



Global Catastrophe Recap

August 2016

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Executive Summary

- Historic flooding devastates the US state of Louisiana; economic damage to exceed USD10 billion
- Major magnitude-6.2 earthquake in central Italy leaves at least 296 people dead
- Active month for tropical cyclone activity with at least five landfalls in the Atlantic & Pacific basins

A slow-moving area of low pressure brought multiple days of extreme rainfall across parts of the Gulf Coast and Midwest in the United States, causing catastrophic flood damage in several communities. At least 13 people were killed. States of emergency were declared in both Louisiana and Mississippi as several feet (meters) of floodwaters left homes, businesses, vehicles and agricultural land almost entirely submerged. As many as 110,000 homes and 100,000 vehicles were damaged or inundated in Louisiana alone. Total economic losses were expected to range between USD10 and 15 billion. Given low NFIP take-up—with more than 80 percent of damaged homes without flood insurance—the public and private insured portion of the losses will be significantly less in the low-digit single billions (USD).

Elsewhere, substantial flooding continued to impact areas across Asia as seasonal monsoon rains persisted through August. In India, the death toll for the season rose to 600 as more than 100,000 homes and other structures were destroyed. Total economic losses were estimated at USD462 million.

China, Pakistan, Vietnam, Philippines, Japan, North Korea, South Korea, Sudan, South Sudan, and Macedonia all cited major flood events in the month.

A severe magnitude-6.2 earthquake struck central Italy and severely impacted parts of Umbria, Abruzzo, Lazio, and Marche regions. Whole towns were flattened as the tremor claimed at least 296 lives. The temblor caused catastrophic damage in the hardest-hit towns of Amatrice, Accumoli, Pescara del Tronto, Arquata del Tronto, and Posta. Total economic damage was estimated to reach into the billions of dollars (USD). However, given very low insurance penetration, the insured loss portion was expected to be a fraction of the overall cost.

Notable earthquake events were also reported in Myanmar and Peru.

Hurricane Earl made separate landfalls in Belize and Mexico after first tracking through the Caribbean Sea. The remnants of the storm brought extreme rainfall to portions of Mexico, Belize, Honduras, and Guatemala. At least 67 people were killed. Total economic losses were estimated at USD250 million, including in Mexico (USD132 million) and Belize (USD110 million).

Other tropical cyclone landfalls or impacts were recorded with Typhoon Nida (Philippines, China, Vietnam), Tropical Storm Dianmu (China, Vietnam), Tropical Storm Mindulle (Japan), and Typhoon Lionrock (Japan, China, Korean Peninsula).

Wildfires burning in southern France, mainland Portugal, and on the islands of Madeira (Portugal) and La Palma (Spain) claimed at least five lives. In Portugal alone, the fires charred 115,000 hectares (284,000 acres) of land as total economic damage was listed at EUR200 million (USD226 million).

Several major wildfires burned in California. The Clayton Fire and the Bluecut Fire each prompted major evacuations and destroyed hundreds of homes. Total economic losses were expected to exceed USD100 million, including costs to fight the fires – which topped USD50 million alone.

United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
08/02-08/04	Flooding	Desert Southwest	0	Hundreds	10s of millions
08/09-08/16	Flooding	Louisiana, Mississippi, MS Valley	13	250,000+	10 to 15 billion
08/13-08/26	Wildfires	California	0	Hundreds	100+ million
08/23-08/24	Flooding	Midwest	1	Hundreds	10s of millions
08/24-08/25	Severe Weather	Midwest	0	Thousands	100+ million

Torrential rains spawned by the Southwest Monsoon brought flash flooding across parts of Arizona from August 2-4, causing widespread damage. Among the hardest-hit areas came in the greater Phoenix, AZ metro region after a 1-in-100 year rainfall caused major flooding that inundated homes, businesses and vehicles. The rains caused millions of dollars' worth of damage.

A slow-moving area of low pressure brought multiple days of extreme rainfall across parts of Louisiana, Mississippi, Missouri, Illinois, and Indiana in the United States from August 9-16, causing catastrophic flood damage in several communities. At least 13 people were killed. States of emergency were declared in both Louisiana and Mississippi as several feet (meters) of floodwaters left homes, businesses, vehicles and agricultural land almost entirely submerged after several rivers and tributaries burst their banks. As many as 110,000 homes and more than 100,000 vehicles were damaged or inundated in Louisiana alone. Total economic losses were expected to range between USD10 to 15 billion. Given low NFIP take-up – with more than 80 percent of damaged homes without flood insurance – the public and private insured portion of the losses will be significantly less in the low-digit single billions (USD).

