

EarthWorks: Property

Ground Infrastructure Assessment

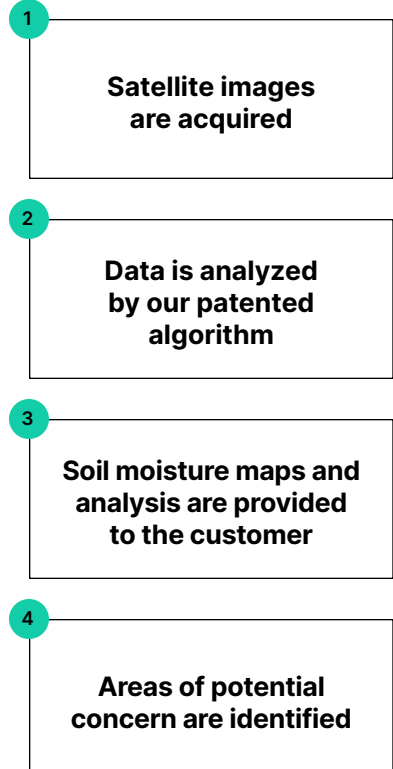
Product Overview

ASTERRA EarthWorks provides visualized soil moisture assessments for a variety of ground infrastructure installations across different industries and applications, such as large developed properties. EarthWorks creates a mapped view of the actual moisture itself as it gathers beneath infrastructure worldwide.

EarthWorks can assess underground soil moisture conditions across vast tracts of land simultaneously, up to 800,000 acres. It points out areas of concern and potential failure locations so that immediate and long-term problems can be found, and preventative repairs made, before more expensive damage and safety issues occur.

EarthWorks gathers data via an orbiting satellite and a highly sensitive radar band that reflects off underground moisture and provides a data layer revealing its locations. The data is visualized as a contoured soil moisture map.

How EarthWorks Works



The EarthWorks Differentiators

EarthWorks gives ground engineers a capability they have never had before: the ability to see — instantly and over an expansive area — where moisture is accumulating beneath and around critical ground infrastructure. EarthWorks sees through the ground, macadam, and treetops, and through all light and weather conditions to gather its insights. Planners and engineers can make decisions and initiate repairs using complete information.

EarthWorks Property

Owners and managers of large property installations use EarthWorks Property to locate and evaluate underground moisture beneath parking lots, roadways, sidewalks, and other paved surfaces. Potential and likely failure locations are mapped out so that owners can mitigate problems before more severe and expensive damage occurs.

What's Included with EarthWorks Property

The deliverable is a contour map with the colors and contours representing percents of soil moisture. It is delivered as a GIS file for viewing through all GIS (geographic information system) platforms. As with all products, they are delivered to the customer through the ASTERRA customer portal website.

About ASTERRA

Utilis developed the ASTERRA products to use satellite-based synthetic aperture radar (SAR) to locate and analyze moisture accumulating underground. Our products include MasterPlan for pipe deficiency assessment; Recover for leak detection; and EarthWorks for ground infrastructure assessment. ASTERRA pierces clouds, forests, and even pavement to assess entire systems quickly and efficiently. Our first commercial use was in 2016. Since then, 36,000 leaks have been verified, saving 9,200 million gallons of drinkable water and 21,800 MWH of energy every year, savings that continually grow.

