Tropical Depression Wilma (2013)

*This article is about the 2013 depression. For other storms of the same name, see*[*Tropical Storm Wilma*](https://en.wikipedia.org/wiki/Tropical_Storm_Wilma)*.*

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| --- | --- |
| **Tropical Depression 30W (Wilma) Depression BOB 05** | |
| **Tropical depression (JMA scale)** | |
| **Tropical storm (SSHWS)** | |
| [Wilma 2013-11-04.jpg](https://en.wikipedia.org/wiki/File:Wilma_2013-11-04.jpg)  Tropical Depression Wilma over the Philippines on November 4, 2013 | |
| **Formed** | November 2, 2013 |
| **Dissipated** | November 21, 2013 |
| ([Remnant low](https://en.wikipedia.org/wiki/Post-tropical_cyclone) after November 17) | |
|  | |
|  | |
| **Highest winds** | [*10-minute sustained*](https://en.wikipedia.org/wiki/Tropical_cyclone_scales#Wind_speed_conversions)*:* 55 km/h (35 mph) [*3-minute sustained*](https://en.wikipedia.org/wiki/Tropical_cyclone_scales#Wind_speed_conversions)*:* 45 km/h (30 mph) [*1-minute sustained*](https://en.wikipedia.org/wiki/Tropical_cyclone_scales#Wind_speed_conversions)*:* 65 km/h (40 mph) |
| **Lowest pressure** | 1003 [hPa](https://en.wikipedia.org/wiki/Pascal_(unit)" \o "Pascal (unit)) ([mbar](https://en.wikipedia.org/wiki/Bar_(unit))); 29.62 [inHg](https://en.wikipedia.org/wiki/Inch_of_mercury" \o "Inch of mercury) |
|  | |
|  | |
| **Fatalities** | 16 deaths |
| **Damage** | Minimal |
| **Areas affected** | [Palau](https://en.wikipedia.org/wiki/Palau), [Philippines](https://en.wikipedia.org/wiki/Philippines), [mainland Southeast Asia](https://en.wikipedia.org/wiki/Mainland_Southeast_Asia), [Andaman Islands](https://en.wikipedia.org/wiki/Andaman_Islands), [Sri Lanka](https://en.wikipedia.org/wiki/Sri_Lanka), [India](https://en.wikipedia.org/wiki/India), [Socotra](https://en.wikipedia.org/wiki/Socotra) |
|  | |
| Part of the [**2013 Pacific typhoon season**](https://en.wikipedia.org/wiki/2013_Pacific_typhoon_season#Tropical_Depression_30W_(Wilma))**and**[**2013 North Indian Ocean cyclone season**](https://en.wikipedia.org/wiki/2013_North_Indian_Ocean_cyclone_season#Depression_BOB_05) | |

**Tropical Depression Wilma**,[[nb 1]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-1) also referred to as **30W**[[nb 2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-2) and **Depression BOB 05**, was a weak but long-lived [tropical cyclone](https://en.wikipedia.org/wiki/Tropical_cyclone) that traveled from the [Northwest Pacific Ocean](https://en.wikipedia.org/wiki/2013_Pacific_typhoon_season) to the [North Indian Ocean](https://en.wikipedia.org/wiki/2013_North_Indian_Ocean_cyclone_season) in 2013. Forming east of [Palau](https://en.wikipedia.org/wiki/Palau) on November 1, the tropical depression passed through the [Philippines](https://en.wikipedia.org/wiki/Philippines) on November 4 and emerged into the [South China Sea](https://en.wikipedia.org/wiki/South_China_Sea) on the next day. Without intensification, the system made landfall over [Vietnam](https://en.wikipedia.org/wiki/Vietnam) on November 6 and arrived at the [Gulf of Thailand](https://en.wikipedia.org/wiki/Gulf_of_Thailand) on November 7.

On November 8, the tropical depression crossed the [Malay Peninsula](https://en.wikipedia.org/wiki/Malay_Peninsula) and emerged into the [Bay of Bengal](https://en.wikipedia.org/wiki/Bay_of_Bengal). Being a low-pressure area later, it was struggling to develop until intensifying into a depression on November 13. The system made landfall over [India](https://en.wikipedia.org/wiki/India) on November 16 and caused 16 fatalities, before it weakened into a low-pressure area, and then entered the [Arabian Sea](https://en.wikipedia.org/wiki/Arabian_Sea) on the next day.