The combination of hot temperatures, extremely low relative humidity levels, gusty winds, and plentiful available dry brush (fuel) allowed for several major wildfires to be ignited in California during the week from August 13-18. The Clayton Fire (189 single-family homes, 8 commercial structures, 102 other structures destroyed) and the Bluecut Fire (105 single-family homes, 216 outbuildings destroyed; 3 single-family homes, 5 other structures damaged) each prompted major evacuations in the state as hundreds of homes and other structures were destroyed. Total economic losses were expected to exceed USD100 million, including costs to fight the fires—which topped USD50 million alone.

Record-breaking floods in portions of Iowa and Wisconsin claimed one life following torrential rainfall on August 23-24. The Turkey and Upper Iowa rivers both reached record flood peaks; while the Kickapoo and Cedar Rivers also burst their banks. Winneshiek County, Iowa, was worst affected as up to 165 homes were flooded in several communities. Chickasaw, Iowa, and Richland and Crawford counties in Wisconsin were also impacted. Total economic damage was estimated in the tens of millions (USD).

Powerful thunderstorms swept across several Midwest states on August 24-25, spawning at least 23 tornadoes across parts of Indiana and Ohio. Two of the twisters were rated EF3, including one that left extensive damage in the town of Kokomo, IN. Additional tornadoes were reported in the northwest Ohio communities of Antwerp, Defiance, Napoleon, and Okolona. Total economic damage was estimated to exceed USD100 million.

Remainder of North America (Non-US)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
08/02-08/07	HU Earl	Mexico, Central America, Caribbean	67	Thousands	250+ million
08/03-08/04	Severe Weather	Canada	0	Hundreds	10s of millions

Hurricane Earl made separate landfalls in Belize and Mexico during the first week of August after first tracking through the Caribbean Sea. The remnants of the storm brought extreme rainfall to portions of Mexico, Belize, Honduras, and Guatemala. At least 67 people were killed as flooding and landslides caused extensive damage. Thousands of homes and other structures were damaged or destroyed; while large swaths of infrastructure were washed away by storm surge and flooding. Total economic losses were estimated at USD250 million, including in Mexico (USD132 million) and Belize (USD110 million).

Powerful thunderstorms impacted parts of Alberta, Saskatchewan, Manitoba, and Ontario on August 3-4. There were at least three confirmed tornado touchdowns one of which caused structural damage in Baldur, Manitoba. Up to ping pong ball-size hail prompted damages in portions of Saskatchewan while there were widespread reports of downed trees and power lines as the result of damaging wind gusts in all of the affected provinces. Structural damage to properties was also reported in Glenboro, Manitoba.

South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
08/14	Earthquake	Peru	4	2,621	Unknown

A USGS-registered magnitude-5.5 earthquake struck southern Peru late on August 14. The epicenter was located approximately 39 kilometers (24 miles) north of Lluta, Caylloma Province, at a shallow depth of 20 kilometers (12 miles). Damages were reported in Chivay, Achoma, Ichupampa, Cabanoconde, Yanque, Coporaque, Maca, Madrigal, Tapay, and Lari. Four people died and a further 67 sustained injuries as the temblor caused damage to 2,608 homes and 13 schools. A total of 158 of the homes collapsed while a further 1,173 of the total were rendered uninhabitable.

Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
08/06	Flooding	Macedonia	22	3,500+	100+ million
08/08-08/20	Wildfires	Portugal, France, Spain	5	200+	250+ million
08/24	Earthquake	Italy	296	Thousands	Billions

Torrential rainfall prompted deadly flooding in the Macedonian capital of Skopje on August 6. A state of emergency was declared after the floods claimed at least 22 lives and injured more than 60 others. Considerable damage was noted in the northern districts of Stajkovci, Indzikovo, Ekonomija and Aracinovo. Skopje's city center was also impacted by flood inundation. Officially, more than 3,500 homes were damaged or destroyed though the final tally of impacted businesses, public structures and automobiles was even higher. Total economic losses were estimated to approach USD100 million.

