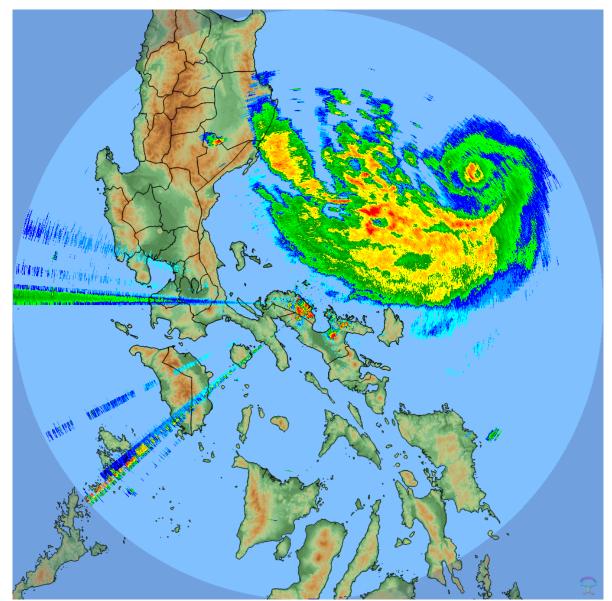


# TROPICAL CYCLONE PRELIMINARY REPORT

Super Typhoon OFEL USAGI (2425)

10 to 16 November 2024

Tel. No.: (+632) 8284-0800 ext. 4800 Website: https://bagong.pagasa.dost.gov.ph



**Fig. 1**. Weather radar image of then-Typhoon OFEL at 1120 UTC on 13 November 2024 while undergoing rapid intensification over the waters east of Aurora. In this image, the typhoon was exhibiting a pinhole eye. Image from the PAGASA Baler Doppler Weather Surveillance Radar.

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## **Summary of Meteorological History**

Based on PAGASA preliminary best track<sup>1</sup> position and intensities

First tracked as a low pressure area	1800 UTC, 07 November 2024 Over the Western North Pacific waters S of Kosrae, Federated States of Micronesia	
Developed into a tropical cyclone	0600 UTC, 10 November 2024 Over the Western North Pacific waters S of Guam 1,950 km East of Northeastern Mindanao (9.8°N, 144.0°E)	
Weakened into a remnant low or transitioned into a post-tropical low	1200 UTC, 16 November 2024 Over the Bashi Channel SW of Taiwan 215 km Northwest of Itbayat, Batanes (22.1°N, 120.3°E)	
Peak intensity (lifetime <sup>2</sup> )	100 kt (185 km/h), 940 hPa, Super Typhoon 1800 UTC, 13 November 2024	
Period of occurrence (lifetime)	6 days and 6 hours	
Entered the PAR region (as tropical cyclone)	Initial entry: 1800 UTC, 11 November 2024 Re-entry: 1800 UTC, 15 November 2024	
Exited the PAR region (as tropical cyclone)	Initial exit: 0500 UTC, 15 November 2024 Final exit: Not applicable (did not exit the PAR region again)	
Peak intensity (within the PAR)	100 kt (185 km/h), 940 hPa, Super Typhoon 1800 UTC, 13 November 2024	
Period of occurrence (within the PAR)	4 days and 18 hours <sup>3</sup>	
Observed landfalls in the Philippines	Baggao, Cagayan: 0530 UTC, 14 November 2024	

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<sup>1</sup> 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.

<sup>2</sup> Lifetime is the period from the development into a tropical depression to its weakening into a remnant low or its transitioning into a posttropical low.

<sup>&</sup>lt;sup>3</sup> For statistics purposes, this period of occurrence includes the brief period on 15 November 2024 when OFEL was outside the PAR.





