AWARE

Agile Watching of Assets and Resources

AWARE provides end-to-end solutions for **asset and infrastructure management, services for smart cities** and, in general, for **territory management**. Early identification of asset deformations, detection of changes and activities in critical areas, life quality and environmental parameters are crucial information provided by AWARE to support decision-makers in their daily activity.

The day-by-day management of **dams, mining areas, airports, pipelines, oil platforms, archaeological sites and cities** can benefit from AWARE's integrated approach and tools.

The platform provides **high precision and accurate positioning analysis, PSP satellite interferometric analysis, GNSS services, Change Detection and Third Parties Interferences detection services, thematic cartography and high resolution 3D models**. AWARE returns the analysis through portals & toolbars, providing information and supporting tools to add further value to geospatial data.

TO WHOM

- OIL & GAS
- RAILWAY & TRANSPORTATION
- PUBLIC ADMINISTRATION FOR ENVIRONMENT & CULTURAL HERITAGE
- ENGINEERING & GENERAL CONTRACTORS
- UTILITIES & INFRASTRUCTURE
- MINING COMPANIES

CAPABILITIES

- CLOUD PROCESSING & SERVICES
- MULTISOURCE INTEGRATION
- HISTORICAL EVOLUTION & MONITORING
- AI & BIG DATA ANALYSIS
- TOOLS AND STATISTICS
- MILLIMETRE PRECISION

e-geos
AN ASI / TELESPAZIO COMPANY

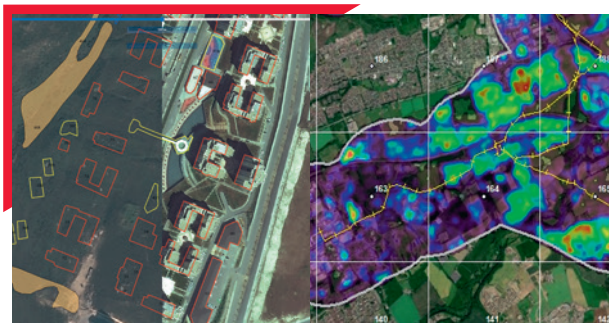
sales.info@e-geos.it
e-geos.it
@e_geos

SERVICES

AWARE uses an integrated, **multiscale, multisource and multitemporal** approach to offer solutions that improve the management of infrastructure and critical assets, support city planning and control, lower the impact of human activities on the environment, and, in general, optimise operations and support the decision-making process.

DEFORMATION ANALYSIS

Identifying deformation and landslides at an early stage is crucial to plan maintenance activities and inspections and to prevent major events. The PSP-IFSAR proprietary algorithm enables **high quality, millimetre precision**, **high density InSAR analysis** (historical and monitoring) for slow deformations, including high resolution analysis with **COSMO-SkyMed**. Continuous monitoring can be also set up through GNSS-based services for critical situations or critical assets.



CHANGE DETECTION AND ENCROACHMENT ANALYSIS

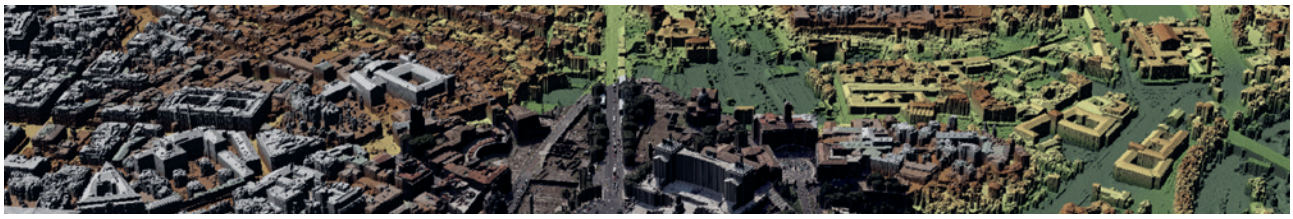
Keeping track of the surroundings of an infrastructure can be vital to guarantee safe operations. AWARE provides **multitemporal analysis based on optical/radar satellite, aerial and drone data** to identify changes in the territory: vegetation along railways or toxic dumps close to aqueducts are just a couple of AWARE's basic services.

ADVANCED MAPPING

Through the AWARE platform, it is possible to access the advanced **mapping services**, responding to the territory's specific requirement characterisation for planning new infrastructure: estimated population impact analysis, transport infrastructure inventory, flooding risk maps, Land Cover Change Map supporting the Sustainable management of natural resources, etc.

3D MODELLING

AWARE provides high resolution **3D models based on satellite**, aerial and RPAS data with different **accuracy levels**, from DSM to realistic models, according to each specific case. 3D modelling linked to other analyses can provide full knowledge of an asset and its health. Moreover, 3D models can be used for Urban Planning, flight simulations and flood event analysis.



A SUITE OF SOLUTIONS, BASED ON:

- Ground motion analysis
- Change detection analysis
- Specific thematic cartography
- Multisource integration
- 3D modelling
- CSK data for high resolution analysis

e-geos
AN ASI / TELESPAZIO COMPANY

sales.info@e-geos.it
e-geos.it
@e_geos