

# MUD<sup>®</sup> Solves InSAR Data Processing Gaps (Mapped Underworld Dimension)

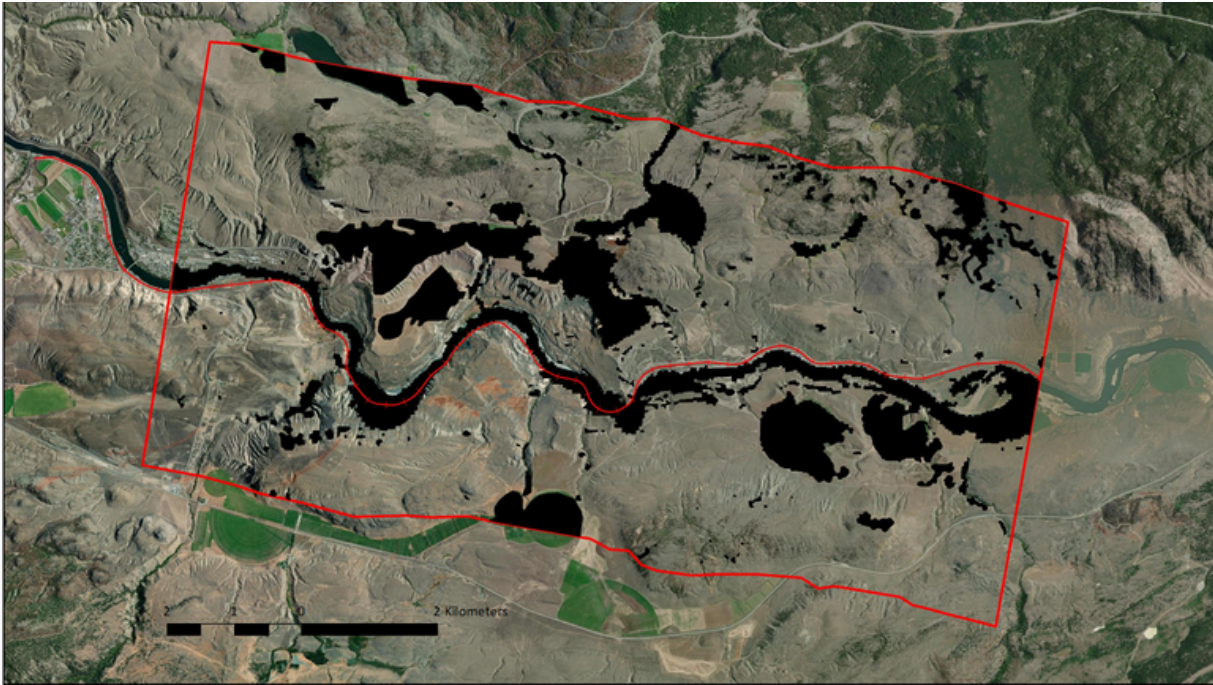
## Background

Radar SAR Interferometry is a well-established method used to measure movement and deformation on the Earth's surface. By duplicating the orbital path, the precise time and geometry, successive radar signals are captured and analyzed for their differences. It is possible to detect, between captured images, movement or change as small as 2 mm.

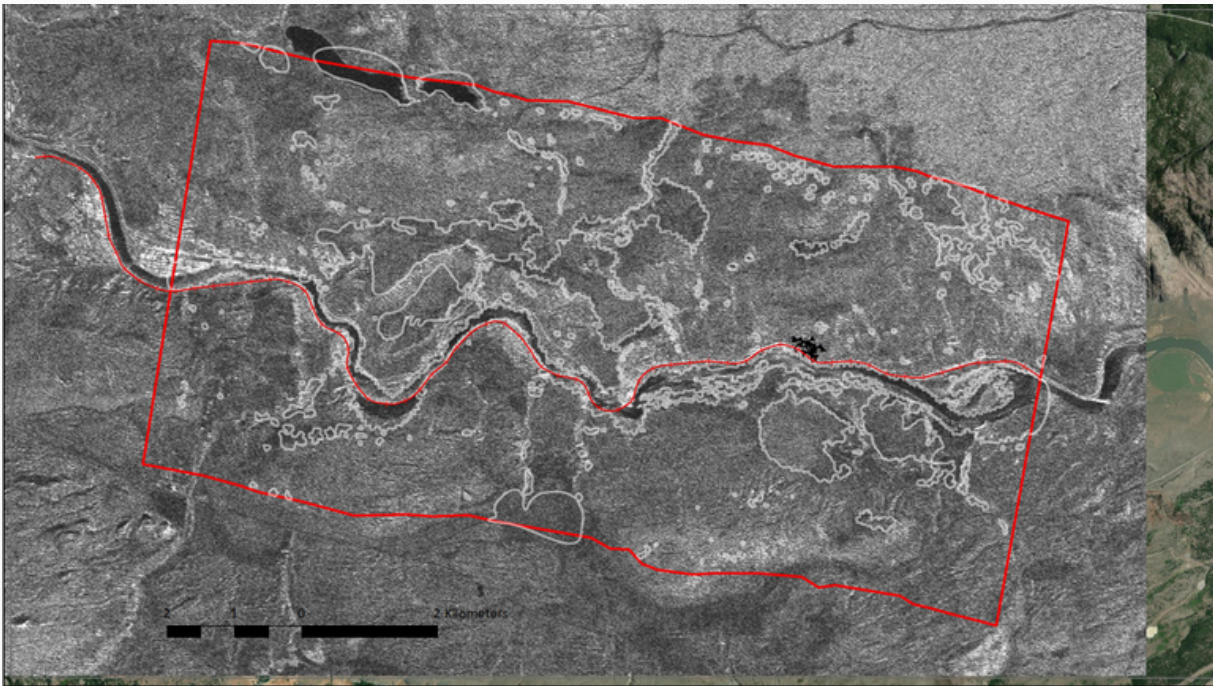
SAR (Synthetic Aperture Radar) satellite data has great potential for monitoring infrastructure and assets, from space. However, there are inherent limitations in standard SAR interferometry processing that create data coverage noise and interfere with signal clarity.

Standard InSAR processing methods result in distortion and voids, making large areas within the data incomplete and non-representative. These gaps in information make it impossible to accurately detect and measure movement or deformation.

MUD<sup>®</sup>, with its proprietary acquisition and processing algorithms, removes noise and distortion and penetrates the surface to see into the subsurface and underwater. With complete subsurface and underwater data, operators and engineers reveal what has previously gone unseen and may have confidence that all of the data has been included in the MUD<sup>®</sup> monitoring program.



This image shows significant and continuous gaps (displayed as black voids that surround a railway being monitored with InSAR).



MUD<sup>®</sup> removed the noise and distortion and filled the previous InSAR data gaps (previous gaps are outlined in white to show correction.) There are no data gaps with MUD<sup>®</sup>.