# Consultation BDD

# OMIV

## Type

TS-ANO5

## Coordination

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## Description

Summary : The French Landslide Observatory (Observatoire Multi-Disciplinaire des Instabilités de Versants) SNO-OMIV, monitors four continuously active landslides which are representative of the deformation mechanisms and forcing conditions (rainfall, seismicity) observed in the French Alps (hard/soft rocks, slow/fast moving slope). On each sites, the SNO-OMIV provides continuous open access to records of the landslide kinematics (by geodetical techniques), the seismic response of the slope to triggers (by seismological techniques), and to the hydro-geochemical characteristics of the slope. Combined together, these three categories of observations are unique worldwide for landslide research. In practice, SNO-OMIV (which has a INSU label since 2007) is labeled for the monitoring and data organization/sharing for: --> 4 sites in the French Alps (Avignonet, La Clapière, Séchilienne, Super-Sauze) --> 3 categories of observation to be monitored on each site: (i) the kinematics using GPS sensors, tacheometers benchmarks, extensometers and satellite/terrestrial based imaging (image correlation LiDAR) (ii) the landslide seismic patterns (endogeneous seismic signals categorized in three types - micro-earthquakes rockfalls, exotic signals- and the landslide response to regional earthquakes) (iii) the hydrological response of the slope to short/long-term weathering forcing (hydro-geochemistry, meteorology). In 2016, SNO-OMIV operates 16 GPS (12 dual frequency, 4 low-cost single frequency), 60 tacheometrics benchmarks, 50 x 1C and 14 x 3C seismic sensors, 7 meterological stations, 7 hydrological stations (with different parameters), and 11 water sampling points. In 2016, the raw data (and advanced solutions for the seismological and GPS observations) are accessible through a single portal http://omiv.osug.fr/donnees.html portal. The portal is currently being upgraded (release in 2017) to have the possibility to visualize interactive graphics of the three parameters. Involved laboratories: - OSUG/ISTerre - OCA/Géoscience Azur - THETA/Chrono-Environnement Other involved structures: -Université d'Avignon et des Pays du Vaucluse (UAPV) -EMMAH Web site : http://omiv.osug.fr