

How we generate a field-zone-specific map



Digital Farming Solutions

INPUT



The two satellites will pass over your field

UP TO **4 X**
A WEEK

Our team of experienced scientists needs to first correct for sensor- and atmosphere-induced distortions and remove clouds and their shadows to provide you the maximum number of cloud-free images of your field. That's how we analyze your field individually.



To increase our chances of getting a usable image, we work with Sentinel and RapidEye. With the satellite images of these international suppliers, we can calculate a vegetation zone map with a resolution of as high as **9 square meters per pixel**.

We also use information regarding national requirements of crop protection product information, seeding date, previous and current crop yield expectations, technical abilities as well as diseases during the season.



ANALYSIS

To determine the vegetation heterogeneity of your field, we **analyze visible and invisible light spectra**, especially the near-infrared range. Healthy vegetation reflects relatively little in the red region of the visible light spectrum and at the same time a lot in the infrared region. Based on this knowledge, we can calculate the Normalized Differenced Vegetation Index (NDVI) of your fields.



We then convert the vegetation zone map into an application map so that your sprayer can use it. In this step, we **assign country- and product-specific dosing rates** to the different zones.

Next, we put together a map of different vegetation zones. For this purpose, we **group locally similar zones** in up to five gradations.



OUTPUT

The final step is to **convert the data into ISOXML or shapefile format** so that your sprayer can use it without any troubles.

Now you're ready to go! Just download the application map, transfer it to your terminal, and you can get to work!

