Global Catastrophe Recap

September 2019

Empower Results®

Table of Contents

Executive Summary

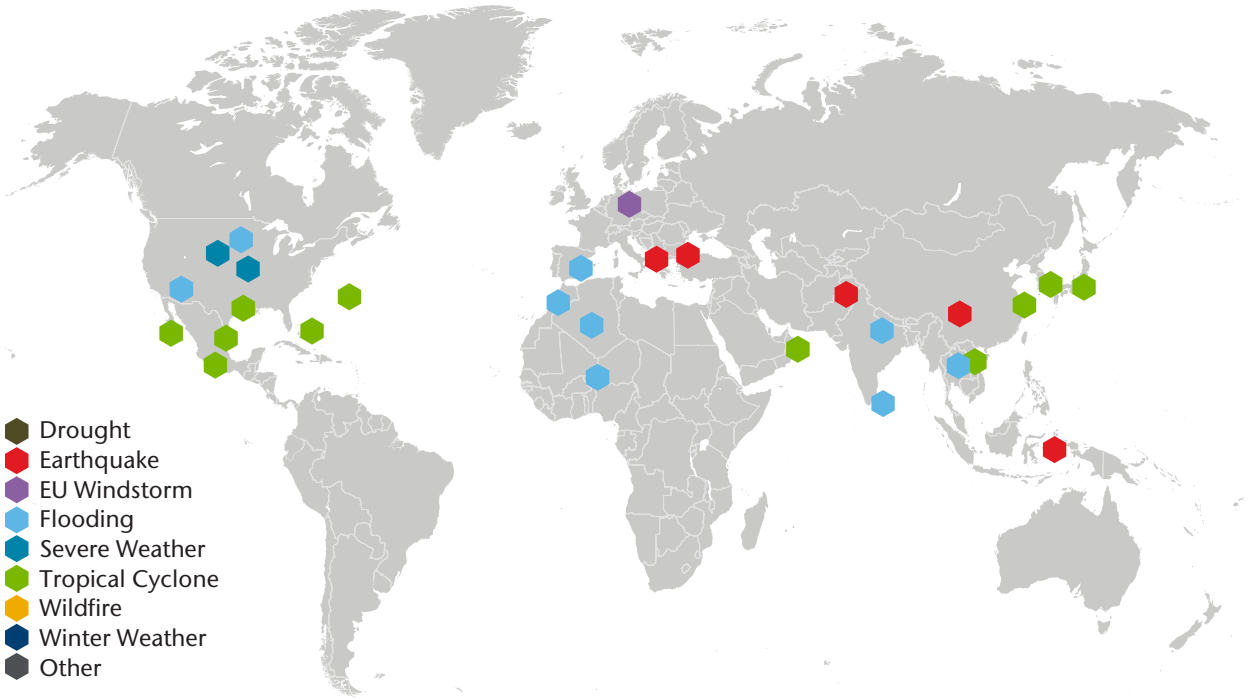
- Hurricane Dorian makes record-tying windspeed landfall in the Bahamas; damage in billions (USD)
- Typhoon Faxai makes Category 2 equivalent landfall in Japan; insurers expect multi-billion payout
- Tropical Storm Imelda brings 1-in-1,000-year rainfall and subsequent major flooding to Texas

185 mph — Landfall intensity of Dorian in the Bahamas; tied as the strongest Atlantic hurricane landfall on record

185 thousand — Initial number of insurance claims reported in Japan due to Typhoon Faxai (thru Sept. 13)

1,850 deaths — Minimum number of fatalities attributable to the 2019 Indian monsoon season

43.39 inches — Maximum rainfall total from Tropical Storm Imelda; 5th wettest mainland U.S. cyclone on record



United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
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	Thousands	2.0+ billion
09/23	Flooding	Arizona	0	Hundreds	Millions
09/27-09/28	Severe Weather	Plains, Midwest	0	Thousands	100+ million

Hurricane Dorian slowly tracked along the U.S. East Coast from September 4-6 before making an official landfall on September 6 as a 90 mph (150 kph) Category 1 storm at Cape Lookout, North Carolina. Hurricane-force wind gusts, several feet of storm surge, heavy rains, and isolated tornadoes impacted parts of the Southeast and Mid-Atlantic. Parts of Florida, Georgia, South Carolina, North Carolina, and Virginia all incurred damage. Total economic losses were estimated at USD1.2 billion, with public and private insurance expected to cover less than half of that total.

