



# Global Catastrophe Recap

October 2019

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# Executive Summary

- Typhoon Hagibis leaves wide damage swath in Japan; likely to become one of 2019's costliest events
- Strong Diablo & Santa Ana winds prompt California wildfires; impact seen as less than 2017/18 fires
- U.S. severe convective storms lead to anticipated billion-dollar payout for the insurance industry



**94K**  
structures

Estimated number of structures damaged or destroyed by Typhoon Hagibis in Japan



**732**  
structures

Number of structures destroyed in California by wildfires in 2019 as of Nov. 5; most in October



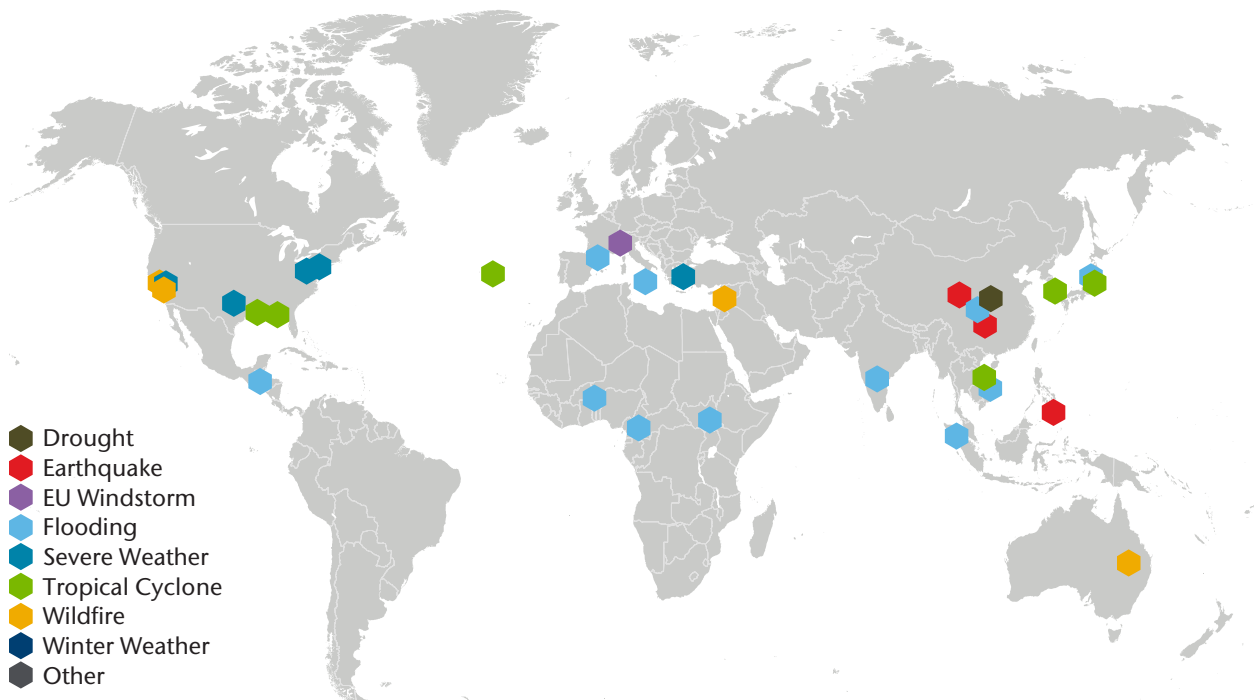
**208**  
deaths

Preliminary death toll due to seasonal flooding across Africa in October



**5.66**  
million km<sup>2</sup>

Average extent of the Arctic Sea Ice in October; lowest in the satellite record since the 1970s



## United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/10-10/17	Wildfire	California	3	1,000+	100+ million
10/16-10/17	Severe Weather	Mid-Atlantic, Northeast	0	35,000+	245+ million
10/18-10/20	Tropical Storm Nestor	Southeast	0	10,000+	150+ million
10/20-10/21	Severe Weather	Plains, Southeast	4	Thousands	100s of Millions+
10/23-10/31	Wildfire	California	0	Thousands	100s of Millions
10/26	Tropical Storm Olga	Southeast	1	Thousands	100+ million
10/26-10/31	Severe Weather	California	1	Thousands	Millions
10/31-11/01	Severe Weather	Mid-Atlantic, Northeast	2	Thousands	100s of Millions

Extreme wildfire conditions marked by the seasonal return of Diablo and Santa Ana winds led to numerous fire ignitions across California from October 10-17. At least three people were killed and nearly a dozen others were injured. The most destructive fires included the Saddle Ridge Fire (Los Angeles County) and Sandalwood Fire (Riverside County); 19 destroyed / 88 damaged and 74 destroyed / 16 damaged, respectively. Total economic damage was expected to exceed USD100 million, with most losses covered by insurance.

