Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY
Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)
Weather Division

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BAGONG PILIPINAS

TROPICAL CYCLONE PRELIMINARY REPORT

Typhoon NIKA
TORAJI (2423)

08 to 15 November 2024

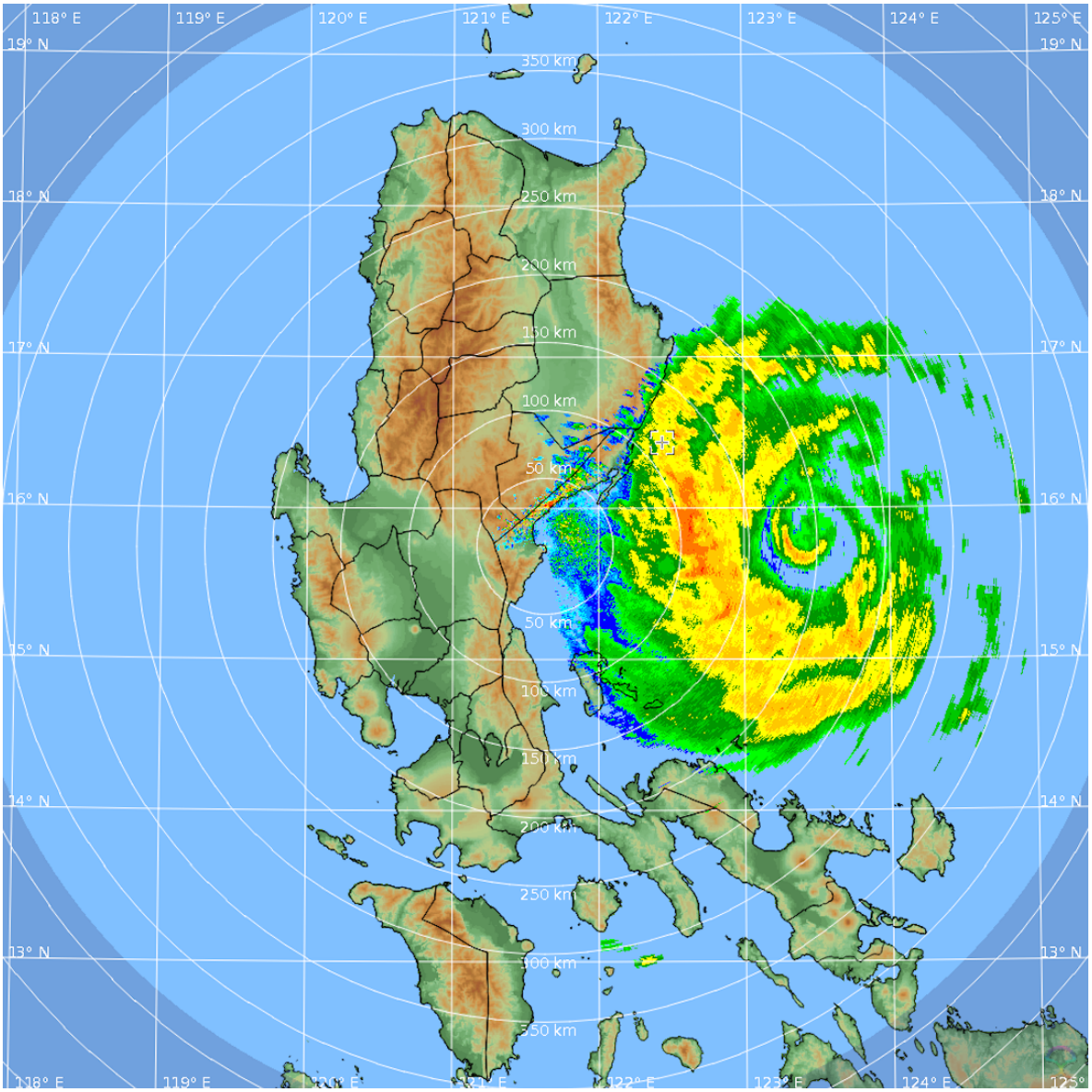

Fig. 1. Weather radar image of then Severe Tropical Storm NIKA at 1707 UTC on 10 November 2024 when it was about to reach typhoon category over the waters east of Aurora. Image from the PAGASA Baler Doppler Weather Surveillance Radar.

