

# **Global Catastrophe Recap**

October 2015



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## **Executive Summary**

- Hurricane Patricia highlights active October for global tropical cyclone activity
- Historic flooding inundates U.S. state of South Carolina; economic cost expected to top USD2.0 billion
- Magnitude-7.5 earthquake leaves hundreds dead in Afghanistan and Pakistan

Major Hurricane Patricia became the strongest tropical cyclone ever recorded in the Western Hemisphere when its maximum sustained wind speeds reached 200 mph (325 kph) and its central pressure plummeted to 879 millibars. The storm eventually made landfall as a 165-mph (265-kph) Category 5 hurricane near Cuixmala, Mexico. At least 14 fatalities were attributed to the storm, though the level of devastation could have been substantially worse had the storm tracked even slightly to the north or south. Preliminary economic damage was estimated at USD300 million, though this figure is subject to change. Given low insurance penetration in the hardest-hit areas, insured losses were expected to be negligible.

Typhoon Mujigae became the costliest tropical cyclone of 2015 after making separate landfalls in China and the Philippines. At least 22 people were killed. Damage was extensive in China's Hainan and Guangdong provinces as the government listed economic losses at CNY26.6 billion (USD4.2 billion).

Super Typhoon Koppu made landfall in the Philippines as a strong category 4 typhoon, killing at least 58 people and injuring 83 others. Nearly 138,000 homes were damaged or destroyed. Economic damage to agriculture and infrastructure alone was listed at PHP11 billion (USD235 million).

Major Hurricane Joaquin lashed the Bahamas before tracking past Bermuda. Severe damage was reported in several sparsely populated Bahamian islands. Total economic losses were estimated around USD100 million; while the insurance industry did not expect insured losses to exceed USD50 million.

Days of relentless record-setting rainfall caused by a complex atmospheric set-up brought tremendous flooding across the U.S. state of South Carolina, killing at least 19 people. The event left considerable inundation damage to residential and commercial properties, vehicles, and infrastructure following the more than two feet (610 millimeters) of rain that fell. Total economic losses were expected to minimally be USD2.0 billion. Insurers preliminarily reported roughly USD350 million in claims. Additional insured losses via NFIP and the USDA RMA crop insurance program were expected to be at least USD100 million.

Severe thunderstorms in the French Riviera impacted areas from Monaco to Fréjus, prompting massive flash flooding. At least 19 people were killed after several rivers and streams overflowed their banks. The French insurance industry expected payouts to reach up to EUR650 million (USD720 million) from 60,000 claims. Total economic losses were expected to exceed USD1.0 billion.

Major flooding was also recorded elsewhere in the U.S., Brazil, Guatemala, Italy, Algeria and Myanmar.

A major magnitude-7.5 earthquake struck northern Afghanistan on October 26, shaking a large swath of the country as well as portions of Tajikistan, Pakistan, and India. At least 403 people were confirmed dead and thousands of others were injured. Nearly 80,000 homes and structures were damaged or destroyed in Pakistan, with up to 16,000 impacted in Afghanistan.

Severe weather left damage resulting from tornadoes, hail and damaging straight-line winds during the month in parts of the U.S., Canada, China, and Australia.

Drought conditions worsened in Papua New Guinea as El Niño impacts intensified globally.

## **United States**

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/01-10/11	Flooding	Southeast, Mid-Atlantic	21	70,000+	2.0+ billion
10/03-10/04	Severe Weather	New Mexico	0	10,000+	90+ million
10/05-10/07	Severe Weather	Texas	0	10,000+	80+ million
10/15-10/16	Flooding	California	1	Hundreds	Millions
10/20-10/23	Severe Weather	New Mexico, Texas	0	Thousands	Millions
10/24-10/26	Flooding	Texas, Southeast	0	Thousands	100+ million
10/29-11/03	Severe Weather	Texas, Southeast	6	Thousands	100+ million

Days of relentless record-setting rainfall brought tremendous flooding across much of the state of South Carolina and elsewhere in the Southeast and Mid-Atlantic. At least 21 people were confirmed dead, of which 19 were from South Carolina. Hundreds of residents were stranded by high water levels following more than two feet (610 millimeters) of rain that fell from October 1-5. The National Weather Service (NWS) confirmed that some areas sustained 1-in-1,000 year rainfall totals. Preliminary reports suggested considerable flood inundation damage in South Carolina to residential and commercial properties, vehicles, and infrastructure. Total economic losses were expected to minimally be USD2.0 billion, including infrastructure and USD300 million in damage to crops. Insurers preliminarily reported roughly USD350 million in claims. Additional insured losses via NFIP and the USDA RMA crop insurance program were expected to be at least USD100 million.

