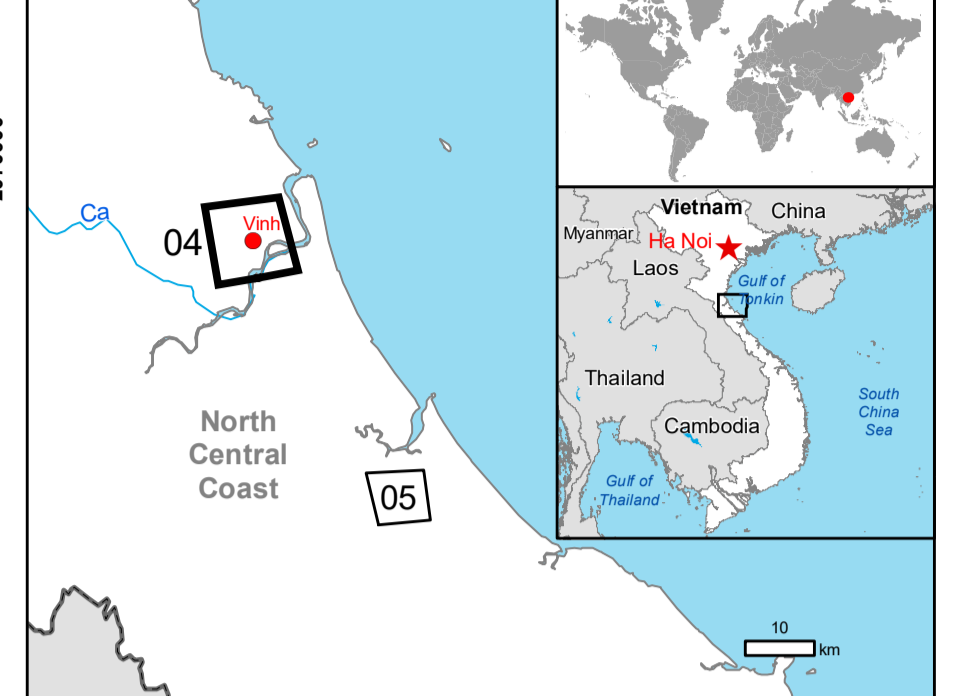


Vinh - VIETNAM

Flood - Situation as of 04/08/2020

Delineation - Overview Map 01



Cartographic Information

1:24000 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 to 04/08/2020)
 - Area of Interest
 - Image Footprint
 - Not Analysed - No data
- General Information**
 - Placenames
- Built-Up Area**
 - Residential
 - Traffic and communication
 - Public entertainment
 - School, university and research
 - Hospital or institutional care
- Hydrography**
 - Stream
 - Lake
 - Land Subject to foundation
 - Reservoir
 - River
- Transportation**
 - Bridge and elevated highway
 - Primary Road
 - Secondary Road
 - Local Road
 - Canal
 - Long-distance railway
- Land Use - Land Cover**
 - Features available in the vector package

Category	Unit of measurement	Affected	
		Area	Total in AOI
Residential	Number of inhabitants	0	0
Public entertainment	Number of buildings	0	0
School, university and research	Number of buildings	0	0
Hospital or institutional care	Number of buildings	0	0
Communication buildings, stations, terminals and associated buildings	Number of buildings	0	0
Primary Road	km	0.2	0.2
Secondary Road	km	0.2	0.2
Local Road	km	0.2	0.2
Canal	km	0.0	0.0
Long-distance railway	km	0.0	0.0
Bridge and elevated highway	km	0.0	0.0
Hydrographic network	km	18.5	18.5
Forest	ha	0.0	0.0
Shrub and/or herbaceous vegetation association	ha	0.0	0.0
Inland wetlands	ha	0.0	0.0
Other	ha	24.4	24.4

Map Information

Tropical storm Sintuku hitting north-central Vietnam has brought heavy rainfall, wind and caused urban flooding in Yen Bai city, Chung My district (North Vietnam) and in Thanh Hoa, Vinh and Ha Tinh (Central Vietnam) at the beginning of August with a maximum water height forecasted on 02/08/2020.

The present map shows the flood delineation in the area of Vinh (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 of the background satellite image.

Relevant date records (UTC)

Event	Date	Situation as of	Date
Activation	02/08/2020 12:00	04/08/2020 10:34	30/09/2020
Map production	03/08/2020 04:11		

Data sources

Pre-event image: SPOT6/7 © Airbus DS (2017), (acquired on 30/04/2017 at 03:03 UTC, GSD 1.5 m, approx. 0% cloud coverage in AOI, 12.6° off-nadir angle), provided under COPERNICUS by the European Union and ESA, 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
 Digital Elevation Model: SRTM (30 m) (NASAUSGS)

Disclaimer

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 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).

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