

Early warning system slide slope



PROJECT

In Val Canaria (south side of the Gotthard massif) several large landslides have occurred in the last two years. The authorities expect that further rock masses could come loose, which would spill the road and the mountain stream in the valley again and therefore pose a great threat.

The largest landslide had a dimension of approximately 170,000 cubic metres.

Thanks to the outstanding performance features of the HAPPY MONITORING systems in poorly accessible mountain areas, the cantonal administration decided to place 1 HAPPY MONITORING sensor on each of the most endangered landslide slopes, which could trigger an early alarm in the event of further movements.

The correction data are obtained via public VRS system "swipos".

ACCURACY

24h: position $\pm 2,5$ mm, height $\pm 6,0$ mm
[average with 15 satellites]

INSTRUMENTS

2 x HAPPY GEM-X11

CUSTOMER BENEFITS

- No local fixed points, which would also be located in the moving area
- Weather-independent GNSS - sensors that deliver data 365 days a year
- Maintenance and control of sensors via Cloud
- Power supply via solar panel and one battery

CUSTOMER

Canton Ticino, Dipartimento del Territorio, Sezione forestale, Ufficio pericoli naturali incendi e progetti