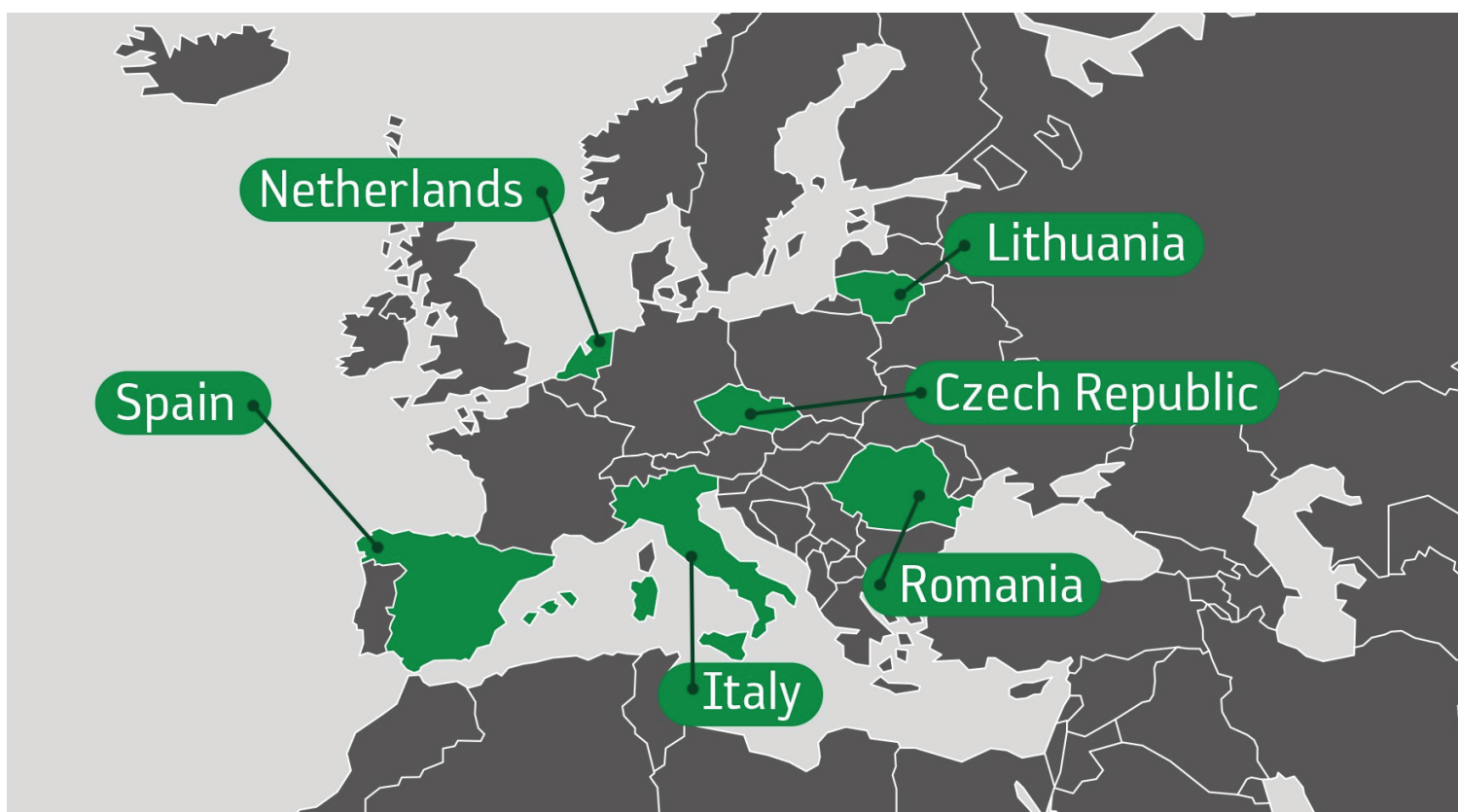


Sentinels for Common Agriculture Policy

Aimed to provide validated algorithms, products, workflows and best practices for agriculture monitoring relevant for the management of the CAP.

