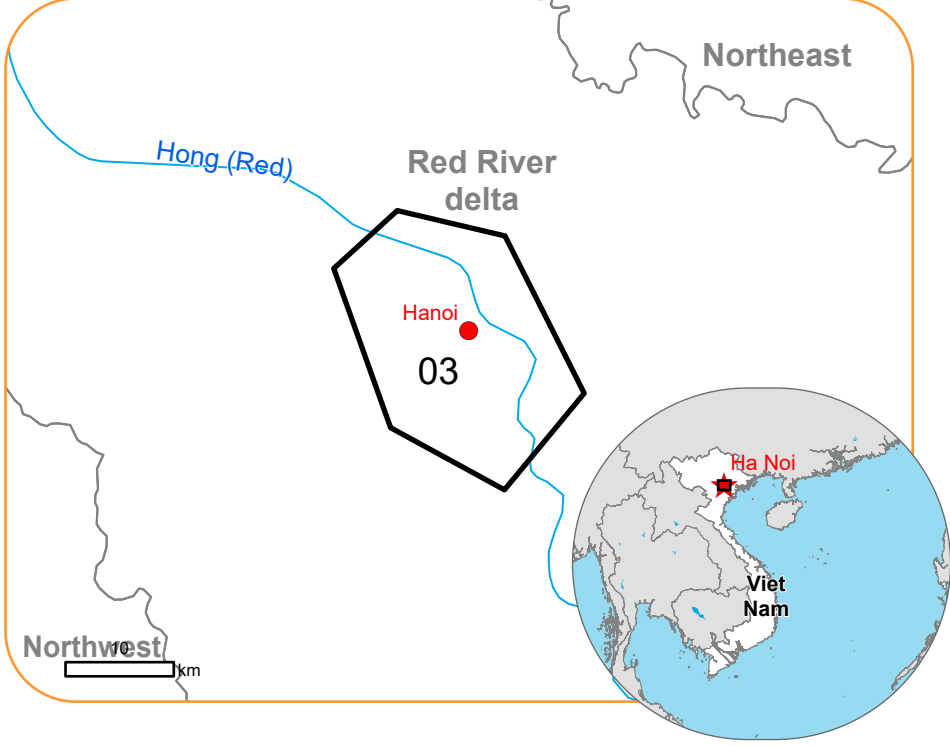




Situation as of 14/09/2024 03:44 UTC
Delineation - Overview map 01



 Flooded area
1,379.9 ha

 Potentially affected
population ~11000

Potentially Affected Built-up and Transportations

 Built-Up
25.2 ha

 Road
240.5 km


Estimated flood depth (m)

 Below 0.50
 0.50 - 1.00
 1.00 - 2.00
 2.00 - 4.00
 4.00 - 6.00

Crisis Information

 Flood trace


General Information


 Area of Interest

 Not Analysed

Administrative Boundaries

 Region

 Province

 Municipality


Placenames


 Placename

Built-Up Area

 Residential

 Non residential

 School, university and
research buildings

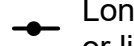
 Hospital or institutional
care buildings

Hydrography

 Lake, River

Facilities

 Long-distance pipelines
or lines


 Local pipelines or lines

 Mining or extraction site

 Water Well

 Sport and recreation
constructions


 Dump Site


 Water or Aquatic
infrastructure

Transportation

 Highway

 Main road

 Railway


 Airfield runway

 Subway

Transportation

 Airfield

 Helipad

 Harbour

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 (acquired on 26/02/2023, resolution 0.5 m).
Post-event image: WorldView-2 © Maxar Technologies, Inc. (2024), (acquired on 14/09/2024 at 03:44 UTC, resolution 2.0 m).
This image is used as background image.
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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 GAF AG released by SERTIT on the 15/09/2024.

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



N 0 0.5 1 2 km
WGS 1984 UTM Zone 48N 1:45,000
City, Maxar, Sentinel Hub, Esri, and other names are trademarks of their respective owners.

Consequences within the AOI			
	Unit of measurement	Affected	Total in AOI
Flood trace	ha		2,384.3
Flooded area	ha		1,379.9
Estimated population	Number of inhabitants	~ 11,000	3,400 Mio.
Built-up	Residential Buildings	ha	16.1
	Office buildings	ha	0
	Wholesale and retail trade buildings	ha	0
	Industrial buildings	ha	3.5
	School, university and research buildings	ha	0.5
	Hospital or institutional care buildings	ha	0
	Military	ha	3.2
	Cemetery	ha	1.9
Transportation	Airfield runways	ha	0
	Helipad	ha	0
	Harbours	ha	0.1
	Airfield runways	km	0
	Highways	km	1.3
	Primary Road	km	2.3
	Secondary Road	km	0.4
	Local Road	km	112.4
	Cart Track	km	124.0
	Railway Yard	km	0
	Subway	km	0
	Harbours	km	0.1
	Long-distance railways	km	0.1
Facilities	Settling Basin	ha	0
	Constructions for mining or extraction	ha	3.0
	Sport and recreation constructions	ha	2.8
	Other civil engineering works not elsewhere classified	ha	0.1
	Long-distance pipelines, communication and electricity lines	km	3.2
	Local pipelines and cables	km	0
Land use	Heterogeneous agricultural areas	ha	2,373.2
	Other	ha	743.4
	Forests	ha	361.7
	Inland wetlands	ha	180.4
	Shrub and/or herbaceous vegetation association	ha	82.6
	Open spaces with little or no vegetation	ha	22.8

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

**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

Digital Elevation Model (DEM) (Airbus,2020).

Digital Elevation Model: COP-DEM-EEA-10-R product © DLR e.V. (2014-2018) and ©

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