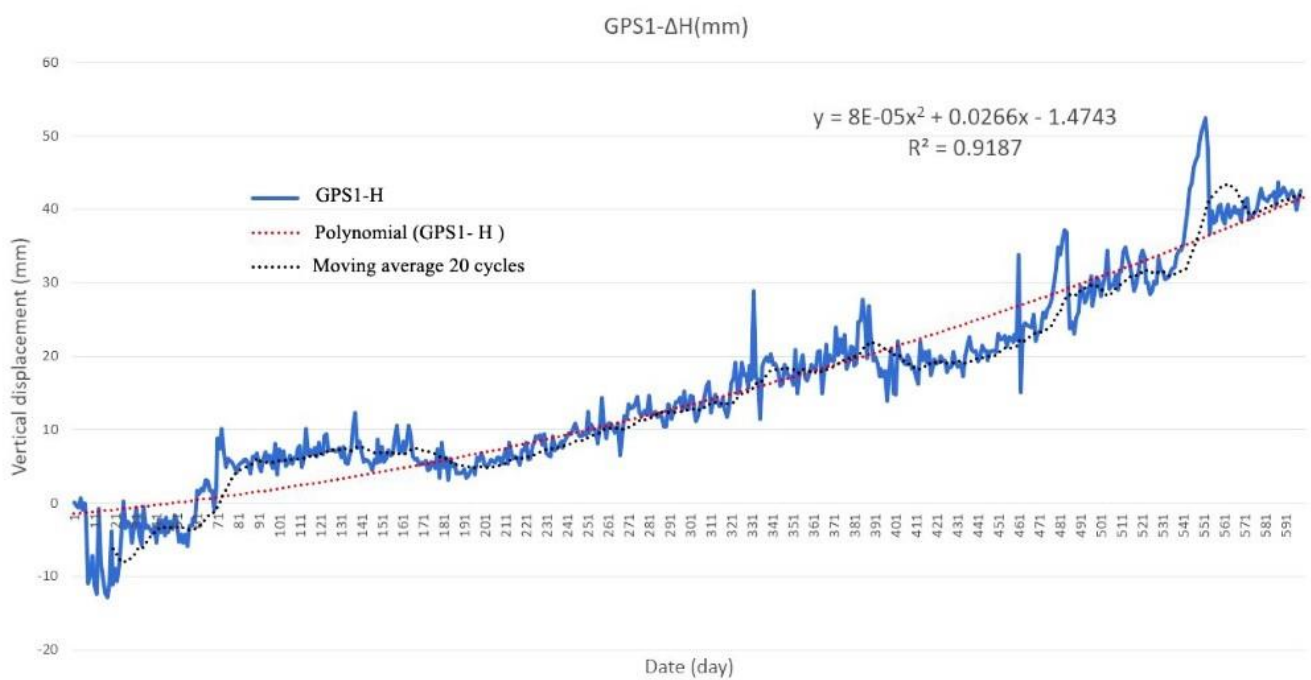


Figure 6 Vertical displacement and its fitting

