European Earth Observations Leading Global Vineyard Innovation

Summary

Integrating Copernicus Earth observation data into decision support systems of vine growers around the world help to improve daily decision making

Sponsor		Project	Soluti
* * * T	The e-shape project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 82085	e-shape	000

Taxonomy

- monitor agriculture
- · assess and monitor crop disease and stress
- monitor water use on crops and horticulture

User profile

Grape growers and vine makers who use decision support tools that help them to manage their farms efficiently and sustainably.



Service description

Riscognition is a provider of Analysis Ready Location Information. We help developers adding the rich content of satellite Earth Observations to their applications for visualisation or analysis. Information delivery through standard APIs support an easy data integration in software applications and reduces the data management burden. We help users generate new location-insight.

Customer experience

Elmibit d.o.o. found it easy to integrate EO data in its eVineyard web application for vineyard managers, eVineyard, thanks to Riscognition: »Riscognition provided an easy-to-use API for fetching some basic EO data such as minimal, maximal and mean NDVI on the fields, so we can now allow our customers to visualize EO data on the same graphs as their in-situ data collected on the field mentions Matic Serc from Elmibit d.o.o., adding that they are »looking forward to some additional indices we defined together with the Riscognition team in the process« to work on beyond the e-shape project scope work.

Need

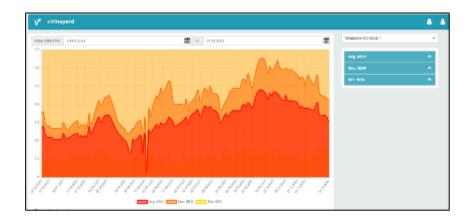
Elmibit d.o.o. was looking to augment their vineyard management software, which provides decision support and basic data analysis capabilities for farming organizations, with Earth Observation derived data, such as soil moisture, NDVI and similar. Such data can bring value to decision making processes, particularly when applied to the vineyard blocks or fields that have no in-situ sensors installed.

Challenges

The main challenge was the service backend development, that is delivering automatically updated information about the vegetation status as soon as a new Sentinel-2 acquisition becomes available.

Results

eVineyard service provided by Elmibit is now capable of displaying vineyard block-specific EO-derived data in it's interface that allows for weighting, combination of data and further alerting when thresholds are reached, allowing eVineyard users to set up alerts in case of out-of-range values in particular blocks which may be caused by vineyard issues such as high number of dead vines, too low or too high vigour of the vines, and similar.



References

Learn more about the service: https://riscognition.io/doc

Learn more about e-shape: www.e-shape.eu

A question? Contact the Helpdesk: https://helpdesk.e-shape.eu