

Third Joint Session
Panel on Tropical Cyclones | Typhoon Committee
(42nd Session of PTC and 47th Session of TC)
9- 13 February 2015
ESCAP - UN Conference Center
Bangkok, Thailand

FOR PARTICIPANTS ONLY
WRD/PTC-TC_3JS/2.1
9 February 2015

ENGLISH ONLY

REVIEW OF THE 2014 TYPHOON SEASON

(submitted by the RSMC Tokyo – Typhoon Center)

Action Proposed

The Committee is invited to review the 2014 typhoon season.

Review of the 2014 Typhoon Season
Provided by RSMC-Tokyo

In the western North Pacific, 23 named tropical cyclones (TCs) formed in 2014, which was below normal, and 11 reached typhoon (TY) intensity (see Table 1). During the season, six named TCs hit the continent. The mean genesis point of named TCs in 2014 excluding Genevieve (1413) was at 13.0°N and 137.1°E, showing a southward deviation from the 30-year average* (16.2°N and 137.4°E).

Three named TCs formed from January to February (see yellow lines in Figure 3). Lingling (1401) formed east of Mindanao Island and caused severe damage to the Philippines. Kajiki (1402) formed east of the Philippines and damaged the Philippines.

Four named TCs formed from April to June (see red lines in Figure 3). Hagibis (1407) formed over the South China Sea and damaged China.

Five named TCs formed in July (see green lines in Figure 3). Neoguri (1408) formed west of the Mariana Islands and damaged Japan. Rammasun (1409) formed southwest of the Mariana Islands and caused severe damage to the Philippines and China, which also damaged Viet Nam. Matmo (1410) formed east of the Philippines and damaged China. Halong (1411) formed east of the Mariana Islands and damaged Japan. Nakri (1412) formed east of the Philippines and damaged Japan and the Republic of Korea.

One named TC formed in August (see purple lines in Figure 3). Genevieve (1413) entered the western North Pacific with TY intensity on 7 August.

Five named TCs formed in September (see blue lines in Figure 3). Kalmaegi (1415) formed east of the Philippines and damaged the Philippines, China and Viet Nam. Fung-wong (1416) formed east of the Philippines and caused damage to the Philippines and China. Phangfone (1418) formed north of the Chuuk Islands and damaged Japan.

Five named TCs formed from October to December (see orange lines in Figure 3). Vongfong (1419) formed northwest of Pohnpei Island and damaged Japan. Sinlaku (1421) formed over the South China Sea and damaged the Philippines and Viet Nam. Hagupit (1422) and Jangmi (1423) caused severe damage to the Philippines.

* The 30-year average is from 1981 to 2010

Table 1 List of the tropical cyclones reaching TS intensity or higher in 2014
Hagibis was of TD intensity between 18 UTC 15 June and 00 UTC 17 June.

