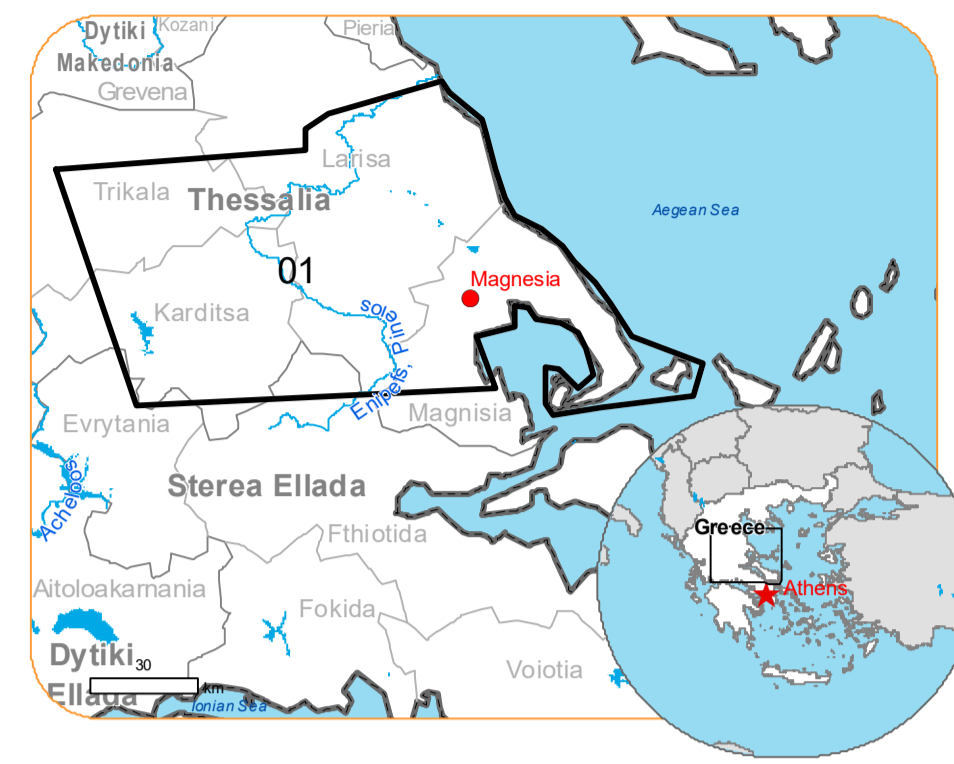




Situation as of 07/09/2023 16:25 UTC
 Delineation MONIT02 - Overview map 01



Previous flooded area
 18,7392.6 ha
 Flooded area
 72,950.6 ha
 Potentially affected population
 ~ 6000

Potentially Affected Built-up and Transportations

Railway 48.0 km
 Road 3,471.8 km
 Built-Up 510.5 ha

Crisis Information

Flooded Area	School, university and research buildings	Mining or extraction site
Previous Flooded Area (07/09/2023 04:40 UTC)	Hospital or institutional care buildings	Sport and recreation constructions
	Military	Dump Site
		Water or Aquatic infrastructure

General Information

Area of Interest	Coastline	Dam
Detail map	River	Transportation
Image Footprint	Stream	Highway
Not Analysed	Waterfall	Main road
Administrative boundaries	Lake	Local road
Province	Inundation	Railway
Municipality	Open Water	Airfield runway
Placename	Reservoir	Airfield
Residential	Long-distance pipelines or lines	Helipad
Non residential	Local pipelines or lines	Harbour
	Dam	

Event:
 Due to extreme rainfall in Thessaly Region, extended floods occurred in Magnesia Regional Unit, mostly around the city of Volos and coastal areas of Pelion mountain peninsula. Extreme rainfall is ongoing and according to the forecast of the National Meteorological Service the rainfall will continue until tomorrow afternoon. One person is missing, and one died, and many cars were drifted away due to the flooding. Local Fire Service received many calls for help to pump water from flooded buildings and rescue people trapped by the rising waters. Copernicus EMS Rapid Mapping is requested to provide initial rough estimation, flood extent and monitoring of the event for the emergency mapping.