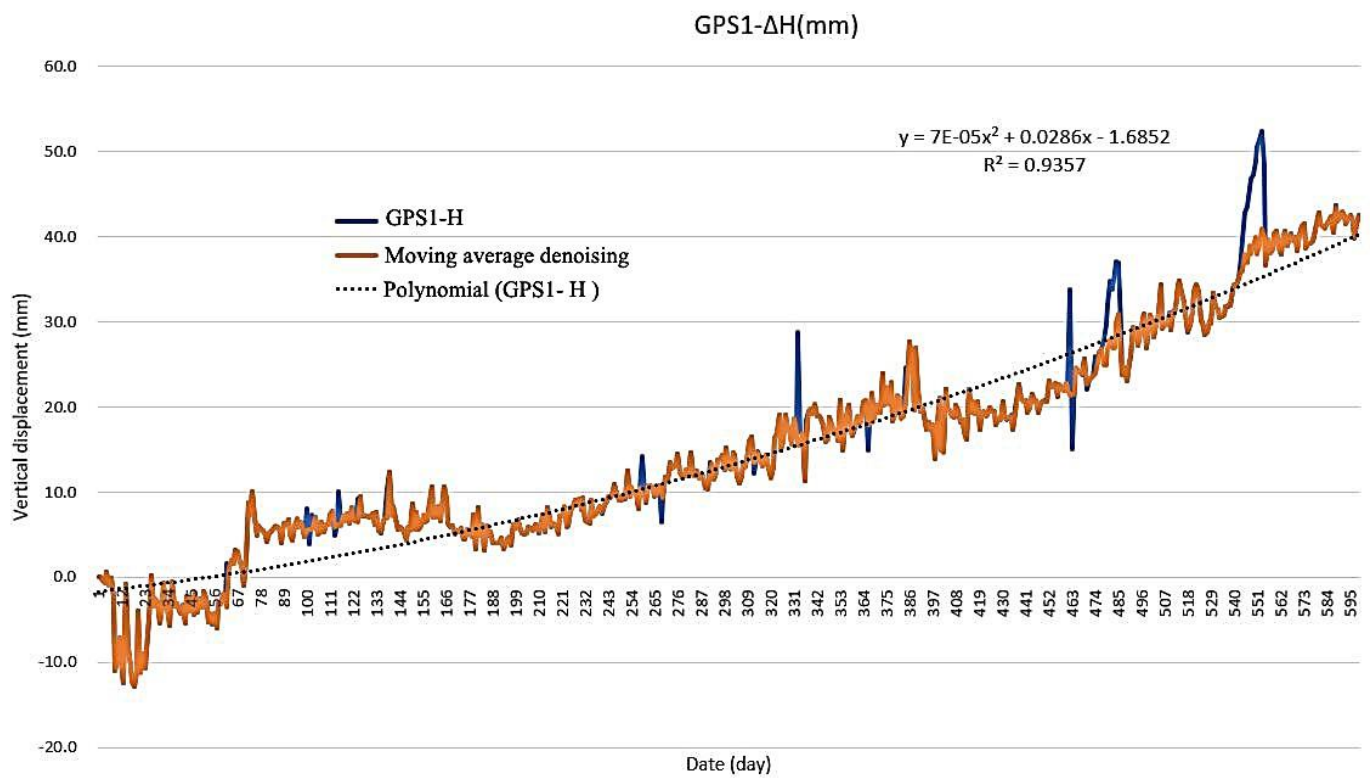


Figure 7 Vertical displacement and its fitting

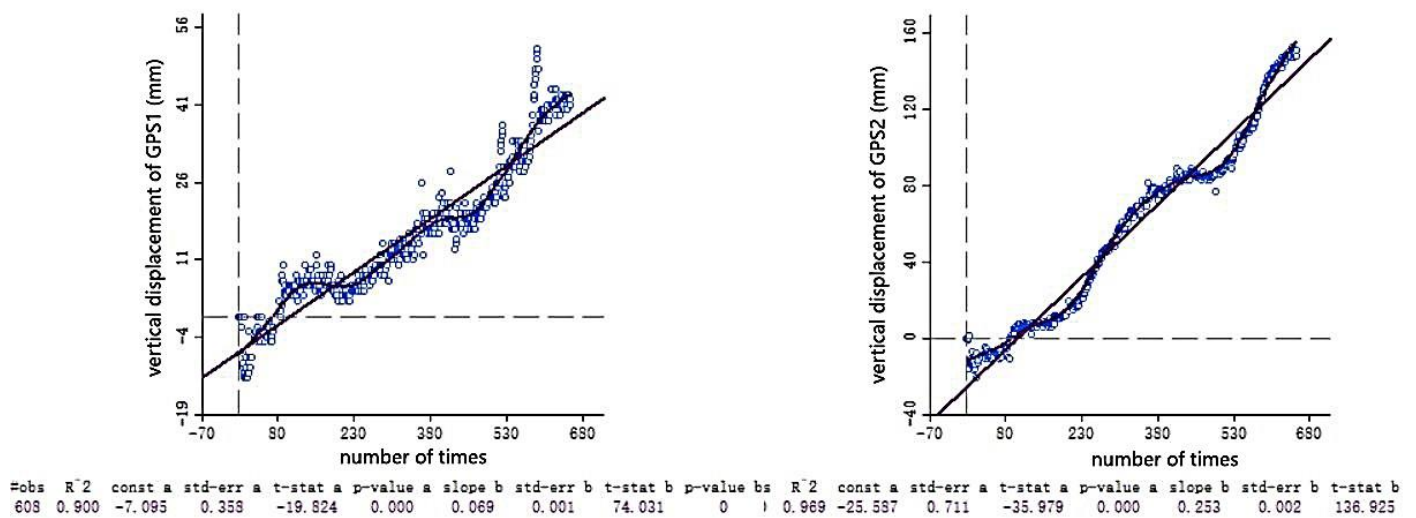
