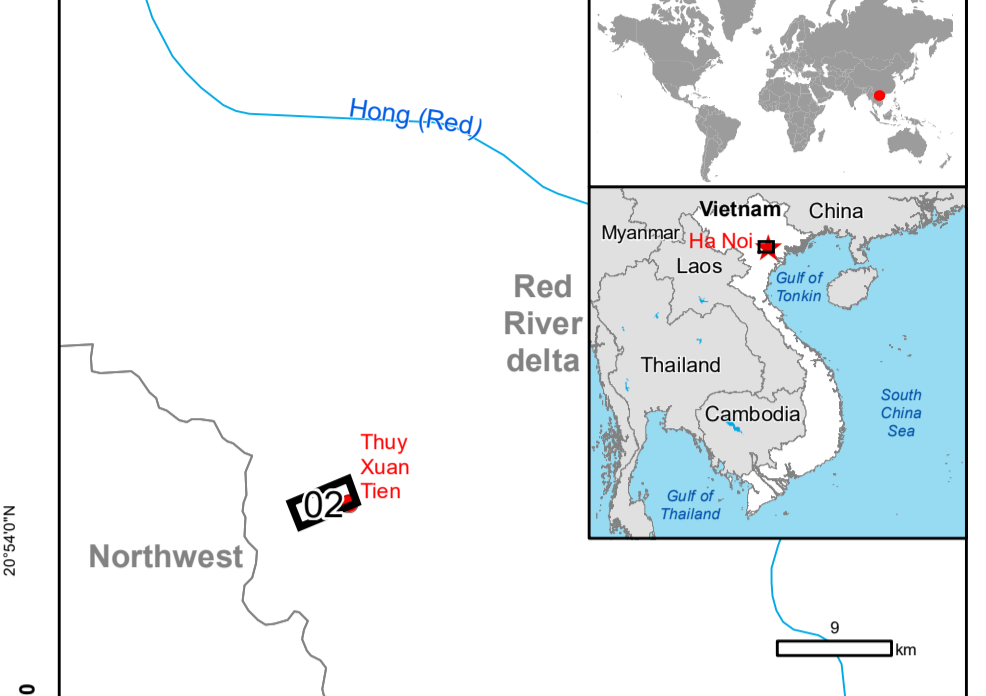


## Thuy Xuan Tien - VIETNAM

### Storm - Situation as of 04/08/2020

#### Flood Delineation - Overview map 01



#### Cartographic Information

1:8000 Full color A1, 200 dpi resolution



Grid: WGS 1984 UTM Zone 48N map coordinate system  
 Tick marks: WGS 84 geographical coordinate system

#### Legend

- Crisis Information**
  - Flooded Area (04/08/2020 10:34)
- General Information**
  - Area of Interest
- Built-Up Area**
  - Residential
- Hydrography**
  - Lake
  - Reservoir
  - River
- Point of Interest**
  - School, university and research building
- Transportation**
  - Primary Road
  - Local Road
  - Cart Track
  - Long-distance railway
- Land Use - Land Cover**
  - Features available in the vector package

Consequences within the AOI			
	Unit of measurement	Affected	Total in AOI
Flooded area (acc=2)	ha	2.6	
Estimated population	Number of inhabitants	53273	
<b>Sarments</b>			
Residential Buildings	km	0.0	12.0
Primary Road	km	0.0	11.5
Local Road	km	0.0	0.2
Cart Track	km	0.0	0.5
Long-distance railways	km	0.0	1.3
<b>Land use</b>			
Heterogeneous agricultural areas	ha	2.6	906.1
Shrub and/or herbaceous vegetation association	ha	0.0	13.3
Other	ha	0.0	89.0

#### Map Information

Local weather forecasts expect a high chance for strong precipitation resulting in localised urban floods in Thanh Hoa, Vinh, Ha Tinh (Central Vietnam) at the beginning of August with a maximum water height at 12:00 (UTC), or 19:00 02/08/2020 (local time in Vietnam). The activation aims at detecting the spatial extent of the flood as currently no established in situ methods are available for this purpose.

The present map shows the flood delineation in the area of Thuy Xuan Tien (Vietnam). The thematic layer has been derived from post-event satellite image using a semi-automatic approach.

The estimated geometric accuracy (RMSE) is 2.5 m or better, from native positional accuracy.

#### Relevant date records (UTC)

Event	02/08/2020 12:00	Situation as of	04/08/2020 10:34
Activation	03/08/2020 04:11	Map production	04/08/2020

#### Data sources

Pre-event image: SPOT7 © Airbus DS (2020), (acquired on 22/06/2020 at 03:16 UTC, GSD 1.5 m, approx. 0% cloud coverage in AoI, 12.3° off-nadir angle), provided under COPERNICUS by the European Union and ESA, all rights reserved. n, ESA and European Space Imaging, all rights reserved.

Post-event image: COSMO-SkyMed © ASI (2020), distributed by e-GEOS S.p.A. (acquired on 04/08/2020 at 10:34 UTC, GSD 5 m), provided under COPERNICUS by the European Union and ESA, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames 2015, Globe Land 30 (2010), Global Administrative Areas (2012), refined by the producer.

Inset maps: JRC 2013, Natural Earth 2012, GeoNames 2013.

Population data: GHS Population Grid © European Commission, 2019  
[https://ghsl.jrc.ec.europa.eu/ghs\\_pop2019.php](https://ghsl.jrc.ec.europa.eu/ghs_pop2019.php)  
 Digital Elevation Model: SRTM (30 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. 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.

Delivery formats are Layered Geospatial PDF, GeoJPEG and vector (ESRI shapefiles, Google Earth KML, GeoJSON).

Map produced by GAF AG released by e-GEOS (ODO).

For the latest version of this map and related products visit <https://emergency.copernicus.eu/EMSR450>

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