

TROPICAL CYCLONE PRELIMINARY REPORT

Super Typhoon PEPITO
MAN-YI (2424)

08 to 20 November 2024

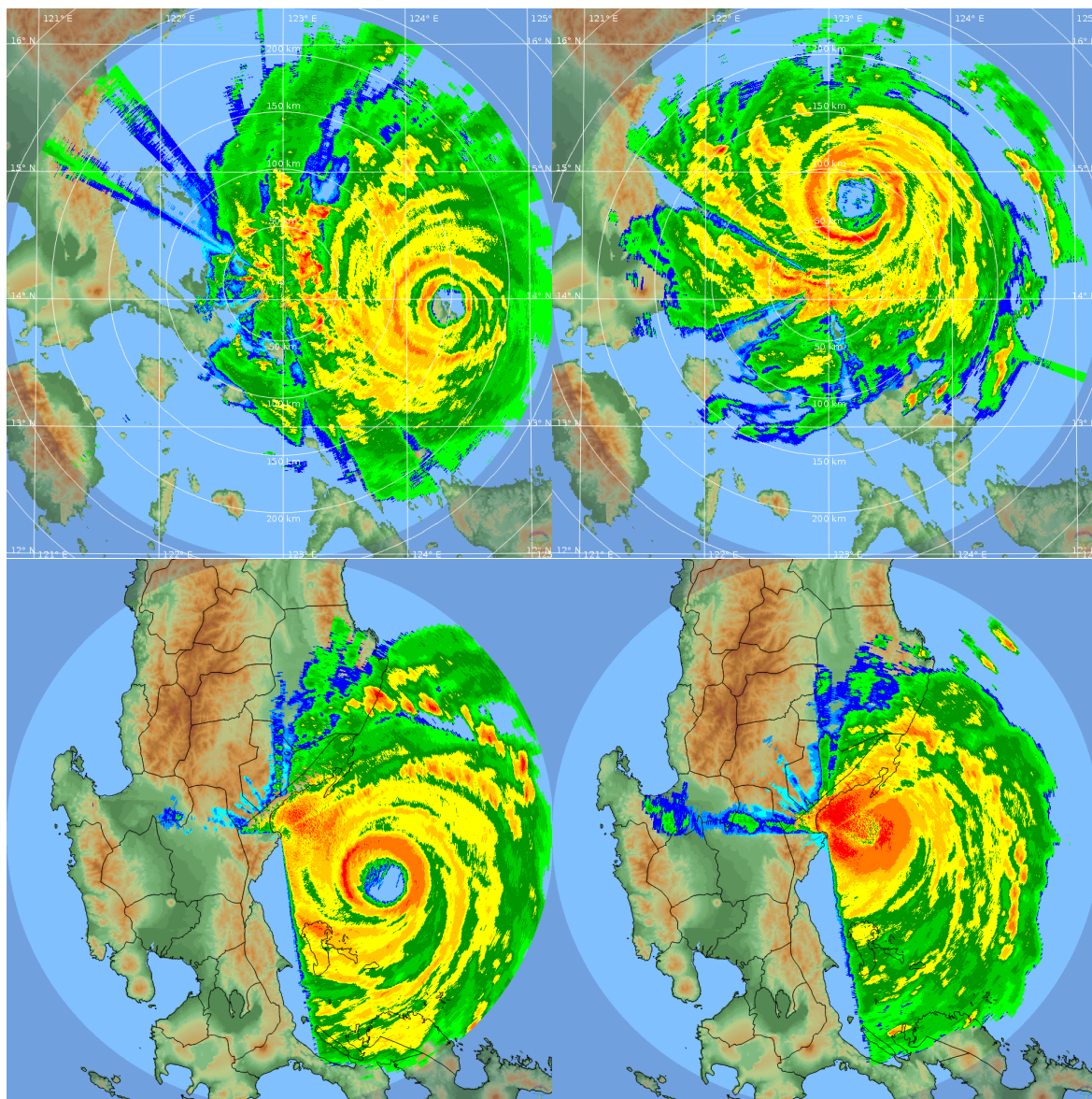


Fig. 1. Weather radar images of Super Typhoon PEPITO at 1340 and 2200 UTC on 16 November 2024 and at 0303 and 0603 UTC on 17 November 2024 (left to right, top row first). Image from the PAGASA Daet Doppler Weather Surveillance Radar.

