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WORST TYPHOONS OF THE PHILIPPINES (1947-2014)

NAME	PERIOD OF OCCURENCE	DEATHS	TOTAL DAMAGE (in Billions of Pesos)	HIGHEST WIND SPEED in Kph (Place Recorded)	AREAS MOST AFFECTED
YOLANDA (Haiyan) [@]	November 2 -13, 2013	6,300¹	89.598¹	205 (Roxas)+	Samar, Leyte, Biliran, Northern Cebu, Northern Negros, North and Central Panay, Calamian Islands
PABLO (Bopha)	December 2-10, 2012	1,067 ^A	39.949	120 (Dumaguete)++	Davao Oriental, Compostela Valley, Caraga Region, Misamis Oriental, Negros Oriental, Palawan
FRANK (Fengshen) ²	June 18-23, 2008	938 ^B	13.321	172 (Roxas)	Eastern-Western Visayas, Romblon, Marinduque, CALABARZON, Central Luzon
ROSING (Angela) ³	Oct. 30-Nov.4, 1995	936	10.829	260 (Virac Radar)	Bicol Region, CALABARZON, NCR
PEPENG (Parma) ⁴	Sept.30 – Oct.11, 2009	492	27.195	120 (PAGASA est. at Cagayan)	Northern Luzon, Cordillera Region
NITANG (Ike)	Aug.23 – Sept.4, 1984	1,363 ^C	4.100	220 (Surigao)	Caraga Region, Bohol, Cebu, Negros
RUPING (Mike) ⁵	November 10-14, 1990	748	10.846	220 (Cebu)	Caraga Region, Northern Mindanao, Visayan Regions
ONDOY (Ketsana) ^{*6}	September 24-27, 2009	464	11.121	85 (PAGASA est. at Casiguran)	NCR,CALABARZON, Central Luzon
KADIANG (Flo)	Sept.30 – Oct.7, 1993	576	8.752	130 (over water)	Northern-Central Luzon, Cordillera
URING (Thelma) [*]	November 2-7, 1991	5,101 ^D	1.045	95 (Tacloban)	Leyte, Negros, Panay
SENDONG (Washi) [*]	December 13-19, 2011	1,268 ^E	1.382	75 (PAGASA est. at Hinatuan)	Misamis Oriental, Bukidnon, Lanao del Norte, Negros Oriental
REMING (Durian)	Nov.26 – Dec. 1, 2006	754 ^F	5.086	320 (Virac)	Bicol Region, Marinduque, CALABARZON, Mindoro
PEDRING (Nesat)	September 24-28, 2011	85	15.553	150 (PAGASA est at Casiguran)	Northern-Central Luzon, Cordillera,NCR, CALABARZON
LOLENG (Babs)	October 15-14, 1998	303	6.787	250 (Virac)	Bicol Region, Central-Northern Luzon
MILENYO (Xangsane)	September 25-30, 2006	231	6.610	180 (Legazpi)	Bicol Region, CALABARZON, NCR, Bataan

GLEND A (Rammasun)	July 12-17, 2014	106	38.616	183 (Tabaco AWS)+++	Bicol Region, CALABARZON, NCR, Bataan, Zambales
SISANG (Nina)	November 23-27, 1987	979	1.119	240 (Legazpi)	Bicol Region, Marinduque, CALABARZON
TRIX	October 16-23, 1952	995	0.880	215 (Legazpi)	Bicol Region, Southern Quezon
UNDANG (Agnes)	November 3-6, 1984	895	1.900	230 (Tacloban)	Samar, Leyte, Panay
UNSANG (Ruby)	October 21-26, 1986	157 ^G	5.636	215 (Virac)	Bicol Region, Central and Northern Luzon

CALABARZON – Cavite, Laguna, Batangas, Rizal and Quezon provinces.

Caraga Region – Surigao del Norte, Surigao del Sur, Agusan del Norte, Agusan del Sur, Dinagat provinces.

NCR – National Capital Region or Metropolitan Manila.

*- a tropical storm only.

@ - the worst natural disaster in the Philippines since the 1976 Moro Gulf Earthquake and Tsunami, and the 1991 Ormoc Flood from Tropical Storm URING (Thelma). Broke records also for the most number of people affected (16.078 million) in a total of 44 provinces and set a record sustained velocity of winds greater than 250 kph in 72 hours through Central Philippines (Samar to Culion Island).

1 – a total of 7,361 dead if we include the missing, and presumed dead from a gigantic storm surge brought by YOLANDA. The damage was concentrated mostly on infrastructure and facilities of chief fishing ports, coco-palm oil refineries, marine reserves, world-class island resorts and dive sites. Power fluctuations on all areas of the Visayas continued for months since the typhoon damaged the Tongonan Geothermal Power Plant of the National Grid Corporation Of the Philippines in Leyte.

2 – had a very erratic movement causing numerous forecasting errors, catching millions off-guard along its path. Induced monsoon rains spawned floods as far as Western and Central Mindanao.

3 – the typhoon unusually maintained winds of at least 240 kph for 60 hrs, most of it while over land.

4 – criss-crossed Northern Luzon making initial landfall at Cagayan, then looping back to landfall in Ilocos Norte, looped back again and entered Cagayan the second time.

5 – this howler had the most number of provinces affected at 46, most number of regions at 12 and had the widest scope of reported significant damage to winds of greater than 100 kph.

6 – brought record flooding in Antipolo, Cainta, Marikina, Quezon City, Manila, Pasig and much of NCR drowning hundreds, stranding millions.

A – a total of 1,901 including those missing and presumed dead under 30 meters of rocks and mud in New Bataan, Compostela Valley.

B – a total of 1,501 including those from the capsized M/V Princess Of The Stars and various fishing fleets in the Visayan Sea, plus those still missing and presumed dead.

C – other agencies estimate toll to have reached 3,000 if the missing will be counted as dead.

D – an estimate of 8,000 might have died with the missing presumed dead. Some may be devoured by sharks at Ormoc Bay and Camotes Sea.

E – a total of 1,449 including those missing and presumed dead.

F – a total of 1,200 including those missing and presumed dead beneath the lahars of Mayon Volcano.

G – not included are the **254^[1]** people who perished when M/V Doña Marilyn capsized at the coast of Masbate **and Biliran**.

+ - JTWC satellite wind analysis estimates of 315 kph maximum sustained and 380 kph of gusts at landfall at Calicon Is., Guiuan, Eastern Samar and Tanauan, Leyte. **PAGASA Tacloban records a peak gust of 200 kph before it went off service.**

++ - JTWC satellite analysis wind estimates of 259 kph gusts 4 hours before landfall at Cateel, Davao Oriental.

+++ - WeatherPhilippines Foundation (WPF) Automated Weather Station (AWS) at Tabaco City, Albay.

Over water – typhoon's estimated strongest winds were recorded while typhoon was still at sea but is closely approaching land PAGASA estimates were given as no actual recorded wind speed was published. Damage costs were not adjusted to current inflation rate.

[I] – taken from www.biliranisland.com/blogs. Wikipedia puts it at 77 with 2 missing conflicting with its stub entry”MV Doña Marilyn” putting it at 389 dead.

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Sources: *“Responses and Lessons Learned from Typhoon Haiyan (Yolanda)”* by Paciente, Rene B., PAGASA Weather Division at JMA/WMO Workshop On Effective Tropical cyclone Warning in Southeast Asia, march 11-14, 2014, Joint Typhoon Warning Center (JTWC), Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA), Japan Meteorological Agency (JMA), Unisys.com, Typhoon2000.com archives and records, Weather Philippines, National Disaster Risk Reduction Management Council.

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