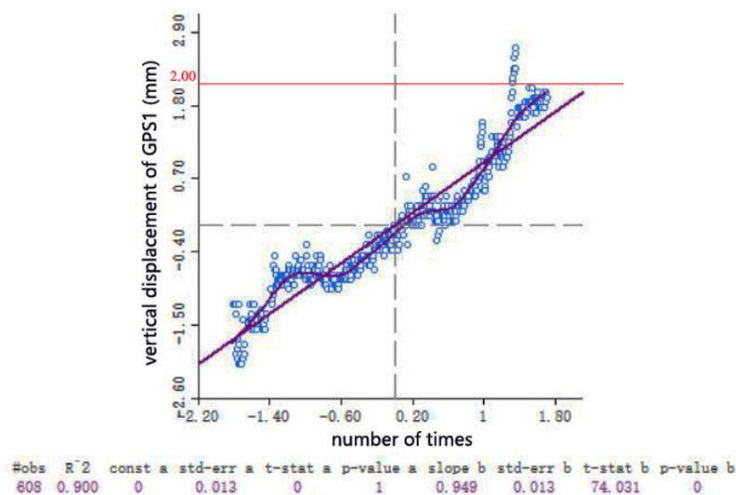
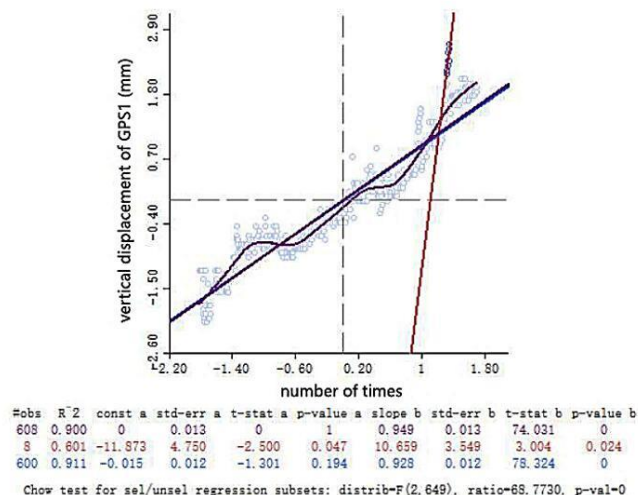


