

Operational Services for the Public Sector

David Hodgson

International Charter: Space and Major Disasters



disasterscharter.org



emergency.copernicus.eu

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Free and Fast Satellite Imagery for Emergency Response

Global humanitarian effort (17 Space Agencies, All Major Commercial Operators)

- Priority Access Satellite Imagery
- Disaster response
- Multi-satellite - Free Data
- Tasked and Archive data
- Data processing to pre-determined level

UK Authorised Users

- Civil Contingencies Secretariat (CCS)
- DFID

ABAE	VRSS-1
CNES	PLEIADES, SPOT
CNSA	CBERS, SJ-9A, GF-1 / GF-2, FY-3C
CONAE	SAC-C
CSA	RADARSAT-1, RADARSAT-2
DLR	TerraSAR-X/TanDEM-X RapidEye
UKSA	UK-DMC2
ESA	SENTINEL-1, SENTINEL-2
ISRO	LISS-4, LISS-3, AWIFS, Cartosat-1, Cartosat-2
INPE	CBERS-2
JAXA	ALOS, ALOS-2, KIBO HDTV-EF
KARI	KOMPSAT-2, KOMPSAT-3, KOMPSAT-5
NOAA	POES, SUOMI-NPP, GOES
ROSCOSMOS	RESURS-DK, METEOR-M, KANOPUS-V, RESURS-P
USGS	Landsat-7, Landsat-8, Quickbird, Worldview, Geoeye-1



Mapping for Disaster Management

Rapid Mapping

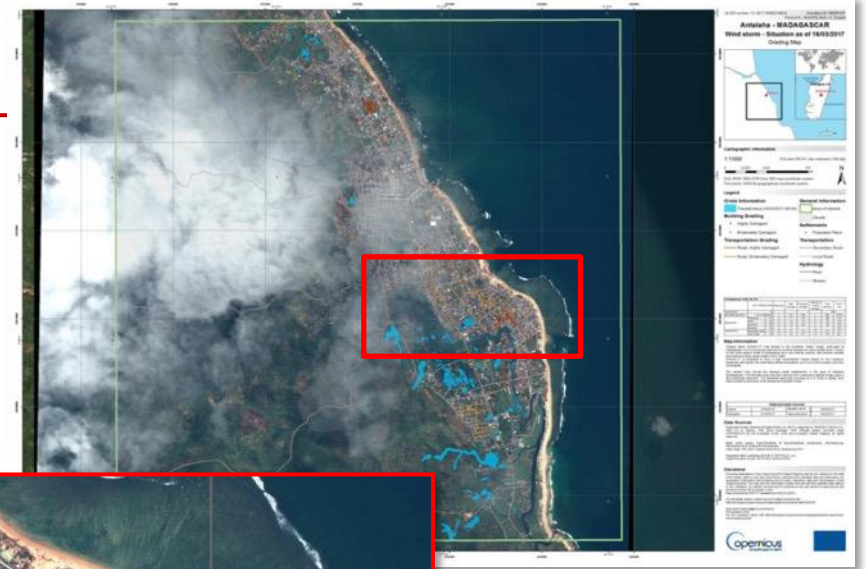
- Reference maps
- Delineation maps
- Grading maps

Risk & Recovery Mapping

- Pre-disaster situation maps
- Post-disaster situation maps

Early Warning

- Fire (also fire monitoring)
- Floods



Crisis Information

■ Flooded Area (16/03/2017 08:59)

Building Grading

- Highly Damaged
- Moderately Damaged

Transportation Grading

- Road, Highly Damaged
- Road, Moderately Damaged

Consequences within the AOI							
	Unit of measurement	Destroyed	Highly damaged	Moderately damaged	Negligible to slight damage	Total affected	Total in AOI
Flooded area	ha					28.8	
Estimated population	No. of inhabitants	0	513	369	0	882	53160
Settlements	Residential	No. 0	171	123	0	294	N/A
	Other	No. 0	16	13	0	29	N/A
	Industrial	No. 0	13	26	0	39	N/A
	Religious	No. 0	0	1	0	1	N/A
Transportation	Secondary roads	km 0.0	0.0	0.0	0.0	0.0	15.1
	Local roads	km 0.0	3.3	6.7	0.0	10.0	64.1

European Forest Fire Information System (EFFIS)