Tropical Cyclone			Duration (UTC)		Minimum Central Pressure				Max Wind	
			(TS or higher)		(UTC)	lat (N)	long (E)	(hPa)	(kt)	
TS	Lingling	(1401)	180000	Jan - 200000	Jan	180600	9.7	127.4	1002	35
TS	Kajiki	(1402)	310000	Jan - 010600	Feb	310000	9.7	130.3	1000	35
TY	Faxai	(1403)	281200	Feb - 051800	Mar	041200	17.5	151.2	975	65
TS	Peipah	(1404)	050000	Apr - 051200	Apr	050600	4.8	139.6	998	35
STS	Tapah	(1405)	280000	Apr - 010000	May	290000	15.6	147.3	985	50
TS	Mitag	(1406)	110000	Jun - 120000	Jun	110600	24.0	128.1	994	40
TS	Hagibis	(1407)	140000	Jun - 171200	Jun	140000	20.6	117.0	996	40
TY	Neoguri	(1408)	031800	Jul - 110000	Jul	061800	19.7	129.1	930	100
TY	Rammasun	(1409)	120600	Jul - 191800	Jul	180600	20.0	111.2	935	90
TY	Matmo	(1410)	171200	Jul - 250600	Jul	210000	16.2	127.3	965	70
TY	Halong	(1411)	290000	Jul - 110000	Aug	021200	14.9	135.1	920	105
STS	Nakri	(1412)	291200	Jul - 030600	Aug	311800	27.6	128.2	980	55
TY	Genevieve	(1413)	070600	Aug - 120600	Aug	071800	15.7	177.5	915	110
STS	Fengshen	(1414)	061800	Sep - 101800	Sep	080600	30.0	137.3	975	60
TY	Kalmaegi	(1415)	120600	Sep - 171200	Sep	160000	19.7	111.2	960	75
TS	Fung-wong	(1416)	171200	Sep - 240000	Sep	190600	18.6	120.9	985	45
STS	Kammuri	(1417)	241200	Sep - 300600	Sep	261200	23.2	145.1	985	50
TY	Phanfone	(1418)	290600	Sep - 061200	Oct	020600	19.7	138.2	935	95
TY	Vongfong	(1419)	031800	Oct - 140000	Oct	071800	17.7	133.2	900	115
TY	Nuri	(1420)	310000	Oct - 061800	Nov	021200	17.2	132.5	910	110
TS	Sinlaku	(1421)	280000	Nov - 300600	Nov	290000	12.7	111.8	990	45
TY	Hagupit	(1422)	010600	Dec - 111200	Dec	040600	10.4	132.4	905	115
TS	Jangmi	(1423)	290000	Dec - 311200	Dec	290600	9.4	125.2	998	35

