Management System ISO 9001:2015

TÜVRheinland CERTIFIED ID 9105085309

MMSS-07 Rev.2 / 03-01-22

# TROPICAL CYCLONE BULLETIN NO. 19 Super Typhoon KARDING (NORU)

Issued at 8:00 PM, 25 September 2022 Valid for broadcast until the next bulletin at 11:00 PM today

# SUPER TYPHOON "KARDING" SLIGHTLY WEAKENS AS IT ABOUT TO MAKE LANDFALL IN THE VICINITY OF GENERAL NAKAR-DINGALAN AREA

### Location of Center (7:00 PM)

The center of the eye of Super Typhoon KARDING was estimated based on all available data including those from Daet, Baler, and Tagaytay Doppler Weather Radars over the coastal waters of General Nakar, Quezon (15.1°N, 121.7°E)

## Intensity

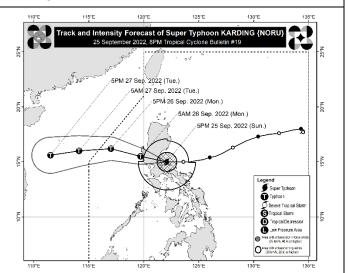
Maximum sustained winds of 185 km/h near the center, gustiness of up to 255 km/h, and central pressure of 925 hPa

### **Present Movement**

Westward at 20 km/h

### **Extent of Tropical Cyclone Winds**

Strong to typhoon-force winds extend outwards up to 290 km from the center



### TRACK AND INTENSITY FORECAST

	Center Position				sity	Movement
Date and Time	Lat. (°N)	Lon. (°E)	Location	MSW (km/h)	Cat.	dir. and speed (km/h)
12-Hour Forecast 5:00 AM 26 September 2022	15.5	119.7	Over the coastal waters of Masinloc, Zambales	130	TY	WNW 20
24-Hour Forecast 5:00 PM 26 September 2022	16.2	117.0	360 km West of Dagupan City, Pangasinan	150	TY	WNW 25
36-Hour Forecast 5:00 AM 27 September 2022	16.0	114.1	635 km West of Iba, Zambales (Outside the PAR)	155	TY	W 25
48-Hour Forecast 5:00 PM 27 September 2022	15.6	111.5	910 km West of Central Luzon (Outside the PAR)	165	TY	W 25

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Prepared by: SMRR



Republic of the Philippines

DEPARTMENT OF SCIENCE AND TECHNOLOGY

Philippine Atmospheric, Geophysical and Astronomical

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TCWS No.	Luzon	Visayas	Mindanao
5 Wind threat: Typhoon- force winds	Polillo Islands, the extreme northern portion of Quezon (the northern and central portions of General Nakar, the northeastern portion of Infanta), the extreme southern portion of Aurora (Dingalan), the extreme southern portion of Nueva Ecija (General Tinio, City of Gapan, Peñaranda, San Isidro, Cabiao), the eastern portion of Pampanga (Arayat, Candaba, Santa Ana, San Luis), the eastern and central portions of Bulacan (San Rafael, Angat, Norzagaray, Doña Remedios Trinidad, San Ildefonso, San Miguel), and the extreme northern portion of Rizal (Rodriguez)	-	-
	Warning lead time: 12 hours Potential impacts of winds: Extreme threat to life and property		
4 Wind threat: Typhoon- force winds	Calaguas Islands, the southern portion of Aurora (San Luis, Baler, Maria Aurora), the central and southern portions of Nueva Ecija (Cuyapo, Nampicuan, Guimba, Licab, Zaragoza, San Antonio, San Leonardo, Jaen, Santa Rosa, Palayan City, Gabaldon, Laur, Cabanatuan City, Aliaga, Quezon, Santo Domingo, Talavera, Llanera, General Mamerto Natividad, Rizal, Bongabon, Talugtug, Science City of Muñoz), Tarlac, the rest of Pampanga, the rest of Bulacan, Zambales, the northern portion of Bataan (Dinalupihan, Hermosa, Morong, Orani, Samal, Abucay), the southern portion of Pangasinan (Bautista, Alcala, Bayambang, Mangatarem, Urbiztondo, Aguilar, Bugallon, Infanta, Dasol, Burgos, Mabini, Labrador), the northern portion of Metro Manila (Marikina, Caloocan, Malabon, Navotas, Valenzuela, and Quezon City), the northern and central portions of Rizal (City of Antipolo, Tanay, San Mateo, Baras), and the extreme northern portion of Laguna (Famy, Siniloan, Santa Maria, Pangil)	-	-
	Warning lead time: 12 hours Potential impacts of winds: Significant to severe threat to life and property		
3 Wind threat: Storm-force winds	The central portion of Aurora (Dipaculao), the southeastern portion of Nueva Vizcaya (Alfonso Castaneda, Dupax del Sur, Dupax del Norte), the rest of Nueva Ecija, the rest of Bataan, the rest of Pangasinan, the rest of Metro Manila, the rest of Rizal, the northern and central portions of Laguna (Mabitac, Pakil, Paete, Kalayaan, Lumban, Cavinti, Pagsanjan, Luisiana, Majayjay, Magdalena, Santa Cruz, Pila, Liliw, Nagcarlan, Victoria, Rizal, City of San Pedro, City of Biñan, City of Santa Rosa, Cabuyao City, City of Calamba, Los Baños, Bay, Calauan), the northern and central portions of Cavite (Tanza, Rosario, Noveleta, Kawit, Imus City, Bacoor City, City of Dasmariñas, Carmona, Gen. Mariano Alvarez, Silang, Amadeo, City of General Trias, Trece Martires City, Naic, Indang), the rest of the northern portion of Quezon (Infanta, Real, General Nakar, Mauban), and the northern portion of Camarines Norte (Vinzons, Paracale, Jose Panganiban, Capalonga)	-	-
	Warning lead time: 18 hours Potential impacts of winds: Moderate to significant threat to life and propert	у	

