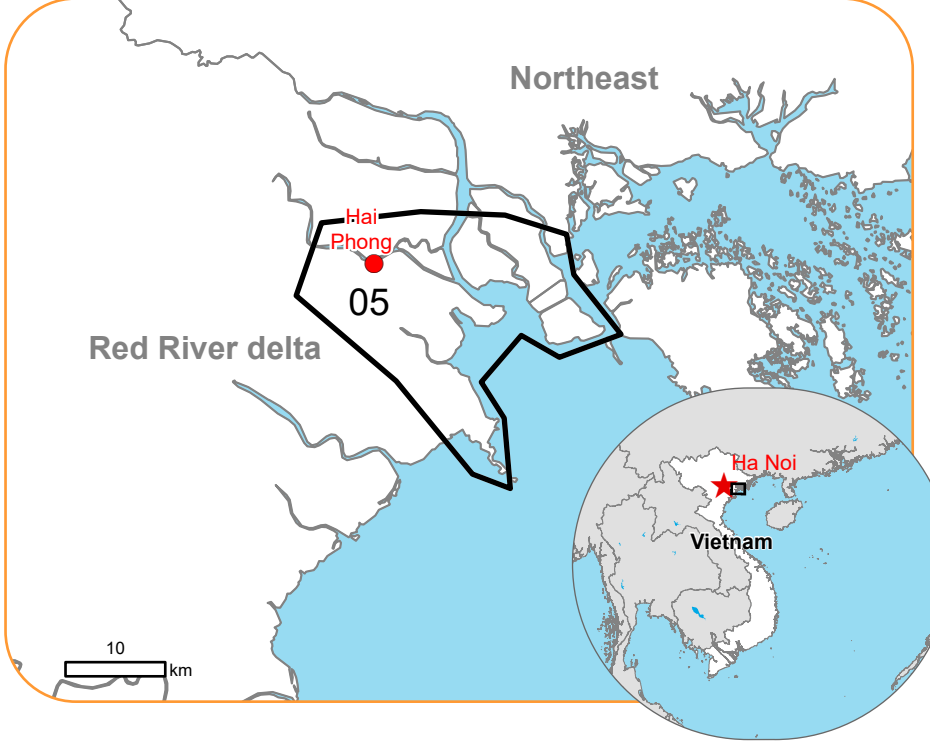




EMSR754 - AOI05
Flood in Viet Nam
HAI PHONG

Situation as of 14/09/2024 03:42 UTC
Delineation - Overview map 01



Observed Event
635.5 ha



Potentially affected
population
~ 400

Potentially Affected Built-up and Transportations



Road
1.4 km



Built-up
40.6 ha

Estimated flood depth (m)

0.50 - 1.00

General Information

Area of Interest
Not Analysed

Administrative Boundaries

Province
Municipality

Placenames

Placename

Built-Up Area

Residential
Non residential
School, university and
research buildings
Hospital or institutional
care buildings
Military

Hydrography

Lake, River

Facilities

Long-distance pipelines
or lines
Water or Aquatic
infrastructure
Mining or extraction site
Sport and recreation
constructions

Transportation

Highway
Main road
Local road
Track
Railway
Airfield
Helipad

Event: On the 09 September 2024 at 06:00 typhoon YAGI passed over central and northern Philippines, Hainan island and Guangdong province, southern China, and the regions of the north of Viet Nam and caused hefty rainfall, floods and landslides that have resulted in an increased number of casualties. The combined effects of the monsoon and tropical disturbances have caused flooding and flash floods in northern Laos and Thailand. In Viet Nam, the authorities have reported, as of 11 September, 127 fatalities, approximately 54 people still missing, more than 750 injured and over 52,000 evacuated people across northern provinces. Quang Ninh and Hai Phong provinces are the worst affected. Three provinces have declared emergencies: Lao Cai, Tuyen Quang and Yen Bai. Copernicus EMS Rapid Mapping is requested to provide an initial rough estimation and flood extent emergency mapping.

Data sources and analysis: Pre-event image: ESRI World Imagery © DigitalGlobe 2024 (acquired on 12/02/2024 at 00:00 UTC, resolution 0.5 m). Post-event image: WorldView-2 © Maxar Technologies, Inc. (2024), (acquired on 14/09/2024 at 03:42 UTC, resolution 2.0 m). This image is used as background image. All images are provided under COPERNICUS by the European Union and ESA, all rights reserved.

The thematic layer has been derived from post-event satellite image using a semi-automatic approach.

The flood depth information is based on the analysis of post-event satellite imagery and on Digital Elevation Model data. The flooded area corresponds to the water observed in the most recent satellite imagery, excluding the permanent water.

Map produced by ITHACA released by SERTIT on the 14/09/2024.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR754>



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0 0.75 1.5 3 km
WGS 1984 UTM Zone 48N 1:50,000

Consequences within the AOI				
	Unit of measurement		Affected	Total in AOI
Flooded area		ha		633.5
Estimated population	Number of inhabitants		~ 400	~ 850,000
Built-up	Residential Buildings	ha	26.0	7,775.4
	Office buildings	ha	0	14.0
	Industrial buildings	ha	0.1	2,124.7
	School, university and research buildings	ha	0	81.2
	Hospital or institutional care buildings	ha	0	26.7
	Military	ha	0	21.4
	Cemetery	ha	0	89.0
	Building block	ha	14.6	1,505.4
Transportation	Airfield runways	ha	0	180.3
	Helipad	ha	0	0.02
	Highways	km	0	129.0
	Primary Road	km	0.2	268.9
	Secondary Road	km	0.2	180.2
	Local Road	km	0.8	2,365.7
	Cart Track	km	0.1	164.9
	Long-distance railways	km	0	29.9
Facilities	Constructions for mining or extraction	ha	0	5.7
	Sport and recreation constructions	ha	0	109.1
	Long-distance pipelines, communication and electricity lines	km	0.5	106.7
	Breakwater	km	0	0.1
Land use	Other	ha	536.9	31,595.0
	Inland wetlands	ha	48.1	3,057.1
	Heterogeneous agricultural areas	ha	30.9	9,060.3
	Shrub and/or herbaceous vegetation association	ha	13.3	921.3
	Forests	ha	4.3	1,110.5
	Open spaces with little or no vegetation	ha	0	70.3

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.

Estimated Population:

Estimated population is based on Copernicus Global Human Settlement Layer (GHSL) dataset. Additional population datasets and analysis are available in the summary table.

Data Sources:

Base Vector Layers: OpenStreetMap © OpenStreetMap contributors (2024), Wikimapia.org, GeoNames 2015, Global Administrative Areas (2012), refined by the producer, Globe Land 30 (2010), Copernicus Global Land Service: Land Cover (2019). Inset maps: JRC 2013, Natural Earth 2012, GeoNames 2015. Digital Elevation Model: FABDEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30

Access to the portal



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