

Typhoon ROSITA (YUTU / 1826) Summary Report



Typhoon ROSITA is the 18th tropical cyclone (TC) that entered the Philippine Area of Responsibility (PAR) in 2018 and also the 2nd TC for the month of October. The international name "YUTU" was contributed by China, which refers to the 'rabbit' character in a Chinese story.

ROSITA formed (became a tropical depression, TD) over the islands of Micronesia on 21 October 2018 (Philippine Standard Time, PST). The next day, the system intensified into a tropical storm (TS) and then became a severe tropical storm (STS) 12 hours later. On 23 October at 8:00 PM, ROSITA attained typhoon (TY) category. Favorable atmospheric conditions allowed the typhoon to reach its peak intensity of 210 km/h in just a short period of time.

At 12:00 AM PST on 25 October, ROSITA made landfall over the islands of Tinian and southern Saipan in the Northern Mariana Islands while maintaining peak intensity. Then, it weakened momentarily as it moved further away from the Islands.

The typhoon entered the PAR on 27 October at 6:30 AM PST. It re-intensified momentarily to 200 km/h, but its intensity began to decline a several hours later. Its maximum winds dropped to 150 km/h just before making landfall in Dinapigue, Isabela at 4:00 AM PST on 30 October. The rugged terrain of Northern Luzon and unfavorable atmospheric conditions caused ROSITA to weaken into a STS upon emerging into the coastal waters of La Union. The system left the PAR at 2:00 PM PST on 31 October as a tropical storm. It weakened further into a TD while over the West Philippine Sea at 8:00 AM PST on 02 November and then into a low pressure area later that day.

Strong winds and heavy rains caused by ROSITA brought widespread damage across Northern and Central Luzon, particularly in the Cordillera Administrative Region (CAR).

Significant Meteorological Observation

The lowest mean sea level pressure (MSLP) of 951 hPa, during the typhoon passage, was recorded in Bayombong, Nueva Ecija at 9:00 AM on 30 October. Meanwhile, the highest gust observation of 169 km/h was recorded at Isabela State University station in Echague, Isabela at 6:37 AM of 30 October. Other significant observations are shown in **Table 1** (below).



Field Station	Mean Sea Level Pressure (hPa)	Peak Gust (km/h)
NVSU, Bayombong, Nueva Vizcaya	951.0	112
ISU, Echague, Isabela	960.0*	169
Casiguran, Aurora	971.8	130
Baguio City, Benguet	985.0	79

	Table 1. Significant wind and	pressure observations durin	g the passage of TY ROSITA.
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*obtained using an aneroid barometer

Figure 2 shows the rainfall distribution during the passage of ROSITA (27 to 31 October). Northern Luzon and the northeastern portion of Central Luzon received the bulk of the rainfall. Baguio City reported the highest 5-day total rainfall (147.6 mm). Aparri, Cagayan and Cabanatuan City, Nueva Ecija ranked 2nd and 3rd with 146.8 and 132.6 mm, respectively.



The wettest day during the typhoon passage was 30 October. Baguio and Cabanatuan stations in Northern Luzon recorded the highest 24-hour rainfall (total amount of rainfall in 1 day). Each location had approximately 140 mm of rainfall. This is followed by Baler station at 119 mm. **Figure 3** presents the 24-hour rainfall from selected synoptic stations in Luzon from 27 to 31 October.







Warning Information

A total of forty-four (44) domestic information, in the form of twenty-two (22) severe weather bulletins (SWB) and five (4) tropical cyclone advisories (TCA), and eighteen (18) tropical cyclone warnings for shipping (TCWS) were issued. The first TCA was issued on 25 October at 11:00 AM and the first SWB was issued on 27 October at 11:00 AM. A total of 30 provinces were placed under Tropical Cyclone Warning Signals (TCWS) during the passage of ROSITA with the highest being TCWS #3.

Meanwhile, a total of eighteen (18) tropical cyclone warnings (formerly 'IWS') were sent for regional exchange with other meteorological centers via the WMO Global Telecommunications System.

Preliminary Damage Statistics

As of 06 November 2018, the National Disaster and Risk Reduction and Management Council (NDRRMC) reported a total of eleven (11) dead, two (2) injured and one (1) missing in regions of CALABARZON and CAR. The estimated total cost of damages is P2.9 billion incurred from damages to agriculture in Regions I, II, III and CAR.

Disclaimer

This report presents a summary of pertinent information obtained during the **operational warning** period and is intended for the general public. As such, the information presented herein are not final and are subject to change when additional data becomes available.