An early season coastal storm system – known as a Nor’easter – brought periods of heavy rainfall and high winds across the Mid-Atlantic and Northeast on October 16-17. Winds gusting beyond 80 mph (130 kph) as well as flash flooding impacted the hardest-hit areas of Massachusetts, New York, Connecticut, New Jersey, and Pennsylvania. Total economic losses were estimated at USD245 million, with insurers paying nearly USD 190 million in claims.

Tropical Storm Nestor came ashore in the Florida Panhandle on October 19 as a post-tropical cyclone with 45 mph (75 kph) winds at St. Vincent Island. The storm brought heavy rainfall, flooding, and severe thunderstorms across Florida, Georgia, and the Carolinas. Total economic losses neared USD150 million with half covered by insurance.

A severe weather outbreak spawned nearly 30 tornado touchdowns, damaging winds, and large hail across the Plains and Southeast on October 20-21. At least four people were killed. Most impacts were recorded in Texas, where a confirmed EF3 tornado with up to 140 mph (220 kph) winds struck several neighborhoods in North Dallas. Further tornado and storm-related impacts were cited in parts of Arkansas, Oklahoma, Missouri, Louisiana, and Tennessee. Economic and insured losses were likely to reach into the hundreds of millions of dollars; if not higher.

Extremely critical wildfire conditions resulted in numerous ignitions across Northern and Southern California from October 23 into early November. The most significant fires included the Kincade Fire in Sonoma County with 374 structures destroyed, Tick Fire in Los Angeles County with 29, Getty Fire in Los Angeles County with 10, Hillside Fire in San Bernardino County with 6, Maria Fire in Ventura County with 4, and the Easy Fire in Ventura County with 2 structures destroyed. The Kincade blaze prompted the largest evacuation on record in Sonoma County. A statewide state of emergency was declared. Total economic and insured losses were expected to reach into the hundreds of millions (USD).

The very windy conditions which helped ignite the California wildfires additionally caused widespread non-wildfire related damage. With wind gusts topping 80 mph (130 kph) in many parts of the state, this resulted in notable damage to homes and vehicles due to downed trees and powerlines. Total economic and insured losses were expected to reach well into the millions (USD).

Tropical Storm Olga briefly formed in the Gulf of Mexico before quickly losing tropical characteristics and coming ashore in Louisiana on October 26. The storm’s remnants brought periods of torrential rains, flooding, severe thunderstorms, and wind gusts topping 70 mph (110 kph) – including in the greater New Orleans metro region. At least one fatality occurred. Total economic losses were likely to exceed USD100 million.

A powerful late-season storm system brought widespread severe convective storms across the Mid-Atlantic and Northeast on October 31 and November 1. At least two people were killed. The storms were marked by damaging straight-line winds and isolated tornadoes that impacted states from South Carolina to New York. Most damage resulted from downed trees and powerlines as winds topped 60 mph (95 kph), including a 110 mph (175 kph) gust in Bucks County, Pennsylvania. Total economic damage was estimated into the hundreds of millions (USD).

## Remainder of North America (Non-US)

Date	Event	Location	Deaths	Structures/Claims	Economic Loss (USD)
10/01-10/31	Flooding	Guatemala	2	3,000+	Millions

Heavy seasonal rain continued to affect Guatemala during the month of October. Spells of heavy rain caused local flooding and landslides throughout the country, which brought the seasonal total of homes damaged or destroyed to 4,200. Approximately 3,000 homes were damaged in October alone.

## South America

There were no major natural disaster events in South America during the month of October.

## Europe

Date	Event	Location	Deaths	Structures/Claims	Economic Loss (USD)
10/02	Hurricane Lorenzo	Portugal	0	Hundreds	367+ million
10/03-10/04	Severe Weather	Greece	0	Thousands	Millions
10/21	Severe Weather	Italy	1	Unknown	Millions
10/22-10/23	Flooding	Spain, France	9	Thousands	10s of millions
10/24-10/26	Flooding	Italy	1	Hundreds	421+ million

Hurricane Lorenzo became the easternmost Category 5 Atlantic Hurricane on record on September 29 with maximum sustained windspeeds of 160 mph (260 kph). By the time it reached the Azores on October 2, it downgraded to Category 1 intensity, but still caused major damage on the islands, particularly on Flores. The government estimated damage costs at EUR330 million (USD367 million); primarily attributed to port infrastructure.

Storm thunderstorms affected a wide swath of Greece on October 3-4, resulting in notable flood- and hail-related damage. Walnut-sized hail hit southern and eastern sections of Athens; while additional damage was reported in Kefalonia, Skopelos and Euboea islands. The largest hailstone in the national record was registered at East Attica, with a diameter of 11 centimeters (4.3 inches).

Parts of the Piemonte, Liguria and Lombardia regions in northwestern Italy were hit by strong thunderstorms and torrential rains. Notable damage to agriculture and property was expected to leave a damage toll well into the millions (EUR). One person was killed.

Heavy rains prompted flooding in northeastern Spain (Catalonia) and parts of Southern France on October 22-23. At least nine people were killed as flood inundation was widespread. Total economic losses were likely to minimally reach into the tens of millions (EUR).

