

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



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# **TROPICAL CYCLONE PRELIMINARY REPORT** Super Typhoon EGAY (DOKSURI)



Fig. 1. CAPPI 1-km reflectivity image of (at that time) Typhoon EGAY at 1610 UTC on 25 July 2023 during its closest point of approach to Camiguin Island (Calayan, Cagayan). Image from the PAGASA Aparri Doppler Weather Surveillance Radar.

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Date Published: 22 August 2023. Updated 03 October 2023.

Disclaimer: The information herein is based on publicly-issued bulletins, advisories, and warnings and the result of the near-real time (initial) best track analysis. As such, the information provided herein are considered preliminary only and will be replaced by the information that will become available once the Annual Report on Philippine Tropical Cyclones (2023 Edition) is published.

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## Summary of Meteorological History

Based on PAGASA preliminary best track position and intensities

First tracked as a disturbance	1200 UTC, 15 July 2023 Over the sea near Yap, Federated States of Micronesia
Developed into a tropical cyclone	1800 UTC, 20 July2023 Over the Philippine Sea far east of southeastern Luzon
Transitioned into a post-tropical low	0600 UTC, 29 July 2023 In the vicinity of Henan, China
Peak intensity (lifetime <sup>1</sup> )	100 kt (185 km/h), 925 hPa, Super Typhoon 1800 UTC, 24 July 2023
Period of occurrence (lifetime)	8 days and 12 hours
Entered the PAR region	Not applicable
Exited the PAR region	0000 UTC, 27 July 2023
Peak intensity (within the PAR)	100 kt (185 km/h), 925 hPa, Super Typhoon 1800 UTC, 24 July 2023
Period of occurrence (within the PAR)	6 days and 6 hours
Observed landfalls in the Philippines	<ul> <li>Fuga Is., Aparri, Cagayan: 1910 UTC, 25 July 2023</li> <li>Dalupiri Is., Calayan, Cagayan: 0130 UTC, 26 July 2023</li> </ul>
Significant primary hydrometeorological hazard/s observed in the country	<ul> <li>Severe Winds</li> <li>Destructive typhoon-force wind gusts over Babuyan Islands and the northern portion of mainland Cagayan</li> <li>Damaging storm-force wind gusts over Ilocos Norte, Ilocos Sur, La Union, Abra, Benguet, Apayao, and the rest of Cagayan</li> <li>Strong to gale-force wind gusts over Aurora, portions of Bicol Region and Quezon, and the rest of northern Luzon.</li> <li>Heavy Rainfall</li> <li>Combined<sup>2</sup> total rainfall &gt; 100 mm over Ilocos Region, Cordillera Administrative Region, Batanes, Cagayan, northern Isabela, Zambales, Bataan, Pampanga, Bulacan, Metro Manila, most of CALABARZON, MIMAROPA, and Bicol Region, and portions of Nueva Vizcaya, Tarlac, and Nueva Ecija. Peak rainfall reaching 500+ mm in Ilocos Norte, Abra, Ilocos Sur, La Union, Benguet, and the northwestern portion of Pangasinan.</li> </ul>

<sup>&</sup>lt;sup>1</sup> 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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<sup>&</sup>lt;sup>2</sup> Combined total rainfall refers to total rainfall brought about by the combined influences of the tropical cyclone and the prevailing monsoon.

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#### Extremes of Surface Weather Observations during Tropical Cyclone Days<sup>3</sup> Based on reports from PAGASA manned surface weather stations

# Highest storm duration (20 to 27 July 2023) rainfall over land:

- Baguio City, Benguet: 785.0 mm
- Sinait, Ilocos Sur: 652.2 mm
- Laoag City, Ilocos Norte: 632.4 mm •

## Highest 24-hour rainfall over land:

- Laoag City, Ilocos Norte: 414.0 mm, 26 July 2023
- Sinait, Ilocos Sur: 391.0 mm, 26 July 2023 •
- Baguio City, Benguet: 347.4 mm, 26 July 2023 •

## Lowest sea level pressure over land:

- Calayan, Cagayan: 957.5 hPa, 1600 UTC, 25 July 2023<sup>4</sup>
- Aparri, Cagayan: 971.5 hPa, 2000 UTC, 25 July 2023
- Tuguegarao City, Cagayan: 984.0 hPa, 2030 UTC, 25 July 2023 •

#### Highest peak gust over land:

- Calayan, Cagayan: NE (040°) at 101.1 kt (52 m/s), 1822 UTC, 25 July 2023
- Basco, Batanes: ENE (060°) at 79.7 kt (41 m/s), 1229 UTC, 25 July 2023 •
- Aparri, Cagayan: S (180°) at 68.0 kt (35 m/s), 2255 UTC, 25 July 2023

# Summary of Tropical Cyclone Product Issuances

#### Public and Marine Tropical Cyclone Products

- Tropical Cyclone Updates:
  - o First issuance: 4:00 PM, 21 July 2023
  - Last issuance: 4:00 PM, 28 July 2023 0
  - Total issued: 15 0
- **Tropical Cyclone Advisories: None**
- **Tropical Cyclone Bulletins:** 
  - First issuance: 11:00 AM, 21 July 2023
  - Last issuance: 11:00 PM, 27 July 2023
  - Total issued: 35 0
- Tropical Cyclone Warnings for Shipping:
  - First issuance: 11:00 AM, 21 July 2023
  - o Last issuance: 11:00 PM, 27 July 2023
  - Total issued: 27 0

# **Tropical Cyclone Wind Signals**

- Highest wind signal level hoisted: TCWS #5
- Number of localities under wind signal: 42
- Timeline of hoisting and lifting of wind signals:
  - 5:00 PM, 23 July 2023: Initial hoisting of TCWS #1 0
  - 11:00 PM, 23 July 2023: Initial hoisting of TCWS #2 0
  - 11:00 PM, 24 July 2023: Initial hoisting of TCWS #3 0

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<sup>&</sup>lt;sup>3</sup> Also called "storm duration", it refers to the meteorological days of occurrence of the tropical cyclone within the PAR region. <sup>4</sup> Estimated from microbarograph tracing from Calayan, Cagayan.

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- 11:00 AM, 25 July 2023: Initial hoisting of TCWS #4
- 2:00 PM, 25 July 2023: Initial hoisting of TCWS #5
- $\circ$   $\,$  11:00 PM, 25 July 2023: Final lifting of TCWS #5  $\,$
- 8:00 PM, 26 July 2023: Final lifting of TCWS #4
- 5:00 AM, 27 July 2023: Final lifting of TCWS #3
- 5:00 PM, 27 July 2023: Final lifting of TCWS #2
- 11:00 PM, 27 July 2023: Final lifting of TCWS #1

## **Other Pertinent Information**

- The Southwest Monsoon was greatly enhanced by EGAY, which further aggravated tropical cyclone-induced rains observed over Southwestern Luzon and the western portion of Central Luzon.
- In its Situational Report No.34, the National Disaster Risk Reduction and Management Council reported that EGAY and the Southwest Monsoon enhanced by it and Typhoon FALCON resulted in 30 dead, 171 injured, and 9 missing persons, as well combined cost of damage to housing, infrastructure, and agriculture amounting to PHP 14,804,333,026.1045.
- The international name "DOKSURI" (meaning: Eagle) was contributed by the Republic of Korea.

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**Fig. 2.** Preliminary best track positions and intensities (as categories) of Super Typhoon Egay. 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 20 to 27 July 2023. The preliminary best track of the tropical cyclone is outside the geographic extent of this figure.

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

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