



Council of the
European Union

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Brussels, 14 December 2018
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AGRI 644
FORETS 55

NOTE

From: General Secretariat of the Council
To: Delegations
Subject: Massive forest damages in Europe
- Information from the Italian delegation

Delegations will find in Annex background information from the Italian delegation on the above mentioned subject to be raised under "Any other business" at the session of the Council ("Agriculture and Fisheries") on 17-18 December 2018.

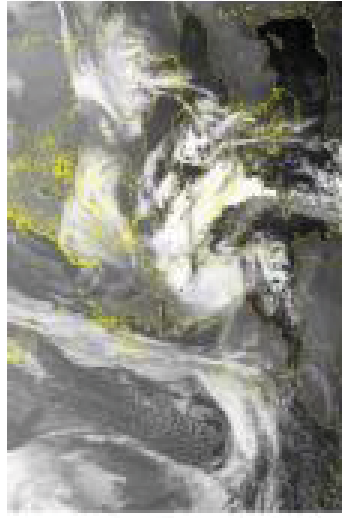


Massive forest damages in Italy: mapping and monitoring activities using EU Copernicus Programme “Emergency Management Service”

Council of the European Union
Bruxelles, 17th – 18th December 2018

1

Area affected by storm «VALA» and a preliminary quantification of its damages



More than 600 mm rainfall in three days (27th -29th October)

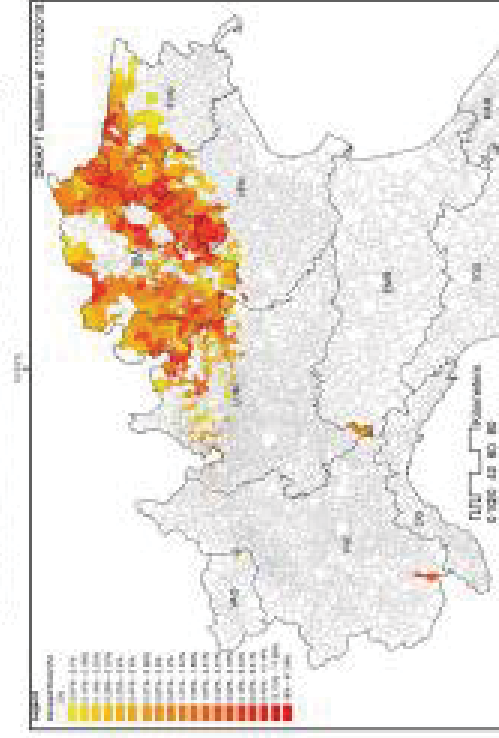
Rainfall combined with strong wind-storm

473 municipalities affected, with a total surface of 2.3 millions hectares (60% of which covered by forests)

Forest totally destroyed:

- 41,314 hectares
- 8,548,099 m³ of timber

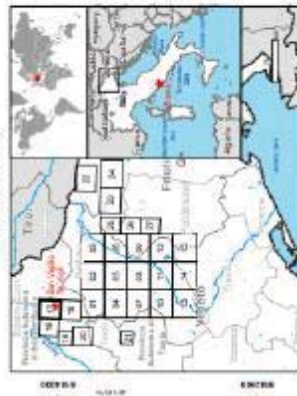
However, the total damaged area is likely to be double than the area totally destroyed, currently mapped



Annex slides

- Slide 4: EU Emergency Mapping Service activation for trees crashed
- Slide 5: Example of the 44 EMS maps provided (open and downloading)
- Slide 6-7-8: Examples of data used (to be used) and clear visible results (Spot and Copernicus Sentinel2), also for the national regional completion
- Slide 9-10: Italian AGEA project for the new CAP reform post 2020 implementation: example of multitemporal satellite data use and flux of work

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Cartographic Information

1:250,000

Full color (RGB), low resolution (100 dpi)