Meteorological history[[edit](https://en.wikipedia.org/w/index.php?title=Tropical_Depression_Wilma_(2013)&action=edit&section=1)]

[](https://en.wikipedia.org/wiki/File:Wilma_2013_track.png)

Map plotting the track and the intensity of the storm, according to the [Saffir–Simpson scale](https://en.wikipedia.org/wiki/Saffir%E2%80%93Simpson_scale" \o "Saffir–Simpson scale)

Late on October 30, the [Japan Meteorological Agency](https://en.wikipedia.org/wiki/Japan_Meteorological_Agency) (JMA) reported that a [low-pressure area](https://en.wikipedia.org/wiki/Low-pressure_area) had formed near [Chuuk](https://en.wikipedia.org/wiki/Chuuk_State" \o "Chuuk State).[[1]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-3) On November 1, a tropical disturbance southeast of [Yap](https://en.wikipedia.org/wiki/Yap) persisted within the low-pressure area, as well as JMA upgraded the system to a tropical depression east of [Palau](https://en.wikipedia.org/wiki/Palau) late on the same day.[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4)[[3]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-5) However, the agency soon downgraded it back to a low-pressure only six hours later, when the system remained poorly organised with [convection](https://en.wikipedia.org/wiki/Convection) confined to the western flank.[[4]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-6)[[5]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-7) Shortly after JMA upgraded it to a tropical depression near Palau again early on November 3, the [Joint Typhoon Warning Center](https://en.wikipedia.org/wiki/Joint_Typhoon_Warning_Center) (JTWC) issued a [Tropical Cyclone Formation Alert](https://en.wikipedia.org/wiki/Tropical_Cyclone_Formation_Alert) for the system.[[6]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-8)[[7]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-9)

Only three hours later, the system was upgraded to a tropical depression and designated as *30W* by JTWC, estimating it would intensify into a category 1 typhoon in the [South China Sea](https://en.wikipedia.org/wiki/South_China_Sea). In post-analysis, JTWC indicated that 30W had already become a tropical depression on November 2.[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4) The low-level circulation centre was partially exposed but consolidating with the bulk of deep convection sheared to the west. At that time, the tropical depression was tracking along the southern periphery of the steering [subtropical ridge](https://en.wikipedia.org/wiki/Subtropical_ridge) to the north, and vertical [wind shear](https://en.wikipedia.org/wiki/Wind_shear) was weak to moderate, offset by radial [outflow](https://en.wikipedia.org/wiki/Outflow_(meteorology)) and a developing poleward channel.[[8]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-10) Late on November 3, the [Philippine Atmospheric, Geophysical and Astronomical Services Administration](https://en.wikipedia.org/wiki/Philippine_Atmospheric,_Geophysical_and_Astronomical_Services_Administration) (PAGASA) upgraded the system to a tropical depression and gave it the local name *Wilma*.[[9]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-11)

On November 4, Wilma made landfall over [Surigao del Sur](https://en.wikipedia.org/wiki/Surigao_del_Sur" \o "Surigao del Sur), [Philippines](https://en.wikipedia.org/wiki/Philippines) before 04:00 [UTC](https://en.wikipedia.org/wiki/Coordinated_Universal_Time), and JMA began to issue tropical cyclone advisories to the tropical depression in the [Bohol Sea](https://en.wikipedia.org/wiki/Bohol_Sea) since 06:00 UTC, expecting it to intensify into a tropical storm within 24 hours.[[10]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-philstar-12)[[11]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-13) Soon, PAGASA downgraded Wilma to a low-pressure area at 09:00 UTC.[[12]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-14) Interacting with the frictional effects by passing through the Philippines, the tropical depression still got slightly organisational improvement, and it began to accelerate westward.[[13]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-15) Late on the same day, it arrived at the [Sulu Sea](https://en.wikipedia.org/wiki/Sulu_Sea), as well as it crossed [Palawan](https://en.wikipedia.org/wiki/Palawan) and arrived at the South China Sea early on November 5. According to the JTWC best track data, 30W was a tropical storm at 06Z and 12Z, while the low-level circulation centre was partially exposed with the bulk of deep convection located to the north at noon.[[14]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-16) Late on the same day, JTWC downgraded 30W back to a tropical depression for becoming increasingly fragmented.[[15]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-17)