Why we think you'll be interested

Sen4CAP has been set up by ESA in direct collaboration and on request from DG-Agri, DG-Grow and DG-JRC. Over the last year, together with the national authorities of the six selected EU pilot countries, Sen4CAP consortium has been working on a demonstration of how the Sentinels can be used on a national scale for the new CAP monitoring approach.



Sen4CAP pilot countries.

For more info visit the Sen4CAP website:
– <http://esa-sen4cap.org/>

1st Evidence Review

20th March 2018, Brussels

9 months after the start of the project, first results were presented to the Steering Committee (DG-Agri, DG-Grow and DG-JRC), pilot paying agencies and to the Committee for Direct Payments of DG Agri. Results available up to then were based on the prototype products and the methods were not yet fully mature. But these results were crucial to have a starting point for a discussion with the potential users of the products and methods in evolution. The member states expressed great interest in the project results and gave meaningful feedback at the workshop following the presentation. Current developments are based on this feedback which will also be much valuable later on, after the real-life demonstrations in 2018 and 2019.



Presentation to the Committee for Direct Payments and the Steering Committee.

For more info see the full presentation to the Committee of Direct Payment:

– http://esa-sen4cap.org/sites/default/files/Sen4CAP_1stEvidence_DirectPaymentCommittee_March2018.pdf

The New CAP Monitoring Approach

22nd May 2018

The European Commission has adopted new rules that will for the first time allow data from the Sentinel satellites and other Earth observation data to be used when carrying out checks for area-based CAP payments (either direct payments to farmers or rural development support payments), as well as cross-compliance requirements. This includes the possibility to completely replace physical checks on farms with a system of automated checks based on analysis of Earth observation data. Other new forms of evidence such as geotagged photos, information from drones and relevant supporting documentation from farmers will also be acceptable for the first time, as part of a broader shift towards the new monitoring approach.

“This new satellite technology will significantly reduce the number of field inspections, removing the climate of fear, which causes significant stress for farmers. It will also benefit public administrations, by reducing the costs of administering controls and checks. It is thus a win-win for farmers and administrators.”

– Phil Hogan, European Commissioner for Agriculture and Rural Development.

In parallel with adopting the new regulation, the JRC has been leading activities with a goal to prepare a “Common Technical Specification” for the member states who will apply the monitoring in the near future. The Sen4CAP consortium is actively participating in this process.



Landscape in Castilla y Leon as captured by Sentinel-2 satellite, in May and July 2017.