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Summary of Meteorological History

Based on PAGASA preliminary best track¹ position and intensities

First tracked as a low pressure area	0600 UTC, 07 November 2024 Over the Western North Pacific waters near Marshall Islands
Developed into a tropical cyclone	1800 UTC, 07 November 2024 Over the Western North Pacific waters near Marshall Islands 4,705 km East of Northeastern Mindanao (9.1°N, 169.1°E)
Weakened into a remnant low or transitioned into a post-tropical low	0000 UTC, 20 November 2024 Over the South China Sea E of central Vietnam 1,035 km West of Northern Luzon (16.4°N, 110.7°E)
Peak intensity (lifetime ²)	105 kt (195 km/h), 925 hPa, Super Typhoon 0600 UTC, 16 November 2024
Period of occurrence (lifetime)	12 days and 6 hours
Entered the PAR region (as tropical cyclone)	1200 UTC, 14 November 2024
Exited the PAR region (as tropical cyclone)	0300 UTC, 18 November 2024
Peak intensity (within the PAR)	105 kt (195 km/h), 925 hPa, Super Typhoon 0600 UTC, 16 November 2024
Period of occurrence (within the PAR)	3 days and 15 hours
Observed landfalls in the Philippines	<ul style="list-style-type: none"> Panganiban, Catanduanes: 1340 UTC, 16 November 2024 Dipaculao, Aurora: 0720 UTC, 17 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 Days³

Based on reports from PAGASA surface weather stations

Table 1. Highest storm duration (14 to 18 November 2024) rainfall over land.

Location of weather station	Rainfall (mm)
Casiguran, Aurora	296.0
La Trinidad, Benguet	261.7
Baguio City	260.0
Virac, Catanduanes	228.6
Basco, Batanes	222.9

Table 2. Highest 24-hour rainfall over land.

Location of weather station	Rainfall (mm)	Date
Casiguran, Aurora	255.0	17 November 2024
Virac, Catanduanes	225.8	16 November 2024
La Trinidad, Benguet	200.5	17 November 2024
Baguio City	192.0	17 November 2024
Muñoz City, Nueva Ecija	174.4	17 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)
Baler, Aurora	965.6	11/17 0700
Virac, Catanduanes	978.8	11/16 1400
Bayombong, Nueva Vizcaya	990.4	11/17 0900
		11/17 1000
Daet, Camarines Norte	993.3	11/16 2100
Pili, Camarines Sur	993.6	11/16 1800

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)
Baler, Aurora	58	WNW (290°)	11/17 0700
Casiguran, Aurora	40	NE (40°)	11/17 0600
Virac, Catanduanes	39	SW (220°)	11/16 1345
Bayombong, Nueva Vizcaya	26	-	11/17 0800 <i>rep.</i>
Legazpi City, Albay	25	SW (220°)	11/16 2136

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 PAGASA automatic weather stations.
- In addition to those reported in Table 3, a digital barometer from a storm chaser (iCyclone) situated in Brgy. Borlongan, Dipaculao, Aurora (15.9863°N, 121.6508°E, 7 ft AMSL) at the time of passage of PEPITO recorded a **minimum MSLP of 951.8 hPa** at 0707 UTC on 17 November 2024.

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:
 - First issuance: 5:00 AM, 13 November 2024
 - Last issuance: 11:00 AM, 14 November 2024
 - Total issued: 4
- Tropical Cyclone Bulletins:
 - First issuance: 11:00 PM, 14 November 2024
 - Last issuance: 5:00 PM, 18 November 2024
 - Total issued: 25
- Tropical Cyclone Warnings for Shipping:
 - First issuance: 11:00 PM, 14 November 2024
 - Last issuance: 5:00 PM, 18 November 2024
 - Total issued: 16
- WC SIGMET
 - First issuance: 5:47 PM, 15 November 2024
 - Last issuance: 1:28 AM, 19 November 2024
 - Total issued: 14

Tropical Cyclone Wind Signals:

