

I. SITUATION OVERVIEW

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PHILIPPINES

CAR and Cagayan Valley Regions

Imagery analysis: 13 November 2020 | Published 15 November 2020 | Version 1.0



TC20201111PHL



Satellite detected waters in CAR and Cagayan Valley regions, Philippines as of 13 November 2020

This map illustrates satellite-detected surface waters in CAR and Cagayan Valley regions, Philippines as observed from a Sentinel-1 image acquired on 13 November 2020 at 17:58 local time. Within the analyzed area of about 18,000 km², a total of about 970 km² of lands appear to be flooded. Based on WorldPop population data and the detected surface waters, about 370,000 people are potentially exposed or living close to flooded areas.

This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR-UNOSAT.

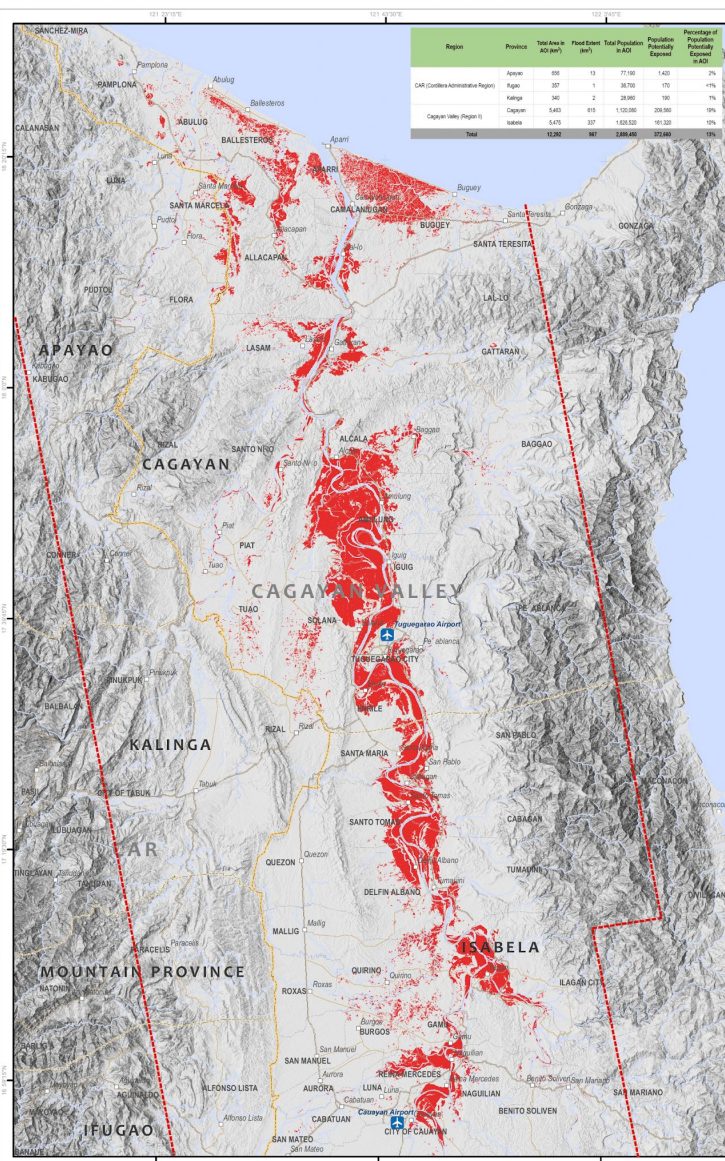
Important Note: Flood analysis from radar images may underestimate the presence of standing waters in built-up areas and densely vegetated areas due to backscattering properties of the radar signal.

- Legend**
- Airport
 - City/Town
 - Primary road
 - Secondary road
 - River
 - Region boundary
 - Province boundary
 - Municipality boundary
 - Analysis extent
 - Reference water
 - Satellite detected water [13 November 2020]

Map Scale for A3: 1:550,000

Analysis conducted with: ArcGIS v10.7
Imagery Date: 13 November 2020
Acquisition Time: 18:08 UTC
Resolution: 10m
Projection: Transverse Mercator
Datum: WGS 1984
Units: Meter

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KEY FIGURES



3.05M

AFFECTED PERSONS



442.6K

EVACUATED PERSONS



39.8K

DAMAGED HOUSES



73

DEAD



24

INJURED



19

MISSING



\$109 Million

USD WORTH OF DAMAGE TO INFRASTRUCTURE



\$56.2 Million

USD WORTH OF DAMAGE TO AGRICULTURE

Note: Estimations are based on data reported/confirmed by National Disaster Management Organisations of the respective ASEAN Member State and other verified sources

The low pressure area east of Bicol developed into a severe tropical storm named "VAMCO" (locally known as "ULYSSES") and intensified into a typhoon on 11 November 2020 as it moved closer towards Quezon-Aurora area prompting the raising of TCWS no. 3 in several provinces. VAMCO made landfall in the vicinity of Patnanungan, Quezon at 0930HRS. By 12 Nov, it moved further inland into the vicinity of Southwestern Nueva Ecija before exiting the landmass the same day. Data from the ASEAN Specialised Meteorological Centre ([ASMC](#)) shows high 7-day average (11-16 Nov 2020) rainfall in Luzon of the Philippines. This is associated to the development of Typhoon VAMCO. Within just a short span of three (3) weeks, a total of six (6) tropical cyclones hit the Philippines — Tropical Storm SAUDEL, Typhoon MOLAVE, Tropical Storm ATSANI, Super Typhoon GONI, Tropical Storm ETAU, and Typhoon VAMCO. The quick succession of these tropical storms undermined the water absorption capacity of the soil and the storage capacity of water reservoirs, resulting in widespread flash floods and landslides. The map of satellite detected waters from UNITAR-UNOSAT and associated files can be downloaded from [here](#).