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TROPICAL CYCLONE WIND SIGNALS (TCWS) IN EFFECT								
TCWS No.	Luzon	Visayas	Mindanao					
Wind threat: Gale-force winds	The southern portion of Isabela (Dinapigue, San Guillermo, Echague, San Agustin, Jones), Quirino, the rest of Nueva Vizcaya, Benguet, La Union, the rest of Aurora, the rest of Cavite, Batangas, the rest of Laguna, the central portion of Quezon (Calauag, Perez, Alabat, Quezon, Tagkawayan, Guinayangan, Sampaloc, Lucban, City of Tayabas, Lucena City, Pagbilao, Padre Burgos, Atimonan, Agdangan, Unisan, Plaridel, Gumaca, Lopez, Pitogo, Dolores, Candelaria, Sariaya, Tiaong, San Antonio, Macalelon, General Luna, Catanauan, Buenavista), the rest of Camarines Norte, the northern portion of Camarines Sur (Del Gallego, Ragay, Lupi, Sipocot, Libmanan, Pamplona, Pasacao, San Fernando, Pili, Minalabac, Ocampo, Tigaon, Cabusao, Magarao, Gainza, Canaman, Camaligan, Milaor, Naga City, Bombon, Calabanga, Tinambac, Siruma, Goa, Lagonoy, San Jose, Garchitorena, Presentacion, Caramoan, Sagñay), and Catanduanes		-					
	Warning lead time: 24 hours Potential impacts of winds: Minor to moderate threat to life and property							
Wind threat: Strong winds	The southern portion of Cagayan (Tuao, Solana, Enrile, Tuguegarao City, Iguig, Peñablanca), the rest of Isabela, the southern portion of Apayao (Conner), Kalinga, Abra, Mountain Province, Ifugao, the southern portion of Ilocos Norte (Nueva Era, Badoc, Pinili, Banna, City of Batac, Currimao, Paoay, Marcos), Ilocos Sur, the rest of Quezon, the northern portion of Occidental Mindoro (Abra de Ilog, Paluan, Mamburao, Santa Cruz) including Lubang Islands, the northern portion of Oriental Mindoro (Puerto Galera, San Teodoro, Baco, City of Calapan, Naujan, Victoria, Pola, Socorro, Pinamalayan), Marinduque, the rest of Camarines Sur, Albay, Sorsogon, Burias Island and Ticao Island	-	-					
	Warning lead time: 36 hours Potential impacts of winds: Minimal to minor threat to life and property							

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### HAZARDS AFFECTING LAND AREAS