Data sources and analysis: Pre-event image: Sentinel-2A/B (2023) (acquired on 31/08/2023 at 09:15 UTC, resolution 10.0 m). This image is used as background image.
 Post-event image: Sentinel-1A/B (2023) (acquired on 07/09/2023 at 16:24 UTC and 16:25 UTC, resolution 10.0 m).
 Sentinel-1A/B (2023) (acquired on 06/09/2023 at 04:39 UTC and 04:40 UTC, resolution 10.0 m).
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Base vector layers: OpenStreetMap © OpenStreetMap contributors (2023), Wikimapia.org, GeoNames 2015, Corine Land Cover (CLC) 2018, EuroBoundaryMap 2017 © EuroGeographics.

Population data: GHS Population Grid © European Commission, 2023 https://ghsl.jrc.ec.europa.eu/ghs_pop2023.php

The thematic layer has been derived from post-event satellite image by means of visual interpretation. Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

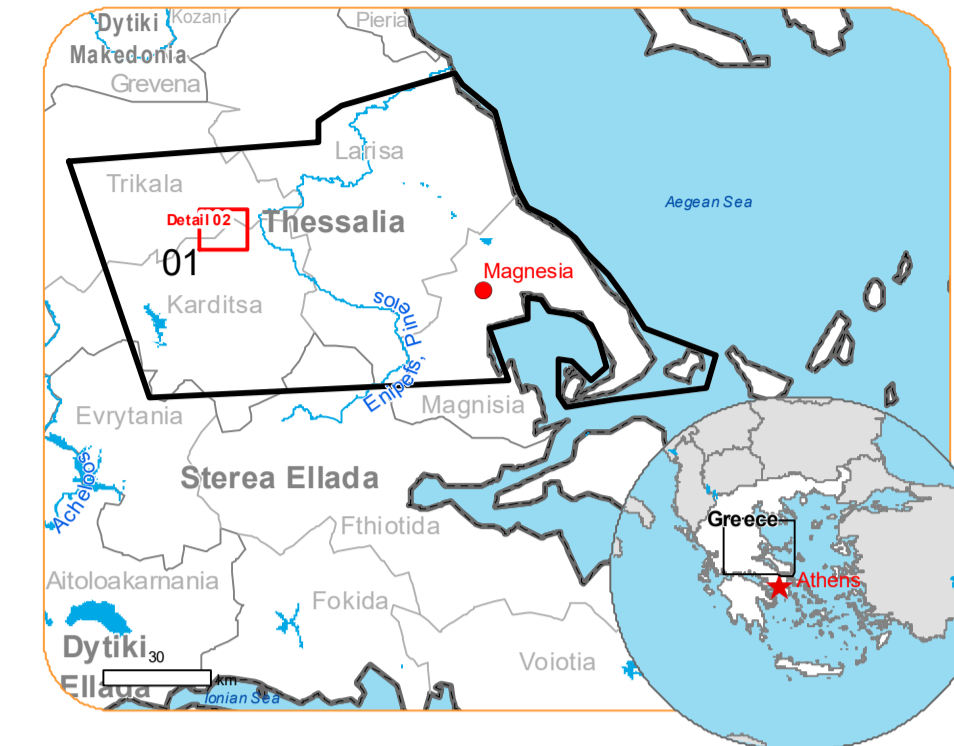
Map produced by GMV released by e-GEOS on the 08/09/2023.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR692>



EMSR692 - AOI01
Flood in Greece
MAGNESIA

Situation as of 07/09/2023 16:25 UTC
Delineation MONIT02 - Detail map 02



Flooded area
8,960.9 ha
(12.2% of total in AOI)

Potentially affected population
~ 950
(16% of total affected)

Potentially Affected Built-up and Transportations

Road
483.0 km
(14% of total affected)

Built-Up
52.0 ha
(10% of total affected)

- Crisis Information**
 - Flooded Area
 - Previous Flooded Area (06/09/2023 04:39 UTC)
- Hydrography**
 - River
 - Stream
 - Lake
- Facilities**
 - Long-distance pipelines or lines
 - Mining or extraction site
 - Power plant
 - Sport and recreation constructions
- General Information**
 - Area of Interest
 - Image Footprint
- Administrative boundaries**
 - Municipality
- Placenames**
 - Placename
- Built-Up Area**
 - Residential
 - Non residential
 - School, university and research buildings
- Transportation**
 - Highway
 - Main road
 - Local road

