



"VanderSat can determine land surface temperature with satellites on any given field in the world. Their technology can see through clouds and vegetation, is unhindered by darkness and has a similar accuracy as weather stations."

Satellite Surface Temperature

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 climate related challenges. From farmers to multinationals: we understand the crucial role temperature plays.

About VanderSat

At VanderSat we have developed a patented method to provide daily, accurate high-resolution images of land-surface temperature, 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. We observe land surface temperature and know the crucial role that it plays in crop yields, climate studies and more.

Key Features

Patented methodology to provide soil moisture content on field scale

- ✓ Global dataset
- ✓ Dynamic open water bodies are taken into account

Unique spatio-temporal resolution

- ✓ 100 x 100 meter
- ✓ Daily (planned 2019: 1000 obs./year)

Near Real Time (NRT) data

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

Long term time series

- ✓ High resolution data from June 2002 onwards

High quality data

- ✓ Similar accuracy as weather stations with high spatial coverage and no maintenance.

Benefits

- Monitor fields without weather stations with a high spatial coverage.
- Long term time series to put events in historical perspective. Ideal for data analytics.
- Key input for generating drought indices, hydrological modelling and climate studies.

Specifications

VanderSat Land-surface Temperature

Unit	Kelvin (K)
Sensing depth	2 mm
Pixel resolution	100x100 meter // 25 x 25 km degree
Temporal resolution	Daily
Planned temporal resolution (2019)	1000 obs. per year
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