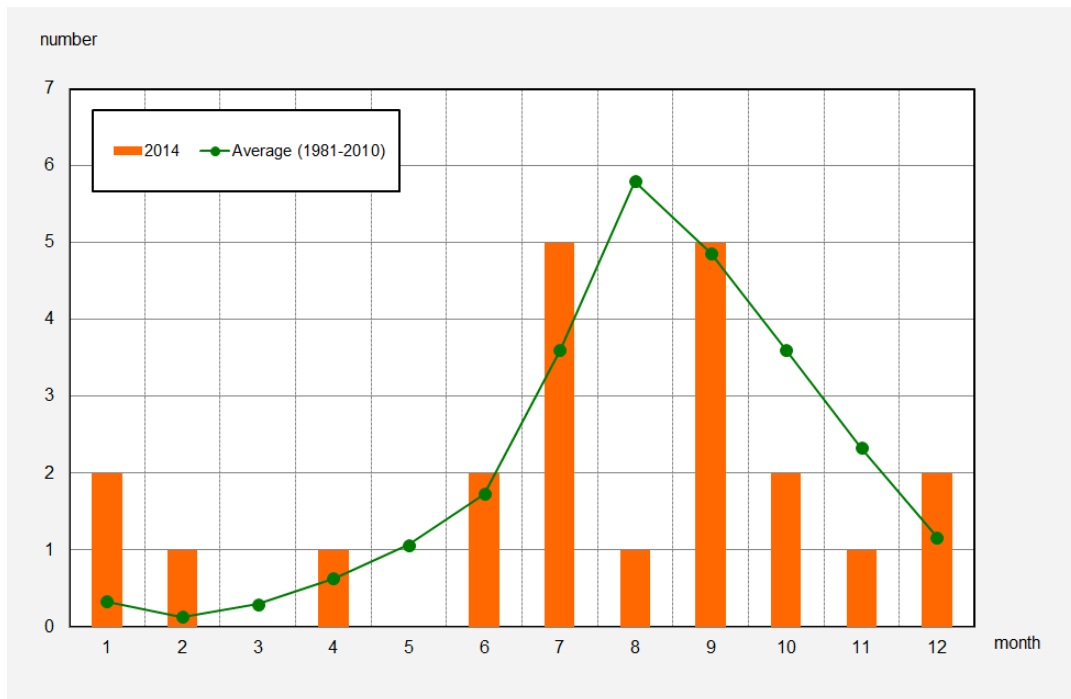


Figure 1 Monthly formation number of named TCs in 2014

Red bar: formation number in 2014, blue line: 30-year average from 1981 to 2010

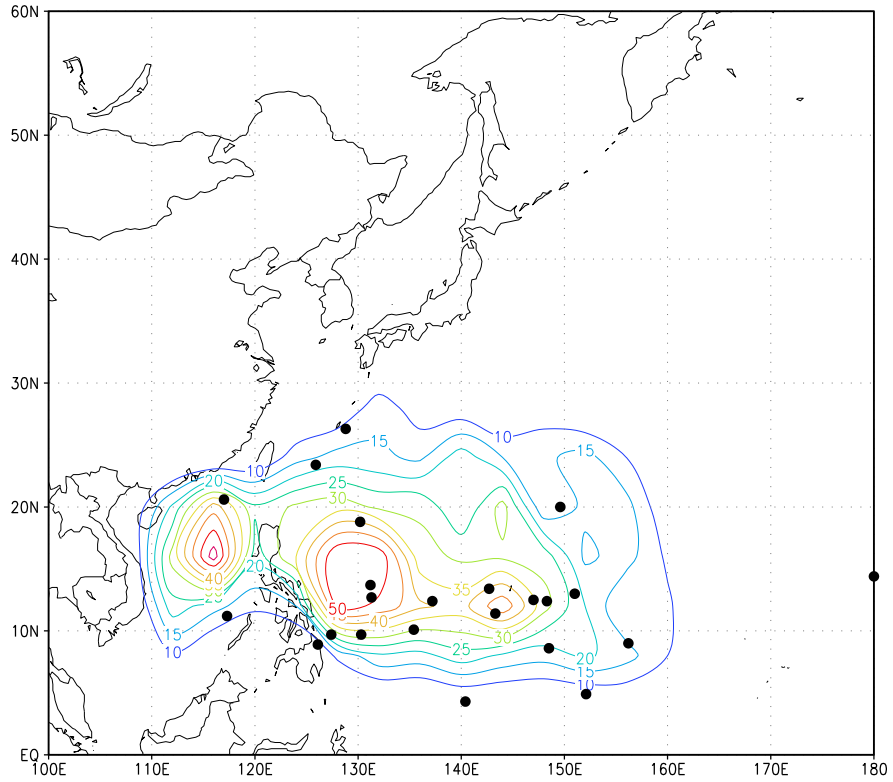


Figure 2 Genesis points of Tropical Cyclones in 2014 (dots) and frequency distribution of genesis points for 1951-2013 (lines)

