

## Tornio Northern- FINLAND

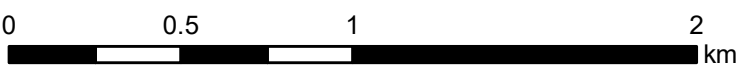
### Flood - Situation as of 17/05/2018

#### Delineation Map - MONIT01

#### Cartographic Information

1:22000

Full color ISO A1, medium resolution (200 dpi)



Grid: WGS 1984 UTM Zone 35N map coordinate system  
Tick marks: WGS 84 geographical coordinate system

#### Legend

##### Crisis Information

- Flooded Area (17/05/2018 15:49 UTC)
- Previous Flooded Area (17/05/2018 05:18 UTC)

##### General Information

- Area of Interest

##### Placenames

- Placename

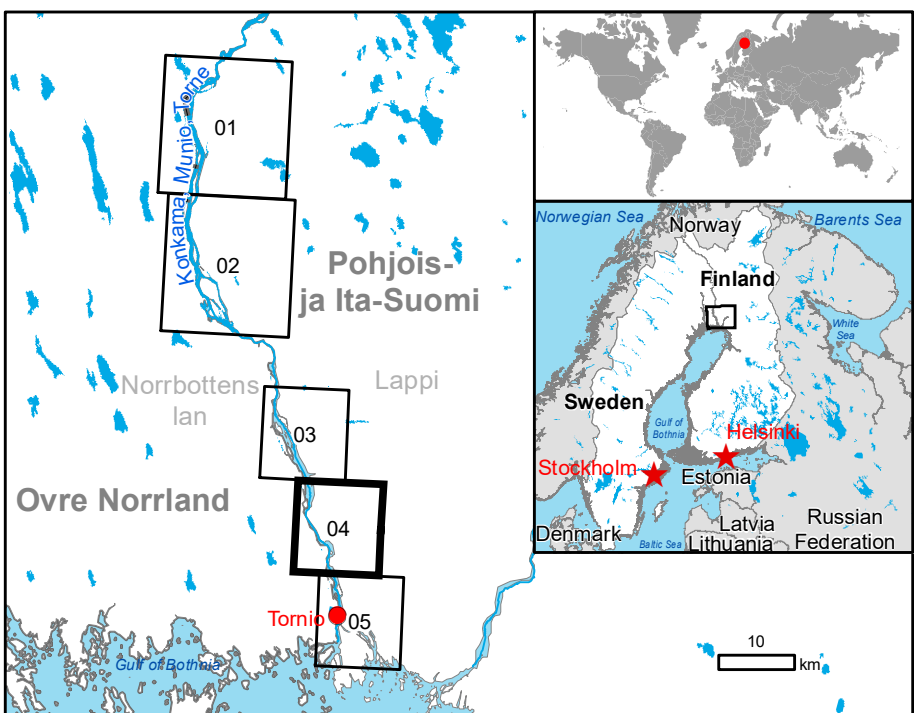
##### Administrative boundaries

- International Boundary

##### Hydrography

- River
- Stream
- Lake
- River

Consequences within the AOI		Unit of measurement	Total in AOI
Flooded area		ha	184.5



#### Map Information

Extensive spring flooding is expected in the Finnish Lapland due to the snow melt made worse by the warm temperatures and the intermittent rains. The floods are estimated to reach the maximum in the coming days and flooded rivers could affect residential areas in Tornio.

The present map shows the flood delineation Tornio Northern (Finland). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The estimated geometric accuracy is 5 m CE90 or better, from native positional accuracy of the background satellite image.

#### Data Sources

Pre-event image: Sentinel 2A/B (2017) (acquired on 13/06/2017 at 10:10 UTC, GSD 10 m, approx. 0% cloud coverage in AOI, 0° off-nadir angle) provided under COPERNICUS by the European Union and ESA.  
Post-event image: RADARSAT 2 Data and products © MacDonald, Detwiler and Associates Ltd. (year of acquisition) (acquired on 17/05/2018 at 05:18 UTC, GSD 8.0 m) – RADARSAT is an official mark of the Canadian Space Agency – provided under COPERNICUS by the European Union and ESA, all rights reserved and Sentinel-1A/B (2018) (acquired on 17/05/2018 at 15:49 UTC, GSD 10 m) provided under COPERNICUS by the European Union and ESA.

Base vector layers: OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames 2015, refined by the producer.  
Inset maps: JRC 2013, © EuroGeographics, Natural Earth 2012, CCM River DB © EUJRC2007, GeoNames 2013.

Population data: GHS Population Grid © European Commission, 2015 [http://data.europa.eu/89h/jrc-ghsl-ghs\\_pop\\_gpw4\\_globe\\_r2015a](http://data.europa.eu/89h/jrc-ghsl-ghs_pop_gpw4_globe_r2015a).  
Digital Elevation Model: EU-DEM (25 m)

#### Disclaimer

Products elaborated in this Copernicus EMS Rapid Mapping activity are realized to the best of our ability, within a very short time frame, optimising the available data and information. All geographic information has limitations due to scale, resolution, date and interpretation of the original sources. The map and the information content are derived from satellite data without in situ validation. No liability concerning the contents or the use thereof is assumed by the producer and by the European Union. 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 GAF AG released by e-GEOS (ODO).

For the latest version of this map and related products visit <http://emergency.copernicus.eu/EMSR284>

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Relevant date records			
Event	17/05/2018	Situation as of	17/05/2018
Activation	15/05/2018	Map production	17/05/2018