

# BREAKTHROUGH SATELLITE DATA ANALYTICS FOR DETECTING AND PREDICTING PIPELINE LEAKS

Photo: Copernicus Sentinel data (2015)/ESA

## MAKE BETTER BUSINESS DECISIONS

Rezatec helps businesses make critical decisions about their land-based assets through the analysis of increasingly sophisticated but complex Earth Observation (EO) imagery and data. Using proprietary algorithms and modelling, we drive profit and substantially reduce the cost of monitoring and predicting land use change and environmental risk. With subscription-based access to our Landscape Intelligence portal, our customers benefit from regularly updated analytical insights that simply aren't possible through traditional landscape data-based reports.



## MONITORING AND DETECTING PIPELINE

Every year, water pipeline leakage causes around a quarter of national water supplies to be lost impacting revenue, supply and customer satisfaction. The challenge water companies face is that pipeline stress can arise from a variety of sources including terrain movement, soil properties, vegetation and anthropogenic influences that are difficult to monitor and detect across large areas without significant ground based resources. To better manage revenue losses and maintenance costs, water companies need to find a more efficient way to predict and prevent pipeline leakage across their entire urban and rural network.



Substantially reduce the cost of monitoring and predicting pipeline failure.

## MANAGE THE RISK OF PIPELINE LEAKAGE WITH ADVANCED EARTH OBSERVATION DATA ANALYTICS

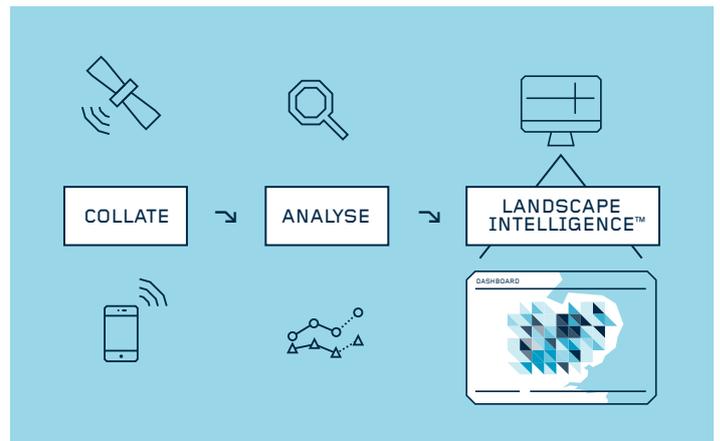
- + Use satellite data to identify hotspots of terrain movement and soil saturation that indicate pipeline leakage or risk
- + Predict likely leakage over very wide areas that can't be covered by ground based observation or sensor networks
- + Drill down on high risk areas for early detection of possible leakage due to soil moisture content in rural areas and subsidence in urban areas
- + Engage all stakeholders with data visualised as easy-to-understand maps, graphics and alerts



Deploy ground interventions more effectively across large areas.

## INCREASE PROFITABILITY BY REDUCING COSTS AND DEPLOYING RESOURCES MORE EFFECTIVELY

- + Substantially reduce the cost of monitoring pipelines compared to ground monitoring alone
- + Deploy ground interventions more intelligently with new satellite data-based insight
- + Reduce predicted damage to pipelines and disruption to communities with pre-emptive repairs
- + Fix potential leaks before they become visible to customers
- + Map maintenance and repair events to anomalous areas of ground movement and soil saturation
- + Reduce the risk of liability and regulatory fines



Rezatec's unique workflow to derive landscape intelligence.

Copyright © Rezatec Ltd. 2016

### Rezatec's users include:

Scottish Water	Ecover
Bristol Water	British Sugar
Northern Ireland Water	European Space Agency
South West Water	John Clegg
Portsmouth Water	Forest Research
University College London	Drax

### DID YOU KNOW?

According to Ofwat (2012), 3.36bn litres of water a day are currently being leaked by UK water companies - equivalent to almost a quarter of the entire supply.