DATA SOURCES

ASEAN Disaster Monitoring & Response System (DMRS); Pacific Disaster Center (PDC Global); ASMC, UNITAR-UNOSAT

Philippines: NDRRMC, PAGASA, DSWD
Verified news media agencies

DISCLAIMER

The AHA Centre was established in November 2011 by the Association of Southeast Asian Nations (ASEAN) Member States to facilitate cooperation and coordination among the Member States, relevant agencies of the United Nations, and international organisations in disaster management and humanitarian assistance.

The use of boundaries, geographic names, related information and potential considerations for response are for reference, not warranted to be error free or implying official endorsement from ASEAN Member States.

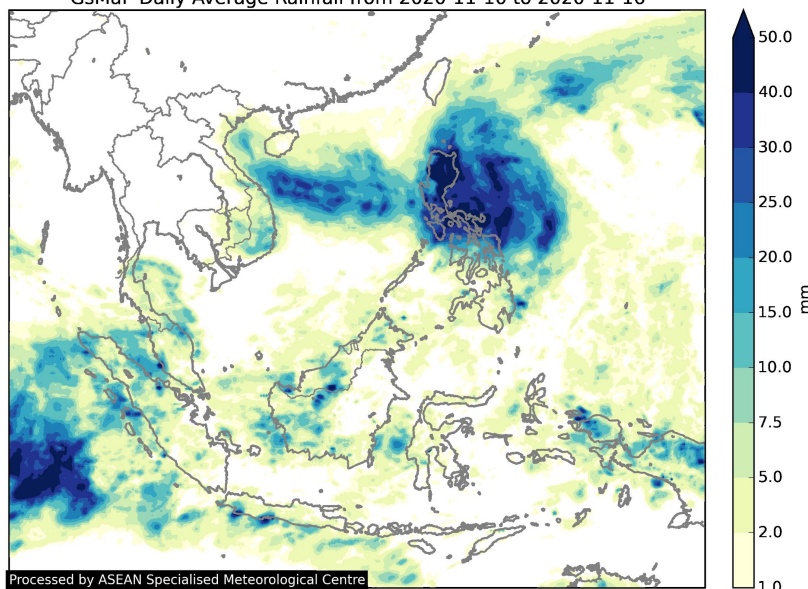
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II. IMPACTS & RESPONSE UPDATES

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GsMaP Daily Average Rainfall from 2020-11-10 to 2020-11-16



Source: Philippine News Agency <https://www.pna.gov.ph/articles/1122006>



Source: UNTV News
<https://www.untvweb.com/news/ph-coast-guard-transport-more-aid-to-cagayan-bicol-areas/>

- A total of **3,052,049 persons (727,738 families)** in **5,594 barangays** in Regions I, II, III, CALABARZON, MIMAROPA, V, NCR, and CAR were affected. Of which, **442,582 persons (111,987 families)** have been **displaced/evacuated** due to the typhoon ([NDRRMC](#)).
- As of 17 Nov, the [NDRRMC](#) also reported **73 dead**, **24 injured**, and **19 missing** persons due to Typhoon VAMCO.
- Status of critical lifelines:
 - a total of **246 road sections** and **115 bridges** have been affected. Of which, **73 road sections** and **55 bridges** are still not passable;
 - **all ports** in CALABARZON and MIMAROPA have resumed operations;
 - a total of **316 cities and municipalities** experienced **power outage**, of which power was already restored in 60 cities and municipalities;
 - A total of **50 municipalities** experienced **water service interruption**;
 - A total of **51 cities/municipalities** experienced **telecommunications network interruption**;
- An estimated **\$56.3M USD** and **\$109M USD** worth of **damage to agriculture and infrastructure** respectively have been incurred.
- The provinces of **Cagayan** and **Isabela** in Region II, and **Cavite** in CALABARZON have been placed under a **State of Calamity**.
- NDRRMC Preparedness and Response measures:
 - **231K persons** were pre-emptively evacuated;
 - The NDRRM Operations Centre maintained **RED ALERT** status;
 - A total of **123 Emergency Alert and Warning Messages** were disseminated;
 - PAGASA continuously monitored the weather and provided updates;
 - Provision of **relief items** to affected communities are ongoing;
 - The Department of Social Welfare and Development ([DSWD](#)) have **stockpiles and standby funds** amounting to **\$26.6M USD**; and
 - A total of **262K family food packs** amounting to **\$2.5M USD**, **other food items** amounting to **\$4M USD**, and **non-food items** amounting to **\$5.7M USD** are available ([NDRRMC](#)).
- To date, the Philippines has **no calls for international assistance** yet.
- The AHA Centre's **In-Country Liaison Team** is in coordination with NDRRMC, through the Office of Civil Defense, for potential requests for assistance.
- The AHA Centre stands **ready to support and facilitate** regional and international assistance, if and when requested by NDRRMC.
- The AHA Centre will continue to monitor and issue necessary updates once more information becomes available from official sources.

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