Multiple days of severe thunderstorms brought periods of large hail, damaging straight-line winds, flash flooding, and isolated tornadoes from the Rockies to the Midwest from September 10-12. Total economic losses topped USD300 million, with insurance covering roughly USD240 million of the cost.

Heavy rains from September 12-16 led to renewed flooding in South Dakota after numerous rivers and streams as part of the Missouri River Basin overflowed their banks. Flooding was reported in Mitchell, Madison, Spencer, Yankton, Brookings, Sioux Falls, and Dell Rapids. Total economic damage was expected to reach the millions.

Tropical Storm Imelda made landfall along the coast of Texas near the city of Freeport on September 17 with 40 mph (65 kph) winds, and later brought torrential rains across the state. At least one person was killed. Imelda prompted 43.36 inches (1,101 millimeters) rain near Beaumont, Texas and led to extensive inland flooding. Total economic damage to property, automobiles, infrastructure, and agriculture was expected to approach USD2 billion. Due to most damage caused by flooding, a much smaller portion of the economic cost will be covered by insurance.

Moisture from the remnants of Hurricane Lorena brought heavy rainfall and spawned rare tornadoes in the Phoenix, Arizona metro region. Flash floods led to the inundation of numerous mobile homes in Maricopa County and also caused some infrastructure damage. Two tornadoes – rated EF0 and EF1 – caused some structural damage in the towns of New River and Wilcox. Total economic and insured losses were each estimated in the millions (USD).

Severe thunderstorms led to damaging impacts in the Plains and Midwest on September 27/28. The most notable damage resulted from straight-line winds and tennis ball-sized hail in portions of Kansas, Missouri, Illinois, and Indiana. Total economic losses were expected to exceed USD100 million.

Remainder of North America (Non-US)

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

Hurricane Dorian tracked across parts of the eastern and central Caribbean and the Northern Bahamas during the first few days of September before striking Canada as an extratropical cyclone. The storm made multiple landfalls as a Category 5 with 185 mph (295 kph) winds – one of the strongest cyclones ever recorded in the Atlantic Ocean – on the islands of Great Abaco and Grand Bahama. As many as 664 people were left dead or missing in the Bahamas (subject to change). Dorian resulted in catastrophic damage in the Bahamas with nearly half of all structures affected by high winds, flooding, or storm surge. Parts of Puerto Rico, the Virgin Islands (U.S. & UK), the Leeward/Windward Islands, and Canada were also impacted. Total combined economic and insured losses were both expected to reach well into the billions of dollars (USD). This will be the costliest event on record in the Bahamas.

Tropical Storm Fernand made landfall in northern Mexico just north of the town of La Pesca in Tamaulipas state on September 5 with 45 mph (75 kph) winds. One person was killed. The storm spread heavy rains and flooding across the states of Coahuila, Nuevo León, Tamaulipas, and San Luis Potosí as thousands of properties were damaged. Economic costs reached MXN4.2 billion (USD215 million) in Nuevo León alone; the overall total is even higher.

Hurricane Humberto tracked very close to Bermuda on September 19/20, bringing wind gusts beyond 100 mph (160 kph) to the island. While no widespread severe damage was reported, there were many instances of downed trees onto properties and impacts to marine. More than 1,000 claims were filed with payouts likely to reach into the millions (USD).

Hurricane Lorena tracked along the Pacific coast of Mexico before making landfall near La Ventana in Baja California Sur on September 20 as an 80 mph (130 kph) storm. Torrential rains and gusty winds led to extensive inundation and damage in parts of Guerrero, Michoacán, Colima, Jalisco, and Baja California Sur. One person was killed. Total economic and insured losses were estimated to reach well into the millions (USD).

