



Large scale monitoring of sustainable water usage

Water & Agriculture



Nelen & Schuurmans



Water & Agriculture

The Water & Agri business unit at Nelen & Schuurmans provides innovative solutions for agriculture. We support development organizations and professional agribusinesses in improving their activities. We build integrated information services and provide consultancy supporting implementation, ensuring long-term sustainability. This ranges from alignment with user requirements, maximizing social impact to a financially sustainable business case. This makes us a reliable and trustworthy partner for professional organizations.



Partners

We work with various partners from different domains, fields of expertise and countries:

- > Knowledge institutes and universities
- > Satellite data providers
- > Agribusinesses
- > NGO's and development
- > Governments



European Space Agency



Enabling Delta Life



COOPERATION >



World Vegetable Center



Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



UNIVERSITY OF TWENTE.



SATELLIGENCE



Better farming Better future



LỘC TRỜI



FEED THE WORLD



VanderSat



Verstegen

SPICES & SAUCES SINCE 1886



ACI Limited





Our solution

Large scale monitoring of water usage

makes water flows transparent and measurable.

We perform specialized analyzes to accurately determine water use on a regional scale. For this we combine various techniques, including satellite observations, hydrological models and trend analysis. We build water management dashboards, online reports and web applications for our clients. This helps them to measure impact of interventions and contribute to the Sustainable Development Goals globally.





The challenge

Due to climate change, the sustainable use of water for agriculture is a more urgent issue than ever before. Numerous interventions are taken worldwide to improve this. However, the effectiveness these interventions are often unknown.

With the use of our inhouse developed software and new data science technologies, we aim to make a difference in sustainable water use.

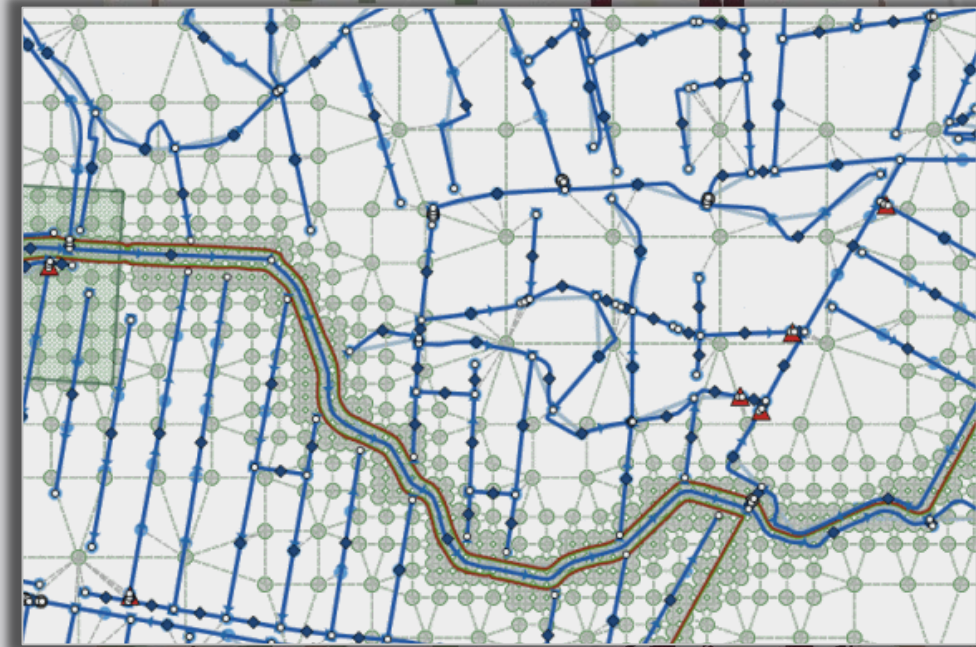




How we overcome this challenge

An enormous amount of data is available about the rural area: from sensors, satellite images and numerous open data sources. New techniques in data science, artificial intelligence and machine learning allows to now use this data.

Our vision is that the integration of data sources is essential to arrive at the best information services. The systems and specialist knowledge we have developed can meet this challenge. We work with a strong network of knowledge and technology partners. With this we deliver total solutions, from interactive dashboards to web applications and smartphone apps.