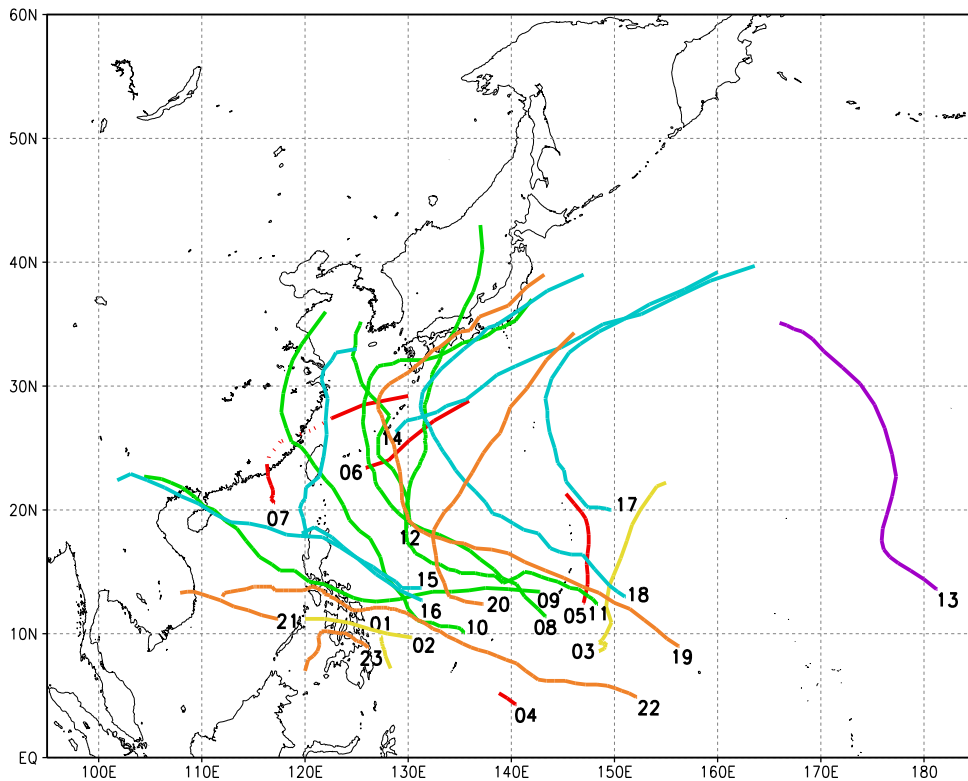


Figure 3 Tracks of Tropical Cyclones in 2014

The numbers represent the genesis points of named TCs (the last two digits of their identification numbers). Dashed line of Hagibis indicates that the maximum sustained wind speed is less than 34 kt.

Narrative Accounts of the 23 Named Tropical Cyclones in 2014

TS LINGLING (1401)

Lingling formed as a tropical depression (TD) over the sea east of Mindanao Island at 00 UTC on 15 January 2014 and slowly moved westward. While Lingling remained almost stationary over the same waters from 12 UTC on 17 January to 12 UTC on 18 January, it was upgraded to tropical storm (TS) intensity at 00 UTC on 18 January and reached its peak intensity with maximum sustained winds of 35 kt and a central pressure of 1002 hPa six hours later. Moving southward, Lingling weakened to TD intensity at 00 UTC on 20 January and dissipated southeast of Mindanao Island 12 hours later.

TS KAJIKI (1402)

Kajiki formed as a tropical depression (TD) around the Caroline Islands at 00 UTC on 29 January 2014. Moving westward, it was upgraded to tropical storm (TS) intensity east of the Philippines at 00 UTC on 31 January when it reached its peak intensity with maximum sustained winds of 35 kt and a central pressure of 1000 hPa. After crossing the central part of the Philippines with TS intensity, Kajiki weakened to TD intensity over the northern part of the Sulu Sea at 06 UTC the next day and dissipated west of Palawan Island 12 hours later.

TY FAXAI (1403)

Faxai formed as a tropical depression (TD) southeast of the Mariana Islands at 12 UTC on 27 February 2014. Remaining almost stationary, it was upgraded to tropical storm (TS) intensity over the same waters at 12 UTC the next day. After remaining almost stationary, Faxai accelerated north-northeastward on 2 March. It was upgraded to typhoon (TY) intensity and reached its peak intensity with maximum sustained winds of 65 kt and a central pressure of 975 hPa east of the islands at 12 UTC on 4 March. Turning gradually eastward, Faxai transformed into an extratropical cyclone south of Minamitorishima Island at 18 UTC on 5 March and dissipated north of Wake Island at 12 UTC on 8 March.

TS PEIPAH (1404)

Peipah formed as a tropical depression (TD) southwest of the Chuuk Islands at 18 UTC on 2 April 2014 and moved westward. Turning west-northwestward, it was upgraded to tropical storm (TS) intensity south of the Yap Islands at 00 UTC on 5 April. Peipah reached its peak intensity with maximum sustained winds of 35 kt and a central pressure of 998 hPa over the same waters six hours later. Keeping its west-northwestward track, it weakened to TD intensity at 12 UTC the same day and dissipated west of the Palau Islands at 06 UTC on 8 April.