Figure 8 Scatter plots of GPS1 and GPS2



(a) Standardized data of GPS1



(b) Brushing the scatter plot of GPS1

Figure 9 Analysis data of GPS1

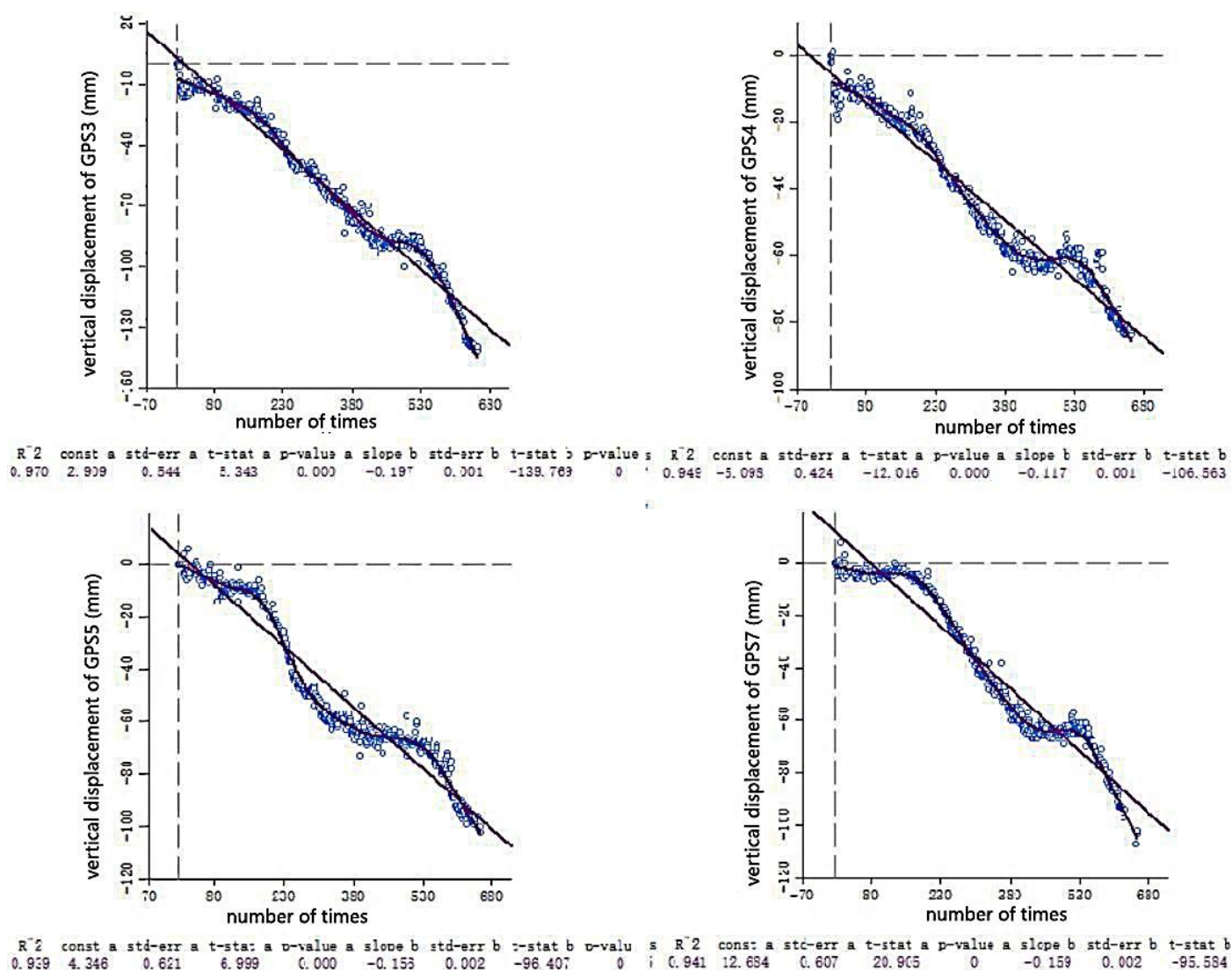


Figure 10 Scatter plots of GPS3 GPS4 GPS5 and GPS7

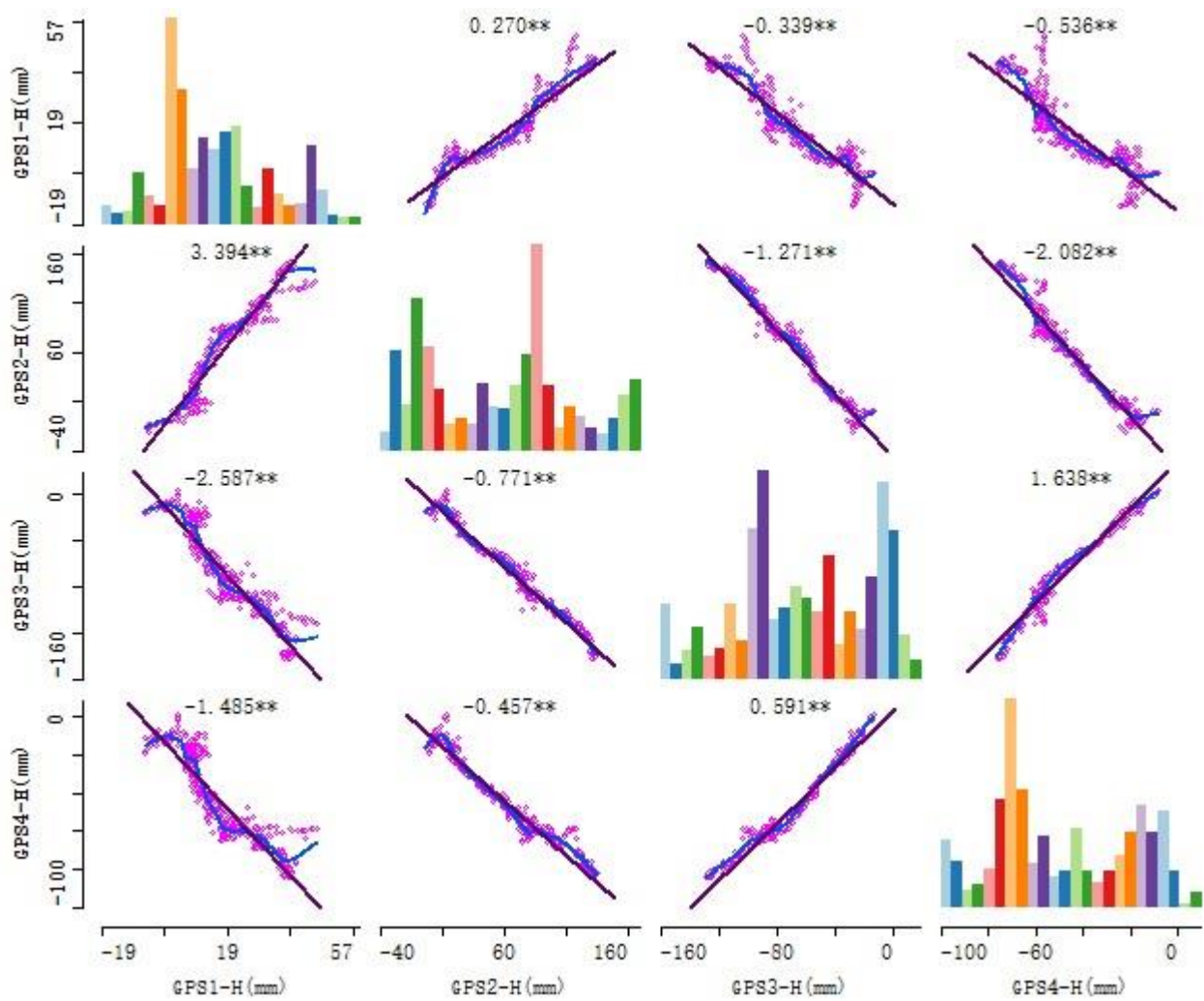