Parts of the Sicily Island in Southern Italy were hit by major flooding on October 24-26, following torrential rains. Among the most affected provinces were Ragusa and Siracusa. Economic losses on agriculture and infrastructure were estimated at EUR380 million (USD421 million).

## Middle East

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/01-10/15	Wildfire	Lebanon, Syria	1	Dozens	Unknown

Heatwave conditions sparked multiple forest fires across Lebanon and Syria during the first two weeks of October. The fires in Lebanon burned in the Shouf Mountains and Zgharta forest, destroyed dozens of homes, and were thought to be the country's worst outbreak in decades. At least one person died, and 106 others were injured. Fires also burned in three Syrian provinces (Latakia, Tartus, Homs).

## Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/01-10/31	Flooding	Ghana, Niger, Togo, Benin	33	21,000+	Unknown
10/01-10/31	Flooding	Eastern Africa	99	Thousands	Unknown
10/01-10/31	Flooding	Cameroon, CAR, Chad, DRC	76	26,000+	10s of millions

Several countries in West Africa were affected by seasonal flooding throughout October. The most significant impacts were noted in the Upper East region of Ghana as at least 19 people were killed. Heavy rains also led to widespread inundation in the Diffa region in Niger, in Togo and in Benin.

Torrential rain in parts of South Sudan, Ethiopia, Uganda, Kenya, Somalia, and Tanzania resulted in major flooding as tens of thousands of homes were damaged and nearly 100 people were killed. Among the hardest-hit areas came in South Sudan as hundreds of thousands of people were displaced.

Seasonal floods brought further flooding to parts of central Africa throughout October. Among the countries hardest hit by excessive rainfall were Cameroon, Chad, Central African Republic, and Democratic Republic of Congo. At least 76 people were killed.

## Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/01-10/02	Typhoon Mitag	China, Taiwan, Korean Peninsula	17	Thousands	816+ million
10/01-10/02	Typhoon Hagibis	Japan	95	94,000+	10+ billion
10/01-10/31	Drought	China	N/A	N/A	2.2+ billion
10/02	Earthquake	China	0	7,800+	Millions
10/15-10/23	Flooding	Vietnam	4	5,200+	Millions
10/15-10/25	Flooding	China	14	Thousands	90+ million
10/16	Earthquake	Philippines	7	7,089+	Millions
10/19-10/22	Flooding	India	12	5,500+	Millions
10/22-10/27	Flooding	Indonesia	0	2,000+	Millions
10/24-10/26	Flooding	Japan	11	2,500+	100+ million
10/28	Earthquake	China	0	7,300+	Millions
10/29-10/31	Earthquake	Philippines	21	34,482+	10s of Millions+
10/29-11/01	Tropical Storm Matmo	Vietnam	1	2,493+	Millions

A weakened Typhoon Mitag made landfall in eastern China's Zhejiang Province (Zhoushan City) on October 1 as a tropical storm and a second landfall in South Korea on October 2. Heavy rains led to flooding and landslides in South Korea, where at least 14 people were confirmed dead or missing and more than 1,000 properties were inundated. In Zhoushan, China, the storm caused three fatalities. Total economic losses amounted to at least USD816 million, including USD553 million in South Korea and USD263 million in China.

Typhoon Hagibis made landfall in Japan's Iza Peninsula on October 12 before later sweeping through the greater Tokyo metro region. The storm brought record rainfall and winds gusting to 160 kph (100 mph) across a broad swath of the country. This resulted in widespread significant flooding after dozens of rivers burst their banks in the hardest-hit prefectures of Tokyo, Fukushima, Miyagi, Shizuoka, Kanawanga, Nagano, Saitama, Gunma, Ibaraki, and Tochigi. At least 95 people were killed, 470 were injured and more than 93,250 structures damaged or destroyed. Total economic losses were expected to exceed USD10 billion, with insured losses minimally in the billions (USD).

Several Chinese provinces, mainly Hubei, Hunan, Guizhou, Anhui, Jiangsu, Jiangxi and Zhejiang, along the middle to lower reaches of the Yangtze River were impacted by moderate to severe drought following under-average rainfall. Economic losses were estimated at CNY15.1 billion (USD2.2 billion).

A magnitude-4.7 earthquake struck Yanhe County in Guizhou Province of central China on October 2. The tremor damaged 7,800 homes to varying degrees.

Heavy rains spawned widespread flooding in parts of Vietnam on October 15-22. The floods affected the provinces of Nghệ An, Bình Định, and Hà Tĩnh, with officials confirming at least four fatalities and widespread damage to crops and fisheries. Government statistics indicated that 5,255 houses were damaged or destroyed.

Heavy rain on October 15-25 resulted in notable flooding and landslides in multiple provinces of Central China. Total economic losses were estimated at CNY630 million (USD90 million). Local authorities reported 14 fatalities.

A strong magnitude-6.4 earthquake struck near Columbio, Philippines on Mindanao Island on October 16. At least 7 people were killed, 215 others were injured, and 7,089 residential and non-residential structures were damaged or destroyed.