Wildfires burning in southern France, mainland Portugal, and on the islands of Madeira (Portugal) and La Palma (Spain) during the first half of August claimed at least five lives. The majority of the fires were ignited around August 8 due to highly favorable burn conditions that would eventually lead to hundreds of homes being destroyed. In Portugal alone, the fires charred 115,000 hectares (284,000 acres) of land. Total economic damage to homes, forestry and infrastructure in Portugal was listed at EUR200 million (USD226 million). Overall damage across Europe was even higher.

A severe magnitude-6.2 earthquake struck central Italy on August 24 affecting parts of Umbria, Abruzzo, Lazio, and Marche regions. Whole towns were flattened as the tremor claimed at least 296 lives. An additional 388 people were injured. The temblor caused catastrophic damage in the hardest-hit towns of Amatrice, Accumoli, Pescara del Tronto, Arquata del Tronto, and Posta. More than 4,000 people were left homeless as buildings collapsed. Several historical sites were heavily damaged as well. Total economic damage was estimated to reach into the billions of dollars (USD). However, given very low insurance penetration, the insured loss portion was expected to be a fraction of the overall cost.

Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
07/01-08/31	Flooding	Sudan, South Sudan	129+	41,000+	Unknown

Heavy seasonal rainfall brought continued flooding throughout Sudan from July through mid-August taking the total death toll to 114. A further 15 fatalities were reported in South Sudan where 22,000 people were displaced in Al Wahdah state. The floods were most substantial in the Sudanese states of Kassala, Al Gezira, and Sennar, where more than 41,000 homes were damaged or destroyed. In total, more than 200,000 people were directly affected by the overflowing rivers.

Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
06/01-08/10	Drought	China	0	N/A	1.6+ billion
07/22-08/04	Flooding	Bangladesh	60	253,413+	Millions
07/22-08/11	Flooding	India	560	100,000+	150+ million
07/25-08/12	Flooding	Myanmar	6	Thousands+	Millions
07/28-08/01	Severe Weather	China	3	2,400+	21+ million
07/31-08/03	Flooding	China	5	3,000+	142+ million
07/31-08/02	TY Nida	Philippines, China, Vietnam	0	15,000+	267+ million
08/02-08/05	Flooding	Vietnam	12	1,000+	10+ million
08/04-08/07	Severe Weather	China	15	4,800+	22+ million
08/05-08/08	Flooding	Pakistan	32	580+	Unknown
08/05-08/10	Flooding	China	23	12,300+	123+ million
08/08-08/16	Flooding	Philippines	26	Thousands	10+ million
08/15-08/16	Flooding	Thailand	3	7,500+	Unknown
08/18-08/19	TS Dianmu	China, Vietnam	17	4,100+	273+ million
08/19-08/22	Flooding	India	40	10,000+	312+ million
08/20-08/24	Flooding	China	1	12,000+	165+ million
08/22	TS Mindulle	Japan	2	1,253+	Millions
08/24	Earthquake	Myanmar	4	1,000+	1.0+ million
08/20-08/25	Flooding	China	2	11,400+	96+ million
08/20-08/25	Severe Weather	China	0	400+	70+ million
08/26-08/30	Flooding	China	8	8,400+	76+ million
08/27-08/28	Flooding	Pakistan	10	Unknown	Unknown
08/30-09/01	TY Lionrock	Japan, China, Korean Peninsula	77	20,781+	245+ million

Severe summer drought conditions, which began in June, intensified across parts of northern China during the month of August. The Ministry of Civil Affairs (MCA) reported that the hardest-hit provincial regions were Inner Mongolia, Jilin and Heilongjiang which were impacted by well-above normal temperatures and reduced rainfall. The MCA cited that more than 3.1 million hectares (7.6 million acres) of cropland was damaged and more than 1.3 million livestock suffered from water shortages. Total economic losses were listed at CNY10.6 billion (USD1.6 billion).

Torrential rains fell across 17 districts in Bangladesh from July 22 to August 4, killing at least 60 people. Nearly a dozen rivers overflowed their banks as a total of 241,685 homes were damaged and a further 10,031 were destroyed. Scores of academic and religious institutions were also affected; while hundreds of kilometers of roads and embankments were damaged. More than 41,390 hectares (102,280 acres) of crops were inundated and significant losses to livestock were noted.