- Highest level of wind signal hoisted: Wind Signal No. 5
- Number of provinces where wind signals had been hoisted: 46
- Timeline of hoisting/lifting of wind signals:
 - 11:00 PM, 14 November 2024: Initial hoisting of Wind Signal No. 1
 - 11:00 AM, 15 November 2024: Initial hoisting of Wind Signal No. 2
 - 2:00 AM, 16 November 2024: Initial hoisting of Wind Signal No. 3
 - 11:00 AM, 16 November 2024: Initial hoisting of Wind Signal No. 4
 - 2:00 PM, 16 November 2024: Initial hoisting of Wind Signal No. 5
 - 8:00 PM, 17 November 2024: Lifting of all hoisted Wind Signal No. 5
 - 2:00 AM, 18 November 2024: Lifting of all hoisted Wind Signal No. 4
 - 11:00 AM, 18 November 2024: Lifting of all hoisted Wind Signal No. 3
 - 11:00 AM, 18 November 2024: Lifting of all hoisted Wind Signal No. 2
 - 5:00 PM, 18 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 "MAN-YI" (meaning: name of a strait, now a reservoir) was contributed by Hong Kong, China.

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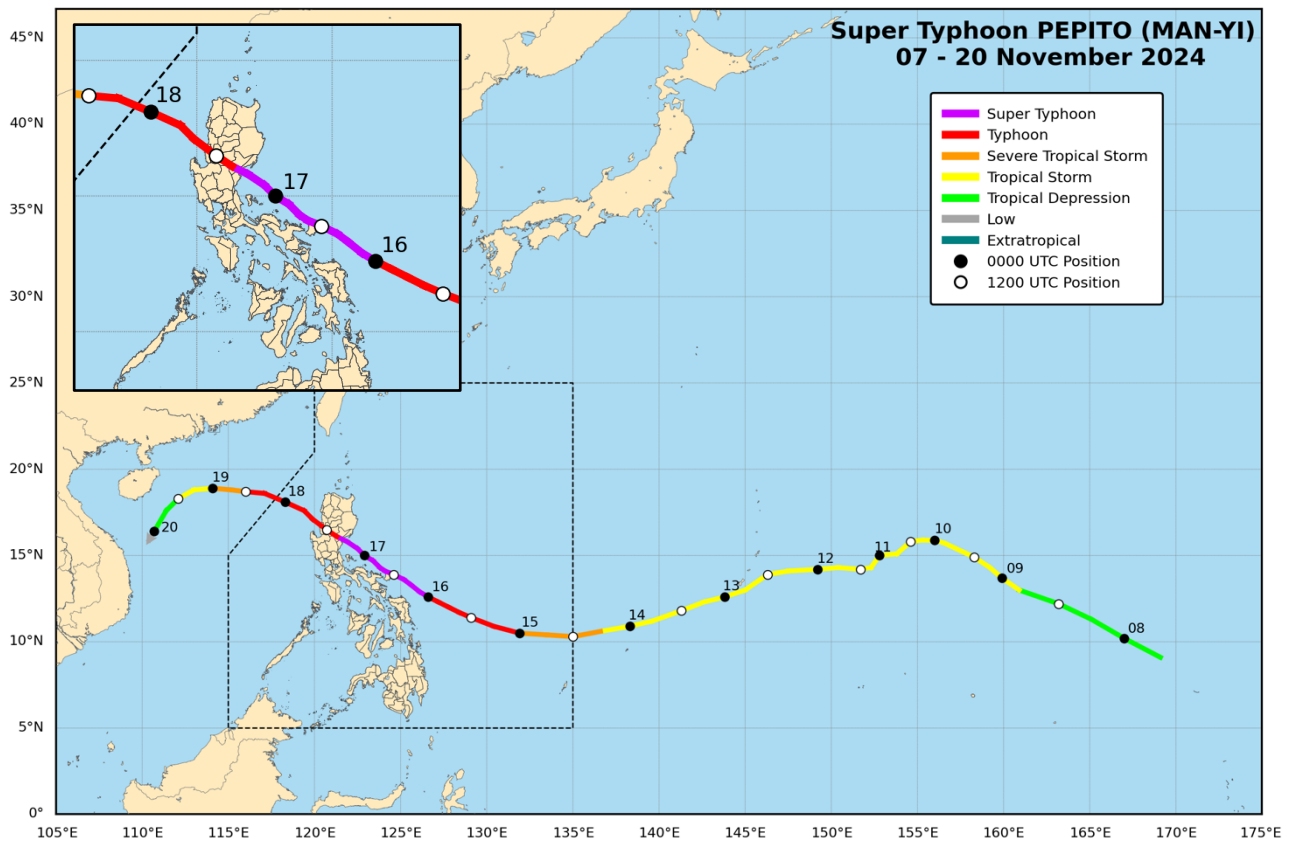


Fig. 2. Preliminary best track positions and intensities (as categories) of Super Typhoon PEPITO. Line color indicates the category of tropical cyclone. Shaded circles with date labels indicated 00 UTC positions while open circles indicate 12 UTC positions. The inset graphic shows the best track segment from 12 UTC, 15 November 2024 to 12 UTC, 18 November 2024.