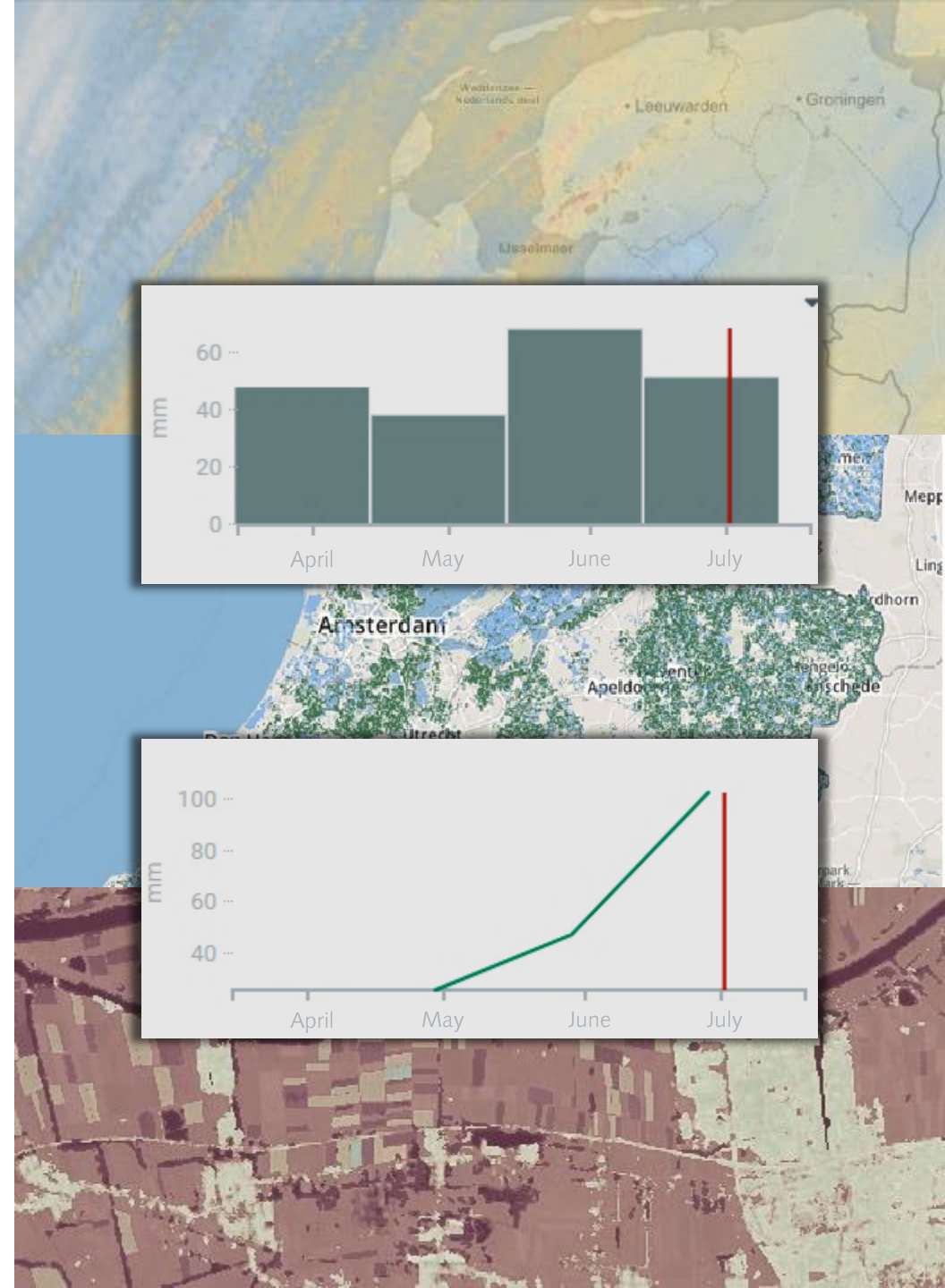


Hydrological analysis

We conduct state-of-the-art scientific substantive hydrological analysis. Our water balance models quantify every in- and outflow of water on plot, catchment or regional level.

The Lizard geodata platform is the basis for our analysis. All available data sources are integrated in the platform, facilitating both static and dynamic operations.

In complex cases, we can rely on our inhouse development hydrological and hydraulic modelling instrument 3Di.