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Danger Forecast

- Fire weather index
- Initial spread index

Damage

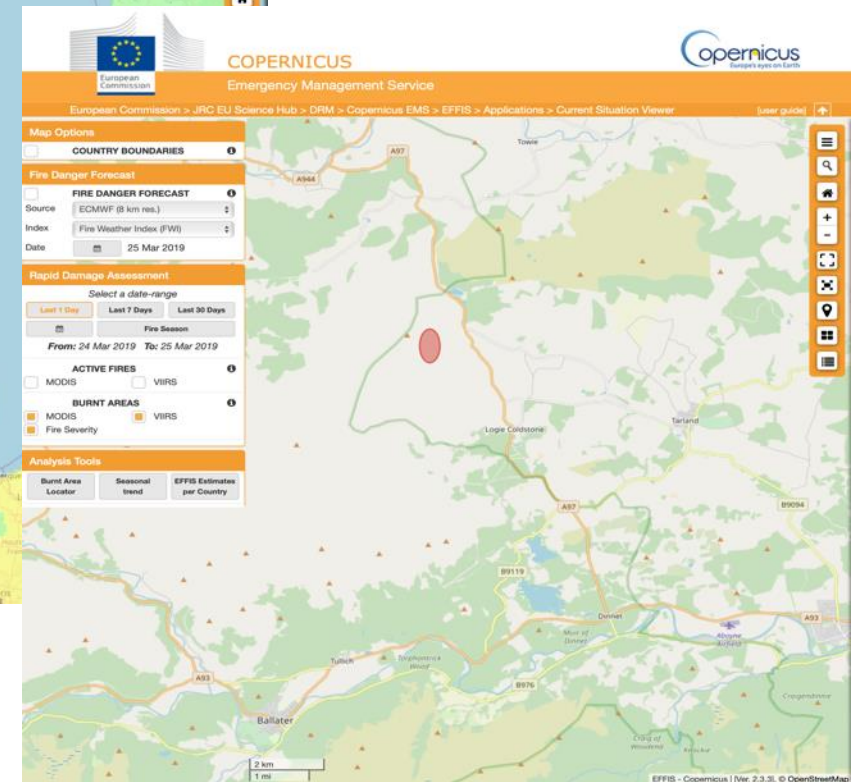
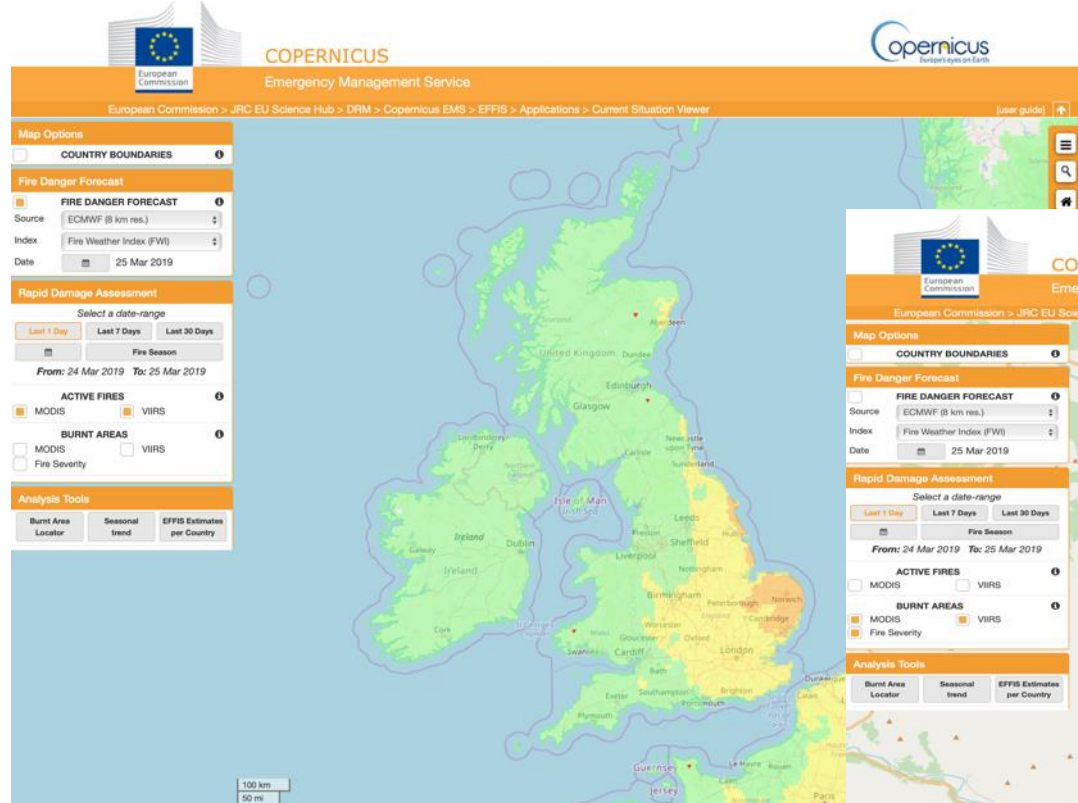
- Active fires
- Burnt areas

Data

- News
- Seasonal trend

UK Authorised Users

- Civil Contingencies Secretariat (CCS)
- Various agencies



Further Information

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