Heavy rains led to flooding in India's Karnataka state from October 19-22. At least 12 people were killed as the floods damaged nearly 5,500 homes and infrastructure across the hardest-hit districts of Belagavi, Gadag, and Koppal.

Floods swept across Northern Sumatra in Indonesia from October 22-27. Nearly 2,000 homes were damaged.

Torrential rains associated with a non-tropical area of low pressure led to additional flooding and landslides across parts of Japan on October 25. At least 11 people were killed, and nearly 2,500 houses damaged or inundated. Total economic and insured losses were expected to reach well into the millions (USD).

A strong, magnitude-5.2 earthquake struck Xiahe County in Gansu Province of central China on October 28. The tremor damaged 7,300 homes to varying degrees.

Two strong and shallow earthquakes struck the Philippines' Mindanao Island in a 48-hour period. The first tremor was a magnitude-6.6 on October 29 and the second was a magnitude-6.5 on October 31. At least 21 people were killed, and 417 others were injured. Extensive damage was noted across the epicentral region, with nearly 35,000 structures identified as incurring varying levels of damage. Economic damage was expected into the millions (USD).

Tropical Storm Matmo made landfall in Vietnam on October 30 before its remnants brought heavy rains through November 1 to central and southern provinces. At least one person was killed, and 14 others injured. Nearly 2,500 homes and 5,500 hectares (13,600 acres) of cropland were damaged or destroyed in the provinces of Quang Ngai, Binh Dinh, Phu Yen, Gia Lai and Thua Thien Hue.

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
09/05-10/10	Wildfire	Australia	2	Hundreds	Millions+

An active bushfire season saw numerous notable fires burn across parts of Queensland and New South Wales as much of Eastern Australia continued to deal with severe drought conditions. The fires destroyed dozens of structures and prompted the Insurance Council of Australia to declare separate insurance catastrophe events in each state. At least two people were killed, and 50 others left injured by one fire in Rappsville, NSW. Total economic and insured losses from the bushfires were expected into the tens of millions (USD).



# Appendix

## Updated 2019 Data: January-September

### United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/05-01/06	Winter Weather	West	0	7,500+	125+ million
01/11-01/14	Winter Weather	Plains, Midwest, Mid-Atlantic	13	Thousands	Millions
01/16-01/18	Winter Weather	West	0	12,000+	275+ million
01/18-01/24	Winter Weather	Midwest, Northeast	10	22,000+	300+ million
01/29-01/31	Winter Weather	Midwest, Northeast, Southeast	22	45,000+	950+ million
02/01-02/03	Flooding	California	0	11,000+	250+ million
02/05-02/08	Winter Weather	Midwest	4	Hundreds	Millions
02/09-02/12	Winter Weather	Northwest, Midwest, Northeast	0	Hundreds	Millions
02/10	Severe Weather	Hawaii	1	Hundreds	10s of Millions
02/18-02/21	Winter Weather	Northern Plains, Southeast	3	Hundreds	Millions
02/22-02/26	Severe Weather	Central/Eastern U.S.	4	175,000+	1.4+ billion
02/26-02/28	Flooding	California	1	6,000+	175+ million
03/03-03/04	Severe Weather	Southeast, Mid-Atlantic, Northeast	23	13,000+	190+ million
03/08-03/09	Severe Weather	Plains, Midwest, Southeast	1	Thousands	Millions
03/12-03/17	Severe Weather	Plains, Midwest, Southeast	5	100,000+	1.0+ billion
03/12-04/30	Flooding	Central U.S.	3	Thousands	5.0+ billion
03/23-03/25	Severe Weather	Plains, Midwest	0	110,000+	1.5+ billion
03/27	Severe Weather	Florida	0	22,000+	225+ million
04/05-04/08	Severe Weather	Southeast	0	25,000+	250+ million
04/10-04/12	Winter Weather	Rockies, Plains, Midwest, Southeast	0	Thousands	100+ million
04/12-04/15	Severe Weather	Plains, Southeast, Midwest, Northeast	9	100,000+	1.1+ billion
04/17-04/19	Severe Weather	Plains, Southeast, Midwest	4	40,000+	350+ million
04/23-04/25	Severe Weather	Plains, Southeast	5	60,000+	850+ million
04/30-05/02	Severe Weather	Plains, Midwest, Southeast	2	35,000+	750+ million
05/01-07/31	Flooding	Central & Eastern U.S.	0	Thousands	10+ billion
05/04-05/10	Severe Weather	Plains, Midwest, Southeast	1	90,000+	1.2+ billion
05/13	Severe Weather	North Carolina	0	20,000+	290+ million
05/16-05/17	Severe Weather	Plains, Midwest	0	60,000+	925+ million
05/17-05/19	Severe Weather	Plains, Midwest, Southeast	0	15,000+	200+ million
05/20-05/23	Severe Weather	Plains, Midwest, Southeast, Northeast	9	45,000+	825+ million
05/24-05/25	Severe Weather	Rockies, Plains, Midwest, Northeast	2	15,000+	150+ million
05/26-05/31	Severe Weather	Rockies, Plains, Midwest, Southeast	3	265,000+	4.0+ billion
06/01-06/06	Severe Weather	Rockies, Plains, Midwest, Northeast	1	20,000+	375+ million
06/08-06/09	Flooding	Southeast	3	Hundreds	50+ million
06/08-06/10	Severe Weather	Rockies, Plains, Southeast	5	60,000+	850+ million
06/15-06/16	Severe Weather	Midwest, Mid-Atlantic	0	Thousands	100+ million
06/16-06/17	Severe Weather	Texas	0	17,500+	200+ million
06/18-06/20	Severe Weather	Plains, Southeast, Mid-Atlantic	1	Thousands	100+ million
06/21-06/22	Severe Weather	Plains, Midwest, Southeast	3	Thousands	100+ million

