3vGEOMATICS

3vGeomatics (3vG) specializes in remote detection and monitoring of displacement, subsidence, and geohazards across large areas using a technology called Interferometric Synthetic Aperture Radar (InSAR). We deliver more than 1,500 InSAR displacement reports a year to clients operating in 30+ countries.
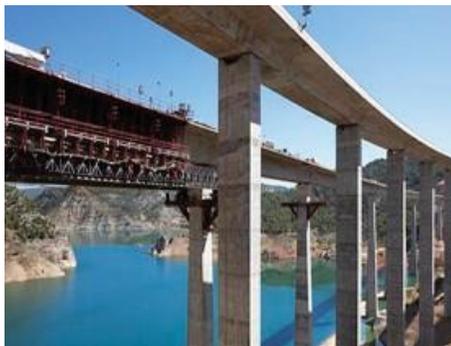

OIL & GAS Assisting in making better production decisions by measuring uplift and subsidence of each field.

PIPELINES Large scale monitoring can detect and monitor risks along pipeline ROWs.

MINING A single monitoring program can screen risks from subsidence, pit walls, infrastructure and tailings.

INFRASTRUCTURE MANAGEMENT Improving asset management by monitoring displacement of critical infrastructure.

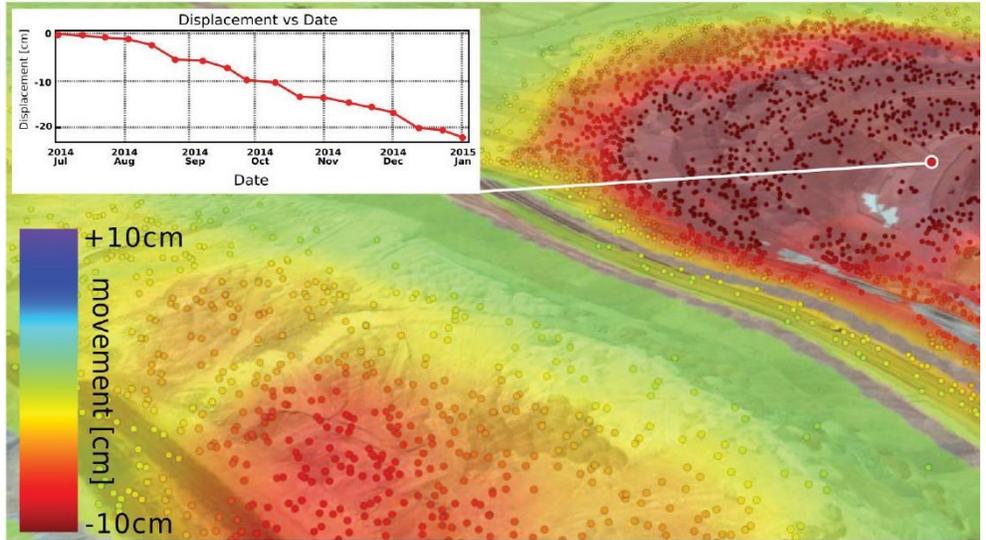**PERMAFROST** Reducing risk by measuring ground and infrastructure movement in an ever-changing northern environment.

GEOHAZARDS Monitoring landslides, subsidence and slope creep to detect and mitigate risk.
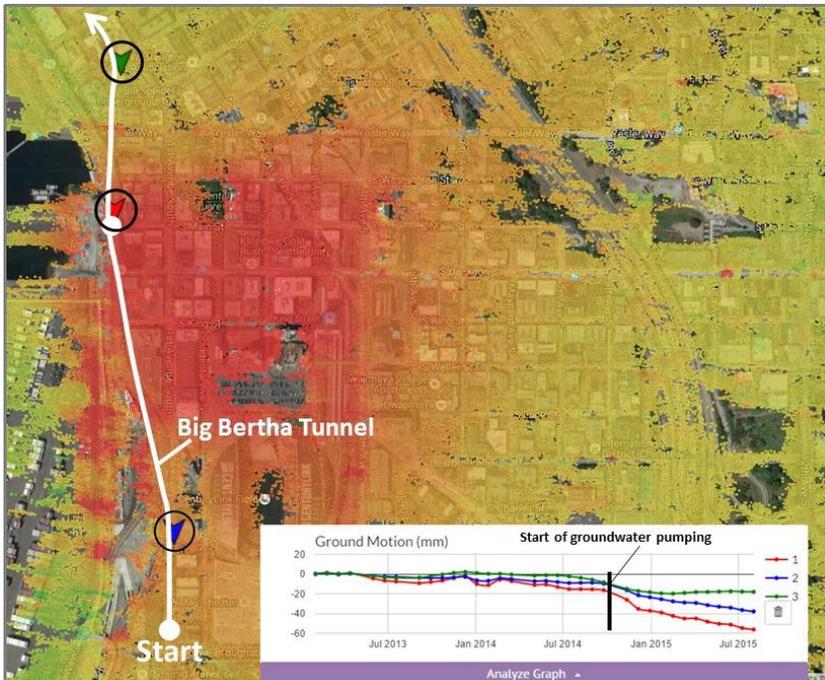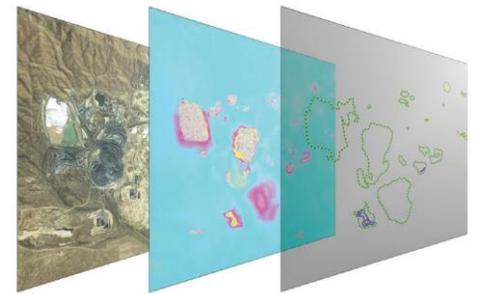
HOW InSAR WORKS

InSAR is based on the analysis of radar satellite images acquired over time. Images are typically at least 600 square miles in size and have a resolution (pixel size) of 3 meters or less (although other image sizes and resolutions are available).

3vG generates tens of millions of data points per image and tracks the displacement of each data point over time with millimeter-scale precision. Measurements are based on the orbit frequency of the satellite, which varies between 2 – 12 days. Displacement data is translated into information that customers can understand and use to mitigate risk, improve safety, and prevent work stoppages.

3vG is satellite independent; we select the best data source for each individual project. InSAR results are translated into information that customers can understand and use to mitigate risk, improve safety, and prevent work stoppages.

3vG now delivers over 1,500 displacement products to customers operating in more than 30 countries. Reports are typically delivered within hours of each new image acquisition, allowing users to identify risks and take prompt action.

3vG is the world leader in developing new processing techniques and turning InSAR technology into effective operational tools for some of the largest companies worldwide. We continue to scale our technology to meet the increased demand for this growing market.