EO services contributing to SDGs Agricultural parcel activity monitoring





- User: farmers, agriculture agencies and cooperatives
- Challenge/Needs: Monitoring the status of crops on parcel level to detect anomalies in crop and management behaviour. Monitoring of agricultural activities such as mowing, harvest, tillage (e.g. ploughing) to help enforce the implementation of agricultural and environmental policies and regulations.
- Initiative: Control with remote sensing of EU Common Agricultural Policy (CAP). The EU Commission has introduced the possibility for member states to implement a monitoring approach as a substitute for the "on the spot" controls.
- Results: 1) agriculture markers are developed using satellite imagery to detect farming events such as mowing, harvest and tillage (ploughing) activities in grassland, annual crops and parcels to monitoring whether regulations are implemented at local scale. 2) mapping crop classification 3) automatic workflows are developed to improve the efficiency of the system.
- Impact: This system provided the user with a set of activity detections on parcel level that they could use in their decision workflow to determine farmers' compliance with the CAP rules, and help reduce significantly manual inspection needed in the fields.
- Service Provider: NEO BV



NEO agriculture solution: https://www.neo.nl/crop-parcel-monitoring/ https://www.neo.nl/precision-agriculture/ https://www.neo.nl/crop-management/ Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.



Crop monitoring using satellite imagery