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
06/23-06/24	Severe Weather	Plains	0	20,000+	235+ million
06/29-06/30	Severe Weather	Northeast, Mid-Atlantic	2	7,500+	100+ million
06/29-06/30	Severe Weather	Plains, Midwest	1	Thousands	100+ million
07/02-07/04	Severe Weather	Plains, Midwest, Northeast	0	10,000+	140+ million
07/04-07/05	Earthquake(s)	California	0	5,000+	200+ million
07/04-07/05	Severe Weather	Rockies, Plains	0	65,000+	800+ million
07/07-07/08	Flooding	Maryland, Washington D.C., Virginia	0	12,000+	325+ million
07/13-07/17	Hurricane Barry	Southeast, Midwest, Northeast	0	50,000+	600+ million
07/17-07/18	Severe Weather	Rockies, Midwest	0	25,000+	260+ million
07/19-07/23	Severe Weather	Midwest, Northeast, Mid-Atlantic	6	82,000+	925+ million
07/26-07/30	Severe Weather	Midwest, Northeast	0	20,000+	235+ million
08/04-08/05	Severe Weather	Midwest	0	42,000+	740+ million
08/06-08/07	Severe Weather	Plains, Midwest	0	11,000+	140+ million
08/06	Flooding	Maryland	0	Hundreds	50+ million
08/10-08/11	Severe Weather	Rockies, Plains	0	40,000+	780+ million
08/13-08/16	Severe Weather	Rockies, Plains, Midwest	0	35,000+	415+ million
08/17-08/18	Severe Weather	Midwest, Northeast	0	15,000+	120+ million
08/25-08/26	Severe Weather	Rockies, Plains, Midwest, Southeast	0	25,000+	250+ million
09/04-09/06	Hurricane Dorian	Southeast, Mid-Atlantic	9	50,000+	1.2+ billion
09/10-09/12	Severe Weather	Rockies, Plains, Midwest	0	20,000+	310+ million
09/12-09/16	Flooding	South Dakota	0	Thousands	10s of Millions
09/17-09/20	Tropical Storm Imelda	Plains, Southeast	1	75,000+	2.0+ billion
09/23	Flooding	Arizona	0	Hundreds	Millions
09/27-09/28	Severe Weather	Plains, Midwest	0	15,000+	150+ million

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/27	Severe Weather	Cuba	6	Hundreds	Millions
02/03-02/05	Flooding	Canada	0	4,500+	110+ million
02/24-02/25	Winter Weather	Canada	0	8,000+	105+ million
03/09-03/11	Flooding	Canada	0	6,000+	110+ million
03/13-03/16	Flooding	Canada	0	11,000+	225+ million
04/16-05/14	Flooding	Canada	1	17,000+	675+ million
03/01-06/06	Wildfire	Canada	0	16+	100+ million
06/02	Severe Weather	Canada	0	1,000+	10s of Millions
06/02	Flooding	Mexico	7	1,000+	Unknown
06/03-06/06	Flooding	Haiti	4	621+	Unknown
06/30	Severe Weather	Mexico	0	Hundreds	Millions
07/06-07/10	Severe Weather	Canada	0	Thousands	20+ million
07/13-07/15	Severe Weather	Canada	0	Thousands	50+ million
07/30-07/31	Severe Weather	Canada	0	6,000+	95+ million
07/31-08/01	Severe Weather	Canada	0	2,000+	23+ million
08/02	Severe Weather	Canada	0	13,000+	95+ million
08/06	Severe Weather	Canada	0	1,000+	10s of Millions

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
08/31-09/07	Hurricane Dorian	Caribbean, Bahamas, Canada	664+	50,000+	Billions
09/05-09/06	Tropical Storm Fernand	Mexico	1	Thousands	250+ million
09/19-09/20	Hurricane Humberto	Bermuda	0	1,000+	Millions
09/19-09/22	Hurricane Lorena	Mexico	1	Thousands	Millions
09/29-10/01	Tropical Storm Narda	Mexico	6	2,000+	Millions

