

EO services contributing to SDGs

Hazard monitoring in Argentina



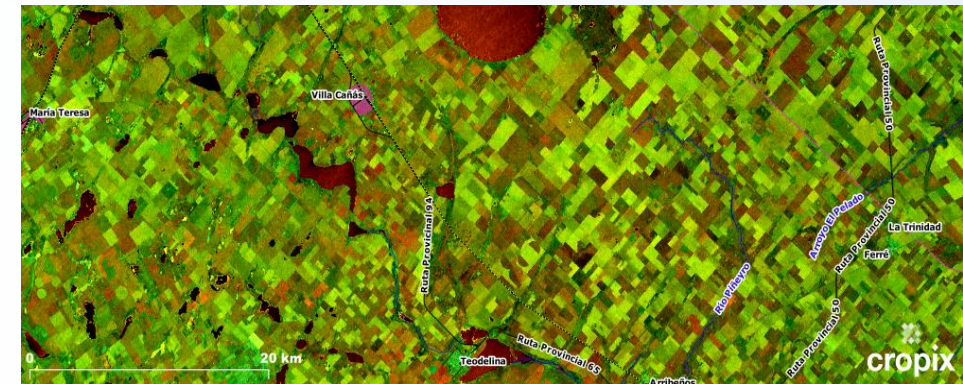
Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

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.

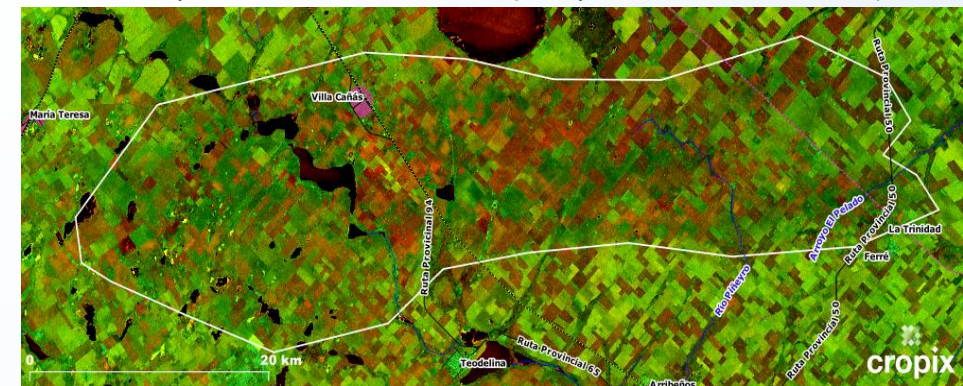
- User: Crop Insurance
- Challenge/Needs: Support for loss estimation after hail event.
- Initiative: Support for loss adjuster and claims manager.
- Results: Indicates the footprint of an event.
- Service Provider: cropix based on Sentinel-1 SAR data.

Color Composite (CC) derived from Sentinel-1 SAR data

- Sentinel-1 acquires data on regular basis with a repetition of 12 days (20x20 m).
- Independent from atmospheric disturbances and daylight.
- Constant observation angle, energy and geometry. Ideal for time-series monitoring.
- Color Composite shows cropland in a pseudo-true color.
- Color Composite is an RGB derived from a single date Sentinel-1 SAR dataset.
- Other map products like ESVI can support in change detection to evaluate the severeness of the damage per zones within the plots.



Color Composite 7. December 2021 (7 days before the hailstorm)



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After a severe hailstorm near Villa Cañás in Santa Fé province in Argentina we compared 2 succeeding images of our Color Composite to detect the footprint of a hailstorm. The data enables the claim manager to identify the insured plots within the affected area. It allows a better planning concerning the number of loss adjusters and financial reserve requirements. Zoning maps help loss adjusters to identify hot spots.