



SOUTHWEST RESEARCH INSTITUTE



Professional Services in Earth Sciences and Engineering

Southwest Research Institute® (SwRI®) provides multidisciplinary applied research and technical assistance solutions through professional services in earth sciences and engineering. With decades of experience providing high-quality solutions to scientifically challenging problems, SwRI meets client needs for on-demand expert professional services throughout the U.S. and abroad. In addition to providing in-depth reach-back capabilities for client organizations to our extensive facilities in San Antonio, Texas, we provide onsite support at client facilities on an as-needed basis.

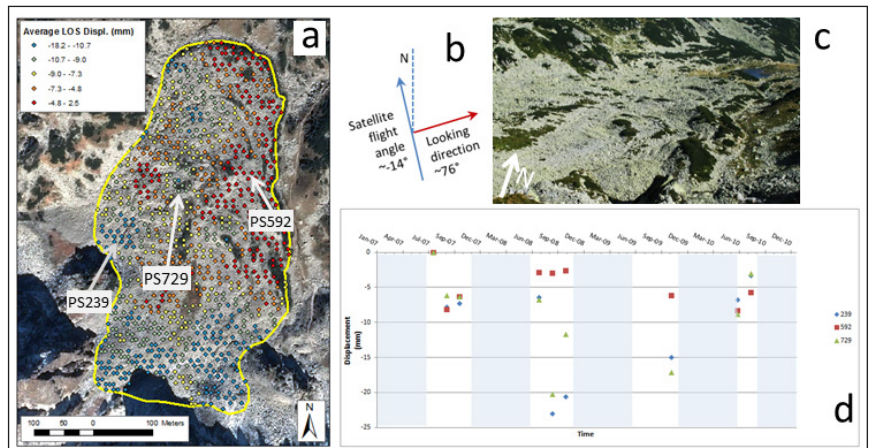
Technical Expertise

SwRI offers capabilities across a broad spectrum of engineering and science disciplines. Our science expertise encompasses climatology and climate-change impact assessment, coastal and arctic processes, environmental studies, fluids and fluid dynamics, geochemistry, geology, geophysics, hydrology, materials, remote sensing, seismology, and volcanology.

Our expertise includes chemical, civil, electrical, geological, geotechnical, hazard and risk assessment, mechanical, materials and corrosion, mining, nuclear, and structural engineering. In-house expertise can be augmented as needed by consultants and subcontractors.

Applications

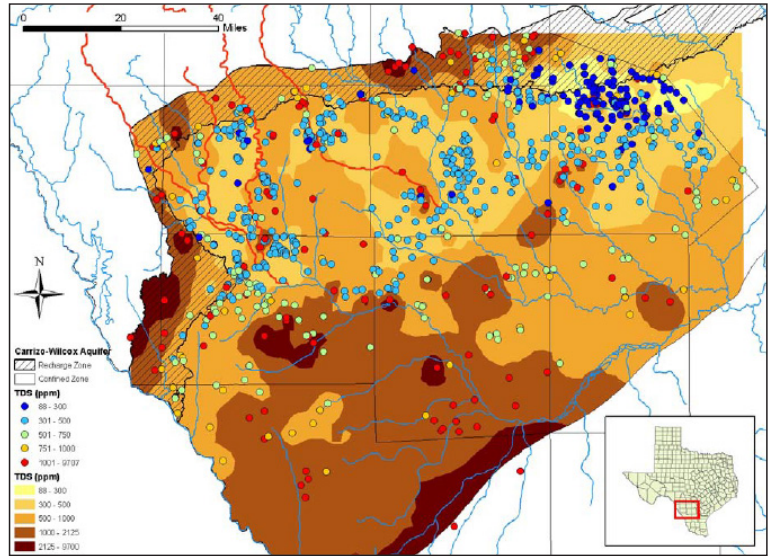
- Site characterization of environmental, geological, hydrological, and radiological conditions, as well as archaeological and cultural resources
- Design analysis, evaluations, and verifications, including safeguards and security
- Deterministic and probabilistic performance and risk assessments
- Environmental reviews, assessments, and impact statements, including public outreach support
- Hazard assessments and hazard mitigation, both natural and human-induced
- Instrumentation and monitoring of engineered and natural systems
- Quality assurance audits, evaluations, and surveillance
- Regulatory analysis, regulatory guidance development, and regulatory compliance determinations
- Technology assessments, including application of existing technologies, evaluation of and guideline development for emerging technologies, and consideration of health, safety, and sustainability



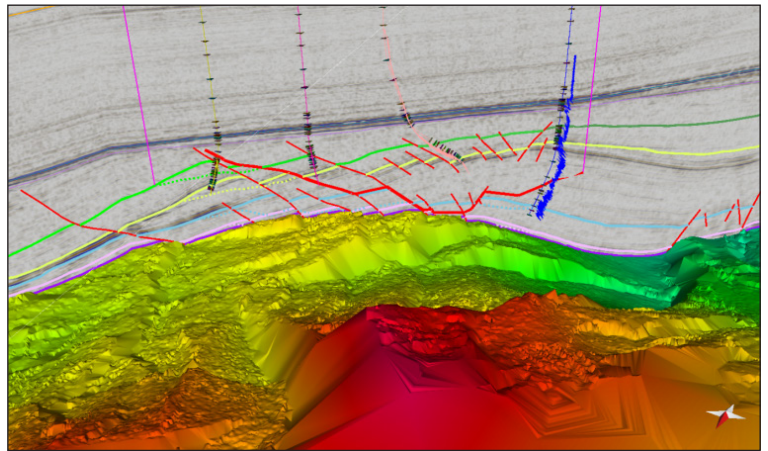
Examination of rock glaciers gives insights into climate change and resulting hazards.

Benefits

- Independent organization, assuring conflict-of-interest-free support to all clients
- Comprehensive engineering and science expertise
- State-of-the-art laboratories, computational resources, and field instrumentation
- Established contracting vehicles to facilitate access by government clients
- Quality assurance and cybersecurity programs meeting U.S. Department of Defense, National Aeronautics and Space Administration, U.S. Nuclear Regulatory Commission, and other federal program requirements
- Vigorous internal research and development program that keeps SwRI staff at the forefront of new and emerging technologies



Hydrostratigraphy, geochemistry (shown here as total dissolved solids concentrations), and other data are used to develop conceptual models for flow, recharge, and contaminant transport.



Three-dimensional seismic imaging provides a framework for structural analysis of subsurface geology that can affect groundwater resources, contaminant transport, and seismic risk.

We welcome your inquiries.

For additional information, please contact:

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**Benefiting government, industry
and the public through innovative
science and technology**

SOUTHWEST RESEARCH INSTITUTE

Southwest Research Institute® is a premier independent, nonprofit research and development organization. With ten technical divisions, we offer multidisciplinary services leveraging advanced science and applied technologies. Since 1947, we have provided solutions for some of the world's most challenging scientific and engineering problems.

swri.org

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Designed and printed by SwRI MPS 01-0724 272387bl



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