Event:
Due to extreme rainfall in Thessaly Region, extended floods occurred in Magnesia Regional Unit, mostly around the city of Volos and coastal areas of Pelion mountain peninsula. Extreme rainfall is ongoing and according to the forecast of the National Meteorological Service the rainfall will continue until tomorrow afternoon. One person is missing, and one died, and many cars were drifted away due to the flooding. Local Fire Service received many calls for help to pump water from flooded buildings and rescue people trapped by the rising waters. Copernicus EMS Rapid Mapping is requested to provide initial rough estimation, flood extent and monitoring of the event for the emergency mapping.

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Post-event image: Sentinel-1A/B (2023) (acquired on 07/09/2023 at 16:25, resolution 10.0 m).
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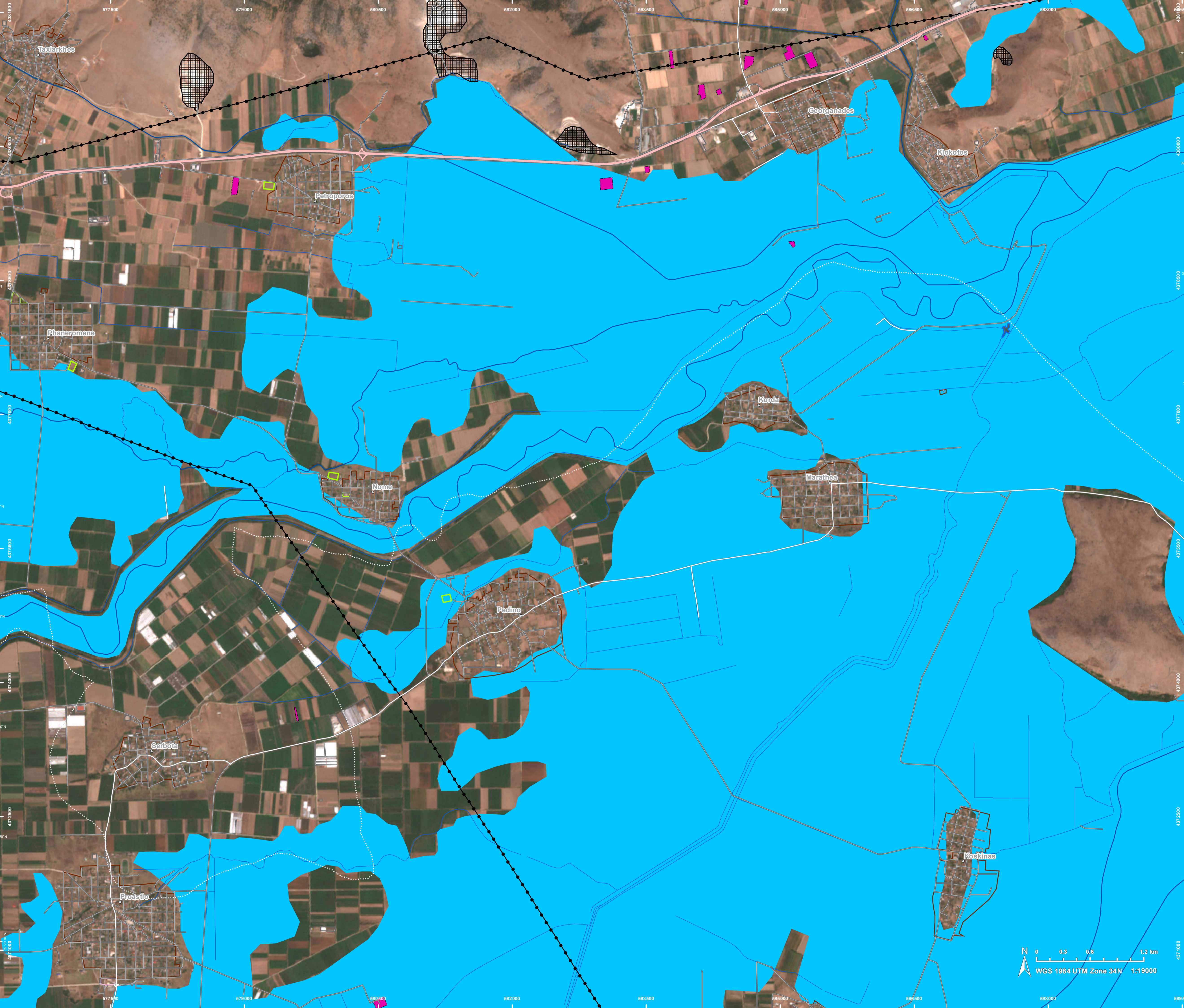
Base vector layers: OpenStreetMap © OpenStreetMap contributors (2023), Wikimapia.org, GeoNames 2015, Corine Land Cover (CLC) 2018, EuroBoundaryMap 2017 © EuroGeographics.
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https://ghsl.jrc.ec.europa.eu/ghs_pop2023.php
Digital Elevation Model: SRTM (30 m) (NASA/USGS)