Scale: 1:250,000

Grid: WGS 1984 UTM Zone 32N map coordinate system

File name: WGS 1984 UTM Zone 32N map coordinate system

Legend

Geographic Information

General Information

Geographic Information

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Copernicus EMS project "portal" page, where different damage maps and relative shape file can be freely downloaded

EMSR334: Wind Storm in north-east of Italy

Event Time (UTC): 2018-10-26 22:00
Event Time (LOC): 2018-10-27 00:00
Event Type: Storm (Extra-tropical storm)
Activation Time (UTC): 2018-11-07 10:55
Reference maps produced: 0 of 0
Delineation maps produced: 44 of 44
Grading maps produced: 0 of 0
Activation Status: Open
Affected Countries/Territories:
 Italian Republic

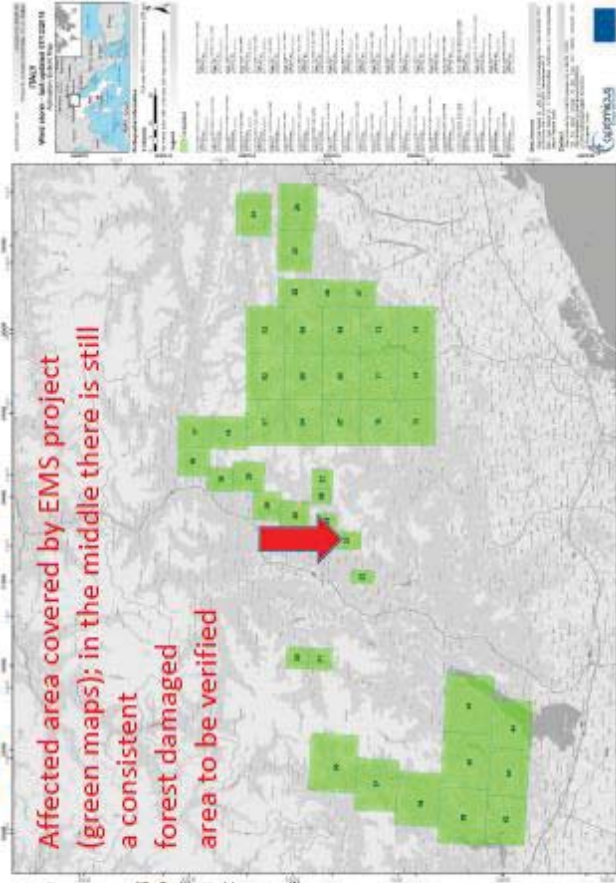
Authorized User:
 Italy/Presidenza del Consiglio dei Ministri - Dipartimento della Protezione Civile - Centro Situazioni
Activation Reason:
 From the first hours of 27 October until 30 October an intense weather event with heavy rain and very strong wind occurred in North Italy and affected especially the North East part (Friuli Venezia Giulia, Veneto, Province Autonoma di Bolzano and Provincia Autonoma di Trento). The event has been important both for intensity and for the duration (it lasted almost 4 days). The heavy rain caused the rapid increasing of the level of Livenza, Piave, Tagliamento and Adige rivers, many areas flooded and an extensive amount of mud and debris flow occurred.

Relevant news:

EMS standard legend, reference map, and statistics on trees area affected

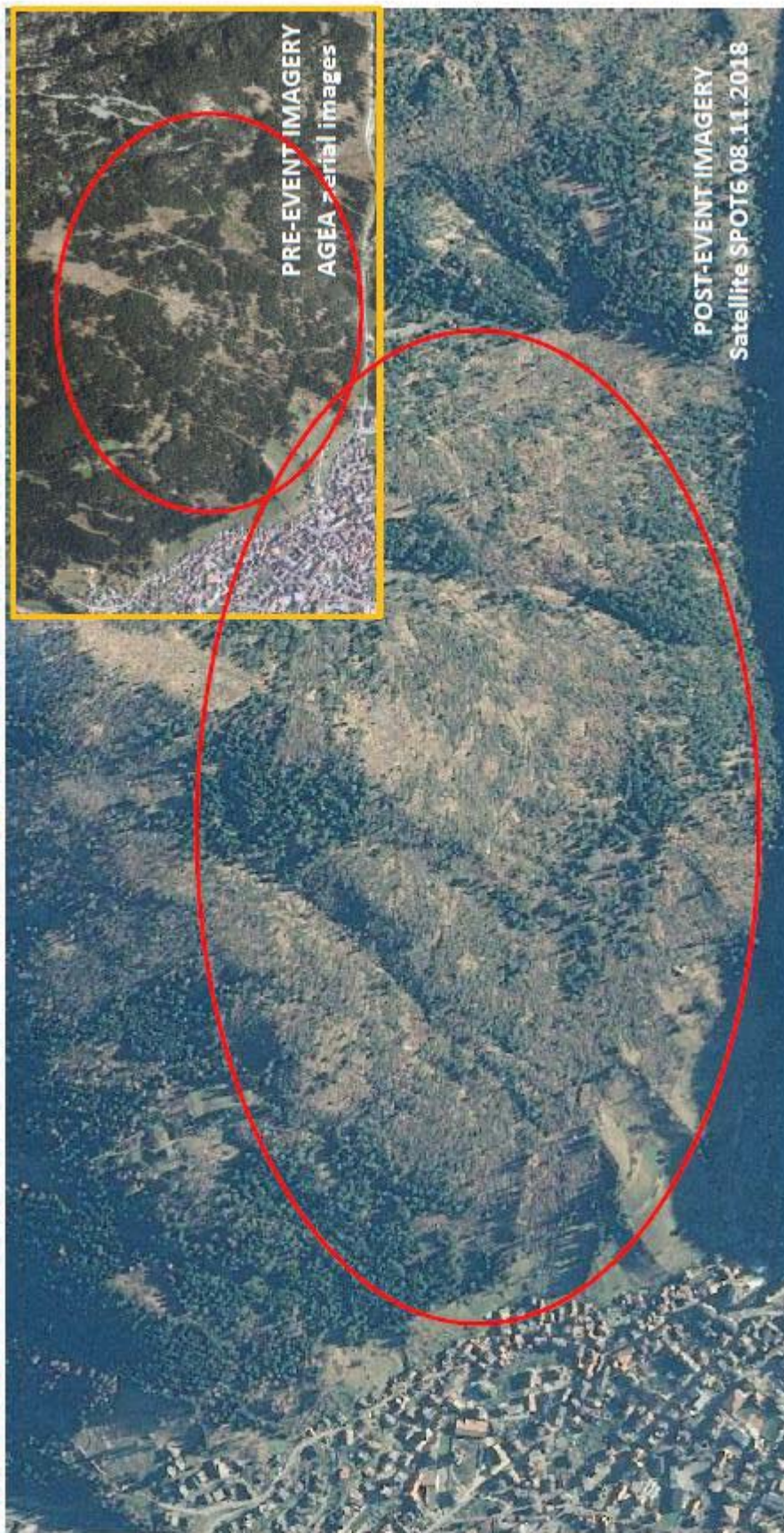


Affected area covered by EMS project (green maps); in the middle there is still a consistent forest damaged area to be verified