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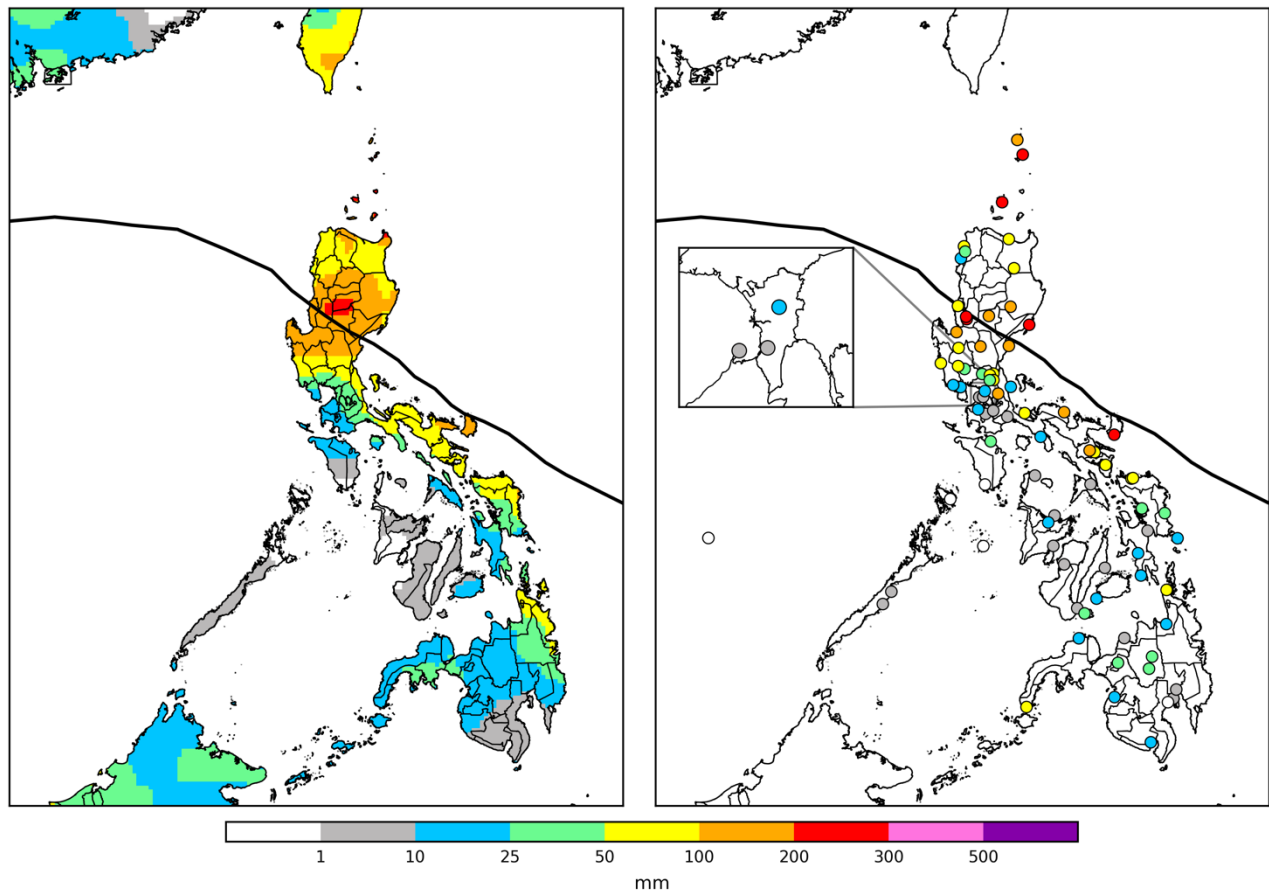


Fig. 3. Nationwide satellite-derived estimates and corresponding gauge observations from PAGASA manned surface weather stations of accumulated rainfall for the period of 14 to 18 November 2024. The preliminary best track is shown as thick black line.

