TROPICAL CYCLONE PRELIMINARY SUMMARY
Super Typhoon KARDING (2216 NORU)

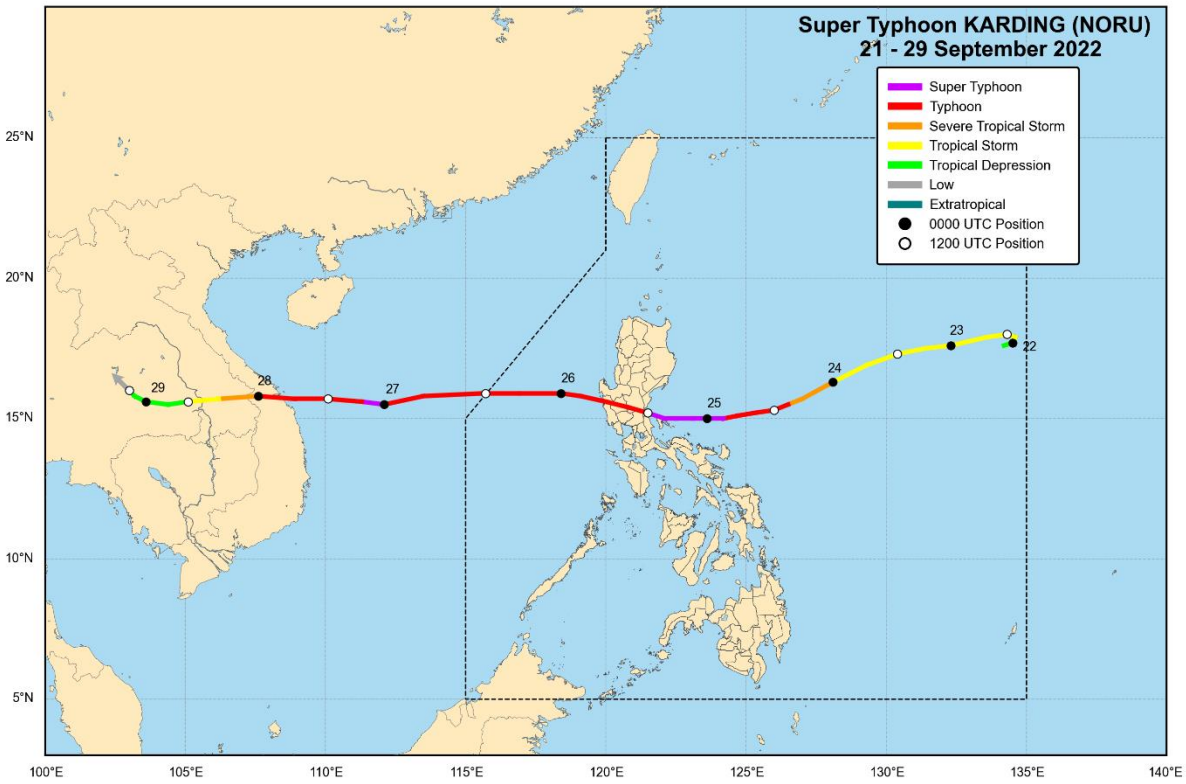

Fig. 1. Preliminary best track positions and intensities of Super Typhoon KARDING. Line color indicates the category of tropical cyclone. Shaded circles with date labels indicated 00 UTC positions while open circles indicate 12 UTC positions.

Meteorological Summary

- First tracked as a disturbance: 0000 UTC, 20 September 2022
- Developed into a tropical depression: 1800 UTC, 21 September 2022
- Weakened into a remnant low: 1200 UTC, 29 September 2022
- Entered the Philippine Area of Responsibility: 1800 UTC, 21 September 2022
- Exited the PAR: 1200 UTC, 26 September 2022
- Duration
  - Within the PAR: 4 days and 18 hours
  - Lifetime[1]: 7 days and 18 hours
- Peak intensity and category:
  - Within the PAR: 105 kt (195 km/h), Super Typhoon
  - Lifetime: 105 kt (195 km/h), Super Typhoon
- Reported landfalls[2]:
  - Burdeos, Quezon: 0930 UTC, 25 September 2022
  - Dingalan, Aurora: 1220 UTC, 25 September 2022

[1] Lifetime is the period from the development into a tropical depression to its weakening into a remnant low or its transitioning into an extratropical low.
[2] Reported landfalls in the Philippines

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Extremes of Surface Meteorological Observations in the Philippines

Highest peak gust over land[3]:

- Baler, Aurora: SE (140°) at 48.6 kt (25 m/s), 1310 UTC, 25 September 2022
- Tanay, Rizal: WSW (240°) at 40.8 kt (21 m/s), 1200 UTC, 25 September 2022
- NAIA, Metro Manila: SW (230°) at 40.8 kt (21 m/s), 1121 UTC, 25 September 2022
- Baguio City, Benguet: SE (140°) at 35 kt (18 m/s), 2054 UTC, 25 September 2022

Lowest sea level pressure over land:

- Infanta, Quezon: 993.6 hPa, 0900 UTC, 25 September 2022
- Tanay, Rizal: 996.7 hPa, 1100 UTC, 25 September 2022
- Dagupan City, Pangasinan: 998.8 hPa, 1900 UTC, 25 September 2022

Highest 24-hour rainfall:

- Subic Bay International Airport, Morong, Bataan: 255.8 mm, 25 September 2022
- Tanay, Rizal: 179.3 mm, 25 September 2022
- Iba, Zambales: 136.2 mm, 25 September 2022