## South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/20	Flooding	Argentina, Uruguay	5	Thousands	2.3+ billion
01/27	Landslide	Peru	15	100+	Negligible
02/01-02/10	Flooding	Chile	6	5,700+	91+ million
02/02-02/05	Landslide	Bolivia	23	Unknown	Unknown
02/07	Landslide	Peru	10	Dozens	Unknown
02/22	Flooding	Colombia	0	4,000+	Millions
03/10-03/12	Flooding	Brazil	13	Hundreds	Millions
03/15-04/05	Flooding	Peru, Paraguay, Bolivia, Colombia	5	Thousands	10s of millions
04/08-04/09	Flooding	Brazil	10	Hundreds	Millions
04/20-04/22	Severe Weather	Colombia	30	Dozens	Unknown
03/15-05/20	Flooding	Paraguay	6	Dozens	Millions
06/13	Flooding	Brazil	7	Hundreds	Millions
06/15-06/16	Flooding	Uruguay	0	Thousands	Millions
01/01-08/31	Wildfires	Brazil, Bolivia, Paraguay, Peru	N/A	N/A	Millions

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/02	Windstorm Alfrida	Northern Europe	0	15,000+	130+ million
01/01-01/14	Winter Weather	Central Europe	26	Thousands	100s of Millions
01/22-01/24	Flooding	Spain	4	3,600+	46+ million
01/29	Windstorm Gabriel	France	0	4,000+	Millions+
02/08-02/09	Windstorm Erik	United Kingdom, Ireland	1	Thousands	10s of Millions
02/10-02/11	Windstorm Isaias	France, Germany	0	Thousands	10s of Millions
02/14-02/17	Windstorm Julia	Norway, Sweden	0	2,000+	17 million+
02/23-02/26	Severe Weather	Italy, Greece, Malta, Croatia	8	Hundreds	250+ million
03/03-03/05	Windstorm Freya	Central & Western Europe	2	Thousands	100s of Millions
03/10	Windstorm Eberhard	Central & Western Europe	2	100,000+	1.5+ billion
04/06	Flooding	Greece	0	Hundreds	Millions
04/18-04/20	Severe Weather	Spain	0	Hundreds	10s of millions
05/11-05/13	Severe Weather	Italy, Croatia, Bosnia	0	Hundreds	150+ million
05/20-05/22	Flooding	Germany, Poland	0	Thousands	100+ million
06/01-06/03	Flooding	Serbia, Bosnia & Herzegovina	0	2,000+	30+ million
06/04-06/05	Severe Weather	Netherlands, Germany	0	12,500+	45+ million
06/07-06/08	Windstorm Miguel	France, Belgium	5	Thousands	10s of Millions

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
06/10-06/12	Severe Weather	Central Europe	0	260,000+	1.1+ billion
06/15-06/16	Severe Weather	Western & Central Europe	2	50,000+	560+ million
06/20-06/22	Severe Weather	Switzerland, Italy, Poland	1	Hundreds	150+ million
06/24-07/01	Heatwave	Western & Central Europe	13+	Unknown	Unknown
06/27	Severe Weather	Slovakia, Hungary, Austria, Romania	0	25,000+	30+ million
07/01-07/03	Severe Weather	Western & Central Europe	1	20,000+	150+ million
07/07-07/08	Severe Weather	Slovenia, Croatia	0	Thousands	40+ million
07/08	Severe Weather	Spain	1	Thousands	75+ million
07/10	Severe Weather	Greece	7	Hundreds	Millions
07/09-07/10	Severe Weather	Italy	1	Thousands	10s of millions
07/24-07/26	Heatwave	Western, Central & Northern Europe	N/A	Unknown	Unknown
07/27-07/29	Severe Weather	Austria, Italy, Hungary	3	25,000+	10s of millions
08/06-08/07	Severe Weather	Western and Central Europe	0	Thousands	150+ million
08/09	Severe Weather	Luxembourg, Western Europe	0	3,000+	125+ million
08/12	Severe Weather	Italy, Hungary, Poland	0	Thousands	150+ million
08/18	Severe Weather	Germany, France	0	2,000+	10s of millions
08/22	Severe Weather	Poland, Slovakia	5	N/A	N/A
08/26-08/28	Severe Weather	Spain	0	4,400+	10s of millions
09/11-09/15	Flooding	Spain	7	Thousands	2.4 billion
09/21	Earthquake	Albania	0	1,500+	45+ million
09/29-09/30	Windstorm Mortimer	Germany, Poland, Czech Republic	3	Thousands	10s of millions