The thematic layer has been derived from post-event satellite image by means of visual interpretation. Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

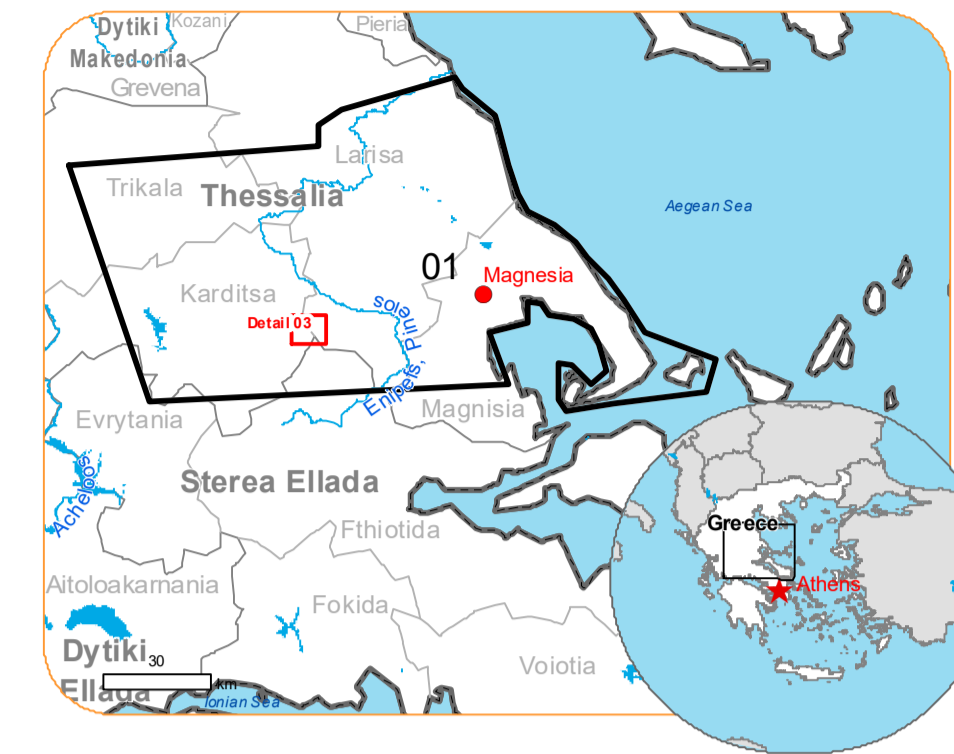
Map produced by GMV released by e-GEOS on the 08/09/2023.

