

EO services contributing to SDGs

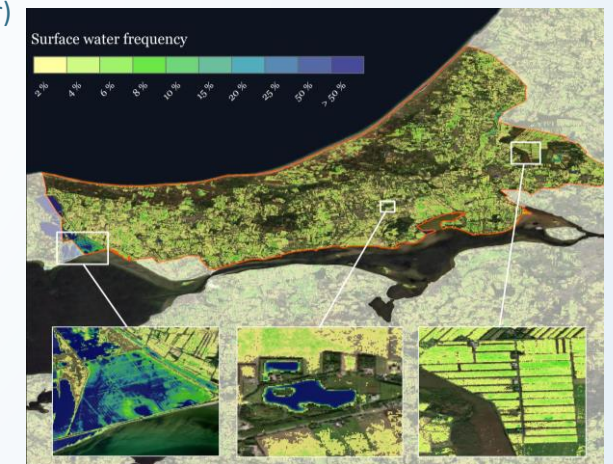
Flood Metrics

- User: Local Authorities/NGO's
- Challenge/Needs: Flooding events are detrimental to people, assets, infrastructure and the economy, and the effects are being felt worldwide. Timely data and information on flood extent is needed to assess damages and manage risks.
- Initiative: Commercial product as a result of several years R&D
- Results: Through the combined use of both optical and SAR (radar) satellite data in high spatiotemporal resolution (*e.g., Sentinel-1 and 2 (10 m) or higher resolution (~ 1 m) commercial sensors when needed*), flood extent can be mapped and monitored regardless of cloud conditions and time of day. This can be used operationally to monitor the impacts and extent of ongoing flooding's and historical time-series can be analysed to assess historical surface water frequency, which can be used to inform physical planning and climate mitigation strategies.
- Service Provider: DHI GRAS – Flood Metrics

Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.



Example: Flood extent map using Sentinel 1 SAR (radar)



Example: Surface water frequency using fused optical and radar data