Highest cumulative rainfall while the tropical cyclone was in the PAR:

- Subic Bay International Airport, Morong, Bataan: 345.8 mm
- Tanay, Rizal : 280.0 mm
- University of the Philippines Los Baños, Laguna: 193.3 mm

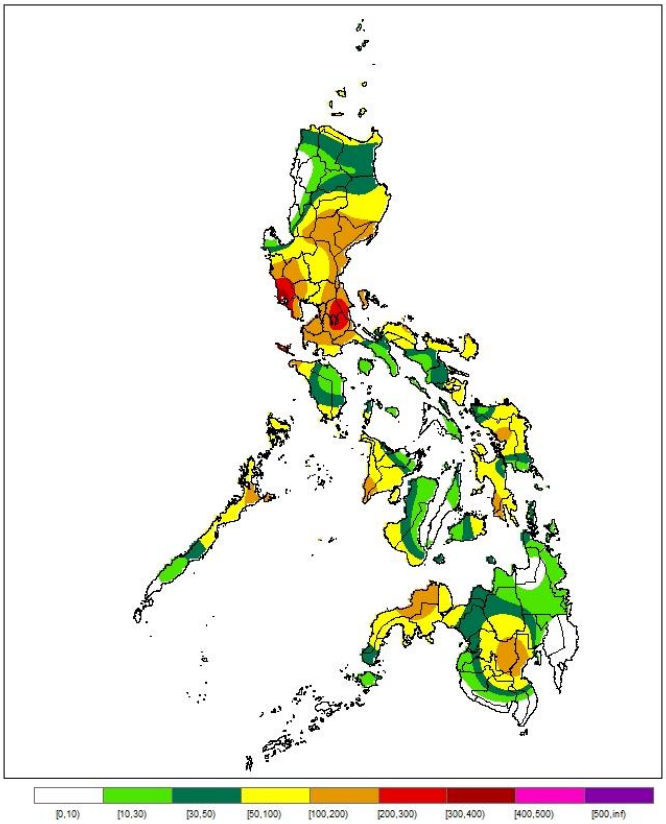

Fig. 2. Spatial interpolation of accumulated rainfall (mm) for the period of 21 to 26 September 2022 from reports of PAGASA synoptic and agromet stations.

[3] Over land extremes are extremes of observation reported by a land-based weather station.

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Warning Summary

Number of Public and Marine Tropical Cyclone Products Issued:

- Tropical Cyclone Updates:
  - First Issuance: 4:00 PM, 22 September 2022
  - Last Issuance: 4:00 PM, 27 September 2022
- Tropical Cyclone Advisories:
  - First Issuance: None
  - Last Issuance: None
- Tropical Cyclone Bulletins:
  - First Issuance: 11:00 AM, 22 September 2022
  - Last Issuance: 11:00 PM, 26 September 2022
- Tropical Cyclone Warnings for Shipping:
  - First Issuance: 11:00 AM, 22 September 2022
  - Last Issuance: 11:00 PM, 26 September 2022

Hoisting of Tropical Cyclone Wind Signals:

- Highest level of wind signal hoisted: TCWS #5
- Number of localities where wind signals had been hoisted: 36
- Timeline of hoisting/lifting of wind signals:
  - 11:00 PM, 23 September 2022: Initial hoisting of TCWS #1
  - 11:00 AM, 24 September 2022: Initial hoisting of TCWS #2
  - 11:00 PM, 24 September 2022: Initial hoisting of TCWS #3
  - 8:00 AM, 25 September 2022: Initial hoisting of TCWS #4
  - 11:00 AM, 25 September 2022: Initial hoisting of TCWS #5
  - 5:00 PM, 26 September 2022: Lifting of all wind signals

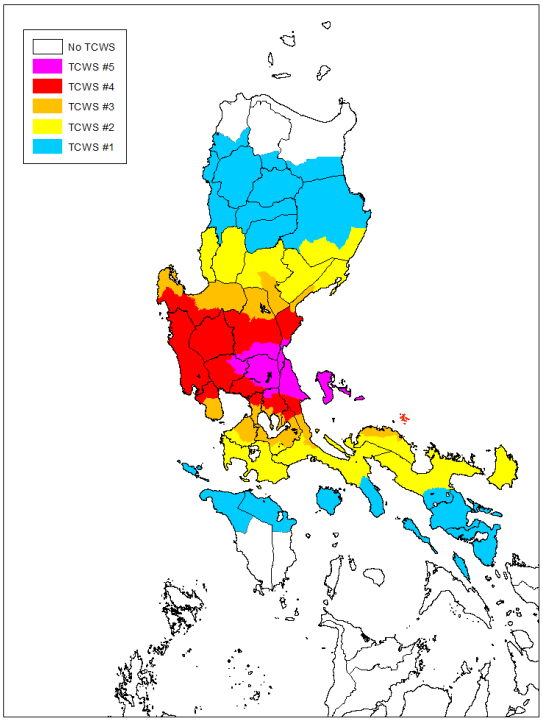

Fig.3. Highest wind signal hoisted by PAGASA during the occurrence of Super Typhoon KARDING.

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Other Pertinent Information:

- The international name NORU, a roe deer, was contributed by the Republic of Korea.
- As of reporting time[4], the occurrence of Super Typhoon KARDING directly resulted in the 69 casualties (12 dead, 52 injured, 5 missing) and combined cost of damage of agriculture, infrastructure, and houses of at least PHP 3,381,213,430.04.

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[4] The information is consolidated by the NDRRMC Situational Report No.9 for Super Typhoon KARDING dated 02 October 2022.

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