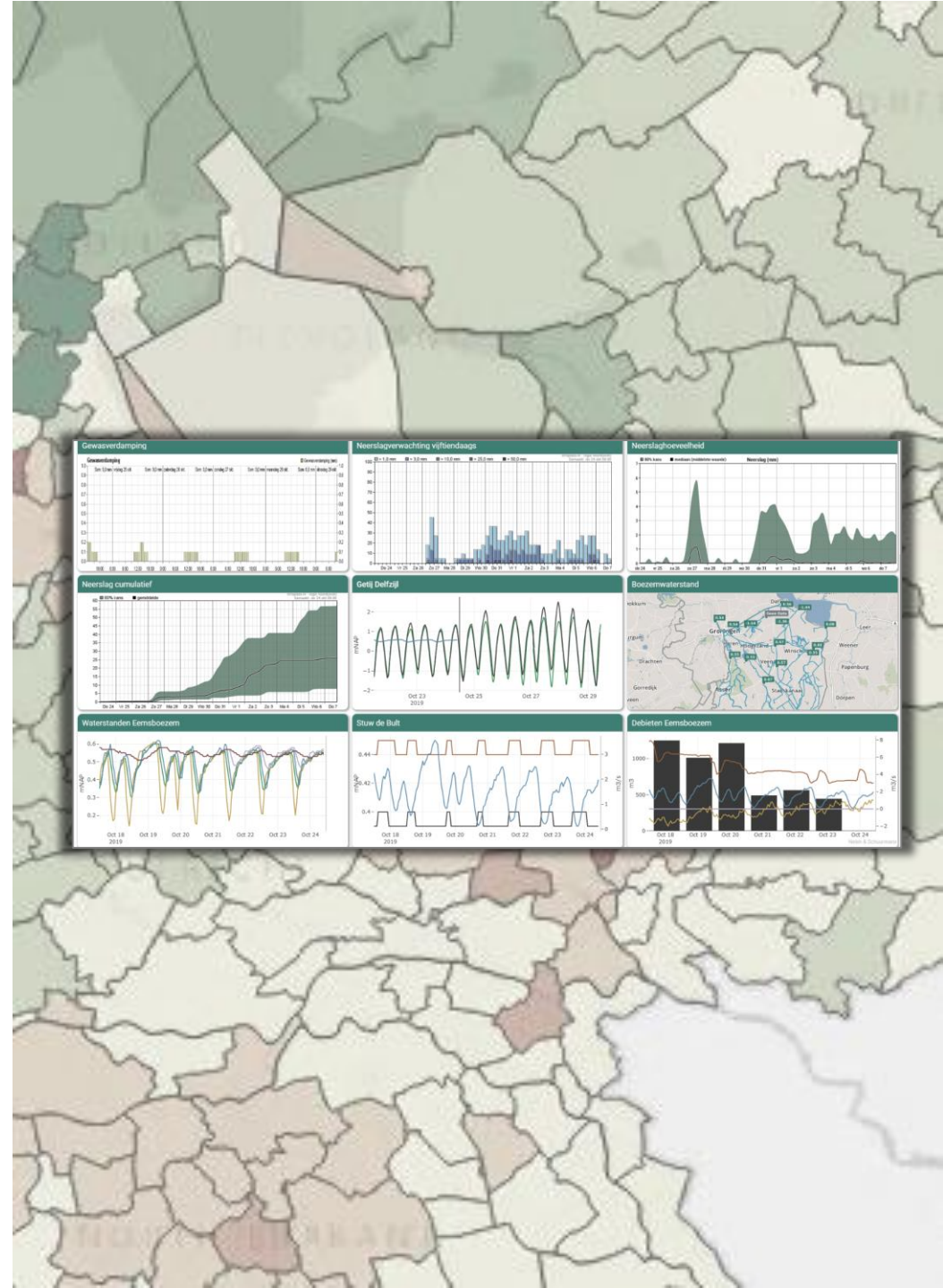
What can we do for your organization

We can literally map water flows, to provide your organization insight in:

- › Effectiveness of water saving interventions
- › Yearly trends and statics
- › Sustainable impact indicators
- › Regional mapping

This information is provided in through our information service framework as:

- › Online dashboards
- › Automatically generated reports
- › Direct performance indicators (API)





Want to know more?

Find us at:

nelen-schuurmans.nl/nl/advies/water-agri

Or contact us directly:

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