The combination of tropical moisture and atmospheric instability led to severe thunderstorms across parts of New Mexico on October 3-4. Golf ball-sized hail pelted multiple communities of the state, including Las Cruces, Berino and East Mesa, which led to significant damage to roofs and windows of homes, businesses and vehicles. Total economic losses were estimated at USD90 million; while insurers noted payouts in excess of USD60 million.

Consecutive days of severe thunderstorms tracked across western Texas from October 5-7, causing major damage in the greater El Paso metro region. Up to golf ball-sized hail and damaging straight-line winds led to widespread damage to commercial buildings, homes and vehicles. Total economic losses were estimated around USD80 million; while insurers noted payouts in excess of USD55 million.

Heavy rainfall over Southern California on October 15 and 16 led to flooding and mudslides that claimed at least one life. Rainfall at Leona Valley, approximately 40 miles (65 kilometers) north of Los Angeles, was reported by the National Weather Service (NWS) to be a 1-in-1,000 year rainfall event. Officials estimated that a total of 300,000 cubic yards (229,365 cubic meters) of mud and debris was deposited on major highways throughout the area. The total cost of damages was still being assessed at the time of this writing but is expected to rise well into the millions of dollars (USD).

Rounds of severe thunderstorms impacted portions of New Mexico and western Texas from October 20-23 due to a slow-moving storm system. Large hail and damaging straight-line winds were reported in several metro regions (including El Paso, TX and Santa Fe, NM) as residential and commercial properties, plus vehicles, were damaged. Total economic and insured losses were expected to reach well into the millions of dollars (USD). The remnants of Hurricane Patricia combined with a separate area of low pressure to bring tremendous rainfall to parts of Texas, Louisiana and the rest of the Gulf Coast states from October 24-26. Flash flood and river flooding was reported as widespread property and vehicle damage occurred due to water inundation. Total economic losses were expected to well exceed USD100 million.

Consecutive days of torrential rainfall and severe thunderstorms impacted Texas and the Southeast, killing at least six people. The storms, which occurred from October 29 to November 3, led to significant flooding in Texas, Louisiana and elsewhere along the Gulf Coast. Some parts of Texas recorded more than 18.00 inches (457 millimeters) of rain. Several tornado touchdowns, large hail and damaging straight-line winds also led to additional impacts across the region. Total economic losses were expected to well exceed USD100 million.

## Remainder of North America (Non-U.S.)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/01	Landslide	Guatemala	304	125	Unknown
10/01-10/04	MHU Joaquin	Bahamas, Bermuda	35	Thousands	100+ million
10/11-10/12	Severe Weather	Canada	0	Thousands	Millions
10/22-10/25	MHU Patricia	Mexico	14	5,000+	300+ million

A prolonged period of heavy rainfall triggered a massive landslide near Guatemala City, Guatemala, on October 1 that claimed hundreds of lives. The slide tore through the community of El Cambray Dos, Santa Catarina Pinula, just southeast of Guatemala City, burying 125 homes. At least 304 people were dead or missing, though just 264 bodies had been recovered.

Major Hurricane Joaquin lashed the Bahamas on October 1 and 2 before tracking past Bermuda on October 4. Devastating damage and significant flooding were reported on Long Island, Samana Cay, Mayaguana, San Salvador, Rum Cay, Crooked Island, Acklins Island, Harbor Island, and Exuma; while damage in Bermuda was widespread but not extensive. Joaquin was also blamed for the sinking of the SS El Faro which went down near the Bahamas on October 2 with 33 crew members on board. Total economic losses were estimated around USD100 million; while the Bahamian insurance industry did not expect insured losses to exceed USD50 million.

A deep low pressure system brought destructive winds to portions of Canada's Prairie Provinces on October 11 and 12. Alberta, Saskatchewan, and Manitoba were all affected as gusts up to 120 kph (75 mph) were recorded. There were widespread reports of downed trees and power lines as well as light structural damage and damage to vehicles. At least 5,000 power outages were noted. Economic and insured losses were both expected to reach into the tens of millions of USD.