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## Extremes of Surface Weather Observations during Tropical Cyclone Days<sup>4</sup>

Based on reports from PAGASA surface weather stations

**Table 1.** Highest storm duration (11 to 16 November 2024) rainfall over land.

Location of weather station	Rainfall
	(mm)
Calayan, Cagayan	259.5
Virac, Catanduanes	226.0
Basco, Batanes	220.0
Itbayat, Batanes	155.3
Baguio City	154.6

**Table 2.** Highest 24-hour rainfall over land.

Location of weather station	Rainfall (mm)	Date
Virac, Catanduanes	225.8	16 November 2024
Basco, Batanes	149.5	15 November 2024
Calayan, Cagayan	142.7	14 November 2024
Daet, Camarines Norte	140.0	16 November 2024
Echague, Isabela <sup>5</sup>	121.3	11 November 2024

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

Location of weather station	Minimum	Date (MM/DD) and
Location of weather station	MSLP (hPa)	Time (UTC)
Maconacon, Isabela (AWS)	990.0	11/14 0450
Aparri, Cagayan	993.6	11/14 0900
Tuguegarao City, Cagayan	997.5	11/14 0600
Luna, Apayao (AWS)	998.7	11/14 0920
Calayan, Cagayan	1000.2	11/14 1300
		11/14 1400

**Table 4.** Highest peak gust over land.

Location of weather station	Peak gust	Peak gust	Date (MM/DD) and
	speed (m/s)	direction	Time (UTC)
Calayan, Cagayan	38	80	11/14 1215
Aparri, Cagayan	25	20	11/14 0700
Tuguegarao City, Cagayan	19	200	11/14 0824
Itbayat, Batanes	18	120	11/14 2012
Baler, Aurora	15	290	11/14 2250

#### 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.
- The anemometer of the weather station in Basco, Batanes was not operational.

<sup>&</sup>lt;sup>4</sup> Also called "storm duration", it refers to the meteorological days of occurrence of the tropical cyclone within the PAR region.

<sup>&</sup>lt;sup>5</sup> Mainly resulting from the passage of Typhoon NIKA that preceded OFEL.





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# **Summary of Tropical Cyclone Product Issuances**

Issued by the Weather Division, DOST-PAGASA

### **Tropical Cyclone Products:**

Tropical Cyclone Advisories:

First issuance: 5:00 AM, 11 November 2024
Last issuance: 5:00 AM, 12 November 2024

Total issued: 4Tropical Cyclone Bulletins:

First issuance: 5:00 AM, 12 November 2024
Last issuance: 11:00 PM, 16 November 2024

Total issued: 26

Tropical Cyclone Warnings for Shipping:

First issuance: 5:00 AM, 12 November 2024
Last issuance: 11:00 PM, 16 November 2024

o Total issued: 20

WC SIGMET

First issuance: 12:07 AM, 13 November 2024
Last issuance: 3:00 PM, 15 November 2024

Total issued: 12

### **Tropical Cyclone Wind Signals:**

• Highest level of wind signal hoisted: Wind Signal No. 5

Number of provinces where wind signals had been hoisted: 15

• Timeline of hoisting/lifting of wind signals:

11:00 PM, 12 November 2024: Initial hoisting of Wind Signal No. 1

11:00 AM, 13 November 2024: Initial hoisting of Wind Signal No. 2

o 11:00 PM, 13 November 2024: Initial hoisting of Wind Signal No. 3

o 5:00 AM, 14 November 2024: Initial hoisting of Wind Signal No. 4

o 8:00 AM, 14 November 2024: Initial hoisting of Wind Signal No. 5

o 2:00 PM, 14 November 2024: Lifting of all hoisted Wind Signal No. 5

o 5:00 AM, 15 November 2024: Lifting of all hoisted Wind Signal No. 4

11:00 AM, 15 November 2024: Lifting of all hoisted Wind Signal No. 3

5:00 PM, 15 November 2024: Lifting of all hoisted Wind Signal No. 2

o 11:00 PM, 15 November 2024: Lifting of all hoisted Wind Signals

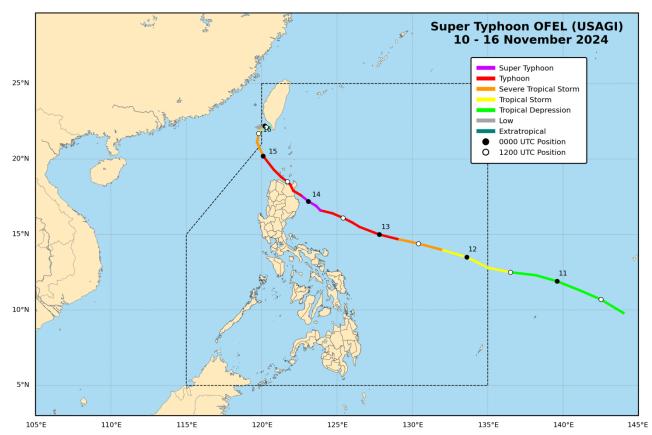
### **Other Pertinent Information**

- 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 "USAGI" (meaning: Lepus; rabbit) was contributed by Japan.





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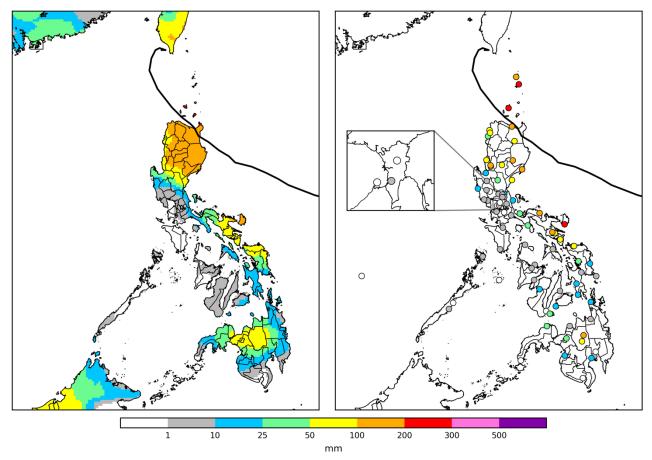


**Fig. 2.** Preliminary best track positions and intensities (as categories) of Super Typhoon OFEL. Line color indicates the category of tropical cyclone. Shaded circles with date labels indicated 00 UTC positions while open circles indicate 12 UTC positions.





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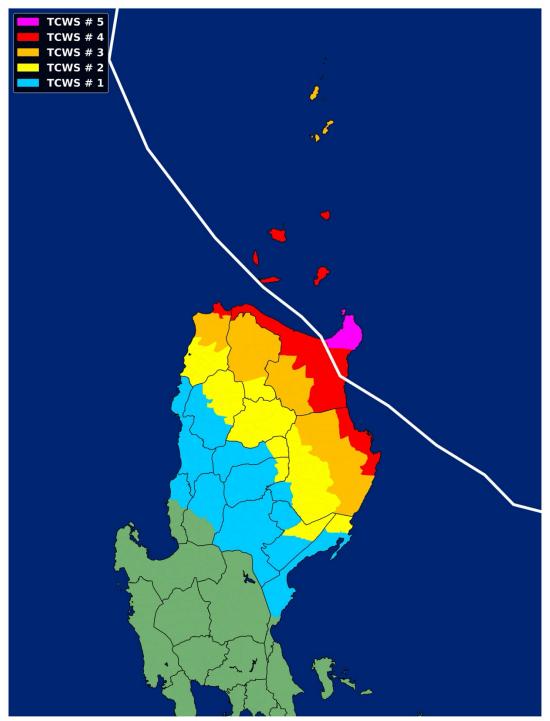


**Fig. 3**. Nationwide satellite-derived estimates and corresponding gauge observations from PAGASA manned surface weather stations of accumulated rainfall for the period of 11 to 16 November 2024. The preliminary best track is shown as thick black line.





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**Fig. 4**. Highest level and maximum extent of hoisted wind signals during the occurrence of Super Typhoon OFEL. 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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