STS TAPAH (1405)

Tapah formed as a tropical depression (TD) over the sea south of the Mariana Islands at 00 UTC

on 27 April 2014 and moved northward. It was upgraded to tropical storm (TS) intensity at 00 UTC the next day southeast of Saipan Island. Continuing northward, Tapah was upgraded to severe tropical storm (STS) intensity and reached its peak intensity with maximum sustained winds of 50 kt and a central pressure of 985 hPa east of the island at 00 UTC on 29 April. Turning northwestward, Tapah weakened to TD intensity at 00 UTC on 1 May, and dissipated southeast of Chichijima Island at 12 UTC the next day.

TS MITAG (1406)

Mitag formed as a tropical depression (TD) over the sea south of Taiwan Island at 00 UTC on 9 June 2014 and moved eastward and then east-northeastward. It was upgraded to tropical storm (TS) intensity at 00 UTC on 11 June south of Okinawa Island, and reached its peak intensity with maximum sustained winds of 40 kt and a central pressure of 994 hPa over the same waters at 06 UTC that day. Moving northeastward, Mitag transformed into an extratropical cyclone south of Honshu Island at 00 UTC on the next day, and dissipated six hours later.

TS HAGIBIS (1407)

Hagibis formed as a tropical depression (TD) over the sea southwest of Taiwan Island at 00 UTC on 13 June 2014. Moving northeastward and then turning northward, it was upgraded to tropical storm (TS) intensity and reached its first peak intensity with maximum sustained winds of 35 kt and a central pressure of 996 hPa over the same waters at 00 UTC the next day. Keeping its northward track and intensity, Hagibis hit the southern part of China and then weakened to TD intensity there at 18 UTC on 15 June. Turning northeastward the next day and then entering the East China Sea, it was re-upgraded to TS intensity there at 00 UTC on 17 June. Hagibis reached its second peak intensity with maximum sustained winds of 40 kt and a central pressure of 996 hPa northwest of Okinawa Island at 06 UTC on 17 June and then weakened to TD intensity north of Amami Oshima Island six hours later. Hagibis transformed into an extratropical cyclone south of Shikoku Island at 18 UTC the same day and moved eastward. It gradually turned northeastward and continued northeastward until it crossed longitude 180 degrees east before 00 UTC on 23 June.

TY NEOGURI (1408)

Neoguri formed as a tropical depression (TD) south of the Mariana Islands at 12 UTC on 2 July 2014. Moving northwestward, it was upgraded to tropical storm (TS) intensity over the same waters at 18 UTC on 3 July. NEOGURI developed rapidly and was upgraded to typhoon (TY) intensity west of the islands at 12 UTC the next day. Keeping its northwestward track, it reached its peak intensity with maximum sustained winds of 100 kt and a central pressure of 930 hPa at 18 UTC on 6 July. Gradually turning northward, it moved between Miyako Island and Kumejima Island with TY intensity early on 8 July. Turning eastward, Neoguri made landfall on Kyushu Island with severe tropical storm (STS) intensity late on 9 July, then continued eastward along

the southern coastal area of Honshu Island the next day. Gradually turning northward, it transformed into extratropical cyclone at 00 UTC on 11 July and dissipated over the Sea of Okhotsk at 12 UTC on 13 July.

TY RAMMASUN (1409)

Rammasun formed as a tropical depression (TD) over the sea east of the Chuuk Islands at 06 UTC on 9 July 2014. Moving northwestward, it was upgraded to tropical storm (TS) intensity west of Guam Island at 06 UTC on 12 July. Moving westward, Rammasun was upgraded to typhoon (TY) intensity east of the Philippines at 18 UTC on 14 July. Moving west-northwestward, it crossed the Philippines with TY intensity the next day and entered the South China Sea. Rammasun reached its peak intensity with maximum sustained winds of 90 kt and a central pressure of 935 hPa northeast of Hainan Island at 06 UTC on 18 July. After hitting the southern part of China, it was downgraded to severe tropical storm (STS) intensity at 00 UTC on 19 July. Rammasun weakened to TD intensity over the southern part of China at 18 UTC the same day and dissipated 12 hours later.