Figure 11 Scatter plot matrix between GPS1 GPS2 GPS3 and GPS4

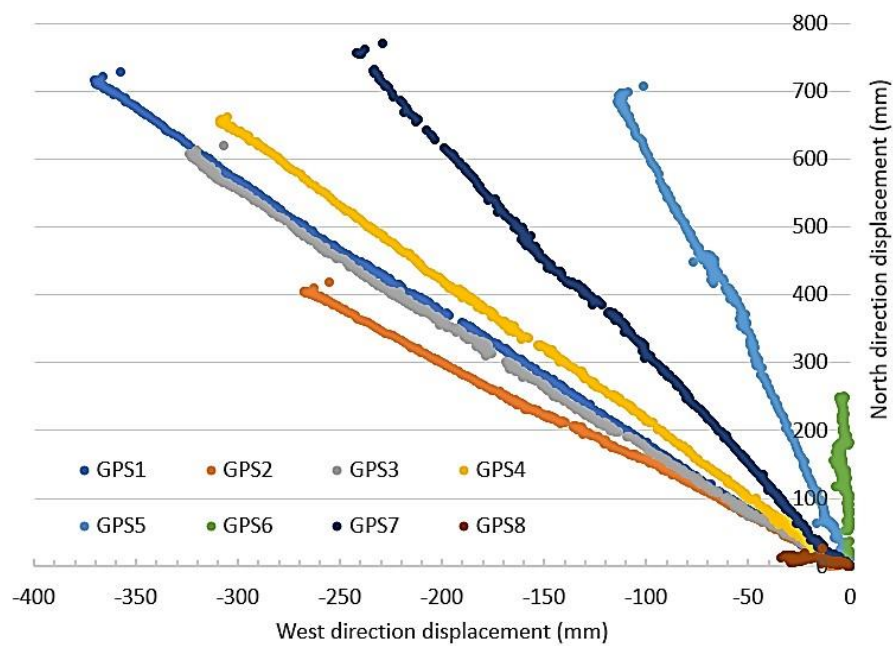


Figure 12 GPS displacement from July 14th 2017 to May 1st 2019



