

# A GUARANTEED CLEAR IMAGE

# EVERY WEEK.

## WELCOME TO CLEARSKY.

# RHIZA

## BRINGING YOU CUTTING-EDGE ADVANCES IN SATELLITE IMAGERY IN 2022

- ✓ Guaranteed imagery every 6 days, **all year round**
- ✓ Based on **ground-breaking techniques** developed by leading astrophysicists
- ✓ **Exclusively available** through Contour in the UK
- ✓ **First** AI derived imagery product of its kind on the market

## THE PROBLEM WITH CLOUDS

Did you know that at any given time...

...on average

# 67%

of the Earth is covered by cloud.

...during March 2021

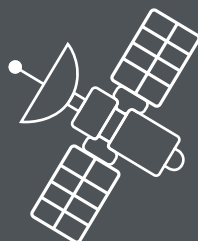
# 68%

of the farms we service hadn't had a clear image for more than 10 days.

## OUR NEW SOLUTION...

RHIZA can now offer an **AI-based product** that derives full-spectrum optical and infrared imagery, including NDVI & GCVI, from radar (SAR) data alone.

As SAR data passes through clouds, this means that for the first time we will be able to guarantee our customers a **regular, reliable image every 6 days, all year round.**



Avg. Clear Images Per Farm In Contour



+ additional ~10-20 clear Sentinel images

## ...AND HOW WE KNOW IT WORKS

ClearSky has been through a **thorough testing and evaluation programme** over the last 6 months:

# 6238 250 10

Images evaluated   Fields evaluated   RHIZA & Agrii farms

- Our evaluation has involved Agrii agronomists, Origin R&D, & RHIZA account managers helping our provider to refine and develop their models, shaping the final product
- The correlation with Sentinel optical imagery has been excellent and proven that ClearSky can be used for scouting and variable rate planning
- Models will be **regularly retrained** to continuously improve quality

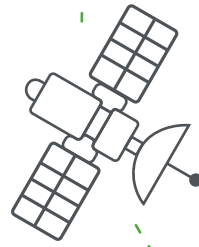
We will continue to evaluate ClearSky as we deploy it, so please send us your feedback to help us further refine this innovative new product.

# HOW CAN CLEARSKY BENEFIT YOU AND YOUR BUSINESS?

**RHIZA**

- Reliable imagery available weekly
- Improved insights into crop variation & performance
- Better targeted field assessments

- Create timely plans with consistent imagery
- Enhanced optimisation of inputs
- Robust foundation for future remote sensing innovations



## WHY USE CLEARSKY FOR VARIABLE RATE NITROGEN?



Unprecedented highs in nitrogen pricing



ClearSky helps determine crop need despite adverse weather



Target inputs to crop variation



Reduce carbon footprint



Increase nitrogen use efficiency



Optimise gross margin

## BENEFITS OF VARIABLE RATE NITROGEN (VRN): IN NUMBERS



**N3**

Timing gives highest response to VRN



**5kg**

N/t of wheat - optimised break-even ratio



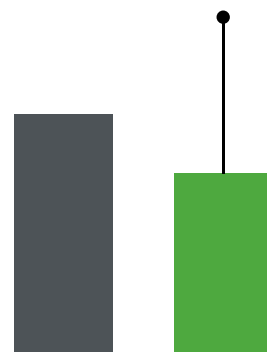
**£34/ha**

Cost reduction assuming N at £650/t

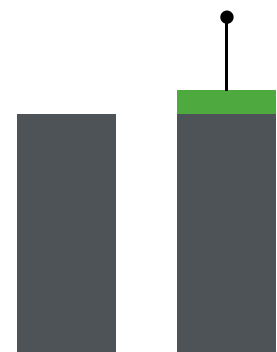
\*Note that persistent snow covering the ground can still interfere with radar data

**25%**  
Reduction

**5-10%**  
Increase



Application volumes



Nitrogen use efficiency