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Situation as of 07/09/2023 16:25 UTC
Delineation MONIT02 - Detail map 03



Flooded area 3138 ha (4% of total in AOI)
 Potentially affected population ~ 200 (3% of total affected)

Potentially Affected Built-up and Transportations

Railway 25.2 km (52% of total affected)
 Road 90.4 km (3% of total affected)
 Built-Up 14.0 ha (3% of total affected)

- Crisis Information**
 - Flooded Area
 - Previous Flooded Area (06/09/2023 04:40 UTC)
- General Information**
 - Area of Interest
 - Image Footprint
 - Not Analysed
- Administrative boundaries**
 - Province
 - Municipality
- Built-Up Area**
 - Residential
 - Non residential
- Hydrography**
 - River
 - Stream
- Facilities**
 - Long-distance pipelines or lines
- Transportation**
 - Main road
 - Local road
 - Railway
- Other**
 - Power plant
 - Sport and recreation constructions

Event:
Due to extreme rainfall in Thessaly Region, extended floods occurred in Magnesia Regional Unit, mostly around the city of Volos and coastal areas of Pelion mountain peninsula. Extreme rainfall is ongoing and according to the forecast of the National Meteorological Service the rainfall will continue until tomorrow afternoon. One person is missing, and one died, and many cars were drifted away due to the flooding. Local Fire Service received many calls for help to pump water from flooded buildings and rescue people trapped by the rising waters. Copernicus EMS Rapid Mapping is requested to provide initial rough estimation, flood extent and monitoring of the event for the emergency mapping.

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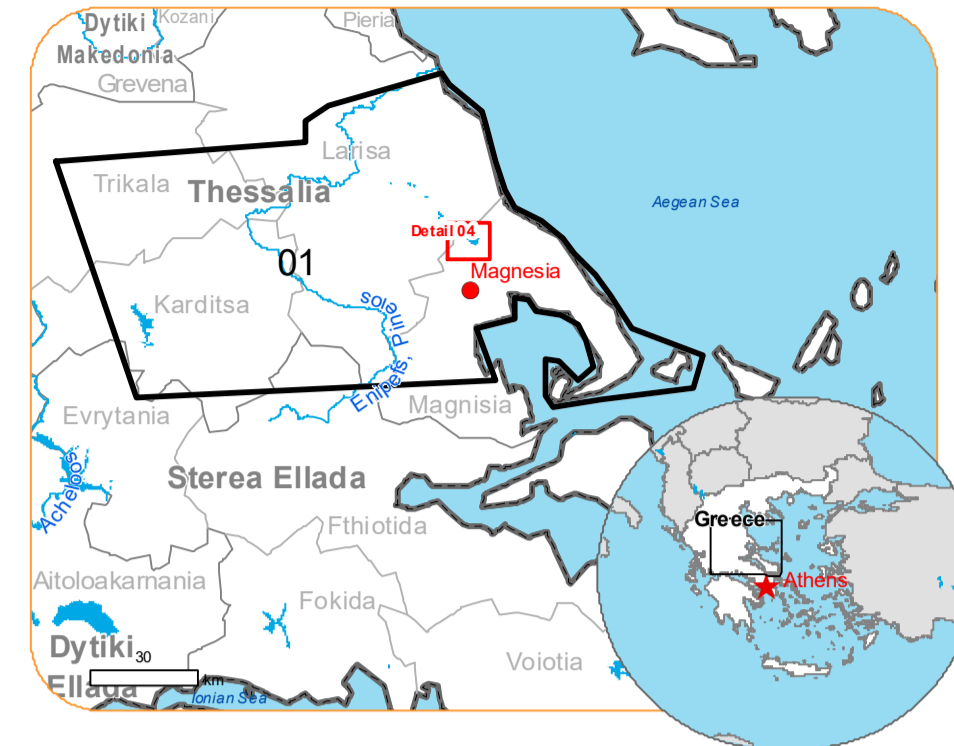
Inset maps: JRC 2013, GISCO 2010 © EuroGeographics, Natural Earth 2012, CCM River DB © EUJRC2007, GeoNames 2015.