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Summary of Meteorological History

Based on PAGASA preliminary best track[1] position and intensities

First tracked as a low pressure area	1800 UTC, 07 November 2024 Over the Western North Pacific waters W of Guam
Developed into a tropical cyclone	1800 UTC, 08 November 2024 Over the Philippine Sea near the eastern limit of the PAR 1,160 km East of Southeastern Luzon (14.5ºN, 134.9ºE)
Weakened into a remnant low or transitioned into a post-tropical low	0000 UTC, 15 November 2024 Over the sea south of Guangdong, China 920 km West of Extreme Northern Luzon (20.9ºN, 113.0ºE)
Peak intensity (lifetime[2])	70 kt (130 km/h), 975 hPa, Typhoon 1800 UTC, 10 November 2024
Period of occurrence (lifetime)	6 days and 6 hours
Entered the PAR region (as tropical cyclone)	Not applicable (developed within the PAR region)
Exited the PAR region (as tropical cyclone)	0400 UTC, 12 November 2024
Peak intensity (within the PAR)	70 kt (130 km/h), 975 hPa, Typhoon 1800 UTC, 10 November 2024
Period of occurrence (within the PAR)	3 days and 10 hours
Observed landfalls in the Philippines	Dilasag, Aurora: 0010 UTC, 11 November 2024

[1] With preliminary best track as reference, the information provided in this report may be different from those reported during the warning period of the subject tropical cyclone.
[2] Lifetime is the period from the development into a tropical depression to its weakening into a remnant low or its transitioning into a post-tropical low.

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Extremes of Surface Weather Observations during Tropical Cyclone Days[3]

Based on reports from PAGASA surface weather stations

Table 1. Highest storm duration (08 to 12 November 2024) rainfall over land.

Location of weather station	Rainfall (mm)
Casiguran, Aurora	215.5 mm
Echague, Isabela	184.4 mm
Malaybalay, Bukidnon	120.0 mm
Bayombong, Nueva Vizcaya	118.2 mm
Baguio City	116.6 mm

Table 2. Highest 24-hour rainfall over land.

Location of weather station	Rainfall (mm)	Date
Echague, Isabela	121.3 mm	11 November 2024
Calayan, Cagayan	103.1 mm	11 November 2024
Casiguran, Aurora	103.0 mm	11 November 2024
Bayombong, Nueva Vizcaya	97.5 mm	11 November 2024
Aparri, Cagayan	96.4 mm	11 November 2024

Table 3. Lowest mean sea level pressure (MSLP) over land.

Location of weather station	Minimum MSLP (hPa)	Date (MM/DD) and Time (UTC)
Dilasag, Aurora (AWS)	978.7	11/11 0010
Casiguran, Aurora	983.4	11/11 0000
Echague, Isabela	988.7	11/11 0300
Bayombong, Nueva Vizcaya	995.8	11/11 0400
		11/11 0600
Batac, Ilocos Norte	999.1	11/11 0900
Baler, Aurora	999.1	11/11 0000

Table 4. Highest peak gust over land.

Location of weather station	Peak gust speed (m/s)	Peak gust direction	Date (MM/DD) and Time (UTC)
Echague, Isabela	35	-	11/11 0300 *rep.*
Casiguran, Aurora	34	SW (220º)	11/11 0200 *rep.*
Baler, Aurora	21	WNW (290º)	11/11 0000
Bayombong, Nueva Vizcaya	20	-	11/11 0500 *rep.*
Calayan, Cagayan	15	-	11/10 1800 *rep.*

Notes:

- For peak gust data retrieved using standard, intermediate, or hourly synoptic observation reports (i.e., QNT), "*rep.*" indicates the time when the observation was reported in the message, but not necessarily its time of occurrence.
- Over land extremes for MSLP and peak gust only covered areas with hoisted Wind Signals to ensure that the extremes are more likely associated with the tropical cyclone itself. There may be lower MSLP and higher peak gust outside these coverage areas.
- Table 3 also includes extremes observed by digital barometers of automatic weather stations.

[3] Also called "storm duration", it refers to the meteorological days of occurrence of the tropical cyclone within the PAR region.

Summary of Tropical Cyclone Product Issuances

Issued by the Weather Division, DOST-PAGASA

Tropical Cyclone Products:

- Tropical Cyclone Advisories: None Issued
- Tropical Cyclone Bulletins:
  - First issuance: 11:00 AM, 09 November 2024
  - Last issuance: 5:00 PM, 12 November 2024
  - Total issued: 20
- Tropical Cyclone Warnings for Shipping:
  - First issuance: 11:00 AM, 09 November 2024
  - Last issuance: 5:00 PM, 12 November 2024
  - Total issued: 14
- WC SIGMET
  - First issuance: 10:55 PM, 09 November 2024
  - Last issuance: 4:40 AM, 13 November 2024
  - Total issued: 15

Tropical Cyclone Wind Signals:

- Highest level of wind signal hoisted: Wind Signal No. 4
- Number of provinces[4] where wind signals had been hoisted: 28
- Timeline of hoisting/lifting of wind signals:
  - 11:00 AM, 09 November 2024: Initial hoisting of Wind Signal No. 1
  - 5:00 AM, 10 November 2024: Initial hoisting of Wind Signal No. 2
  - 8:00 PM, 10 November 2024: Initial hoisting of Wind Signal No. 3
  - 5:00 AM, 11 November 2024: Initial hoisting of Wind Signal No. 4
  - 8:00 PM, 11 November 2024: Lifting of all hoisted Wind Signal No. 4
  - 11:00 PM, 11 November 2024: Lifting of all hoisted Wind Signal No. 3
  - 5:00 AM, 12 November 2024: Lifting of all hoisted Wind Signal No. 2
  - 5:00 PM, 12 November 2024: Lifting of all hoisted Wind Signals

Other Pertinent Information

- According to the National Disaster Risk Reduction and Management Council (NDRRMC), the succeeding passages of NIKA, OFEL, and PEPITO in Luzon resulted in prolonged and compounding impacts. A total of 4,316,062 individuals across eight (8) regions were affected by these tropical cyclones, including 14 dead, 15 injured, and 2 missing individuals. Furthermore, the combined cost of damage to agriculture and infrastructure was reported to be PHP 3.745 billion.
- The international name “TORAJI” (meaning: broad bell flower) was contributed by the Democratic People's Republic of Korea.

[4] Metro Manila will be counted as one (1) province for the purpose of this statistic.