## Middle East

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/27-01/29	Flooding	Saudi Arabia	12	1,000+	Millions
01/24-01/26	Severe Weather	Turkey	2	4,100+	20+ million
03/09-03/10	Flooding	Iran	0	Hundreds	80+ million
03/17-04/09	Flooding	Iran	77	85,000+	8.3+ billion*
03/24-03/29	Flooding	Iraq, Syria	10	Unknown	Unknown
05/17-05/27	Flooding	Oman, Yemen, UAE, Saudi Arabia	7	Hundreds	Millions
06/07-06/09	Flooding	Yemen	3	5,000+	Millions
06/09	Flooding	Turkey	3	1,000+	10s of Millions+
07/08	Earthquake	Iran	1	Thousands	Millions
07/17	Flooding	Turkey	7	2,000+	Millions
07/31-08/06	Flooding	Yemen	12	Unknown	Unknown
08/17	Flooding	Turkey	1	5,000	10s of millions
08/23	Flooding	Turkey	0	Hundreds	50+ million
09/24	Cyclone Hikaa	Oman	0	Hundreds	Millions
09/26	Earthquake	Turkey	0	10,000+	Millions

\*Global free market currency conversion; unofficial local free market conversion cost is USD2.6 billion

## Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/31	Flooding	Mozambique, Malawi, Zambia	22	Hundreds	Millions
01/17-01/21	Flooding	Burundi	10	Hundreds	Unknown
01/19	Flooding	Madagascar	9	Unknown	Unknown
02/10	Cyclone Gelena	Mauritius	0	Hundreds	Millions+
02/12-02/18	Flooding	Zimbabwe	26	Unknown	Unknown
02/21-02/22	Flooding	Angola	4	711+	Unknown
03/04-03/22	Cyclone Idai	Southern Africa	1,100+	150,000+	2.0+ billion
03/10-03/12	Flooding	South Africa	10	7,000+	7.0+ million
03/16-03/19	Flooding	Angola	27	Hundreds	Millions
04/22-04/24	Flooding	South Africa	87	1,000+	100+ million
04/23	Flooding	Uganda	17	Unknown	Unknown
04/24-04/26	Cyclone Kenneth	Comoros, Mozambique	48	60,000+	100+ million
05/08-05/17	Flooding	Tanzania	5	1,000+	Millions
05/15-18	Flooding	Mali, Guinea	21	Hundreds	Millions
05/26-05/29	Flooding	Uganda	8	Dozens	Unknown
05/30-06/01	Flooding	Ghana	13	Hundreds	Millions
05/31-06/02	Flooding	Somalia	9	Unknown	Millions
06/03	Flooding	Libya	4	Thousands	7.1+ million
06/04-06/08	Landslide	Uganda	6	Unknown	Unknown
06/05-06/10	Flooding	South Sudan	3	10,892+	Millions
07/24	Landslide	Morocco	15	N/A	N/A
08/01-08/31	Flooding	Sudan	59	48,800+	10s of millions
08/11-08/12	Flooding	Ethiopia	0	6,650+	Unknown
08/20-08/25	Flooding	Nigeria	12	11,300+	Unknown
08/26-08/27	Flooding	Mauritania	0	4,000+	Unknown
09/01-09/15	Flooding	West Africa	57	15,000+	Millions
09/09	Flooding	Morocco	17	Negligible	Negligible
09/11-09/18	Flooding	Algeria	7	2,000+	Unknown

## Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-12/31	Drought	India	0	N/A	1.75+ billion
01/03-01/05	Tropical Storm Pabuk	Thailand, Vietnam, Malaysia	9	2,300+	150+ million
01/06	Flooding	Afghanistan	30	0	Negligible
01/21-02/01	Flooding	Indonesia	80	22,500+	Millions
02/01-02/28	Winter Weather	China	3	N/A	95+ million
02/20-02/21	Flooding	Pakistan	26	Hundreds	Millions
02/24-02/25	Earthquake	China	2	11,000+	37+ million
02/25-02/27	Severe Weather	India	6	Hundreds	Millions
03/01-03/04	Flooding	Afghanistan, Pakistan	65	6,000+	Unknown
03/07-03/10	Flooding	Indonesia	8	Dozens	Unknown
03/16-03/18	Flooding	Indonesia	200	Hundreds	Millions
03/18	Flooding	Afghanistan	13	Dozens	Unknown