Major Hurricane Patricia became the strongest tropical cyclone ever recorded in the Western Hemisphere when its maximum sustained wind speeds reached 200 mph (325 kph) and its central pressure plummeted to 879 millibars. The storm would make landfall on October 23 as a 165-mph (265-kph) Category 5 hurricane near Cuixmala, Mexico in Jalisco state. At least 14 fatalities were attributed to the storm, though the level of devastation could have been substantially worse had the storm tracked even slightly to the north or south. More than 5,000 homes and other structures were damaged or destroyed, though impacts to infrastructure and agriculture were significant. Preliminary economic damage was estimated at USD300 million, though this figure is subject to change. Given low insurance penetration in the hardest-hit areas, insured losses were expected to be negligible.

## South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/08-10/20	Flooding	Brazil	3	40,700+	Millions

Heavy rainfall throughout the southern Brazilian states of Santa Catarina and Rio Grande do Sul prompted local authorities to declare a state of emergency due to the resulting floods. The rains, enhanced by El Niño, fell from October 8-20. At least three people died in Santa Catarina as 1,698 homes and 80 public buildings sustained damages. In Rio Grande do Sul, numerous rivers were flowing above their flood levels including the Guaiba and Itajaí do Sul Rivers which recorded its second highest level ever in the capital city of Porto Alegre. Approximately 39,000 homes were damaged rendering 1,790 families homeless.

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/03-10/04	Flooding	France	19	60,000+	1.0+ billion
10/14-10/16	Flooding	Italy, Balkans	5	Hundreds	10s of Millions

Severe thunderstorms flared up in the French Riviera in a line extending from Monaco in the northeast to Fréjus in the southwest. At least 19 people were killed while one other was listed as missing as torrential rainfall prompted flash floods throughout the region. Several rivers and streams overflowed their banks while, at the height of the storms, some 27,000 customers were without power. Several roads were closed and numerous train services were halted due to flooded tracks. The French insurance industry expected payouts to reach up to EUR650 million (USD720 million) from 60,000 claims. Total economic losses were expected to exceed USD1.0 billion.

Portions of Italy and the Balkan countries were hit by severe storms from October 14-16 that brought torrential rainfall and prompted flash floods. Italy was worst affected, reporting at least five fatalities and widespread damages to properties and vehicles. Flooding was also reported in parts of Croatia as the Korana and Kupa Rivers both overflowed their banks. At least 400 homes and 84 commercial buildings were damaged. In Bosnia, at least 20 homes were damaged in Knežica and 60 were inundated in Bihać according to local media reports.

## Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/16-10/25	Flooding	Algeria	0	Thousands	Unknown

Heavy rainfall and flooding impacted southwestern portions of Algeria from October 16-25, causing widespread devastation. At least 25,000 people lost their homes as floods swept through and destroyed mud-brick homes. Other facilities such as hospitals, schools, shops, and livestock sheds were also damaged. Water inundation severely impacted local infrastructure as well.

## Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
9/30-10/1	Winter Weather	China	1	Unknown	177 million
10/02-10/04	TY Mujigae	China, Philippines	22	26,800	4.2+ billion
10/06-10/11	Severe Weather	China	14	5,200	43 million
10/08-10/12	Flooding	Myanmar	39	Hundreds	Unknown
10/18-10/22	STY Koppu	Philippines	58	150,000+	235+ million
10/26	Earthquake	Afghanistan, Pakistan	403+	95,000+	100+ million

A cold air outbreak engulfed northern provinces of China from September 30 through October 1 sending temperatures plummeting in Gansu, Hebei, Henan, Ningxia Hui, Shaanxi, Shandong, and Shanxi. At least one individual died while thousands of hectares of crops were damaged. Economic losses were estimated at CNY1.1 billion (USD177 million).

Typhoon Mujigae made landfall in Philippines as a tropical storm on October 2 before rapidly intensifiying and striking China on October 4 as a Category 3 Typhoon. Mujigae claimed two lives in the Philippines and at least 20 in China. More than 700 homes in Philippines were damaged while almost 100 villages were flooded. Damage in China was much more extensive: approximately 8,600 homes were destroyed and 17,500 were damaged. Extensive damage to agriculture and infrastructure was also noted. Economic losses in Philippines were USD1.3 million; while in China they reached CNY26.6 billion (USD4.2 billion) making Mujigae the costliest tropical cyclone of the calendar year to date.

