



Near Surface Solutions

Simple. Powerful.

Geosoft provides industry-standard software and custom solutions to integrate and manage all of your geophysical, geological, and geochemical data. Contractors, consultants, government, and industry use Geosoft to process, map, analyse and visualise near surface data for a multitude of applications.

We provide solutions for:

- Unexploded Ordnance (UXO) detection, analysis and classification
- Cable and pipeline detection and monitoring
- Onshore and offshore wind farm projects
- Environmental site investigations – geophysics and borehole
- Well/Borehole data visualisation and analysis in 1D, 2D and 3D
- Water resource mapping and monitoring
- Contaminant and waste mapping
- Archaeological mapping
- Salinity and agricultural mapping
- Geotechnical mapping - utilities and infrastructure
- Dams and levee management
- Geohazard mapping

Dramatic increases in data volumes and analysis requirements in near surface investigation are generating new opportunities and challenges. Geosoft's Oasis montaj platform is ideally suited for today's multidisciplinary and collaborative projects. Access to data and a powerful set of mapping and analysis tools are provided within one dynamic, 3D environment. More than 20 software extensions are available to conduct specialised geoscientific processing and analysis within Oasis montaj.

From small, single-user projects to corporate enterprise-wide systems, Geosoft enables customers around the world to make faster, more educated decisions by delivering industry-leading technology to their fingertips.

We deliver what earth scientists need.

- Industry standard data formats and processing techniques
- Comprehensive workflows and tools
- Efficient processing, analysis and quality control of large volumes of geophysical survey data – without the frustration of data format incompatibility, reformatting or reprojection
- A strong, responsive global services and support network
- Faster, easier ways to integrate, visualise and analyse a multitude of data types
- Specialized reports and maps
- Variety of software licensing options – project based or organizational
- Integration and built-in capabilities for mapping and analysis within ArcGIS
- Compatibility with industry standard platforms (i.e., ArcGIS, Mapinfo and Autocad)

Information Management Solutions

Increased transparency and audit requirements as well as increasing data volumes and complexity are driving the need for effective data management in all disciplines, including earth science. Geosoft's Information Management Solutions help the world's leading geoscientists solve business challenges by effectively managing large volume geospatial data of all types. We help improve performance through organizing and cleaning historical data, delivering seamless metadata and data management, data archiving and high-speed access, and reporting. Systems are scaled to your organization's needs to deliver measurable business results and optimize productivity of technical teams.

Professional Services – Custom Development

Geosoft's professional services team works with your organization to build specialized capabilities. Geosoft can work with you to:

- Assess needs and design a solution
- Develop specific software tools, enhancements and workflows
- Create customised User Interfaces
- Automate repetitive or cumbersome processes

If you have a proprietary technical capability that is a competitive advantage, Oasis montaj provides a secure environment for such tools, including integration with other internal or third party software as needed.



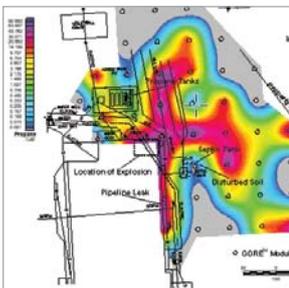
Accurate Detection of Unexploded Ordnance (UXO)

The ability to accurately detect and identify buried unexploded ordnance (UXO) is essential when clearing sites in order to restore these land or marine environments for public or commercial use. Geosoft offers the world's most complete software solution for geophysical detection and classification of UXO, developed over the past 20 years. Since 2000, in partnership with the US Army Corps of Engineers and Leidos Inc., and with funding from the US Department of Defense's Environmental Security Technology Certification Program (ESTCP), Geosoft has also developed and integrated tools for survey planning, quality control, and classification of buried items (scrap metal vs. UXO) and management of UXO projects.

"Using a combination of techniques, we generated a prioritized target list that isolated larger and higher conductance targets more likely to be munitions of concern."

-Ken Hayes, President, Aqua Survey

Read more about Aqua Survey, *On the Trail of UXOs*, www.geosoft.com/near-surface



Effective Environmental Investigations and Remediation

Effective analysis of subsurface conditions is critical when conducting environmental investigation of buried contaminants for site remediation. Geosoft streamlines mapping and analysis of large geoscientific datasets, providing an industry-standard platform for advanced data processing, quality control and project management. The Geosoft solution enables 3D mapping and modelling of geophysics, borehole and other datasets for subsurface characterisation and analysis, including groundwater mapping, sediment analysis and site mapping.

"The Geosoft montaj mapping environment also allows me to combine compound data from multiple surveys at a site, into one set of map compositions easily, for a more comprehensive understanding of the subsurface contamination."

-Jay Hodny, Ph.D, Amplified Geochemical Imaging LLC (AGI) (formerly W.L. Gore & Associates)

Read more about Amplified Geochemical Imaging LLC (AGI), *Production mapping streamlines environmental site assessments*, www.geosoft.com/near-surface



Enhancing Archaeological Discoveries

Archaeologists often need to locate buried or submerged artifacts or to determine the nature of continuity between known excavations or surface observations. Geophysical methods are selected for the desired purpose and commonly include magnetics, electromagnetics (EM), resistivity and ground penetrating radar (GPR). Geosoft provides a full suite of powerful and specialized data processing, analysis, mapping and visualisation capabilities for these geophysical data.

Oasis montaj was used to process the data. "What the Geosoft gradient maps showed us was phenomenal," Boshoff enthuses. They used the gradient maps to decide where to excavate, "which was no small matter as most of the wrecks were under three to four metres of sand."

-Jaco Boshoff, maritime archaeologist at Iziko Museums of Cape Town

Read more about Iziko Museums, *Hunting for a lost ship*, www.geosoft.com/near-surface



Improved Accuracy in Marine Surveys

Geosoft's UXO Marine extension provides a dedicated workflow along with specialized new tools to process and visualise magnetic data to detect and analyse targets for effective marine site investigation surveys. Global consultants and marine surveyors use UXO Marine to easily work with and manage the rapidly expanding volume of site investigation surveys aimed at detecting unexploded ordnance (UXO), buried utilities, and other seabed contamination.

After processing the magnetometer data with Oasis montaj, the team was impressed. "The images are pretty phenomenal," says Hrvoic. "Extremely sharp."

-Doug Hrvoic, president and owner of Marine Magnetics Corp.

Read more about AUV Magnetometers, *AUV Magnetometers a leap forward in seabed surveying*, www.geosoft.com/near-surface

Visit our Near Surface page to see these articles and many others. www.geosoft.com/near-surface.