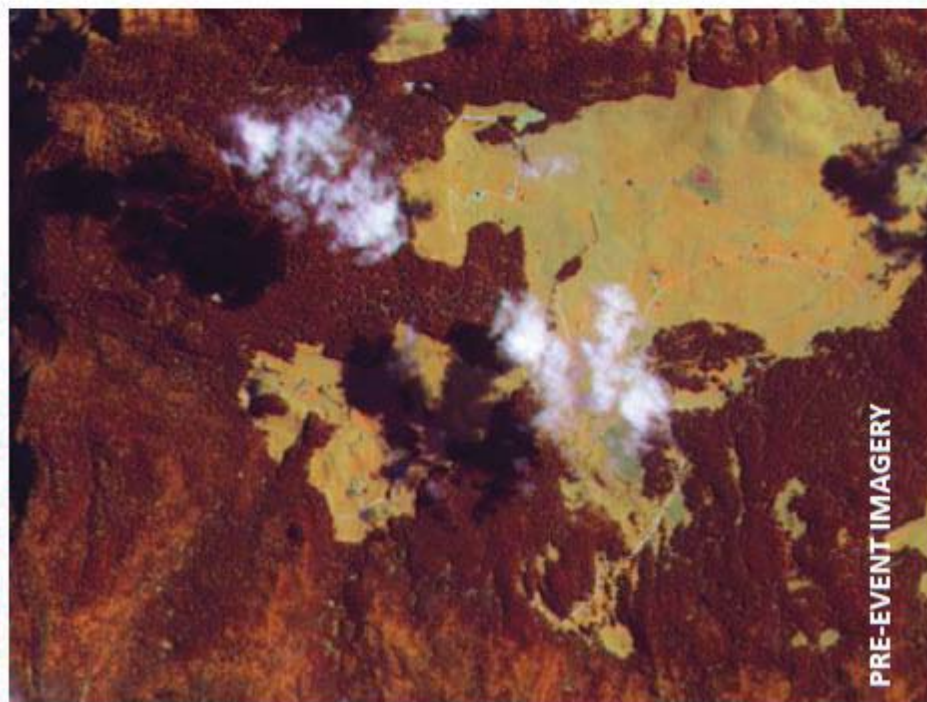


[illegible]

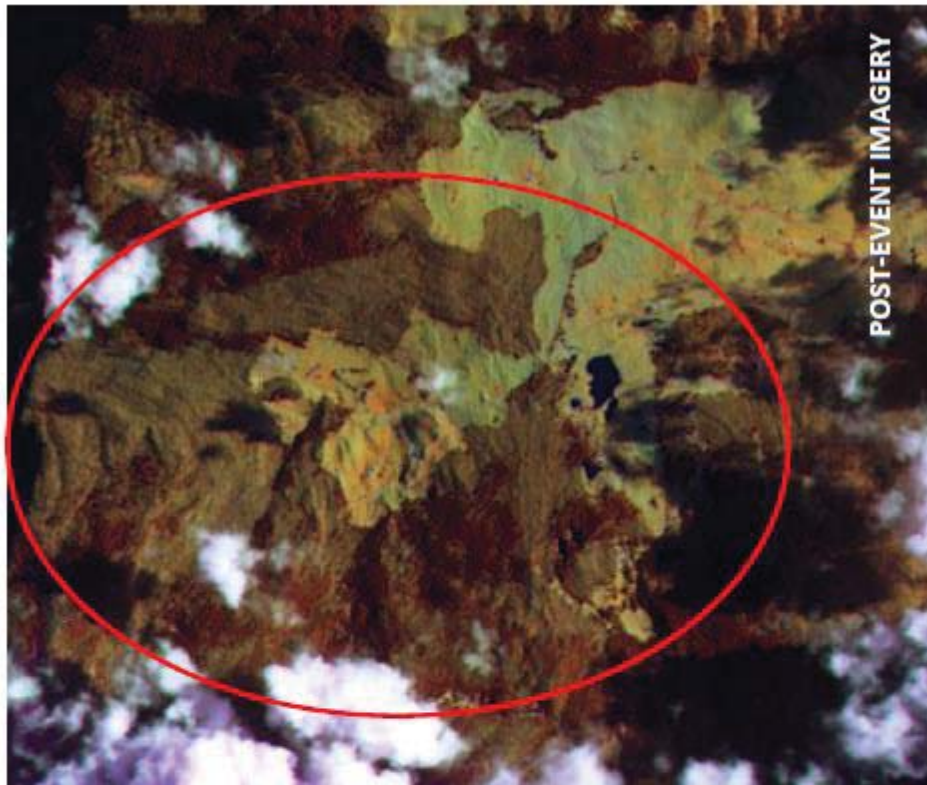
Copernicus EMSR334: Wind Storm in north-east of Italy – Area of Interest 35 Predazzo