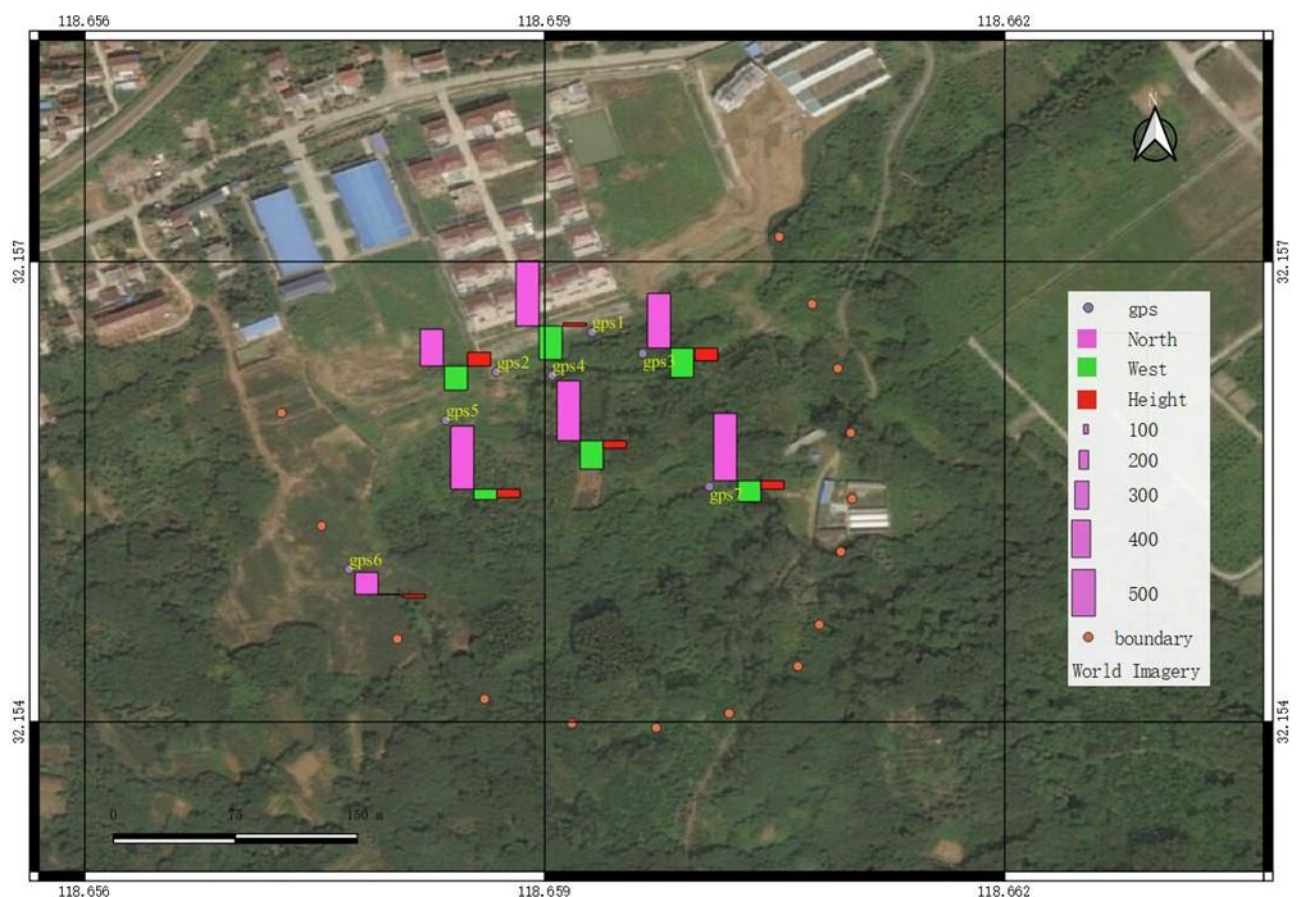


Figure 13 Surface displacement visualization

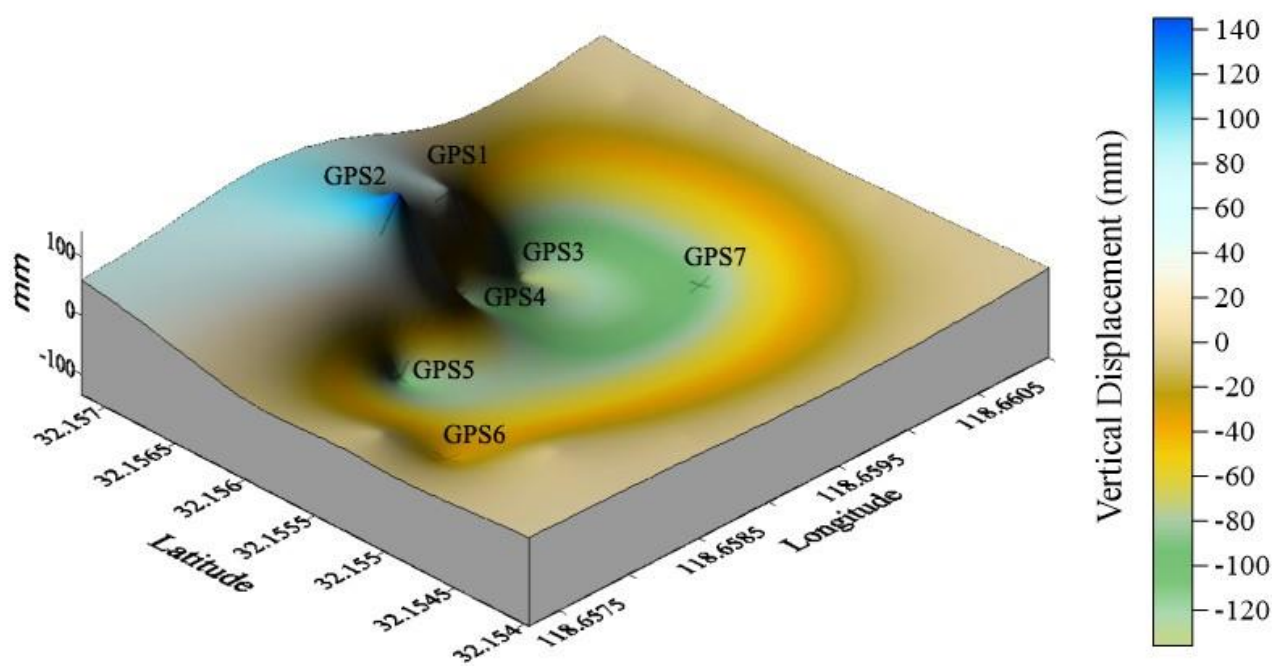


