



# ASD FieldSpec® Dual Collection Software offers improved disease and weed mapping data collection for 2Excel Geo.

We caught up with David Mothersdill, Data Manager at 2Excel Geo, to discover how Malvern Panalytical's ASD FieldSpec Dual Collection Software is used field-based ground truthing.

# Our agricultural trials of 2017 would have looked very different without the ASD FieldSpec Dual Collection Software. The use of a solitary ASD FieldSpec 4, whilst giving us reliable results, was never going to give us the scope we required. The purchase of the Dual Software allowed us to collect in the thousands of spectra over the course of a few hours, massively reducing our workload.

The team at Analytik have always been very helpful and I know that if we have any issues at all they will be on hand to give us support. This is crucial when the Dual has been such a cornerstone of projects in the past.

# David Mothersdill Data Manager at 2Excel Geo

## What challenges did 2Excel Geo experience prior to purchasing the ASD FieldSpec Dual Collection Software?

While I was fortunate enough to join after the Dual system had been purchased, I was aware that prior to this the collection process was fraught with difficulty. A single ASD FieldSpec system was used meaning that collections could only be made during the same illumination conditions as the white reference was taken. This impacted heavily on the ability to collect spectra and meant that 10s of samples were taken as opposed to the 1000s that can be taken with the FieldSpec Dual.

### What was your role and what did a typical day entail for you?

I joined 2Excel Geo in 2017 as a Field Data Operator. My role was to perform weekly ground truthing on two different wheat disease sites and fortnightly ground truth on a blackgrass site. My day would involve heading out to the site with the FieldSpec Dual system. I would then proceed to collect 10 samples per subplot. Once back in the office the data would be georectified and analysed.

# What has the ASD FieldSpec Dual Collection Software enabled you to achieve?

The application of the Dual allowed us to improve our collection rate whilst reducing our workload. An average day of collection went from yielding  $\sim 100$  samples to over 5000. This was down to the fact that the system allowed us to work in different illumination conditions.

# What has the system allowed you to do which you would otherwise struggle to do without it?

We are able to run successful trials, collecting copious amount of data.

### How do you plan to use the FieldSpec Dual in the future?

We have recently used the system for a project in which we were tasked with identifying Rhododendrons in a forest in Herefordshire. The ASD FieldSpec Dual system allowed us to collect high-quality spectra despite the fact that we were collecting mid-afternoon in December.

To find out more, please contact us or visit our website: <a href="mailto:analytik.co.uk/product/fieldspec-dual-collection-software">analytik.co.uk/product/fieldspec-dual-collection-software</a>