A severe weather outbreak that struck southern China's Yunnan Province from October 6-11 claimed at least 14 lives and prompted widespread damages. More than 300 homes collapsed and a further 4,900 were damaged. Significant damage was also noted to tobacco and rice crops. China's Ministry of Civil Affairs listed total economic losses at CNY270 million (USD43 million).

Torrential rain from October 8-12 triggered flooding and landslides that claimed up to 39 lives in Myanmar. Of note, flash floods swept through Kalewa Township, Sagaing, on October 8, washing away at least 16 individuals and damaging some agricultural interests. Hpa-Saung Township, Kayah State, was struck by a landslide on October 11 that claimed at least 17 lives and destroyed 60 homes.

Super Typhoon Koppu made landfall in the Philippines on October 18 as a strong category 4 typhoon, killing at least 58 people and injuring 83 others. The storm stalled over and near Luzon Island bringing tremendous rainfall and flooding. More than 3.1 million people were affected as the government noted that nearly 138,000 homes and 1,000 other facilities were damaged or destroyed. Economic damage to agriculture and infrastructure alone was preliminarily listed at PHP11 billion (USD235 million).

A major magnitude-7.5 earthquake struck northern Afghanistan on October 26, shaking a large swath of the country as well as portions of Tajikistan, Pakistan, and India. At least 403 people were confirmed dead and nearly 3,000 others were injured. Geopolitical issues in Afghanistan made it difficult for officials to gauge an accurate death toll and scope of damage in the hardest-hit regions. The main tremor struck at 01:40 PM AFT local time (09:10 UTC) with an epicenter located 254 kilometers (158 miles) north-northeast of Kabul. Nearly 80,000 homes and other structures were damaged or destroyed in Pakistan, with more than 15,000 impacted in Afghanistan. Total economic losses were expected to exceed USD100 million. Given extremely low insurance penetration, insured losses will be negligible.

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
7/1-10/31	Drought	Papua New Guinea	0	Unknown	60+ million
10/27-10/28	Severe Weather	Australia (QLD)	0	Hundreds	Millions

## Oceania (Australia, New Zealand, South Pacific Islands)

The government of Papua New Guinea announced in October that USD60 million in aid was being distributed to the country to cope with impacts from drought. Some parts of the country were feeling the effects of drought as early as July. Food security and water access issues were growing as the current El Niño phase has intensified.

A series of supercell thunderstorms led to widespread damage in multiple communities in southeastern Queensland on October 27-28. No serious injuries or fatalities were reported. The towns of Fernvale and Chinchilla were worst affected as high winds, hail, and flooding rains accompanied the storms. Hail accumulated up to 7.5 centimeters (3 inches) in some isolated locations. Total economic losses were estimated in the millions of dollars (USD) by local officials.