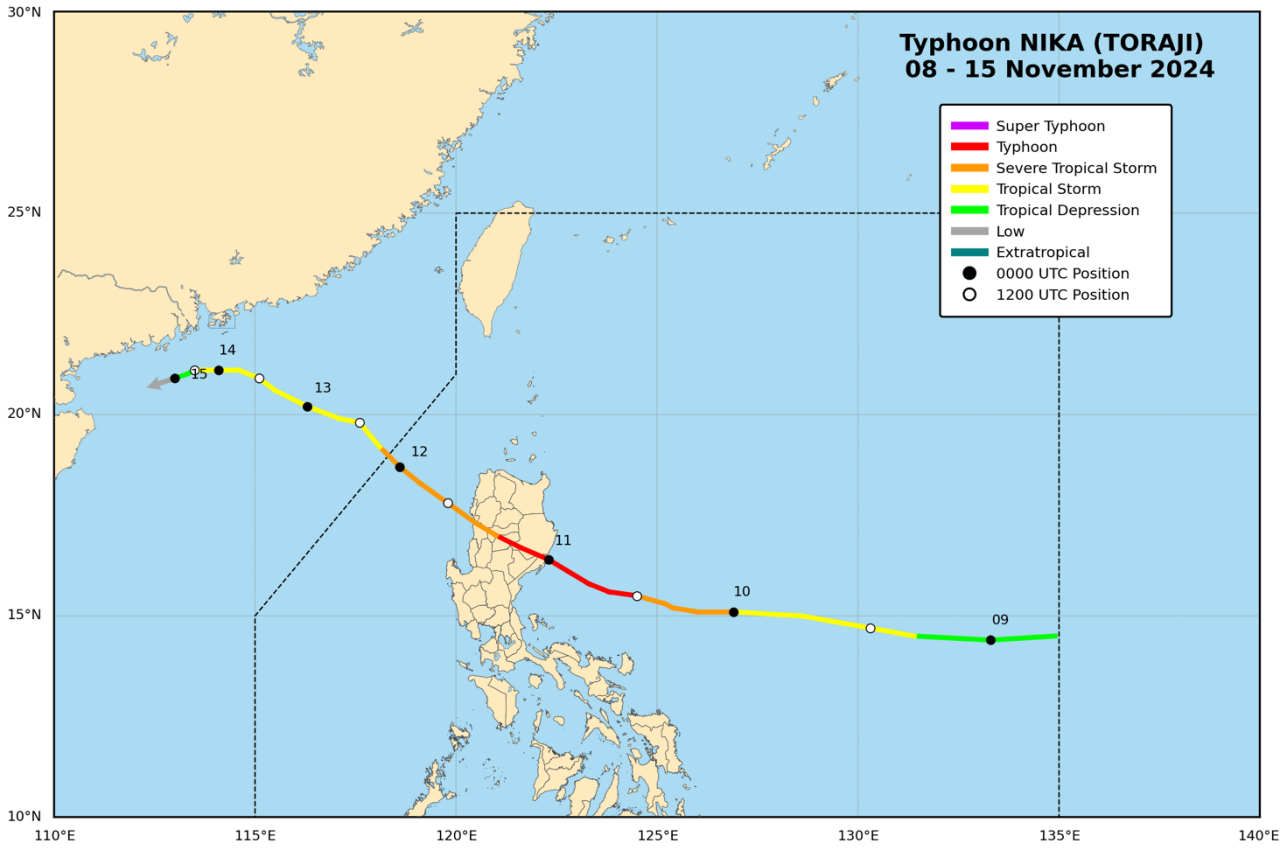

Fig. 2. Preliminary best track positions and intensities (as categories) of Typhoon NIKA Line color indicates the category of tropical cyclone. Shaded circles with date labels indicated 00 UTC positions while open circles indicate 12 UTC positions.

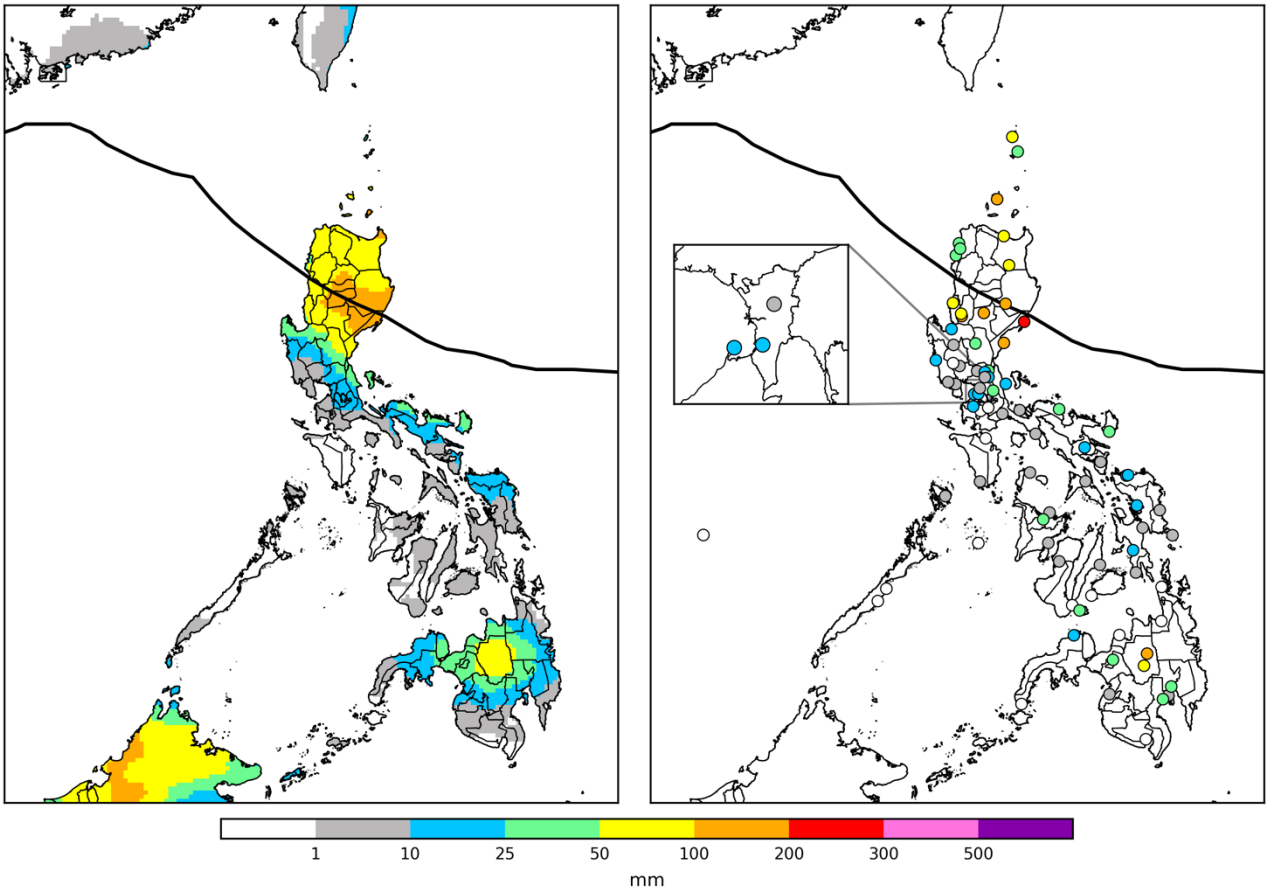

Fig. 3. Nationwide satellite-derived estimates and corresponding gauge observations from PAGASA manned surface weather stations of accumulated rainfall for the period of 08 to 12 November 2024. The preliminary best track is shown as thick black line.