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
03/19-03/21	Flooding	China	0	2,500+	40+ million
03/29-03/30	Flooding	Afghanistan	45	13,000+	10s of Millions
03/30-04/09	Wildfire	China	31	N/A	N/A
03/31	Severe Weather	Nepal, India	35	2,400+	Millions
03/31	Severe Weather	Bangladesh	15	Hundreds	Unknown
04/04-04/05	Wildfire	South Korea	2	1,400+	Millions
04/09	Severe Weather	Pakistan	8	Dozens	Unknown
04/11-04/12	Flooding	China	11	Unknown	Unknown
04/13-04/14	Flooding	Pakistan	20	Dozens	Unknown
04/15-04/17	Severe Weather	Afghanistan, Pakistan, India	146	Hundreds	Millions
04/19-04/20	Wildfire	Russia	0	311	20+ million
04/22-04/23	Earthquake	Philippines	21	5,100+	50+ million
04/25-04/27	Flooding	Indonesia	44	1,200+	15+ million
05/01-05/31	Drought	China	0	N/A	138+ million
05/03-05/05	Cyclone Fani	India, Bangladesh	89	Thousands	Billions
05/22-05/25	Flooding	Afghanistan	24	330+	Millions
05/23-05/29	Flooding	China	9	Hundreds	165+ million
05/31-06/17	Heatwave	India	210+	N/A	Unknown
06/01-10/05	Flooding	India	1,850+	200,000+	10+ billion
06/01-06/03	Severe Weather	India	10	Hundreds	Unknown
06/01-06/30	Flooding	Indonesia	2	75,047+	50+ million
06/01-08/01	Flooding	China	225	300,000+	8.5+ billion
06/03	Flooding	Afghanistan	2	Hundreds	Millions+
06/06-06/14	Severe Weather	India	50	Dozens	Unknown
06/15-06/16	Flooding	Mongolia	12	Hundreds	Unknown
06/17	Earthquake	China	13	156,000+	1.0+ billion
06/18	Earthquake	Japan	0	1,000+	10s of Millions
06/22-06/27	Severe Weather	Nepal, India	53	Unknown	Unknown
06/27-07/03	Flooding	Russia	26	10,900+	460+ million
06/28-07/04	Flooding	India	77	Thousands	Millions+
06/29-07/04	Flooding	Japan	2	1,000+	Millions
07/03	Severe Weather	China	6	15,000+	145+ million
07/09-07/26	Flooding	Bangladesh	210	450,000+	40+ million
07/11-07/14	Flooding	Nepal	76	Thousands	Millions
07/14	Earthquake	Indonesia	6	2,590+	Unknown
07/15	Flooding	Pakistan	28	150+	Unknown
07/15-07/31	Wildfire	Russia	0	Unknown	30+ million
07/18-07/23	Severe Weather	Sri Lanka	9	3,600+	Unknown
07/22-07/30	Heatwave	Japan	11	N/A	N/A
07/23	Landslide	China	51	21	Unknown
07/23	Landslide	Nepal	11	Unknown	Negligible
07/25-07/31	Flooding	Russia	0	3,000+	91+ million
07/29-08/01	Flooding	China	0	2,500+	315+ million
07/29	Flooding	Pakistan	16	Dozens	Unknown
07/29-08/05	Heatwave	Japan	162+	N/A	Unknown
08/01-08/31	Wildfire	Russia	0	N/A	106+ million
08/01-08/08	Tropical Storm Wipha	China, Vietnam	27	7,000+	51+ million

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
08/02	Earthquake	Indonesia	6	635	Unknown
08/04	Flooding	China	13	Dozens	Unknown
08/08-08/10	Flooding	Vietnam	10	12,000+	Unknown
08/08-08/14	Landslide	Myanmar	65	27	N/A
08/09-08/11	Typhoon Lekima	China	71	149,000+	10+ billion
08/09-08/11	Flooding	Pakistan	38	Dozens	Unknown
08/15-08/16	Typhoon Krosa	Japan	3	Hundreds	25+ million
08/16-08/20	Flooding	Pakistan	16	Hundreds	Unknown
08/19-08/20	Flooding	China	37	2,200+	200+ million
08/24-08/25	Tropical Storm Bailu	Taiwan, China, Philippines	3	11,000+	25+ million
08/27-08/30	Tropical Storm Podul	Philippines, Vietnam	18	Thousands	10s of millions
08/27-08/29	Flooding	Japan	3	2,000+	100s of millions
08/28-08/31	Flooding	Russia	0	3,500+	25+ million
09/02-09/12	Tropical Storm Kajiki	Laos, Vietnam, Cambodia	40	10,000+	10s of Millions
09/05-09/08	Typhoon Lingling	Japan, China, Korea	8	10,000+	165+ million
09/08	Earthquake	China	1	5,100+	50+ million
09/08-09/09	Typhoon Faxai	Japan	3	185,000+	7.0+ billion
09/13-09/19	Flooding	Thailand	33	4,000+	Millions
09/21-09/22	Tropical Storm Tapah	Japan, Korean Peninsula	1	2,000+	Millions
09/23-09/25	Flooding	Sri Lanka	1	1,000+	Millions
09/24	Earthquake	Pakistan	39	5,700+	17+ million
09/25	Earthquake	Indonesia	37	6,350+	Millions

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/31	Heatwave	Australia	N/A	Unknown	Unknown
01/28-02/07	Flooding	Australia	3	30,000+	1.9+ billion
02/04-02/27	Wildfire	New Zealand	0	Dozens	Millions
02/11-02/25	Flooding	Papua New Guinea	4	Hundreds	Unknown
03/01-03/20	Wildfire	Australia	0	432+	40+ million
03/24-03/25	Flooding	New Zealand	1	Hundreds	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 public and private insurance entities 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 determined based on various public media sources, including news websites, publications from insurance companies, financial institution press releases, and official government agencies. Economic loss totals are separate from any available insured loss estimates. An insured loss is the portion of the economic loss covered by public or private insurance entities. In rare instances, specific events may include modeled loss estimates determined from utilizing Impact Forecasting's suite of catastrophe model products.



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