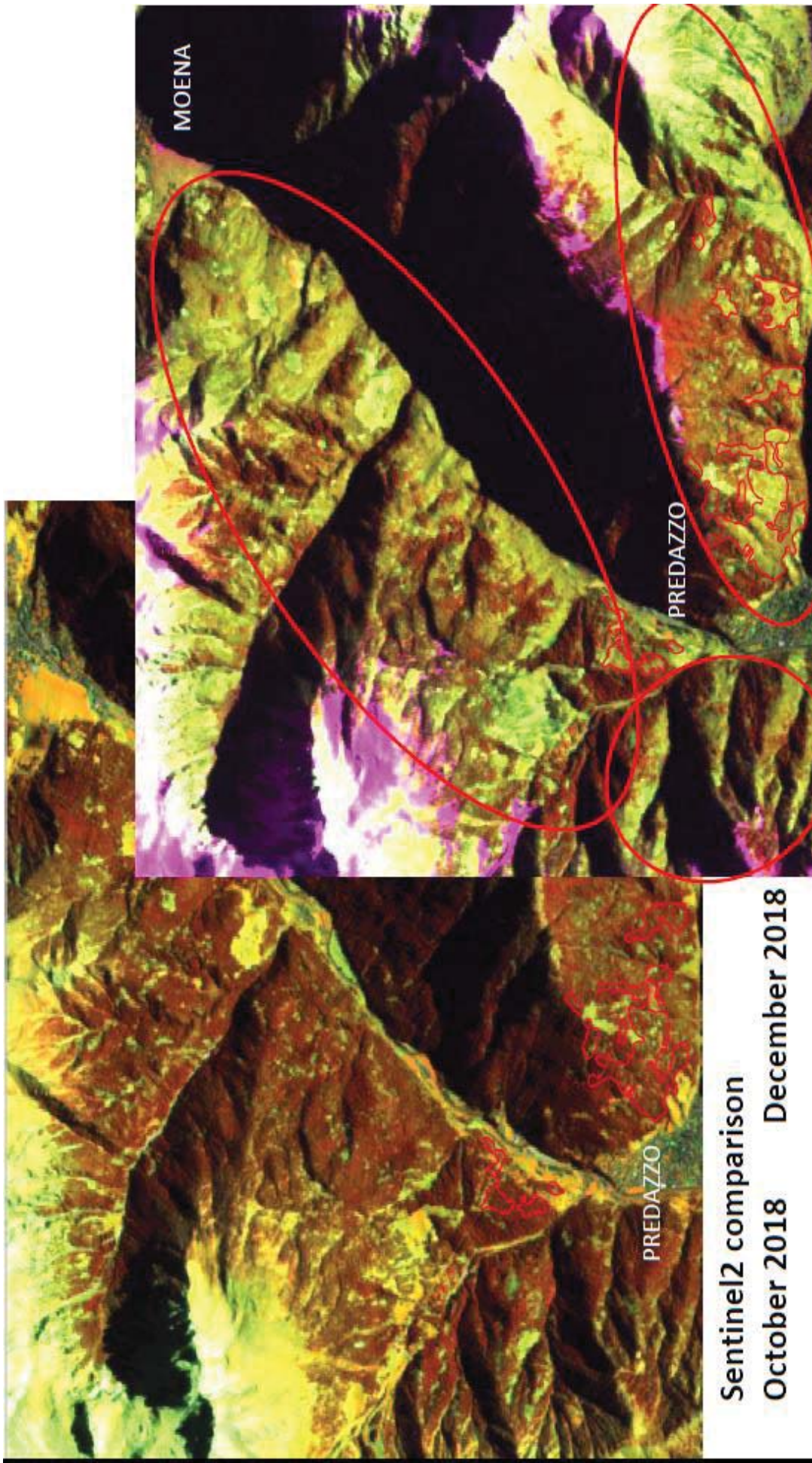
Sentinel 2 infrared pre-post event comparison; the red circle well delineates the large crash of the high valuable forest - Veneto Region 27-30 October 2018



