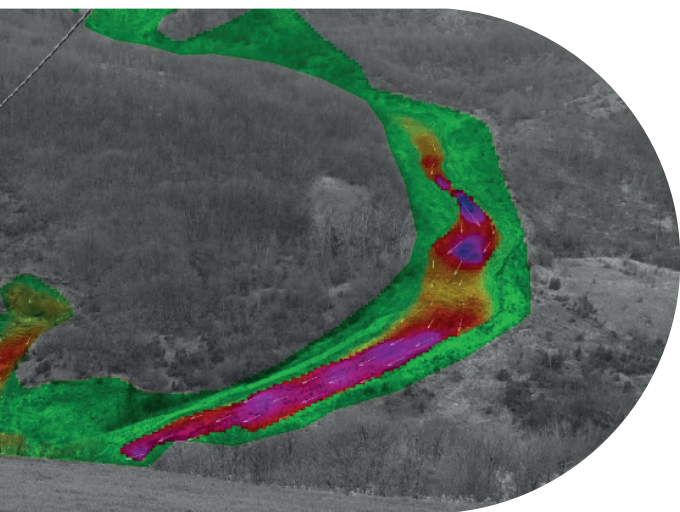# Photomonitoring™ by RE-MONITOR

Transform your camera into a geotehcnical and structrual monitoring system

What is Photomonitoring?

Photomonitoring™ is a RE-MONITOR's advanced, proprietary technology that enables precise monitoring of geological, geotechnical, and structural assets.
Leveraging high-resolution imaging and automated analysis, Photomonitoring provides unparalleled insights into changes and deformations of critical infrastructure.

How It Works

CAPTURE
Utilizing satellite, aerial, and ground-based cameras, the system collects comprehensive imagery.
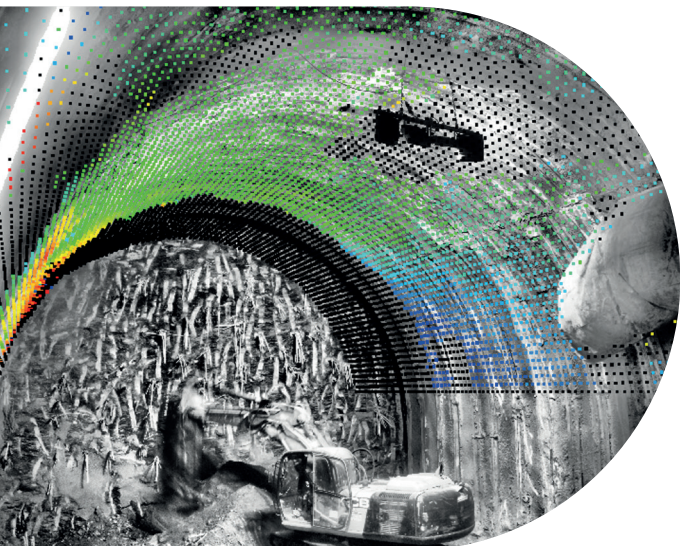
ANALYZE
Our proprietary IRIS software transforms raw data into actionable insights, identifying minute changes in structure and terrain.

ACT
Customizable reports and real-time alerts empower decision-makers to address potential issues before they escalate.

Benefits for our Clients

High-Resolution Imaging	Detect minute changes that standard monitoring systems may miss.
Real-Time Alerts	Stay ahead of potential risks with instant notifications.
Cost-Effective Solutions	Reduce maintenance costs and prevent costly repairs.
Versatile Applications	Suitable for diverse industries, from transportation to oil and gas.

Photomonitoring™ Applications

Photomonitoring is applicable over different time scales and supports the assessment and monitoring of a wide range of processes that may affect the areas under investigation.

TUNNEL CONVERGENCE MONITORING
Full field monitoring to assess the convergence and deterioration of tunnels under construction and fully commissioned tunnels.
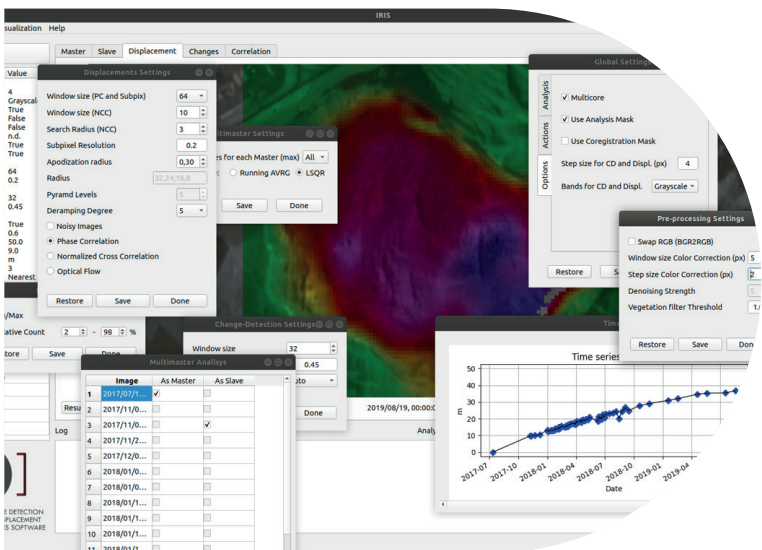
ROCKFALL DETECTION AND MAPPING
Capture even the smallest rockfalls and map the most active sections at 60 second sampling rates.

FAST MOVING LANDSLIDE MONITORING
Map and monitor displacement rates of fast moving and sudden landslides without loss of information.

Iris Software

PhotoMonitoring™ is based on a set of advanced image processing algorithms (e.g. digital image correlation and change detection) implemented in the IRIS software. IRIS is conceived to work with terrestrial, aerial and satellite imagery of any datatype (Optical, Thermal, Near-Infrared) allowing subpixel accuracy in displacement monitoring.

Customized Hardware

Photomonitoring solutions can be realized using a wide range of tools, from ad-hoc sensors (e.g. thermal cameras) to commercial-grade cameras (e.g. DSLR, IPcam) able to address different needs. All these devices are specifically set to continuously acquire reliable and comparable data and, thanks to rugged and weatherproof housing, in any type of environment such as constructions sites, remote areas, industrial zones, etc.