[](https://en.wikipedia.org/wiki/File:Wilma_2013-11-08.jpg)

The tropical depression crossing the [Malay Peninsula](https://en.wikipedia.org/wiki/Malay_Peninsula) on November 8

On November 6, JTWC issued a final warning to 30W at 06:00 UTC, when the tropical depression began to erode further.[[16]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-18) Prior to making landfall over the area near [Phan Rang–Tháp Chàm](https://en.wikipedia.org/wiki/Phan_Rang%E2%80%93Th%C3%A1p_Ch%C3%A0m" \o "Phan Rang–Tháp Chàm), [Vietnam](https://en.wikipedia.org/wiki/Vietnam), JMA stopped issuing any tropical cyclone advisory to the tropical depression at noon, although it still remained its 10-minute maximum sustained winds at 30 knots (55 km/h; 35 mph) briefly.[[17]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-19) According to the JTWC best track data, 30W weakened into a tropical disturbance early on November 7, yet it developed into a tropical depression again at noon, when the system was entering the [Gulf of Thailand](https://en.wikipedia.org/wiki/Gulf_of_Thailand) from the southernmost border of [Thailand](https://en.wikipedia.org/wiki/Thailand) and [Cambodia](https://en.wikipedia.org/wiki/Cambodia).[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4)[[18]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-20) Late on the same day, JTWC reported that the organisation and [vorticity](https://en.wikipedia.org/wiki/Vorticity" \o "Vorticity) of 30W had got better.[[19]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-21) Early on November 8, the tropical depression made landfall over the area about 200 km (125 mi) south-southwest of [Bangkok](https://en.wikipedia.org/wiki/Bangkok), Thailand.[[20]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-22) Since 06:00Z, JMA stopped monitoring because it moved out of the area of responsibility.[[21]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-23) The system arrived at the [Andaman Sea](https://en.wikipedia.org/wiki/Andaman_Sea) by crossing the [Malay Peninsula](https://en.wikipedia.org/wiki/Malay_Peninsula) before noon, but then deep convection over the low-level circulation centre dissipated rapidly.[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4)[[22]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-24)

On November 9, the system slowed down, as well as easterly vertical [wind shear](https://en.wikipedia.org/wiki/Wind_shear) had become stronger over the system located southwest of [Yangon](https://en.wikipedia.org/wiki/Yangon), [Burma](https://en.wikipedia.org/wiki/Burma), making it remain partially exposed and disorganised.[[23]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-25) The [India Meteorological Department](https://en.wikipedia.org/wiki/India_Meteorological_Department) (IMD) started to mention the system as a [low-pressure area](https://en.wikipedia.org/wiki/Low-pressure_area) on the same day, right before it emerged into the [Bay of Bengal](https://en.wikipedia.org/wiki/Bay_of_Bengal).[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4)[[24]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-imd_preliminary-26) IMD upgraded it to a well-marked low-pressure area on November 11, yet a microwave imagery showed a broad low-level circulation centre with shallow [convection](https://en.wikipedia.org/wiki/Convection) as well as dry air beginning to wrap around the western quadrants.[[24]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-imd_preliminary-26)[[25]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-27) On November 13, IMD upgraded the system to a depression and designated it as *BOB 05* at 00:00 UTC.[[24]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-imd_preliminary-26) As new formative bands developed along the northern and southeastern sectors, JTWC issued a [Tropical Cyclone Formation Alert](https://en.wikipedia.org/wiki/Tropical_Cyclone_Formation_Alert) again for the better-organised system at 13:00 UTC.[[26]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-28) The low-level circulation centre became fully exposed but well-defined on November 14, and deep convection was sheared to the northwest by moderate vertical wind shear which was offsetting easterly diffluent [outflow](https://en.wikipedia.org/wiki/Outflow_(meteorology)).[[27]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-29)