Copernicus Sentinel2 September 21st 2018



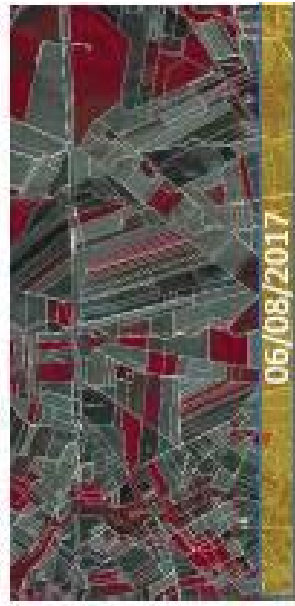
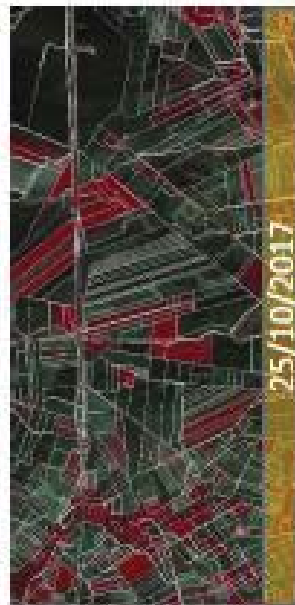
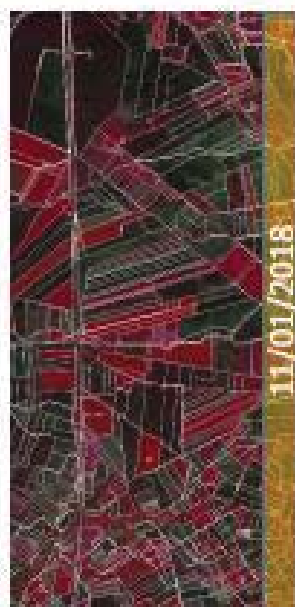
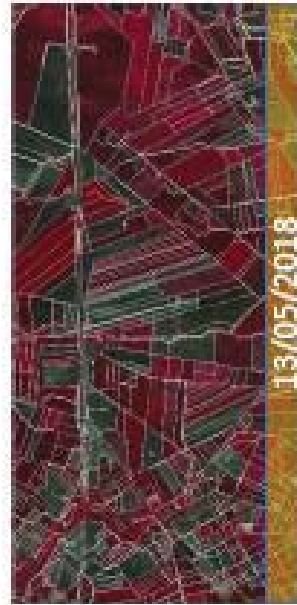
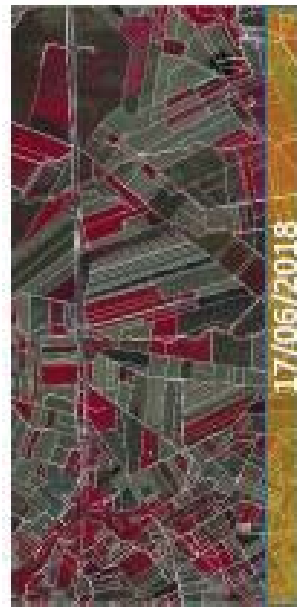
Copernicus Sentinel2 October 31st 2018



Copernicus Sentinel2 (and Sentinel1) - multi-temporal time series to be used for new CAP reform post 2020 within the “monitoring approach”

Example from automatic satellite time series analysis on the same target (Italy processed more than 300 Sentinel images for Foggia province project in 2018 on 600,000 parcels) =>

This system automatically detects and extracts any agronomic CAP compliance or change and contextually any territorial alert or change (civil protection interest) can be provided, in near real time, as a multiservice for the different national/local needs



CAP monitoring in Apulia (2018)

About 635.000 parcels in 2018 automatically classified for Foggia province (7,000 skm) by AGEA