Population data: GHS Population Grid © European Commission, 2023 https://ghsl.jrc.ec.europa.eu/ghs_pop2023.php Digital Elevation Model: SRTM (30 m) (NASA/USGS)

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Flooded area 2,930.9 ha (4% of total in AOI)
 Potentially affected population ~ 100 (2% of total affected)

Potentially Affected Built-up and Transportations

Road 40.7 km (1% of total affected)
 Built-Up 79.3 ha (16% of total affected)

- | | | |
|--|------------------------------------|-----------------------|
| Crisis Information | Hydrography | Transportation |
| Flooded Area | Stream | Main road |
| Previous Flooded Area (06/09/2023 04:39 UTC) | Lake | Local road |
| Area of Interest | Land Subject to Inundation | Airfield runway |
| Image Footprint | Open Water | Airfield |
| Administrative boundaries | Reservoir | |
| Municipality | Facilities | |
| Placenames | Long-distance pipelines or lines | |
| Placename | Dam | |
| Built-Up Area | Power plant | |
| Residential | Sport and recreation constructions | |
| Military | Dam | |

Event:
Due to extreme rainfall in Thessaly Region, extended floods occurred in Magnesia Regional Unit, mostly around the city of Volos and coastal areas of Pelion mountain peninsula. Extreme rainfall is ongoing and according to the forecast of the National Meteorological Service the rainfall will continue until tomorrow afternoon. One person is missing, and one died, and many cars were drifted away due to the flooding. Local Fire Service received many calls for help to pump water from flooded buildings and rescue people trapped by the rising waters. Copernicus EMS Rapid Mapping is requested to provide initial rough estimation, flood extent and monitoring of the event for the emergency mapping.