### **Heavy Rainfall**

- Tonight through tomorrow early morning: Heavy to intense with at times torrential rains over Metro Manila, Zambales, Bataan, Tarlac, Pampanga, Nueva Ecija, Bulacan, Aurora, Rizal, and the northern portion of Quezon including Polillo Islands. Moderate to heavy with at times intense rains over Isabela, Nueva Vizcaya, Quirino, Benguet, Ifugao, Mountain Province, Pangasinan, Cavite, Laguna, Batangas, the central portion of Quezon, Occidental Mindoro and Camarines Norte. Light to moderate with at times heavy rains over Oriental Mindoro, Marinduque, and the rest of CALABARZON and Bicol Region.
- Tomorrow early morning through early afternoon: Heavy to intense with at times torrential rains over Zambales, Bataan, Pampanga, and Bulacan. Moderate to heavy with at times intense rains Metro Manila, Pangasinan, Cavite, Occidental Mindoro, and the rest of Central Luzon. Light to moderate with at times heavy rains over Mountain Province, Ifugao, Benguet, Quirino, Nueva Vizcaya, Oriental Mindoro, and the rest of CALABARZON.
- Under these conditions, widespread flooding and rain-induced landslides are expected, especially in areas that
  are highly or very highly susceptible to these hazard as identified in hazard maps and in localities with significant
  antecedent rainfall.
- Due to the Southwest Monsoon, occasional to monsoon rains over Palawan, Western Visayas and Zamboanga Peninsula. For more information, refer to the 24-Hour Public Weather Forecast issued at 4:00 PM today and Weather Advisory #1 for Southwest Monsoon issued at 1:30 PM today.

#### **Severe Winds**

During the passage of KARDING, areas under Wind Signal No. 4 and No.5 will experience winds peaking at **typhoon-force** strength, while winds may reach **storm-force** in strength within any of the areas where Wind Signal No. 3 is hoisted. **Gale-force** conditions are likely any of the areas where Wind Signal no.2 is hoisted, while **strong winds (strong breeze to near gale strength)** will be experienced within any of the areas where Wind Signal No. 1 is currently in effect.

### Coastal Inundation

There is a **high to very high risk of storm surge more than 3.0 m in height** in the low-lying and exposed coastal areas of northern Quezon including Polillo Islands and Aurora. In addition, a **moderate to high risk of storm surge** is also possible over Camarines Norte, Pangasinan, Zambales, Bulacan, the northern portion of Metro Manila, the southern portion of La Union, and the rest of Quezon. The combined effects of storm surge and high waves breaking along the coast may cause **life-threatening and damaging inundation or flooding**. For more information, refer to **Storm Surge Warning #3** issued at 5:00 PM today.

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### HAZARDS AFFECTING COASTAL WATERS

Under the influence of KARDING, a marine gale warning remains in effect over the seaboards of Luzon. For more information, refer to **Gale Warning #5** issued at 5:00 PM today.

### TRACK AND INTENSITY OUTLOOK

- Super Typhoon KARDING made landfall in the vicinity of Burdeos, Quezon at 5:30 PM today. This super typhoon
  is forecast to track generally westward in the next 6 hours, then west northwestward for the remainder of the day.
  On the forecast track, KARDING will likely make landfall in the vicinity of General Nakar or Dingalan tonight.
- For the remainder of this evening post-landfall through tomorrow early morning, KARDING will traverse the landmass of Central Luzon and emerge over the West Philippine Sea via the coastal waters of Zambales or Pangasinan. The typhoon will then continue tracking generally west northwestward to westward over the West Philippine Sea for the remainder of the forecast period.
- KARDING is forecast to maintain its strength prior to its landfall. Frictional effects during landfall and traverse of the Luzon landmass will weaken KARDING throughout the evening through tomorrow early morning, although it is highly likely that this tropical cyclone will remain a typhoon while crossing the landmass.

Considering these developments, the public and disaster risk reduction and management offices concerned are advised to take all necessary measures to protect life and property. Persons living in areas identified to be highly or very highly susceptible to these hazards are advised to follow evacuation and other instructions from local officials. For heavy rainfall warnings, thunderstorm/rainfall advisories, and other severe weather information specific to your area, please monitor products issued by your local PAGASA Regional Services Division.

The next tropical cyclone bulletin will be issued at 11:00 PM today.

**DOST-PAGASA** 

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