TY MATMO (1410)

Matmo formed as a tropical depression (TD) over the sea northeast of the Palau Islands at 06 UTC on 16 July 2014. Moving westward, it was upgraded to tropical storm (TS) intensity over the same waters at 12 UTC the next day. Turning northwestward, Matmo was upgraded to typhoon (TY) intensity east of the Philippines at 18 UTC on 20 July and reached its peak intensity with maximum sustained winds of 70 kt and a central pressure of 965 hPa six hours later. After crossing Taiwan Island with TY intensity on 22 July, it was downgraded to TS intensity over the coast of southeastern China at 12 UTC the next day. After turning north-northeastward, Matmo transformed into an extratropical cyclone over the Yellow Sea at 06 UTC on 25 July and dissipated over the northern part of the Korean Peninsula 24 hours later.

TY HALONG (1411)

Halong formed as a tropical depression (TD) over the sea north of Chuuk Islands at 18 UTC on 27 July 2014, and then moved northwestward. It was upgraded to tropical storm (TS) intensity east of Guam Island at 00 UTC on 29 July. After turning westward on 31 July, Halong was upgraded to typhoon (TY) intensity over the sea north of the Yap Islands at 18 UTC on 1 August. Halong reached its peak intensity with maximum sustained winds of 105 kt and a central pressure of 920 hPa over the same waters at 12 UTC the next day. After turning northward on 4 August, it moved east of Minamidaitojima Island on 7 August. Turning northeastward the next day, Halong made landfall on Shikoku Island with TY intensity late on 9 August. After crossing the Kinki region, it entered the Sea of Japan and was downgraded to severe tropical storm (STS) intensity at 06 UTC on 10 August. Moving northward, Halong transformed into an extratropical cyclone over the same waters at 00 UTC on 11 August. Turning eastward the next day, it crossed

Sakhalin Island and dissipated around the Chishima Islands at 06 UTC on 15 August.

STS NAKRI (1412)

Nakri formed as a tropical depression (TD) east of the Philippines at 06 UTC on 28 July 2014 and moved westward. Turning northward, it was upgraded to tropical storm (TS) intensity over the same waters at 12 UTC the next day. Nakri gradually turned northwestward on 30 July before turning northeastward the next day and moving over the East China Sea. It was upgraded to severe tropical storm (STS) intensity over the same waters at 18 UTC on 31 July. Turning northwestward again, Nakri reached its peak intensity with maximum sustained winds of 55 kt and a central pressure of 980 hPa north of Okinawa Island six hours later. Decelerating northeastward on 2 August, it was downgraded to TS intensity west of Jeju Island at 12 UTC the same day. Nakri weakened to TD intensity over the Yellow Sea at 06 UTC on 3 August and dissipated over the Korean Peninsula at 06 UTC the next day.

TY GENEVIEVE (1413)

Genevieve moved northwestward and crossed longitude 180 degrees east over the sea east of the Marshall Islands with typhoon (TY) intensity before 06 UTC on 7 August 2014. Moving northwestward, it reached its peak intensity with maximum sustained winds of 110 kt and a central pressure of 915 hPa over the same waters at 18 UTC the same day. Turning northward then northwestward, Genevieve was downgraded to severe tropical storm (STS) intensity northwest of the Midway Islands at 18 UTC on 10 August. Moving northwestward, it weakened to tropical depression (TD) intensity over the sea far east of Japan at 06 UTC on 12 August. Turning northeastward on 13 August, Genevieve was dissipated south of the Aleutian Islands at 12 UTC the next day.

STS FENGSHEN (1414)

Fengshen formed as a tropical depression (TD) south of Okinawa Island at 12 UTC on 5 September 2014 and moved northward. Turning northeastward, it was upgraded to tropical storm (TS) intensity east of the island at 18 UTC the next day. Keeping its northeastward track, Fengshen reached its peak intensity with maximum sustained winds of 60 kt and a central pressure of 975 hPa over the sea south of Honshu Island at 06 UTC on 8 September. Accelerating northeastward, it transformed into an extratropical cyclone far east of Japan at 18 UTC on 10 September and dissipated 12 hours later.