# Appendix

## Updated 2015 Data: January-September

#### **United States**

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/01-9/30	Drought	Western U.S.	0	Unknown	4.5+ billion
1/06-1/11	Winter Weather	Midwest, Northeast, Mid-Atlantic	15	Hundreds+	100+ million
1/26-1/28	Winter Weather	Northeast, Mid-Atlantic	2	5,000+	500+ million
1/31-2/04	Winter Weather	Midwest, Northeast, Southwest	22	10,000+	150+ million
2/06-2/08	Flooding	Northwest, Southwest	1	Hundreds	Millions+
2/07-2/11	Winter Weather	Northeast	2	25,000+	400+ million
2/13-2/15	Winter Weather	Midwest, Northeast, Mid-Atlantic	30	45,000+	650+ million
2/16-2/17	Winter Weather	Southeast	10	10,000+	100+ million
2/16-2/22	Winter Weather	Plains, Ohio Valley, Mid-Atlantic	8	215,000+	3.25+ billion
2/25-2/26	Winter Weather	Southeast, Mid-Atlantic	2	Thousands	Millions+
3/01-3/06	Winter Weather	Central & Eastern U.S.	13	10,000+	175+ million
3/25-3/26	Severe Weather	Plains, Midwest, Southeast	1	35,000+	500+ million
3/31-4/01	Severe Weather	Plains, Midwest, Southeast	0	20,000+	175+ million
4/02-4/03	Severe Weather	Plains, Midwest, Southeast	0	25,000+	250+ million
4/07-4/10	Severe Weather	Plains, Midwest, Mississippi Valley	3	160,000+	1.6+ billion
4/16-4/17	Severe Weather	Plains	1	Thousands	100s of Millions
4/18-4/21	Severe Weather	Plains, Southeast, Northeast	0	135,000+	1.4+ billion
4/24-4/28	Severe Weather	Plains, Southeast	4	115,000+	950+ million
5/03-5/05	Severe Weather	Plains, Midwest	1	15,000+	175+ million
5/06-5/13	Severe Weather	Plains, Midwest, Rockies	6	90,000+	1.0+ billion
5/10	TS Ana	South Carolina	0	Hundreds	Millions
5/15-5/19	Severe Weather	Plains, Midwest, Rockies	2	15,000+	150+ million
5/23-5/28	Severe Weather	Plains, Midwest, Rockies, Southeast	32	150,000+	3.75+ billion
5/28-5/30	Severe Weather	Plains, Midwest, Rockies, Southeast	0	20,000+	170+ million
6/03-6/08	Severe Weather	Rockies, Plains	0	60,000+	600+ million
6/09-6/11	Severe Weather	Great Lakes	0	10,000+	100+ million
6/16-6/18	TS Bill	Texas, Oklahoma	1	10,000+	100+ million
6/19-6/26	Severe Weather	Plains, Midwest	4	100,000+	925+ million
6/28-6/30	Wildfires	Northwest	0	100+	150+ million
6/29-7/01	Severe Weather	Midwest, Northeast, Southeast	0	Thousands	Millions+
7/12-7/14	Severe Weather	Midwest, Ohio Valley, Southeast	4	60,000+	500+ million
7/16-7/18	Severe Weather	Plains, Midwest	4	7,500+	75+ million
7/20-8/05	Flooding	Florida	0	2,000+	100+ million
7/29-8/13	Wildfires	California	1	150+	Millions
8/02-8/04	Severe Weather	Midwest, Plains, Northeast, Mid-Atlantic	4	100,000+	750+ million
8/13-8/31	Wildfires	Northwest, Rockies	4	Thousands	150+ million
8/29-8/30	Severe Weather	Pacific Northwest	2	1,000+	Millions+

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
9/09-10/30	Wildfires	California	7	10,000+	2.0+ billion
9/13-9/15	Flooding	Southwest	19	Thousands	Millions
9/24-9/28	Flooding	Northeast, Mid-Atlantic, Southeast	1	Thousands	Millions

## Remainder of North America (Non-U.S.)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/01-12/31	Drought	Canada	0	Unknown	1.0+ billion
2/20-2/21	Flooding	Dominican Republic	2	4,190+	Unknown
3/26-3/28	Severe Weather	Mexico	14	1,000+	Millions
4/04-4/05	Flooding	Haiti	6	8,832+	Unknown
5/26	Severe Weather	Mexico	14	1,000+	Unknown
6/01-7/31	Drought	El Salvador	0	Unknown	100 million
6/08	HU Blanca	Mexico	0	Hundreds	Thousands
6/12	Severe Weather	Canada	0	5,000+	75+ million
6/22	Severe Weather	Canada	0	5,000+	40+ million
6/27-7/09	Flooding	Costa Rica	0	3,308+	Unknown
7/01-7/10	Wildfire	Canada	1	Hundreds	Unknown
7/21-7/22	Severe Weather	Canada	0	25,000+	375+ million
8/04-8/05	Severe Weather	Canada	0	17,700+	150+ million
8/13-8/21	Wildfires	Canada	0	Hundreds	193+ million
8/27-8/30	TS Erika	Caribbean Islands	36	5,000+	300+ million
8/29-8/30	Severe Weather	Canada	0	2,100+	50+ million
9/22-9/28	Flooding	Central America, Caribbean	5	1,700+	Millions

#### South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
12/01-1/31	Drought	Brazil	0	Unknown	Unknown
1/15-1/31	Flooding	Bolivia, Peru	16	10,780+	Unknown
2/15	Flooding	Argentina	8	1,500	17.2 million
3/01-3/06	Flooding	Argentina, Bolivia, Brazil, Ecuador, Peru	47	30,000+	Millions+
3/20-4/05	Severe Weather	Colombia, Ecuador, Peru	23	802+	Unknown
3/25-4/08	Flooding	Chile	25	14,000+	1.5+ billion
4/20	Severe Weather	Brazil	2	2,188+	2.0+ million
4/22-4/23	Volcano	Chile	0	Thousands	600+ million
4/27	Landslide	Brazil	15	Hundreds	Unknown
5/17	Flooding	Colombia	83	Hundreds	Unknown
8/06-8/10	Flooding	Argentina, Chile	9	Thousands	Unknown
9/16	Earthquake	Chile	14+	10,000+	1.0+ billion