Incessant rains left at least 510 people dead across India from June through until mid-August. Worst affected were the states of Rajasthan, Maharashtra, Assam, Bihar, Uttar Pradesh, West Bengal, and Jharkhand. Throughout the monsoon season, there were at least 6,187 homes destroyed and another 62,599 damaged. Nearly one million people were displaced or affected by the recent rains. It was also reported that nearly 338,000 hectares (835,000 acres) of cropland was submerged. Total economic losses were minimally estimated at INR10 billion (USD150 million).

Periods of heavy rainfall led to widespread flooding in Myanmar from late July into the middle of August, leaving at least six people dead. The floods displaced more than 420,000 people in some of the hardest-hit regions including Sagaing, Mandalay, Bago, Ayeyarwady, Magway, and Yangon. Thousands of homes and other structures were inundated by floodwaters. Additionally, nearly 100,000 acres (40,470 hectares) of crops were submerged in Ayeyarwady.

A severe weather outbreak pounded portions of China's Chongqing, Sichuan, Guizhou, and Yunnan Provinces from July 28 through August 1. According to the MCA, three people died, 100 homes were destroyed, and a further 2,300 homes were damaged. Some 4,100 hectares (10,130 acres) of crops were also damaged. Economic losses were listed at CNY142 million (USD21 million).

At least five people were killed or listed as missing following flooding in Xinjiang Province, China, from July 31 through August 3. A total of 100 homes were destroyed and 2,900 were damaged while more than 2,200 hectares (5,435 acres) of crops were damaged. The MCA listed economic losses at CNY940 million (USD142 million).

Typhoon Nida made landfall in the Philippines on July 31 and in Guangdong, China, on August 2 prompting widespread disruption. Hong Kong ground to a virtual standstill on August 2 as strong winds and heavy rainfall lashed the city. Nearly 6,000 homes were damaged or destroyed in southern China where more than 32,000 hectares (79,070 acres) of crops were also affected. The storm would later track into Vietnam and destroyed thousands of homes. Total economic losses were listed at USD267 million, including in China (USD123 million) and Vietnam (USD144 million).

Torrential rainfall spawned flooding across northern Vietnam from August 2-5, leaving at least 12 people dead or missing. Vast areas of land were submerged by floodwaters and more than 1,000 homes were inundated. Roughly 15,000 hectares (37,065 acres) of cropland was damaged as well. Total economic losses were listed by the local government at VND210 billion (USD10 million).

Two severe weather outbreaks impacted portions of China from August 4-7 affecting Fujian, Jiangxi, Henan, Hubei, Hunan, Sichuan, Guizhou, Yunnan, Hebei, Shanxi, Inner Mongolia, Liaoning, and Heilongjiang. At least 15 people were killed and four others were listed as missing. A total of 4,800 homes were damaged and 13,500 hectares (33,360 acres) of crops were affected. Aggregated economic losses were listed by the MCA at CNY148 million (USD22 million).

Excessive seasonal rainfall brought renewed flooding to parts of Pakistan from August 5-8, killing at least 32 people. The states of Balochistan and Sindh were hardest-hit by landslides and flash flooding that wiped out more than 580 homes.

Heavy rains brought more flooding to China's provincial regions of Hunan, Guangxi, Chongqing, Sichuan, Guizhou, and Yunnan from August 5-10, leaving at least 23 people dead or missing. Widespread damage to infrastructure and crops occurred, as more than 12,300 homes were damaged or destroyed. In total 72,500 hectares (179,150 acres) of agricultural land was impacted. Total economic losses were listed at CNY853 million (USD123 million).

At least 26 people were left dead or missing as enhanced monsoon rainfall drenched western portions of the Philippines from August 8-16. More than 1.3 million residents were affected by the storm's impacts. Data from the federal government indicated that more than 1,000 homes were damaged or destroyed. Total economic losses were listed in excess of PHP465 million (USD10 million).

Heavy downpours triggered flooding in portions of Thailand's Nan and Phayao provinces on August 15-16. Numerous schools and hundreds of homes were reportedly damaged as the floods claimed at least three lives. Three other people sustained injuries. More than 4,100 homes in 206 villages were affected in Nan, while more than 3,400 homes in 98 villages in Phayao were impacted. At least 300 of the affected homes in Phayao were destroyed. On August 16, six districts in Nan were declared to be disaster zones.