Figure 14 3D graph on April 8th 2019

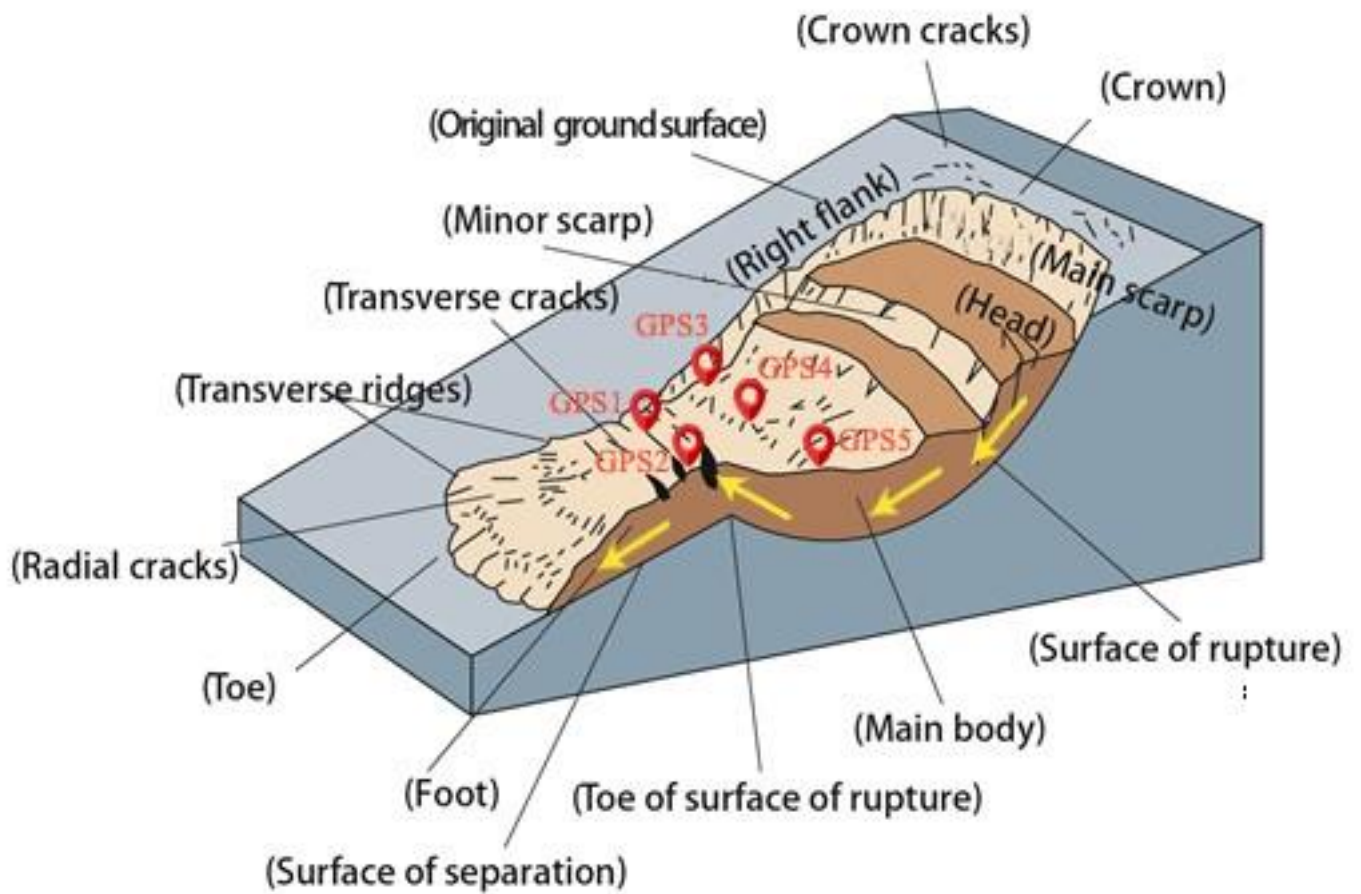


Figure 15 Zhutoushan landslide type based on Varnes 1978