On November 15, JTWC upgraded the system to a tropical cyclone and continued designating it *30W*, when the low-level circulation centre was tightly-wrapped but partially exposed with deep convection sheared to the west. It developed radial outflow, but moderate easterly vertical wind shear kept affecting the tropical cyclone.[[28]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-30) However, 30W was considered as a tropical cyclone only at 18Z in post-analysis.[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4) On November 16, JTWC issued a final warning to 30W, as the intensity became below the warning threshold due to rapidly eroding convection.[[29]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-31) At 07:30 UTC, Depression BOB 05 made landfall over [Tamil Nadu](https://en.wikipedia.org/wiki/Tamil_Nadu), [India](https://en.wikipedia.org/wiki/India), and it weakened into a well-marked low-pressure area overland at 00:00 UTC on the next day, right before emerging into the [Arabian Sea](https://en.wikipedia.org/wiki/Arabian_Sea).[[24]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-imd_preliminary-26) Since that, the remnants no longer had a chance to develop as it continued drafting westward and encountering strong dry air.[[30]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-32) The remnants became almost stationary and turned west-southwestward on November 20, before finally dissipating near [Socotra](https://en.wikipedia.org/wiki/Socotra), [Yemen](https://en.wikipedia.org/wiki/Yemen) on the next day.[[2]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-jtwcbst-4)

Impact[[edit](https://en.wikipedia.org/w/index.php?title=Tropical_Depression_Wilma_(2013)&action=edit&section=2" \o "Edit section: Impact)]

[](https://en.wikipedia.org/wiki/File:BOB05_15_Nov_2013.jpg)

Depression BOB 05 near [Sri Lanka](https://en.wikipedia.org/wiki/Sri_Lanka) on November 15

**Philippines**[[edit](https://en.wikipedia.org/w/index.php?title=Tropical_Depression_Wilma_(2013)&action=edit&section=3" \o "Edit section: Philippines)]

Being a weak tropical depression, Wilma did not cause fatalities in the Philippines, but it still damaged houses and brought flooding. In [Bohol](https://en.wikipedia.org/wiki/Bohol), 83 houses and a wooden bridge were damaged, as well as several towns were flooded. The tropical depression also caused flooding in [Palawan](https://en.wikipedia.org/wiki/Palawan), leading to the evacuation of 146 families. Two bridges collapsed due to the flooding, and a further two provincial bridges made impassable.[[31]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-33) When Wilma made landfall, 4,355 passengers were stranded in seaports in [Visayas](https://en.wikipedia.org/wiki/Visayas" \o "Visayas), as well as 352 passengers were stranded in Manila.[[10]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-philstar-12) Only three days after Wilma left the Philippines, [Typhoon Haiyan](https://en.wikipedia.org/wiki/Typhoon_Haiyan) (Yolanda) made landfall over there and became the deadliest Philippine typhoon in modern history.

**India**[[edit](https://en.wikipedia.org/w/index.php?title=Tropical_Depression_Wilma_(2013)&action=edit&section=4)]

Depression BOB 05 brought a heavy downpour and caused 16 deaths in [Tamil Nadu](https://en.wikipedia.org/wiki/Tamil_Nadu). Two people were drowned by flooding, and one woman was killed by a collapsing wall. Hundreds of trees were uprooted, and many banana plantations were damaged in [Nagapattinam](https://en.wikipedia.org/wiki/Nagapattinam" \o "Nagapattinam) following gusty winds. The downpour also brought copious inflows to various reservoirs and lakes in the state that supply drinking water to the people.[[32]](https://en.wikipedia.org/wiki/Tropical_Depression_Wilma_(2013)#cite_note-34) In [Sirkazhi](https://en.wikipedia.org/wiki/Sirkazhi" \o "Sirkazhi), electric posts were damaged with power supply suspended in most parts of the district, and the roof of a school building flew off due to squally winds. A fish auction hall building near [Tharangambadi](https://en.wikipedia.org/wiki/Tharangambadi" \o "Tharangambadi) was also damaged due to strong winds. More than 10,000 fishermen did not venture into the sea due to the very rough sea condition and visible high tides in many places