

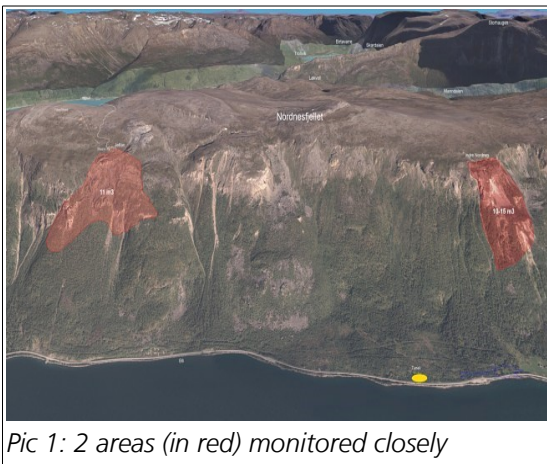
DIMETIX APPLICATION EXAMPLE

AE-1601

ROCK SURVEILLANCE TSUNAMI WARNING

Industry : Geodesy
Application type : Monitoring

Brief description



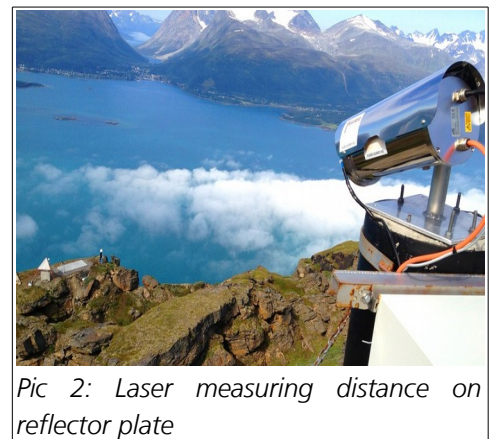
Pic 1: 2 areas (in red) monitored closely

Across the bay is Nordnesfjellet. On the hillside is Jettan, a volatile mountainous area that is 350 meters wide, 400 meters long and contains 11 million cubic meters of rock what is probably the world's most heavily guarded mountain. But people who live here are not frightened of that mountain that sooner or later will trigger a Tsunami.

Altogether there are four to five independent systems which all confirms the same: Jettan is about to detach from the parent rock, with a speed of around five centimeters a year.

There are parts of the mountain Jettan left of the Pic. 1 being monitored closely, but also an area of Inner Nordnes is moving. Up on Jettan three lasers are set up. They measure every day the distance to a reflector plate that stands out on the block that is in motion. The inhabitants are warned in the event of a landslide in order to get themselves to safety before the caused tsunami hits.

A tsunami is a series of fast moving waves in the ocean caused by powerful earthquakes or volcanic eruptions. A tsunami has a very long wavelength. It can be hundreds of kilometers long. Usually, a tsunami starts suddenly. The waves travel at a great speed across an ocean with little energy loss. They can remove sand from beaches, destroy trees, toss and drag vehicles, damage and even destroy whole towns. Tsunamis can also be caused by meteorite impacts.



Pic 2: Laser measuring distance on reflector plate

Customers advantages

- Measuring range 0.05 up to 500 m
- Accuracy 1 mm
- Repeatability 0.3 mm
- Extended operating temperature
- Solid metal case IP65
- Supply voltage 9V CD – 20V CD

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