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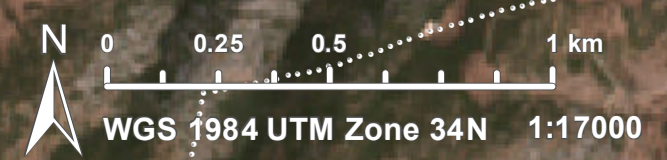
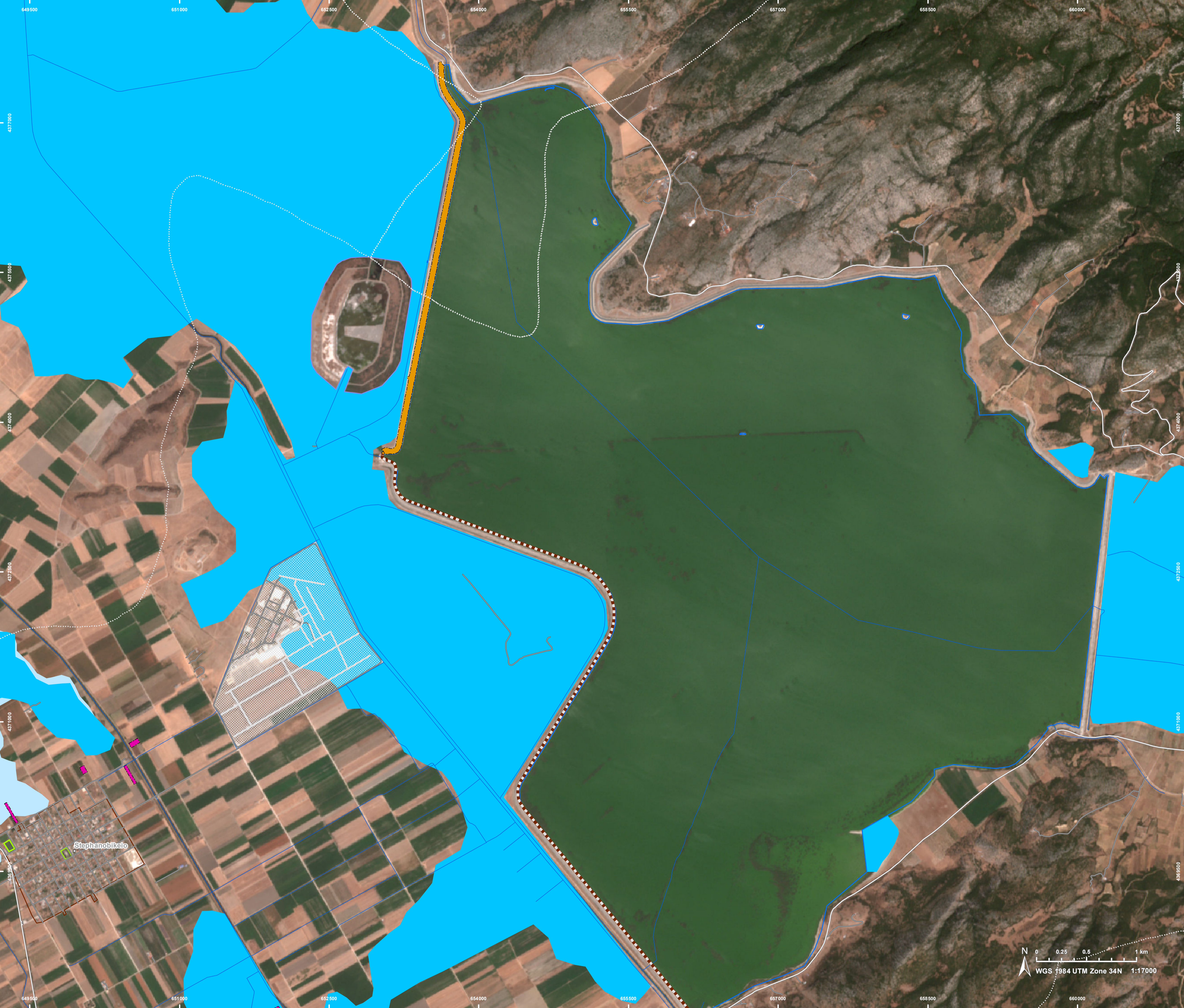
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Consequences within the AOI				
		Unit of measurement	Affected	Total in AOI
Previous flooded area		ha		18,392.6
Flooded area		ha		72,950.6
Estimated population		Number of inhabitants	~ 6,000	~ 640,000
Built-up	Residential Buildings	ha	360.8	26,690.3
	Office buildings	ha	0.4	142.0
	Wholesale and retail trade buildings	ha	0.0	26.7
	Industrial buildings	ha	61.7	1,716.1
	School, university and research buildings	ha	0.1	207.7
	Hospital or institutional care buildings	ha	0.0	36.7
	Military	ha	82.6	2,030.2
	Cemetery	ha	5.0	102.2
Transportation	Airfield runways	ha	93.3	2,066.3
	Helipad	ha	0.0	0.5
	Harbours	ha	0.0	25.7
	Airfield runways	km	6.4	64.3
	Highways	km	62.5	661.0
	Primary Road	km	32.0	513.3
	Secondary Road	km	80.2	1,612.5
	Local Road	km	365.5	11,002.8
	Cart Track	km	2,931.6	20,067.0
	Railway Yard	km	0.0	1,165.3
	Harbours	km	0.0	0.6
	Long-distance railways	km	48.0	625.0
Facilities	Settling Basin	ha	1.0	21.0
	Breakwater	ha	0.0	2.7
	Dams	ha	0.4	33.0
	Constructions for mining or extraction	ha	26.5	819.2
	Power plant constructions	ha	42.0	618.7
	Sport and recreation constructions	ha	18.1	590.3
	Other civil engineering works not elsewhere classified	ha	0.0	34.8
	Long-distance pipelines, communication and electricity lines	km	65.7	987.7
	Local pipelines and cables	km	0.0	12.4
	Dams	km	0.6	8.8
Land use	Arable land	ha	66,328.3	390,522.6
	Pastures	ha	2,598.6	9,123.2
	Other	ha	2,401.8	96,798.5
	Heterogeneous agricultural areas	ha	508.2	73,578.0
	Inland wetlands	ha	418.5	1,098.0
	Shrub and/or herbaceous vegetation association	ha	118.2	223,294.2
	Open spaces with little or no vegetation	ha	58.3	3,100.4
	Forests	ha	51.0	109,840.0
	Permanent crops	ha	24.2	24,250.8
	Coastal wetlands	ha	0.0	25.8

Disclaimer:

Full disclaimer and other helpful information available in the online manual:
<https://emergency.copernicus.eu/mapping/ems/online-manual-rapid-mapping-products>
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Data access:

All data displayed on the map(s), as well as the Physiography and Land Use - Land Cover layers, are available in the Crisis Information Package and the Base Layer Package (for reference data). The table above is available in editable format in the Crisis Information Package. All products and data are also available for download on the portal.

Access to the portal