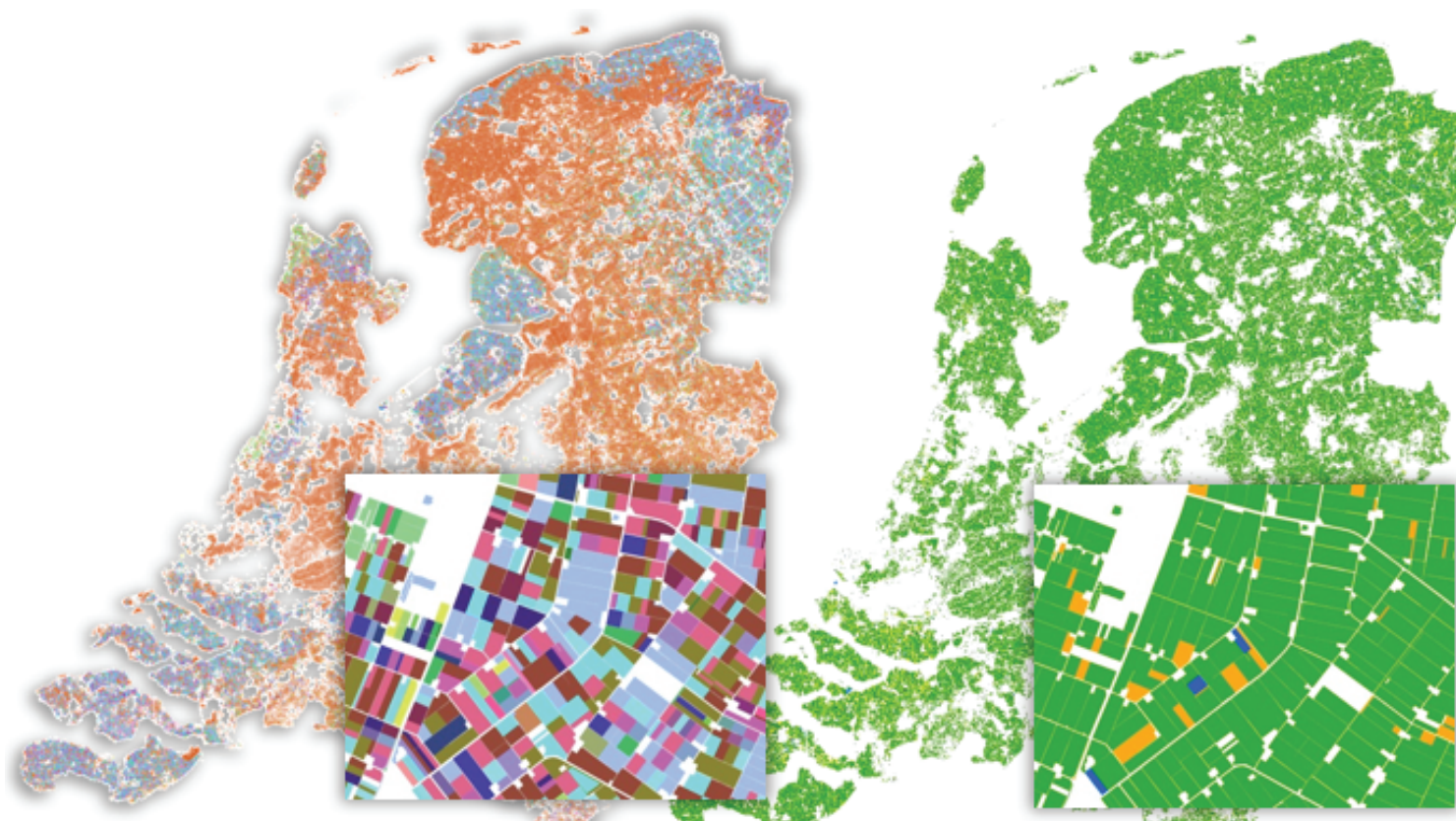
For more info see the press releases of ESA and DG-Agri:

– http://www.esa.int/Our_Activities/Observing_the_Earth/Copernicus/Sentinels_modernise_Europe_s_agricultural_policy

– https://ec.europa.eu/info/news/modernising-cap-satellite-data-authorized-replace-farm-checks-2018-may-25_en

Crop Diversification Use Case

Farmers receiving an area-based payment have to comply with various practices that benefit the environment and the climate. One of these practices is diversifying crops within farms. For example, farmers with over 10 ha and up to 30 ha of arable land have to grow at least 2 crops and the main crop cannot cover more than 75% of the land. Sentinels can help to decide whether the farmer is compliant or not by providing information about the planted crop type and about the crop growing vegetation cycle over the season, at the parcel level. Then, the number and the proportions of the cultivated crops can be estimated at the farm level.