TY KALMAEGI (1415)

Kalmaegi formed as a tropical depression (TD) over the sea east of the Philippines at 18 UTC on 11 September 2014. Moving westward, it was upgraded to tropical storm (TS) intensity over the same waters 12 hours later. Turning northwestward, Kalmaegi was upgraded to typhoon (TY) intensity east of Luzon Island at 18 UTC on 13 September. After crossing the island and moving

westward over the South China Sea, it reached its peak intensity with maximum sustained winds of 75 kt and a central pressure of 960 hPa near Hainan Island at 00 UTC on 16 September. After hitting the northern part of Viet Nam with TY intensity that day, it was downgraded to TS intensity over the southwestern part of China at 06 UTC the next day. After turning southwestward, Kalmaegi weakened to TD intensity near the border between China and Laos six hours later and dissipated over the same region at 00 UTC on 18 September.

TS FUNG-WONG (1416)

Fung-wong formed as a tropical depression (TD) over the sea east of the Philippines at 00 UTC on 17 September 2014 and moved westward. Gradually turning northwestward, it was upgraded to tropical storm (TS) intensity over the same waters at 12 UTC the same day. Keeping its northwestward track, Fung-wong hit Luzon Island with TS intensity early on 19 September. It reached its peak intensity with maximum sustained winds of 45 kt and a central pressure of 985 hPa over the Luzon Strait at 06 UTC the same day. Fung-wong turned in a counterclockwise direction to circle west of Luzon Island and then moved northward. It moved along the eastern coast of Taiwan Island and entered the East China Sea late on 21 September. Hitting the eastern part of China and turning eastward on 23 September, Fung-wong transformed into an extratropical cyclone west of Jeju Island at 00 UTC on 24 September. After entering the Sea of Japan, it dissipated over Honshu Island at 06 UTC the next day.

STS KAMMURI (1417)

Kammuri formed as a tropical depression (TD) east of the Mariana Islands at 12 UTC on 23 September 2014 and moved northward. Turning westward, it was upgraded to tropical storm (TS) intensity over the same waters at 12 UTC the next day. Turning northwestward on 25 September, Kammuri reached its peak intensity with maximum sustained winds of 50 kt and a central pressure of 985 hPa southeast of the Ogasawara Islands at 12 UTC the next day. After moving northward east of the islands on 27 September, it accelerated northeastward the next day. After transforming into an extratropical cyclone far east of Japan at 06 UTC on 30 September, Kammuri moved eastward and crossed longitude 180 degrees east late the next day.

TY PHANFONE (1418)

Phanfone formed as a tropical depression (TD) over the sea northwest of the Chuuk Islands at 06 UTC on 28 September 2014 and moved northwestward. It was upgraded to tropical storm (TS) intensity east of Guam Island at 06 UTC the next day. Keeping its northwestward track, Phanfone was upgraded to typhoon (TY) intensity over the sea west of the Mariana Islands at 06 UTC on 1 October. It reached its peak intensity with maximum sustained winds of 95 kt and a central pressure of 935 hPa east of Okinotorishima Island at 06 UTC the next day. Continuing northwestward east of Minamidaitojima Island on 4 October, Phanfone turned sharply northeastward and accelerated on 5 October. Keeping its TY intensity, it made landfall on

Honshu Island late the same day. After crossing the Kanto region, Phanfone was downgraded to severe tropical storm (STS) intensity east of Japan at 06 UTC the same day. Turning eastward, Phanfone transformed into an extratropical cyclone over the same waters six hours later. Continuing eastward, it crossed longitude 180 degrees east over the sea south of the Aleutian Islands before 00 UTC on 8 October.

