

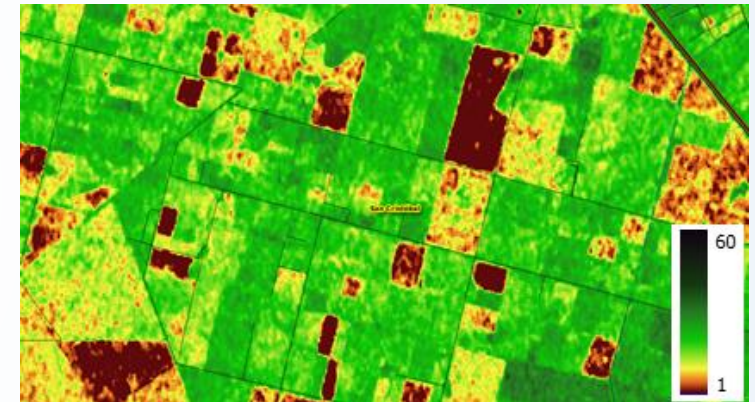
EO services contributing to SDGs

Crop monitoring based on Sentinel-1 SAR data

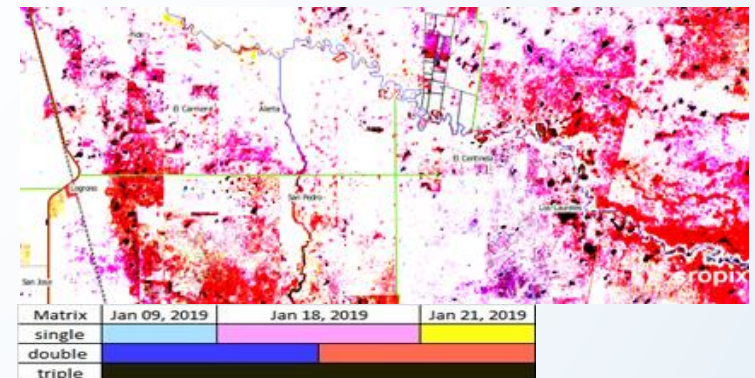


- User: Local authorities / NGOs
- Needs: Gapless time-series data with high spatial and temporal resolution for crop monitoring, change detection and yield estimation.
- Challenge: Implementation of early warning in case of hazards and loss estimation on broad scale to mitigate food shortages.
- Initiative: Use reliable Sentinel-1 data and derive different indices to monitor anomalies in crop growth, biomass development, drought condition and leaf area index (LAI) for yield approximation.
- Results: Permanent crop monitoring and change detection seasonal and perennial (baseline). Yield forecast based on LAI. Support for insurance schemes and disaster management.
- Service Provider: cropix

Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.



Approximation of LAI based on Sentinel-1 data.



Flooding event: extent and duration