Recover: Water

Leak Detection and Analysis

Solution Overview

ASTERRA Recover uses satellite imagery and the power of AI to cover large areas and monitor the regions that contain probable leaks. How do we do this?

Specifically, L-band synthetic aperture radar (SAR) sensors are used for their day/night, cloudy/clear capabilities along with the ability to penetrate beneath the surface of the ground. Using a patented algorithm and machine learning, Recover filters out the signature of drinking water for the customer. This service provides locations directly to the utility's preferred field crew to search and pinpoint the exact leak location.

This technology (winner of the 2021 AWWA Innovation Award) has been adapted from the search for water on other planets, underscoring its innovative and outstanding capability here on Earth. Recover offers a fresh approach and non-invasive method to the problem of urban water leakage. When compared with other methodologies, continuous monitoring with satellite leak detection saves you time, water, money, and energy.

Key Benefits

1
Reduce your non-revenue water

2
Maximize leaks found while increasing field crew efficiency 400%

3
Most cost-effective tool to support regulatory compliance

4
Lowest cost solution on the market

Image to Repair: 3 Easy Steps

1 **Monitoring and analysis**
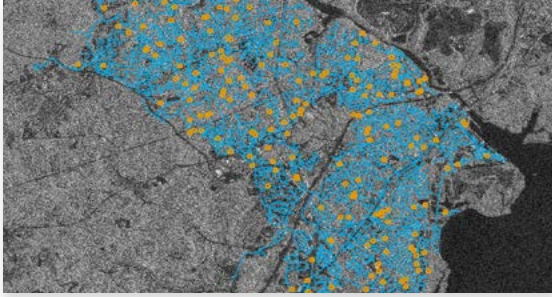
2 **Delivery via subscription**

3 **Pinpoint leak to mark for excavation**

About ASTERRA

ASTERRA (formerly Utilis) provides underground soil moisture data on pipes, roads, rails, dams, and mines to water utilities, government agencies, and infrastructure managers. Using SAR (synthetic aperture radar) data from satellites and a series of proprietary algorithms, ASTERRA turns the data into actionable intelligence that supports large-scale decisions and Earth's resource resilience. Since 2017, in 64 countries, ASTERRA technology has saved over 210,830 million gallons of water, 527,070 MWH of energy, and 134,930 metric tons of carbon. ASTERRA is headquartered in Israel with offices in the U.S., the U.K., and Japan.

Recover by the Numbers

650
services provided in 64 countries

177K
metric ton reduction in CO_2 emissions, equal to 151 million pounds of coal burned

690K
MWH of energy saved

75K
leaks verified worldwide

276B
gallons (1.23B m³) of water saved, equal to the water used by a city of 4 Million people

3.5
leaks found per crew day vs 1.3 average with traditional acoustic methods

ASTERRA