DEXERONS

THE OFFERING BASIC NDVI AND NDRE PACKAGING

The Normalized Difference Vegetative Index (NDVI) and Normalized Difference Red Edge Index (NDRE) are two tools for estimating the leafiness and greenness of crop canopies, and for these reasons are often referred to as 'Plant Health' indices. The NDVI is suited to vegetative growth stages while the red edge index generally performs better in the reproductive growth stages and has stronger correlations to chlorophyll content.

HOW DOES IT WORK?

Deveron will acquire imagery following the establishment of high precision GPS control points. You will receive processed index maps of the site, a geospatial overlay of all plot boundaries, and plot-level statistics extracted to CSV.

NDRE

| | A | В | C | D |
|----|---------|-------|-----|-------------|
| 1 | PLOT_ID | Range | Row | MEAN |
| 2 | 101 | 1 | 1 | 0.644338513 |
| 3 | 102 | 1 | 2 | 0.628833112 |
| 4 | 103 | 1 | 3 | 0.615040821 |
| 5 | 104 | 1 | 4 | 0.613880361 |
| 6 | 105 | 1 | 5 | 0.559972991 |
| 7 | 106 | 1 | 6 | 0.556792747 |
| 8 | 107 | 1 | 7 | 0.612558339 |
| 9 | 108 | 1 | 8 | 0.672981983 |
| 10 | 109 | 1 | 9 | 0.682316624 |
| 11 | 110 | 1 | 10 | 0.679879883 |
| 12 | 111 | 1 | 11 | 0.728311871 |

- We will collect 5-band multispectral imagery in the red, green, blue, near infrared, and red edge wavebands
- We will process all raw imagery to generate NDVI and NDRE maps

• We will generate plot overlays according to the experimental design and use them to extract reflectance statistics for each plot

WHAT ELSE CAN I USE THE DATA FOR?

NDVI and NDRE are a simple way to measure the growth and vigour of crops. At the plot-level, differences between treatments may be detected where a new product or practice alters the greenness of the crop, which can indicate loss/increase of yield potential. These indices are useful for qualitative assessment of a site showing the underlying trends such as compaction shown as red in the NDRE example above. They are also useful for nitrogen studies due to the green reflectivity of chlorophyll, and strong absorptance of red light for use in photosynthesis.

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3 EASY STEPS TO ORDER:

1

2

Log into our order management platform at **soar.deveronuas.com** and create an account or use your existing login credentials.

Click Manage Fields to import (or create) your field boundary.

Click Order Flight and complete the information. Choose **Research-Basic NDVI/NDRE** as the reason for your order. Based on the estimated plant date, we will determine the most beneficial data collection protocols.

You are done! Our pilots will collect the data. You will be notified once each step is completed. The final product will be available through your SOAR account.

Estimated turnaround time from data capture to deliverable is **3-5 business days**, depending on the complexity of analysis required.

Having trouble? Visit www.deveronuas.com/products for a video tutorial on how to order this product!

Contact Us

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