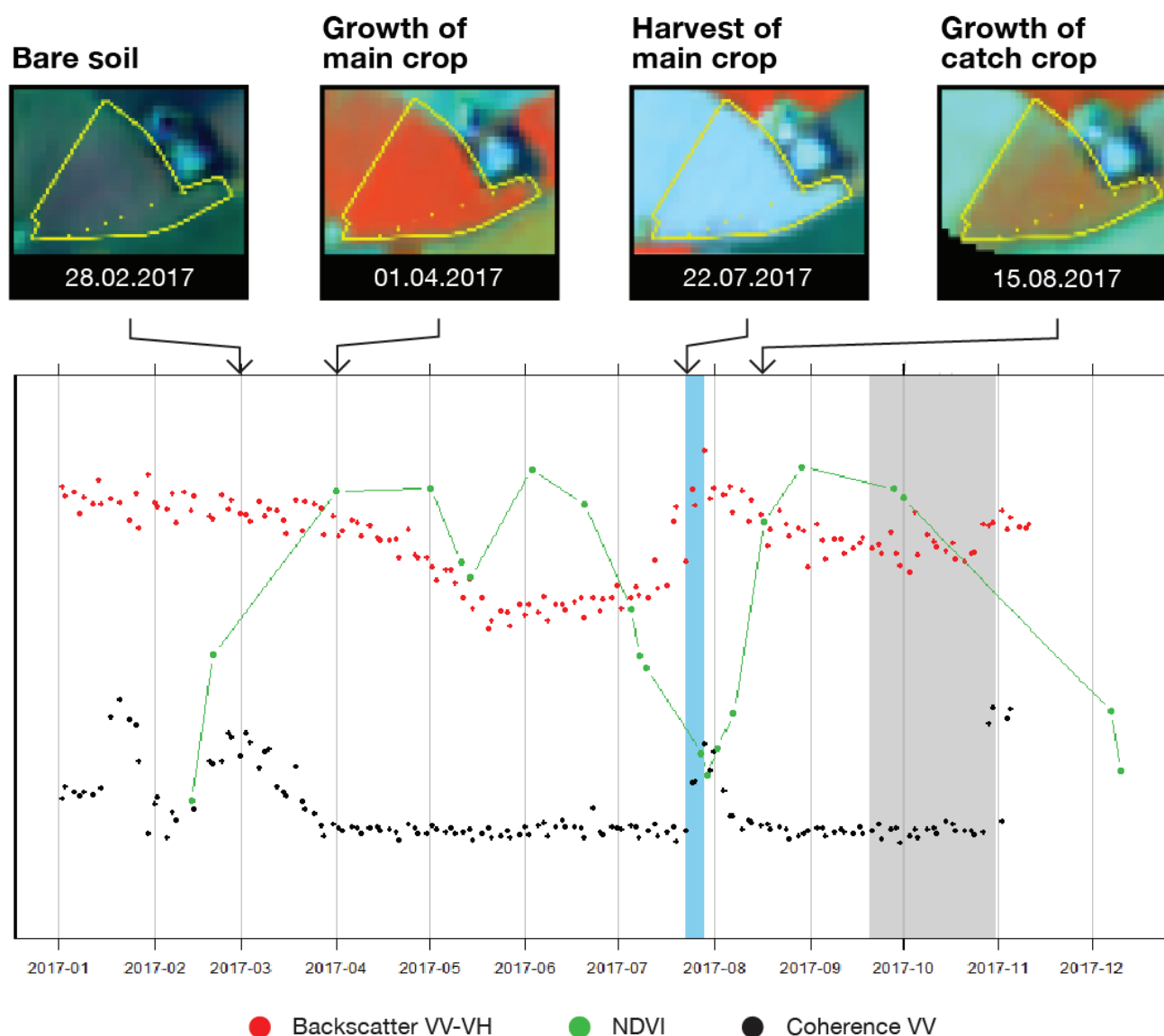


Observed crop type (left) and classification confidence indicator (right) for the Netherlands in 2017.

For the details on the applied methodology, visit:
– <http://esa-sen4cap.org/content/crop-diversification>

Agricultural Practices Monitoring Use Case

The agricultural practices monitoring prototype product, also presented at the 1st evidence review, focused on the Ecological Focus Area (EFA) elements - catch crops, nitrogen-fixing crops and fallow land. By analysing the dense time series over the parcels for which EFA practices have been declared and comparing these to the agricultural practices rules (permitted periods and duration, permitted and forbidden actions e.g. mulching and ploughing), one can obtain information on the occurrence of crop harvest or clearance events and reach a conclusion on the degree of compliance of a parcel to a particular agricultural practice.



Time series analyses providing information on the occurrence of crop harvest and clearance events.

For the details on the applied methodology, visit:

– <http://esa-sen4cap.org/content/agricultural-practices>

UPCOMING EVENT

October 3-5, 2018 – 54th Panta Rhei conference in Andau, Austria. Sen4CAP will be presented by Sophie Bontemps to whole group of Paying Agencies.

Please do not hesitate to send us any feedback to info@esa-sen4cap.org. You can also meet us in person at the upcoming events. We look forward to hearing from you.

The Sen4CAP team