TY VONGFONG (1419)

Vongfong formed as a tropical depression (TD) over the sea west of the Marshall Islands at 12 UTC on 2 October 2014. Moving northwestward, it was upgraded to tropical storm (TS) intensity northwest of Pohnpei Island at 18 UTC the next day. Keeping its northwestward track, Vongfong was upgraded to typhoon (TY) intensity west of the Mariana Islands at 18 UTC on 6 October. It developed rapidly and reached its peak intensity with maximum sustained winds of 115 kt and a central pressure of 900 hPa east of the Philippines 24 hours later. After turning north-northwestward, Vongfong passed around Okinawa Island with TY intensity on 11 October. Turning northeastward over the East China Sea, it made landfall on Kyushu Island late the next day shortly before being downgraded to severe tropical storm (STS) intensity. Vongfong made landfall again on Shikoku Island with STS intensity early on 13 October. Accelerating northeastward, it made landfall again on Honshu Island with STS intensity the same day. Keeping its northeastward track, Vongfong transformed into an extratropical cyclone east of Honshu Island at 00 UTC on 14 October and crossed longitude 180 degrees east near the Aleutian Islands before 12 UTC on 16 October.

TY NURI (1420)

Nuri formed as a tropical depression (TD) over the sea west of Guam Island at 00 UTC on 30 October 2014 and moved westward. Keeping its westward track, it was upgraded to tropical storm (TS) intensity over the same waters at 00 UTC the next day. Gradually turning north-northwestward, Nuri was upgraded to typhoon (TY) intensity over the sea east of the Philippines at 12 UTC on 1 November. Keeping its north-northwestward track, it reached its peak intensity with maximum sustained winds of 110 kt and a central pressure of 910 hPa over the same waters at 12 UTC the next day and then turned northeastward. Nuri was downgraded to severe tropical storm (STS) intensity west of the Ogasawara Islands at 18 UTC on 5 November. Accelerating northeastward, it transformed into an extratropical cyclone east of Japan at 18 UTC on 6 November and dissipated southeast of the Chishima Islands at 12 UTC the next day.

TS SINLAKU (1421)

Sinlaku formed as a tropical depression (TD) east of Mindanao Island at 00 UTC on 26 November 2014 and moved west-northwestward. After crossing the Philippines, it was upgraded to tropical storm (TS) intensity over the South China Sea at 00 UTC on 28 November. Continuing west-northwestward, Sinlaku reached its peak intensity with maximum sustained winds of 45 kt

and a central pressure of 990 hPa over the same waters at 00 UTC the next day. After hitting Viet Nam late on 29 November, it weakened to TD intensity over Viet Nam at 06 UTC the next day and dissipated six hours later.

TY HAGUPIT (1422)

Hagupit formed as a tropical depression (TD) south of the Chuuk Islands at 00 UTC on 1 December 2014. Moving westward, it was upgraded to tropical storm (TS) intensity over the same waters six hours later. Turning west-northwestward on 2 December, Hagupit was upgraded to typhoon (TY) intensity southeast of the Yap Islands at 18 UTC the same day. It rapidly developed and reached its peak intensity with maximum sustained winds of 115 kt and a central pressure of 905 hPa east of the Philippines at 06 UTC on 4 December. Decelerating westward, Hagupit hit the Philippines late on 6 December with TY intensity and it was downgraded to TS intensity over the Philippines at 12 UTC on 8 December. It entered the South China Sea early the next day and moved westward. Hagupit weakened to TD intensity over the same waters at 12 UTC on 11 December and dissipated six hours later.

TS JANGMI (1423)

Jangmi formed as a tropical depression (TD) east of Mindanao Island at 06 UTC on 27 December 2014. Moving westward, it was upgraded to tropical storm (TS) intensity over the island at 00 UTC on 29 December. Jangmi reached its peak intensity with maximum sustained winds of 35 kt and a central pressure of 998 hPa six hours later. Turning southward on 30 December, it weakened to TD intensity over the Sulu Sea at 12UTC the next day. Turning westward, Jangmi hit the northern part of Kalimantan Island on 1 January 2015 and dissipated at 00 UTC the next day.