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/09-1/16	EU Windstorms	Northern/Central/Western Europe	2	Thousands	650+ million
1/29-2/01	Winter Weather	Western/Northern Europe	12	Hundreds	Millions+
1/30-2/02	Flooding	Balkans, Turkey	13	2,170+	13+ million
2/03-2/08	Winter Weather	Spain, France, Italy, Slovenia, Croatia	7	Thousands	Millions+
3/04-3/07	Winter Weather	Italy, Balkans	7	Thousands	Millions+
3/29-4/01	WS Mike & Niklas	Western & Central Europe	9	10,000+	1.0+ billion
4/12-4/13	Wildfire	Russia	33	1,476+	140+ million
5/05-5/06	Severe Weather	Germany, Belgium	1	Thousands	10s of millions
6/01-8/31	Drought	Romania, Poland, Czech Republic	0	100,000+	2.7+ billion
6/27-7/01	Heatwave	Western Europe	0	Unknown	Unknown
7/24-7/25	Severe Weather	Netherlands, Germany, Poland, Slovakia	3	Thousands	25+ million
8/01-8/14	Heatwave/Wildfires	Central & Southern Europe, Middle East	109+	Unknown	9.0+ million
9/05	Severe Weather	Italy	0	Thousands	Millions
9/07	Flooding	Spain	4	1,000+	Millions

#### Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
12/01-1/31	Flooding	Malawi, Mozambique, Zimbabwe	307	550,000+	550+ million
1/02-1/04	Severe Weather	Malawi, Zimbabwe	15	Hundreds	Unknown
1/16-1/18	TS Chedza	Madagascar	89	5,000+	36 million
2/07-2/08	TS Fundi	Madagascar	6	8,091	10+ million
2/13-2/14	Flooding	Angola	5	2,862+	Unknown
2/27-3/01	Flooding	Madagascar	24	642	Unknown
3/04	Flooding	Tanzania	47	634	Unknown
3/09-3/12	Flooding	Angola	69	2,500+	Unknown
3/28-3/29	Flooding	Burundi, Angola, Congo	24	500+	Unknown
4/04-4/10	Flooding	Kenya	13	Hundreds	Unknown
4/28	Flooding	Kenya	16	300+	Unknown
6/01-6/21	Flooding	Côte d'Ivoire	16	Unknown	Unknown
6/01-8/31	Drought	Botswana	0	Unknown	44+ million
8/08-8/09	Severe Weather	Sudan	20	Unknown	Unknown
8/13-8/15	Heatwave	Sudan	16	Unknown	Unknown
8/14	Flooding	Niger	4	2,170+	Unknown
7/15-9/10	Flooding	Burkina Faso	8	15,000+	31+ million
9/05-9/24	Flooding	Nigeria	53	53,000+	25+ million

#### Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/01-12/31	Wildfires	Indonesia	0	Unknown	4.0+ billion
1/01-12/31	Drought	China	0	Unknown	1.8+ billion
1/01-4/30	Drought	Thailand	0	Unknown	428+ million
1/01-1/23	Flooding	Indonesia	8	13,050+	6+ million
1/01-12/31	Wildfires	Indonesia	0	Unknown	4.0+ billion
1/06-1/10	Winter Weather	Egypt, Israel, Jordan, Lebanon, Syria	9	Unknown	100+ million
1/09-1/12	Winter Weather	China	1	5,300+	226+ million
1/10-1/14	Earthquakes	China	0	17,500+	16+ million
1/14-1/20	Flooding	Malaysia	1	Thousands	Unknown
1/17-1/18	TY Mekkhala	Philippines	2	538+	1.0+ million
1/19	Severe Weather	Oman	0	5,000+	221+ million
1/23-1/25	Flooding	Indonesia	1	2,750+	Unknown
1/28-1/31	Winter Weather	China	0	1,000+	28+ million
1/31	Severe Weather	China	0	Unknown	80+ million
1/31-2/2	Flooding	Indonesia	2	5,050+	Unknown
2/08-2/13	Flooding	Indonesia	6	Thousands	235+ million
2/15-2/28	Winter Weather	Afghanistan, India	230	6,013	Unknown
2/22	Earthquake	China	0	3,000+	15+ million
2/24-3/3	Flooding	Pakistan	32	Unknown	Unknown
3/01	Earthquake	China	0	16,300+	19+ million
3/07-3/08	Winter Weather	Afghanistan, Pakistan	26	150+	Unknown
3/11-3/15	Severe Weather	India, Iran	20	1,140+	Unknown
3/14	Earthquake	China	2	11,234+	Millions+
3/16	Flooding	Indonesia	0	1,600+	Unknown
3/23-3/27	Flooding	Saudi Arabia	11	1,000+	Millions+
3/24-3/25	Severe Weather	China	0	1,000+	275+ million
3/25-4/5	STY Maysak	Micronesia, Philippines	9	2,000+	8+ million
3/28	Flooding	Indonesia	12	Unknown	Unknown
3/29-3/31	Winter Weather	China	0	1,000+	108+ million
3/29-3/31	Flooding	India	17	Thousands	38+ million
3/30	Earthquake	China	0	6,260+	20+ million
3/30-4/04	Severe Weather	China	6	19,300+	209 million
4/01-4/03	Severe Weather	India, Pakistan, Tajikistan, Afghanistan	33	1,000+	Millions
4/04-4/05	Severe Weather	China	7	14,500+	20+ million
4/04-4/05	Severe Weather	Bangladesh, India, Myanmar	40	46,033+	4.3+ million
4/06-4/09	Severe Weather	China	1	5,000+	130+ million
4/08-4/12	Flooding	Kazakhstan	2	1,760+	5.3+ million
4/11-4/13	Winter Weather	China	0	Unknown	174+ million
4/19-4/21	Severe Weather	China	0	2,000+	350+ million
4/21	Severe Weather	India	42	25,000+	158+ million
4/25 & 5/12	Earthquake	Nepal, India, Bangladesh, China	9,120	850,000+	8+ billion
4/27	Landslide	Afghanistan	52	100	Unknown

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
4/27-4/28	Severe Weather	Pakistan	49	Hundreds	Unknown
4/27-4/29	Severe Weather	China	2	36,500	485+ million
5/02-5/03	Severe Weather	Bangladesh	13	Unknown	Unknown
5/07-5/12	Severe Weather	China	4	26,600+	461+ million
5/10-5/12	STY Noul	Micronesia, Philippines, Japan	2	Unknown	24+ million
5/12	Flooding	China	0	2,000+	290+ million
5/13-5/17	Flooding	China	20	20,000+	254+ million
5/15	Severe Weather	Armenia	0	Hundreds+	10+ million
5/18-5/22	Flooding	China	48	87,000+	1.15+ billion
5/21-5/28	Heatwave	India	2,500+	Unknown	Unknown
5/23-5/27	Flooding	China, Taiwan, Hong Kong	7	2,500+	282+ million
5/28-6/01	Flooding	China	16	20,000+	500+ million
5/29-6/01	Severe Weather	China	0	10,000+	325+ million
6/01-8/01	Drought	China	0	Unknown	1.8+ billion
6/01-6/04	Flooding	China	9	20,000+	625+ million
6/02-6/29	Volcano	Indonesia	0	Unknown	61+ million
6/05	Earthquake	Malaysia	19	Dozens	Thousands
6/06-6/11	Flooding	India, Nepal	21	1,000+	Unknown
6/07-6/11	Flooding	China	16	20,000+	2.0+ billion
6/12	CY Ashobaa	Oman	0	Dozens	Thousands
6/18-6/24	Heatwave	Pakistan	1,265+	Unknown	Unknown
6/19-6/25	Flooding	India	41	Thousands	100+ million
6/20-6/24	Flooding	China	9	8,700+	187+ million
6/21-6/23	Severe Weather	China	0	Hundreds	145+ million
6/22-6/24	TS Kujira	China, Vietnam	7	223+	11+ million
6/23-6/30	Flooding	Bangladesh, Myanmar, India	63	Thousands	Unknown
6/25-6/29	Flooding	China	0	6,200+	58+ million
6/26-7/02	Flooding	China	16	50,000+	645+ million
7/01-7/05	Flooding	China	6	23,300+	345+ million
7/03	Earthquake	China	4	12,000+	3.2+ million
7/03-7/07	Severe Weather	China	1	2,000+	169+ million
7/04-7/13	TY Chan-hom	China, Guam, Japan, Taiwan, Korea	0	4,700+	1.6+ billion
7/04-7/10	TY Linfa	Philippines, China	5	493+	214+ million
7/07-7/13	Flooding	India, Pakistan	35	Thousands	Unknown
7/08-7/13	Flooding	Philippines	16	10+	Unknown
7/13-7/14	Severe Weather	China	1	600+	85+ million
7/13-7/14	Flooding	China	3	8,500+	71+ million
7/16	STY Nangka	Japan	2	288+	200+ million
7/17-7/25	Flooding	Pakistan	18	Thousands	Unknown
7/17-8/11	Heatwave	Japan	59	Unknown	Unknown
7/20-7/24	Flooding	China	28	42,900+	1.2+ billion
7/22-7/27	Flooding	Pakistan, Myanmar, Afghanistan, Bangladesh	162	39,000+	25+ million
7/24-8/06	Flooding	Vietnam	42	2,028+	204+ million
7/25-8/07	Flooding	Myanmar	121	50,000+	109+ million

