

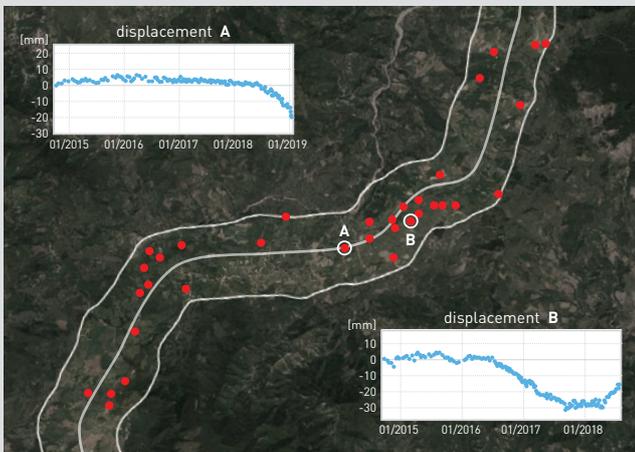
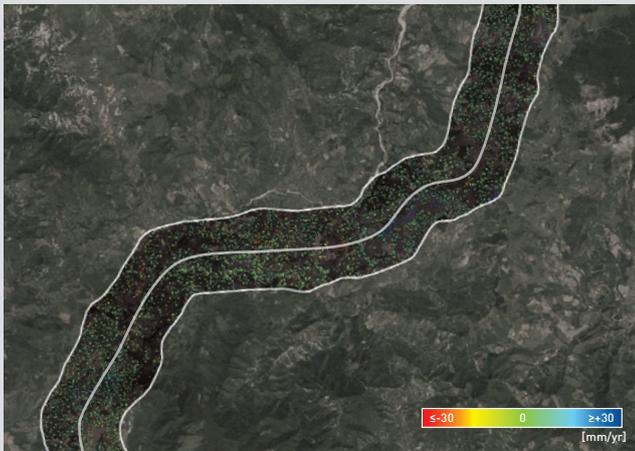
Detect threats to pipelines and infrastructure

with TRE ALTAMIRA's radar satellite solutions

LAND MOVEMENTS

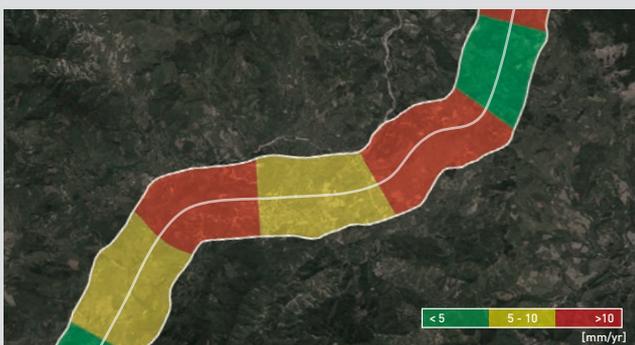
ASSESS RISK

We monitor land movements along entire networks, highlighting hotspots where changes in motion trends occur. The frequency of monitoring is tailored to clients' needs.



PRIORITISE MAINTENANCE

We highlight assets exposed to stress that may require further investigation or remediation.



THIRD PARTY INTERFERENCE

DETECT CHANGES ON THE GROUND

We map surface changes, e.g. new structures, construction or other issues encroaching on your assets.



OPTIMISE PATROLS

With targeted change detection, we offer frequent surveying in and around important infrastructure.



TECHNOLOGY

TRE ALTAMIRA employs its patented algorithms to extract information from satellite radar data.

SqueeSAR® is the industry standard for advanced InSAR analysis, providing measurements of ground deformation to millimetre accuracy.

Trend variation with SqueeSAR® enables the highlighting of changes in motion dynamics over time, serving as a tool to flag up areas that may require further investigation.

Spatially dense and precise results	Measurement point density can exceed 10,000 points/km ² . Movement precision is typically around 1 mm/year.
Non-invasive Scalability	Completely remote. No need for installation of any ground equipment. SqueeSAR® is unrivalled in its ability to obtain displacement measurements over large or small areas.
Fast delivery	Repeated satellite image acquisition and rapid delivery of results allow SqueeSAR® to be part of your operational plan.
Cost-effective	No other technology provides such dense measurements at a fraction of the cost of other survey techniques.
Historical data	Assess past movement trends. Satellite data archives extend back to 1992 and can be processed to produce a historical record of ground movement.
Movement vectors	Measurements of vertical and horizontal displacement can be retrieved.

Change detection. Satellite radar imagery coupled with **Despecks®** is also used to **map** and **monitor changes** on the ground.

Unparalleled frequency compared to traditional patrolling	Current satellite constellations ensure new radar images every few days, allowing frequent surveying in and around important infrastructure.
Customizable	Change detection can be used to map small or large areas at a preferred frequency of reporting.
Value for money	Patrolling is optimized for early detection of encroachments that may be a threat to a network.
Historical data	Using radar data archives, third party interference can be identified for claim assessment.

With over 20 years' experience, **TRE ALTAMIRA** is globally recognized as the world leader in satellite SAR technology. We offer our clients reliable and timely information on how areas of interest are changing over time, allowing them to mitigate risks, optimise operations and plan future activities.

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