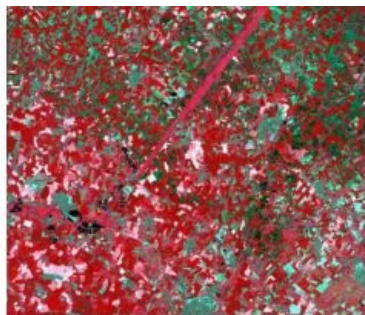


Sharper Satellite Images Guide Farmers



In the two years since DMCii added 22m multispectral imagery to its geospatial data portfolio, the detailed satellite views of the Earth's surface have proved to be useful tools for farmers facing growing challenges, such as the pressure to reduce fertiliser costs.

Acquired from the latest generation of DMC imaging satellites: UK-DMC2 and Deimos-1, this new class of data is employed every season for precision agriculture across countries including the US, Canada, the UK, France, The Netherlands, Germany, Lithuania, Russia and Japan, and accounts for 50% of DMCii's annual growth.

In precision agriculture, satellite data is used to gather precise knowledge of a farmer's land, pinpointing variations in crop growth and condition. The farmer is shown just where fertiliser or crop protection chemicals need to be applied, and in what quantities. GPS-based instructions can be relayed directly to tractors and other automated farm equipment. The aim is to maximise crop yield and quality while minimising production costs and environmental impact.

For the last five years, DMC satellite data has been utilised by specialist precision agriculture companies. The imagery comes geo-rectified, as is standard, for integration into users' Geographical Information Systems (GIS) software. Because the DMC satellites are operated together as a constellation, they offer much more timely data than a single satellite, delivering rapid revisit opportunities every 1-2 days. Compare this to Landsat's sixteen day minimum revisit time which often means months between cloud-free images.

The improved-quality 22m data produced by the two newest DMC satellites has opened up new service possibilities for value-adding companies, with more detail making the data suitable for much smaller field sizes. In addition, these higher resolution images now have 10-bit instead of 8-bit pixels, yielding greater sensitivity in the DMC's three Landsat-compatible spectral bands of red, green and near-infrared.

The DMC satellites combine relatively high resolution with an extremely wide 650km swath width. Enhanced onboard storage and downlink bandwidth on the 22m satellites stretch this along-track length up to more than 1,200km.

The sensors on all satellites are rigorously calibrated so that customers can use the data from any satellite interchangeably and extract quantitative biophysical information about the crop.