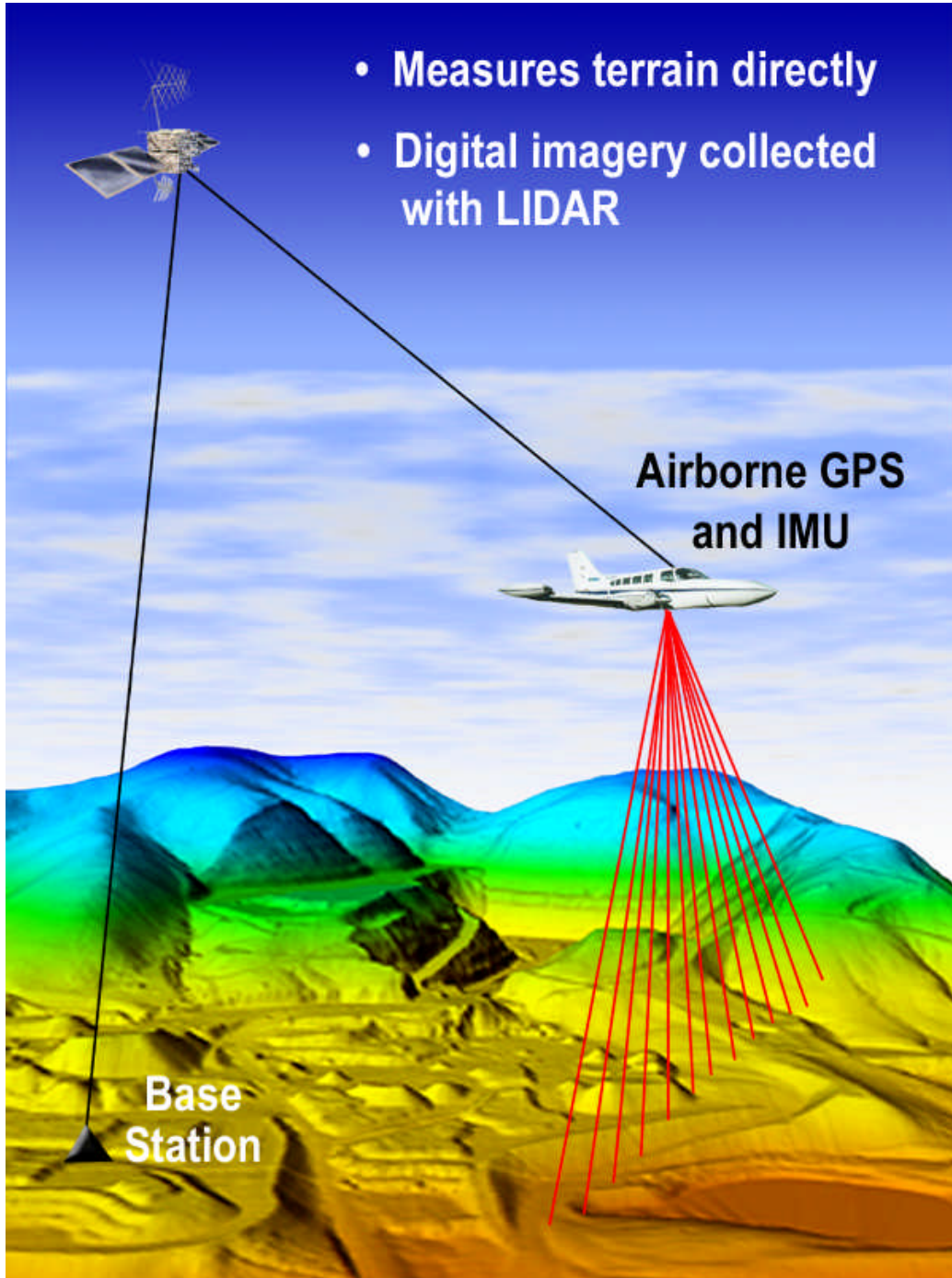


LIDAR Provides Highly Accurate Land Surface Elevations for Seismic Exploration

On seismic projects, the use of LIDAR can result in extensive operational cost savings and improvements in data quality. In many environments, LIDAR can make a significant contribution toward conducting a successful seismic program.

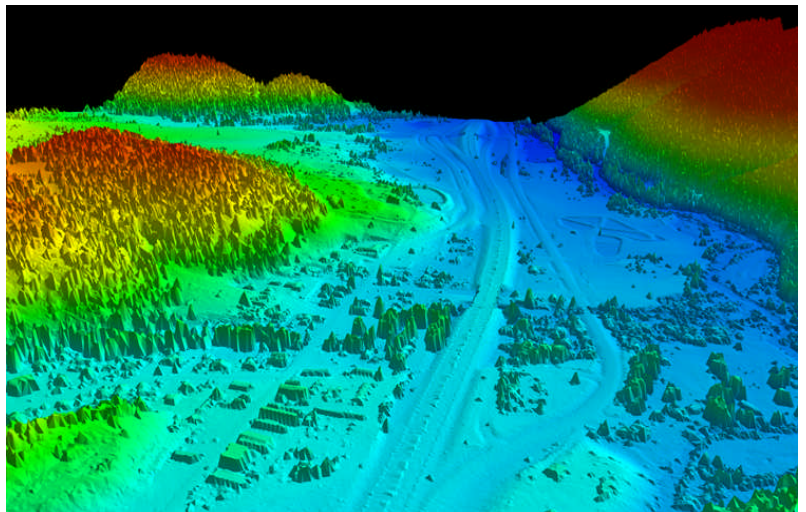


LIDAR accurately measures surface elevation using a laser scanner mounted on a fixed wing aircraft producing, high-resolution Digital Elevation Models (DEM's), depicting ground and vegetation surfaces. Numerous products for seismic exploration can be derived from these DEM's including:

- Contour and slope maps
- Hillshade models which simulate surface terrain illuminated by various angles and heights of the sun
- Elevation values at given locations
- Fly-through simulations
- 3D digital terrain models (DTM)
- Radio Frequency (RF) shadow zone models
- Vegetation extent and height for coniferous forest. LIDAR is capable of imaging beneath vegetation as long as light can penetrate it.



Seismic projects typically cover tens to hundreds of square miles and consist of hundreds of source and receiver points within each square mile. Surveying each point is a requirement to obtain an accurate position and elevation. Projects of this magnitude require extensive planning, scheduling, and communication resulting in a constant need for a variety of surface maps and models. LIDAR is a tool providing multiple benefits for such an operation, especially in areas of rough terrain.



About Spectrum Mapping:

Spectrum Mapping, LLC is a full-service mapping, software development, and GIS company with core competencies in the fields of LIDAR; Photogrammetry; Remote Sensing Services; and Software Development. With over 25 years experience in the mapping industry, 61 employees in six offices located throughout the United States and Canada, Spectrum is widely recognized as a leader for advancing the capabilities and uses of digitally captured geospatial data.

Spectrum Mapping was one of the first pioneers in the industry to adopt LIDAR and participated in one of the first NASA commercialization projects for the technology. LIDAR has precipitated the recent paradigm shift in the mapping industry because of the ability to collect data points in a faster, more accurate and efficient manner.

For more information about Spectrum Mapping's LIDAR mapping and remote sensing capabilities, please contact Roland Mangold at the phone number listed below, extension 333, or by email at rmangold@specmap.com

