

Lear Synthetic Aperture high-resolution radar PACK (LISA)

Description

LISA (Linear Synthetic Aperture high-resolution radar) is an innovative suite of software concerning a system to monitor landslides of ground and avalanches based on imaging radar instrumentation.

It has been specially developed to help scientists on the ground control process and analyse the collected data. LISA is able to perform measurements on areas extending from a few metres to a few kilometres to provide close-up views of sections of particular interest.

This application is part of a range of technologies deployed for environmental and risk monitoring in Europe, as part of the GMES (Global Monitoring of Environment and Security) initiative. Everyday new and more interesting applications are developed.

Innovative aspects and main advantages

- Total independence of the system from reference points on the examined object
- Measured area does not require any contact or human presence
- Insensitivity to disturbance and interference
- Ability to generate displacement maps and to operate at a long range (max. 4km)
- Operational day/night with adverse weather conditions
- Fast and easy deployment
- High level of system availability (24 / 7 / 365)
- Possibility to provide measurements in "near-real time" (observation every few minutes)
- Extreme precision of measurements (0,3-0,7mm)

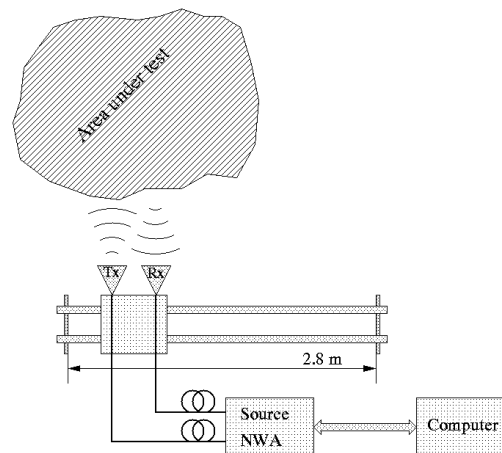
Areas of application

- Civil Protection, national technical services, etc.
- Environmental Protection Agencies, geological surveys, fire departments, dam monitoring agencies
- National or local administrations
- Ministries (Public Works, Cultural Heritage, Environmental Ministry, etc.)
- Supranational or national institutions (Development Banks, United Nations, European Union, etc.)
- Surveillance of Infrastructure (dams, highways, railways, electricity producers, etc.)

- Assurance and reinsurance companies
- Real estate
- Engineering and construction companies;

Stages of development

- Mature product (licensed for landslide)
- Copy right registered



Scientific contact

TARCHI Dario
Sensors, radartechnologies and cybersecurity Unit
IPSC - DG JRC - European Commission
Via E. Fermi, 1
I - 21020 Ispra (VA) - Italy
Tel: +(39) 0332 785143 - Fax: +(39) 0332 785469

Licensing contact

Intellectual Property and Scientific Collaboration Unit
JRC - European Commission
B-1049 Brussels, Belgium
Email: JRC-TechTransfer@ec.europa.eu

Reference: file n°2702