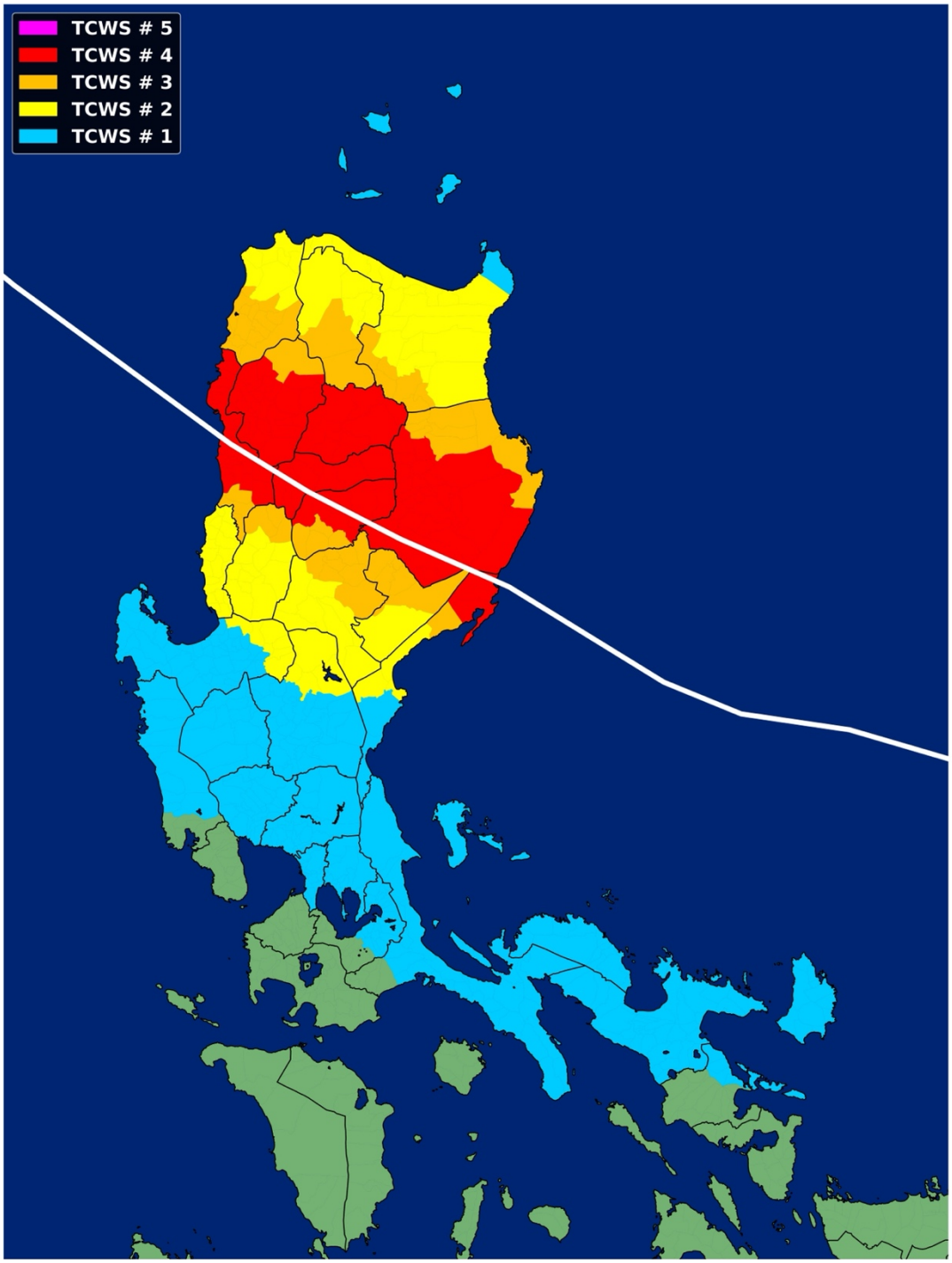

Fig. 4. Highest level and maximum extent of hoisted wind signals during the occurrence of Typhoon NIKA. The preliminary best track is shown as thick white line.

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This technical report is published on behalf of the DOST-PAGASA by the:

Marine Meteorological Services Section
Weather Division, DOST-PAGASA

While we ensure the factual correctness and accuracy of the entries in this preliminary tropical cyclone report, readers are advised to report any text or figure in this report which may require correction to the Marine Meteorological Services Section by email at **typhoon.ops@pagasa.dost.gov.ph** with the subject *"Prelim Report [Name of TC], [Year]: For Correction"*.

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