



"VanderSat can determine soil moisture with satellites on any given field in the world. Their technology can see through clouds and vegetation, is 1000 times cheaper than alternative methods and has an accuracy similar to ground sensors."

Satellite Soil Moisture Data

VanderSat is a leading global provider of global satellite-observed water and temperature data, products and services. Using our proprietary satellite technology, we work with the world's leading organizations to solve their water related challenges. From farmers to multinationals: we understand the crucial role water plays.

About VanderSat

At VanderSat we have developed a patented method to provide daily, accurate high-resolution images of soil moisture, at any place on earth. Our technology is extensively validated and documented in scientific peer-reviewed literature and can now be accessed through our viewer and API.

By combining microwave data obtained from different satellites, VanderSat is revealing a revolutionary data set that can be used to retrieve crucial information about the vulnerability of our water and food resources at field level. It's the most accurate, consistent and scalable technology available, regardless of whether the alternative techniques considered are ground based, aerial (e.g. drone, aircraft) or satellite driven.

Key Features

Patented methodology to provide soil moisture content on field scale

- ✓ Global dataset
- ✓ Available for different root zone depths
- ✓ Dynamic open water bodies are taken into account

Unique spatio-temporal resolution

- ✓ 100 x 100 meter
- ✓ Daily

Near Real Time (NRT) data

- ✓ Available within 6 hours after overpass of satellite
- ✓ Cloud and darkness proof. Seeing through crops

Long term time series

- ✓ High resolution data from June 2002

High quality data

- ✓ Similar accuracy as ground sensors. With better spatial representation and consistency

Benefits

- Monitor fields without soil moisture ground sensors. Cheaper and more accurate.
- Long term time series to put natural events in perspective. Ideal for data analytics.
- Key input for generating drought indices, monitoring saturation and for crop, irrigation and hydrological modelling applications.
- Soil moisture's predictive value is greater than NDVI or any other parameter.

Specifications

VanderSat Soil Moisture Monitoring

Unit	Moisture content in m ³ /m ³
Sensing depth	0-5 cm
Rootzone Options	10 cm // 20 cm // 40 cm
Pixel resolution	100x100 meter // 25x25 km
Temporal resolution	Daily
Data availability 100m product	June 2002 - present
Data availability ¼ degree product	October 1978 - present
File format	GeoTiff (images), csv (time series)
Data delivery	VanderSat API
Data viewer	VanderSat Viewer