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
7/26-8/06	Flooding	India, Pakistan, Bangladesh	303	350,000+	500+ million
8/01-8/05	Flooding	North Korea	21	968+	Unknown
8/01-8/07	Flooding	Nepal	90	1,000+	Unknown
8/01-8/15	Flooding	Laos	0	2,200+	10+ million
8/02-8/04	Flooding	China	15	15,000+	418+ million
8/02-8/08	STY Soudelor	China, Taiwan, Saipan	41	150,000+	3.2+ billion
8/07-8/12	Severe Weather	China	1	1,000+	59+ million
8/15-8/26	TY Goni	Japan, Philippines, Korea Peninsula	70	20,000+	900+ million
8/16-8/19	Flooding	China	23	25,800+	220+ million
8/19-8/26	Severe Weather	China	1	10,000+	281+ million
8/28-9/01	Flooding	India, Myanmar	47	50,000+	100+ million
9/06	Severe Weather	India	32	Unknown	Unknown
9/08-9/10	Sandstorm	Middle East	12	Thousands	Unknown
9/08-9/10	Flooding	Japan	8	25,000+	500+ million
9/15-9/23	Flooding	China	14	4,000+	473+ million
9/25	Earthquake	Indonesia	0	2,500	Unknown
9/25-9/28	TY Dujuan	Taiwan, China, Japan, Philippines	3	Thousands	687+ million

## Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/02-1/08	Wildfires	Australia	0	996+	50+ million
2/20	Cyclone Lam	Australia	0	Hundreds	78+ million
2/20	Cyclone Marcia	Australia	0	36,483+	650+ million
3/11-3/15	CY Pam	Vanuatu, South Pacific Islands	16	30,000+	443 million
3/13-3/15	CY Olwyn	Australia (WA)	0	500+	76+ million
3/20-3/24	CY Nathan	Australia (QLD, NT)	0	Hundreds	Millions
4/19-4/22	Severe Weather	Australia (NSW)	4	119,935+	925+ million
4/25	Severe Weather	Australia (NSW)	0	14,239+	500+ million
4/30-5/03	Flooding	Australia (QLD, NSW)	6	27,825+	400+ million
5/14-5/15	Flooding	New Zealand	1	Thousands	100+ million
5/14	STY Dolphin	Northern Mariana Islands	0	Hundreds	Unknown
6/20	Flooding	New Zealand	0	2,839+	171+ million
6/30-7/05	CY Raquel	Solomon Islands	1	150+	Millions
8/25-8/26	Severe Weather	Australia (NSW)	0	1,600+	Millions

#### Additional Report Details

TD = Tropical Depression, TS = Tropical Storm, HU = Hurricane, TY = Typhoon, STY = Super Typhoon, CY = Cyclone

Fatality estimates as reported by public news media sources and official government agencies.

Structures defined as any building – including barns, outbuildings, mobile homes, single or multiple family dwellings, and commercial facilities – that is damaged or destroyed by winds, earthquakes, hail, flood, tornadoes, hurricanes or any other natural-occurring phenomenon. Claims defined as the number of claims (which could be a combination of homeowners, commercial, auto and others) reported by various insurance companies through press releases or various public media outlets.

Damage estimates are obtained from various public media sources, including news websites, publications from insurance companies, financial institution press releases and official government agencies. Damage estimates are obtained from various public media sources, including news websites, publications from insurance companies, financial institution press releases and official government agencies. Economic loss totals include any available insured loss estimates, which can be found in the corresponding event text.

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