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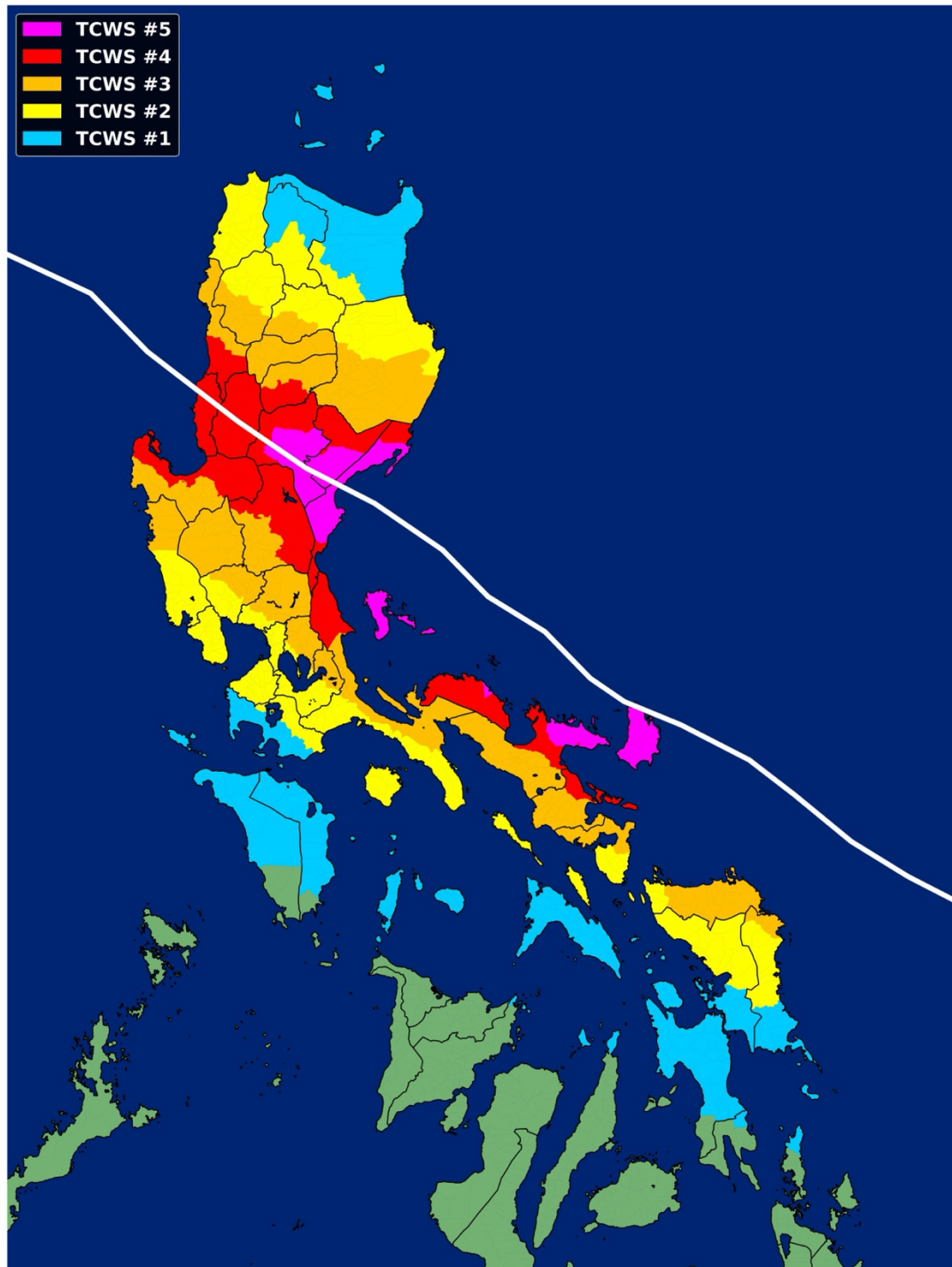


Fig. 4. Highest level and maximum extent of hoisted wind signals during the occurrence of Super Typhoon PEPITO. The preliminary best track is shown as thick white line.

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This Report shall be properly acknowledged in any work connected, either in full or partly, to this publication.

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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