Tropical Storm Narda made multiple landfalls along the Pacific coast of Mexico from September 28-October 1. At least six people were killed in flood-related instances. The storm led to notable flood inundation in parts of Oaxaca, Guerrero, Colima, Nayarit, Jalisco, and Sinaloa as nearly 2,000 homes and structures were damaged. Total economic and insured losses were estimated in the millions (USD).

South America

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

Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
09/11-09/15	Flooding	Spain	7	30,000+	2.4+ billion
09/21	Earthquake	Albania	0	1,500+	45+ million
09/29-09/30	Windstorm Mortimer	Germany, Poland, Czech Republic	3	Thousands	Millions

Torrential rain in mid-September resulted in major flooding in southeastern and central Spain. The event was caused by a cut-off low pressure area, which locally dropped up to 370 millimeters (14.6 inches) of rain on September 11-15. The floods claimed seven lives among the hardest-hit autonomous regions of Valencia, Murcia, and Andalusia. Total economic losses were preliminary estimated by local government at EUR2.2 billion (USD2.4 billion); though may possibly be higher. Insured losses were likely to top EUR287 million (USD318 million).

A magnitude-5.6 earthquake struck Durrës County in Western Albania on September 21. The USGS cited the event as the strongest tremor to hit the country since 1988. Local reports noted at least 1,500 homes with minor damage in Durrës, Tirana and Elbasan. At least 108 people sustained minor injuries. Economic loss in Durrës was preliminarily estimated by the government at ALL5.0 billion (USD45 million).

Windstorm Mortimer became the first notable low-pressure system that affected Central Europe during the 2019/2020 windstorm season with strong winds. Three fatalities and minor property damage were reported from Germany and parts of Poland and the Czech Republic. Economic and insured losses will likely reach into the millions.

Middle East

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
09/24	Cyclone Hikaa	Oman	0	Hundreds	Millions
09/26	Earthquake	Turkey	0	6,000+	Millions

Cyclone Hikaa made landfall near Duqm, Oman on September 24 as a Category 1 storm with 1-minute sustained wind speeds of 130 kph (80 mph). The very small-sized storm brought heavy rain and high waves to Oman that resulted in localized flooding that inundated properties, vehicles, and infrastructure.

A strong, magnitude-5.7 earthquake struck the Marmara region in Turkey, southwest of Istanbul on September 26. According to the information from the Turkish Catastrophe Insurance Pool, more than 6,000 claims were filed due to the event, particularly in Istanbul, Tekirdag, Kocaeli, Bursa and Balikesir.

Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
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

Heavy seasonal rains resulted in notable riverine flooding on the river Niger at the beginning of September. Authorities in Niger reported more than 132,000 people affected by the flood, while the number of fatalities was as high as 57. Among the worst affected regions were Maradi, Zinder, Agadez, Dosso and Niamey. According to the local media, nearly 12,240 homes were destroyed. Seasonal floods continued across West Africa in Mali, Nigeria and Central African Republic.

Local authorities in Morocco reported 17 fatalities and 29 injuries due to flooding near Errachidia in Eastern Morocco on September 8. All victims were passengers of a bus that was overturned while crossing a local river, swollen by recent heavy rains. No property losses were reported.

Algeria received torrential rainfall rainfall and isolated hailstorms between September 11-18. The flooding, which affected the northern provinces, impacted the Houari Boumediene Airport and caused severe disruption to transportation. At least 7 people were killed and dozens of public and private buildings were damaged.

Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
06/01-10/05	Flooding	India	1,850+	200,000+	10+ billion
09/02-09/12	Tropical Strom 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

Late season monsoon rains further affected swaths of northern India throughout the month of September into early October. Parts of Uttar Pradesh, Bihar, Madhya Pradesh, and Rajasthan were the worst-affected, with the monthly death toll nearing 200. Tens of thousands of homes were inundated. For the entire season, which began on June 1, more than 1,850 people died from monsoon-related incidents. The total economic cost neared USD10 billion.

