



SATELLITE-BASED
MONITORING
SERVICE FOR
LAND STABILITY
ASSESSMENT



Rheticus[®]
SAFELAND



SATELLITE-BASED LAND STABILITY MONITORING SOLUTION.



The prediction and mitigation of land instability hazards have always been a real challenge for authorities and agencies or civil engineering. Pressed by human activities and climate change, these events' intensity and frequency are overgrowing.

It is becoming increasingly important to have effective monitoring systems to gather timely information and act proactively to protect people and infrastructures.



The background image shows a road with a significant crack and a large hole. A traffic cone with orange and white stripes is visible in the upper right. The scene is surrounded by green bushes and trees. A white rope is strung across the road. A green square frame highlights a portion of the road and the bushes on the left. A red horizontal bar is located above the traffic cone.

INDUSTRIES.

GOVERNMENT

National and Local Administrations, Civil Protection, Geological Survey Agencies.

ENGINEERING

Transportation (Roads & Railways), Industrial plants, Construction.

OTHER

Insurance companies, Professionals.



RHETICUS[®] SAFELAND.

Get an in-depth analysis, which thoroughly tracks any relevant ground displacement and slope instability within your area of interest.

The radar satellite analysis provided by Safeland leads to a reliable, user-friendly, periodical report that pinpoints any displacement to the millimeter while also tracking emerging trends and anomalies.

In a nutshell, Rheticus[®] Safeland provides invaluable assistance with critical and timely information to let you plan land instability hazards prevention and mitigation campaigns.

BENEFITS



**PREVENT RISKS TO ENSURE HAPPY
CITIZENS AND SAFE INFRASTRUCTURES**



ENHANCE LAND MONITORING AND RISK DETECTION



**GET UP-TO-DATE SYNOPTIC VIEW
OF LAND INSTABILITY RISKS**



**GET SMART ACTIONABLE REPORTS,
ANALYTICS, AND MAPS**

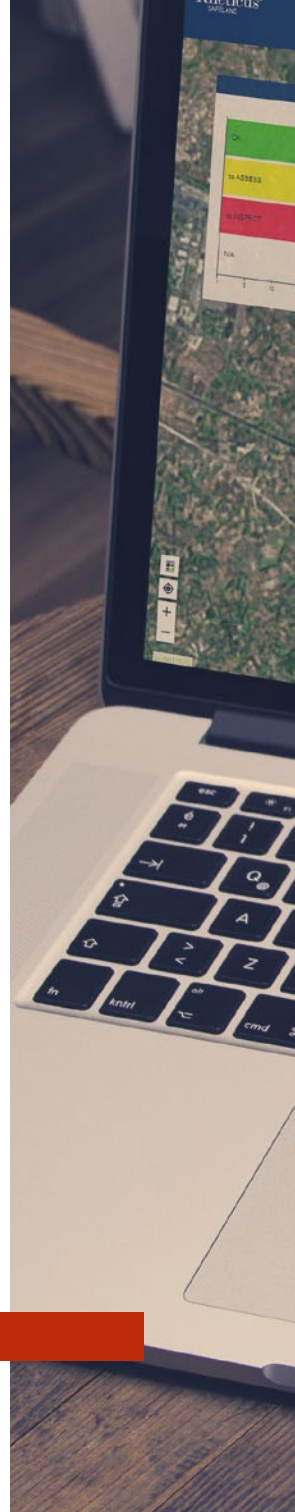


SAVE BOTH TIME AND MONEY



ACTIONABLE INSIGHTS FOR SAFER COMMUNITIES.

The classification is carried out by measuring **superficial millimetric displacements** due to natural or man-induced subsidence slow landslides and/or subsidence. The synoptic view of the territory, both in urban and extra-urban areas, is completed by a **multi-year historical analysis** of the movements. The report includes indicators and actionable insight that provide an easy-to-read overview that allows users to make quick and informed decisions. All detailed info is accessible in a simple, user-friendly way by the Rheticus® geoportal, available **24/7 from any device**.



There are 808 cells to inspect and 1290 cells to assess out of 16185

planetek
Italia

FROM SATELLITE TO YOUR HANDS IN 4 STEPS



Satellite image
acquisition



Constantly updated
information, ranging
over the whole area of
interest



Accessible,
easy-to-read, and
actionable report

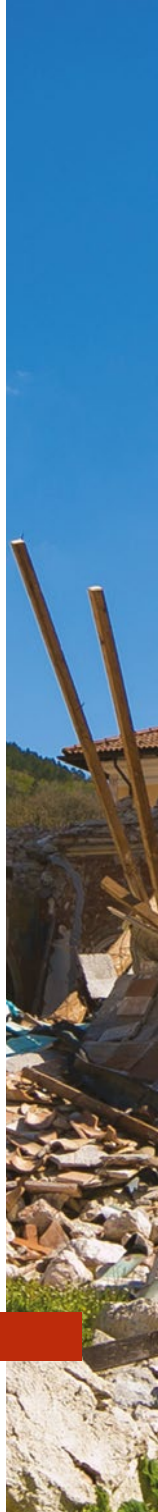


Field investigation



EVERYTHING UNDER CONTROL.

Rheticus® Safeland offers a periodically updated synoptic view of the territory's stability level and a historical dataset of the superficial displacement levels over the land. The monitored area is divided into 250×250 meters of cells. Each cell is colored according to the attention it requires green, yellow, and red. The level of attention is determined by combining the measurements of surface displacement measured with satellite data with other parameters that take into account the topography, the vegetation cover, the level of infrastructure, and the human presence. The reports, periodically updated according to the user's contract, are sent via email as a PDF and available through the geoportal.





Up-to-date insights
of land use/land
cover changes



Detailed, Synoptic
view of ground
motion dynamics



Previous expertise
with GIS or Earth
Observation Data
is not required



Pinpoint unstable
areas, improving
safety and planning



Enhanced land
monitoring
and reporting



Cloud-based

GATHER GEOSPATIAL INTELLIGENCE, NOW.

Many users have already discovered the benefits of Rheticus® Safeland. Search our website for our customers' success stories and learn about the benefits of integrating Rheticus geoinformation services in your management and operational activities.

For commercial and technical support, you will always count on our global team of authorized distributors and on Planetek Italia's experience of over 25 years. Gather geospatial intelligence, now. Contact us or request a demo.



WHAT CUSTOMERS SAY

Monitoring with radar images acquired from the satellite on landslide areas has allowed us to drastically reduce the stability analysis of the slopes and to immediately identify the areas to pay attention to for the implementation of any on ground monitoring networks.

Antonio Bratus
Department of Soil Protection
Friuli Venezia Giulia Region, Italy



Rheticus®

monitoring the evolution of our earth

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Developed by



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italia