Tropical Storm Kajiki brought heavy rain to Vietnam, Laos, Philippines, and Cambodia from September 2-12. Thousands of homes were flooded in Vietnam's Quang Binh province of Vietnam after the Gianh River overflowed its banks. At least 19 people were left dead or missing. Agricultural losses in Vietnam alone were listed at VND300 billion (USD13 million). Further flooding from Kajiki's remnants led to damage and fatalities in Cambodia (7 dead) and Laos (14 dead). Overall economic losses were estimated in the tens of millions (USD).

Typhoon Lingling impacted parts of Japan, China, and the Korean Peninsula from September 5-8. The storm was blamed on eight fatalities in North Korea and South Korea. Total combined economic losses neared USD165 million: China (USD131 million), South Korea (USD24 million), Japan (USD10 million).

A magnitude-5.1 earthquake struck near Neijiang in Sichuan Province, China on September 8. The tremor damaged or destroyed 5,132 buildings and left at least one person dead and 63 others injured.

Typhoon Faxai made landfall in Japan's Chiba Prefecture on September 8 with one-minute sustained winds of 170 kph (105 mph); equivalent to a Category 2 storm. At least 3 people were killed and nearly 150 others were injured. The storm damaged a minimum of 40,000 homes, including in Tokyo, though damage impacts were also widespread to commercial property, vehicles, agriculture, and other sectors. The General Insurance Association of Japan cited that a minimum of 185,000 claims had already been filed. Total insured losses were minimally expected to approach USD5 billion, with the overall economic cost even higher.

Rainfall associated with the remnants of Tropical Storm Kajiki prompted significant flooding in northeast Thailand from September 13-20. The flooding caused at least 33 deaths in 31 provinces. Total damage to crops was noted across 325,000 hectares (803,000 acres) of land, and more than 4,000 homes were inundated.

Tropical Storm Tapah passed between Japan and the Korean Peninsula from September 21-22, bringing strong winds and flooding rain to the two regions. At least two people were killed. Tapah damaged nearly 1,000 structures and left notable agricultural damage in Japan. Similar damage was noted in South Korea. Total economic and insured losses were estimated into the millions (USD).

Heavy rains swept across central and southern Sri Lanka from September 23-25, killing at least one person and displacing 15,000 others. More than 1,000 homes were damaged or destroyed by floodwaters.

A magnitude-5.6 earthquake struck just south of New Mirpur, Pakistan at 11:01 UTC (4:01 PM local time) on September 24. At least 39 people were killed, and 746 others were injured. The tremor caused widespread damage to about 5,700 structures and vehicles across the regions of Azad Jammu & Kashmir and Punjab. Total economic losses were preliminarily estimated at PKR2.7 billion (USD17 million).

A strong, magnitude-6.5 earthquake struck the Maluku Islands in eastern Indonesia at 23:46 UTC on September 25 (8:46 local time on September 26). The tremor left 37 people dead and more than 150 others injured. Official assessments cited that nearly 6,350 homes and other structures were damaged or destroyed, with Ambon City being particularly affected. Total economic losses were estimated to reach into the millions (USD).

Oceania (Australia, New Zealand, South Pacific Islands)

No major natural disaster events affected Oceania during the month of September.

Appendix

Updated 2019 Data: January-August

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	225,000+	2.75+ 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+	825+ million
07/26-07/30	Severe Weather	Midwest, Northeast	0	20,000+	235+ million
08/04-08/05	Severe Weather	Midwest	0	42,000+	675+ 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	37,000+	550+ million
08/13-08/16	Severe Weather	Rockies, Plains, Midwest	0	35,000+	325+ 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

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

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
02/23-02/26	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
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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
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

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

*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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
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

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
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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
06/01-09/30	Flooding	India	1,750+	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
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

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.

Contact Information

Adam Podlaha
Head of Impact Forecasting
Impact Forecasting
Aon
adam.podlaha@aon.com

Steve Bowen
Director & Meteorologist
Head of Catastrophe Insight
Impact Forecasting
Aon
steven.bowen@aon.com

Michal Lörinc
Senior Catastrophe Analyst
Impact Forecasting
Aon
michal.lorinc@aon.com

Anwesha Bhattacharya
Senior Analyst (Hydro-meteorologist)
Impact Forecasting
Aon
anwesha.bhattacharya@aon.com

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