Southern portions of China and northern Vietnam were affected by heavy rainfall brought by Tropical Storm Dianmu on August 18-19. At least 17 people were killed or listed as missing as the storm caused widespread damage to homes and agricultural interests. More than 4,000 homes were damaged and 61,000 hectares (150,730 acres) of agricultural land was affected across both countries. Combined economic losses were listed at USD273 million.

Days of seasonal torrential rainfall brought renewed and continued flooding to parts of India from August 19-22, killing at least 40 people. The hardest-hit states were Uttar Pradesh, Bihar, Uttarakhand, Madhya Pradesh, and Rajasthan. Most of the damage was within the Ganges River basin. Damage was noted to tens of thousands of homes and mud huts; while vast swaths of agricultural land were inundated. Total combined economic losses were listed at INR20.7 billion (USD312 million).

Periods of torrential rainfall impacted Inner Mongolia, Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang provinces in China from August 20-24. One of the most notable affected locations was Helan Mountain in Ningxia, where several prehistoric cliff paintings were damaged. China's MCA indicated that 12,000 homes were damaged or destroyed in addition to more than 55,000 hectares (136,000 acres) of agricultural land that was submerged. Total economic losses were listed at USD165 million.

Tropical Storm Mindulle made landfall near Tokyo on August 22 bringing torrential rainfall to central prefectures of Japan. Authorities reported that two people were killed and 70 more were injured as the rainfall prompted flooding and landslides. A total of 1,211 homes and 42 commercial buildings sustained damage. Saitama, Hokkaido, and Chiba prefectures were hardest-hit.

A major magnitude-6.8 earthquake struck central Myanmar on August 24 causing shaking felt as far as Dhaka, Bangladesh, and Bangkok, Thailand. At least four people were killed and two others were injured as the temblor caused damage to hundreds of buildings and other structures – including nearly 400 ancient temples and pagodas dating back to the 10th century. The worst affected area was the city of Bagan.

From August 20-25, Gansu, Ningxia Hui, Inner Mongolia, Shaanxi, and Qinghai provinces in northeastern China were affected by flooding that left at least one person dead and one other missing. A total of 11,000 homes were damaged and 400 homes were destroyed. Some 37,900 hectares (75,860 acres) of crops were affected, with the majority of agricultural losses incurred in Gansu. The MCA listed aggregated economic losses at CNY644 million (USD96 million).

Portions of China's Xinjiang province were heavily impacted by powerful thunderstorms from August 20-25. The severe weather outbreak caused damage to 17,800 hectares (43,985 acres) of agricultural land, of which 3,300 hectares (8,155 acres) of crops were destroyed. Additionally, some 400 homes sustained varying degrees of damage. Economic losses were listed at CNY430 million (USD70 million).

Nine provinces in southern China were impacted by flooding from August 26-30 that claimed at least eight lives. Fujian, Jiangxi, Hubei, Hunan, Guangdong, Chongqing, Sichuan, Guizhou, and Yunnan were all impacted. A total of 8,400 homes were damaged or destroyed and 17,100 hectares (42,255 acres) of agricultural land was affected. The MCA listed economic losses at CNY505 million (USD76 million).

Torrential downpours in Pakistan's largest city claimed 10 lives from August 27-28. All of the fatalities occurred in the greater Karachi metro area following 110 millimeters (4.3 inches) of rain in 48 hours. The rain prompted widespread flooding throughout the city as sewer and drainage systems were overwhelmed by the deluge.

Typhoon Lionrock made landfall in Japan on August 30 before impacting portions of South Korea, North Korea, and China through September 1. The torrential rain generated by Lionrock prompted flooding and landslides that claimed at least 17 lives in Japan and 60 in North Korea. Dozens of others were injured or listed as missing. More than 8,100 homes were destroyed and 12,673 were damaged, the majority of which were in North Korea. Additionally, 464,900 hectares (1.1 million acres) of agricultural land was impacted in China including 53,500 hectares (132,200 acres) of crops that were destroyed. Ten thousand hectares (24,710 acres) of arable land was inundated in North Korea. Economic losses in China alone were listed at USD245 million. Losses throughout Japan and North Korea were also expected to reach into the hundreds of millions (USD).

Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
8/22	Earthquake	Australia (Queensland)	0	1,000+	Millions

A magnitude-5.8 earthquake struck just off the coast of Bowen, Australia on August 22. The tremor caused minor damage to properties in the state of Queensland, with local agencies reporting more than 1,000 calls for assistance. The Insurance Council of Australia reported that claims totaled AUD2.0 million (USD1.6 million). Total economic losses were higher.

Appendix

Updated 2016 Data: January-July

United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/04-01/08	Flooding	California	0	10,000+	125+ million
01/09	Severe Weather	Florida	0	200+	10+ million
01/17	Severe Weather	Florida	2	200+	20+ million
01/21-01/24	Winter Weather	Mid-Atlantic, Northeast, Southeast	58	25,000+	1.0+ billion
01/24	Earthquake	Alaska	0	Hundreds	Unknown
01/31-02/01	Severe Weather	California	0	12,500+	175+ million
02/08-02/09	Winter Weather	Northeast, Mid-Atlantic	0	Hundreds	25+ million
02/13	Earthquake	Oklahoma	0	Hundreds	Unknown
02/13-02/16	Winter Weather	Northeast, Midwest, Southeast	6	20,000+	700+ million
02/19-02/20	Severe Weather	Midwest	0	25,000+	250+ million
02/22-02/25	Severe Weather	Plains, Midwest, Southeast, Northeast	10	100,000+	1.2+ billion
02/29-03/01	Severe Weather	Plains, Southeast	0	Hundreds	Millions
03/04-03/12	Severe Weather	Plains, Southeast, Midwest, West	6	60,000+	1.5+ billion
03/13-03/14	Severe Weather	Plains, Midwest, Southeast	0	10,000+	175+ million
03/13-03/15	Severe Weather	West, Midwest, Plains	1	17,500+	175+ million
03/17-03/18	Severe Weather	Plains, Southeast	0	135,000+	1.4+ billion
03/22-03/25	Severe Weather	Rockies, Plains, Southeast, Midwest	0	175,000+	2.5+ billion
03/26-03/27	Severe Weather	Midwest, Southeast	0	10,000+	75+ million
03/30-04/01	Severe Weather	Plains, Southeast, Midwest	0	20,000+	200+ million
04/02-04/04	Severe Weather	Midwest, Mid-Atlantic, Northeast	2	60,000+	475+ million
04/06-04/07	Severe Weather	Southeast, Midwest	0	Thousands	Millions
04/10-04/13	Severe Weather	Plains, Southeast	1	350,000+	3.75+ billion
04/15-04/19	Flooding	Plains, Rockies	9	25,000+	1.0+ billion
04/24-04/28	Severe Weather	Plains, Midwest, Southeast, Mid-Atlantic	1	110,000+	800+ million
04/29-05/03	Severe Weather	Plains, Midwest, Southeast, Mid-Atlantic	6	150,000+	1.6+ billion
05/07-05/10	Severe Weather	Plains, Midwest, Mississippi Valley	2	90,000+	900+ million
05/10-05/12	Severe Weather	Plains, Midwest	0	90,000+	850+ million
05/16-05/17	Severe Weather	Texas, Oklahoma	0	17,000+	175+ million
05/21-05/28	Severe Weather	Plains, Midwest	1	95,000+	1.1+ billion
05/28-05/30	TS Bonnie	Southeast	0	Hundreds	Millions
05/29-06/02	Severe Weather	Plains	12	25,000+	275+ million
06/06-06/07	Severe Weather	Colorado	0	15,000+	175+ million
06/06-06/07	TS Colin	Florida, Carolinas	0	Hundreds	Millions
06/16-06/18	Severe Weather	Mid-Atlantic, Southeast, Northeast	0	20,000+	275+ million
06/16-06/18	Severe Weather	Plains, Midwest	0	Thousands	100+ million
06/22-06/26	Severe Weather	Mid-Atlantic, Midwest	23	5,500+	100s of Millions
06/23-07/05	Wildfire	California	2	Hundreds	100+ million

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
06/27-06/29	Severe Weather	Rockies, Plains	0	Thousands	Millions
07/04-07/07	Severe Weather	Plains, Midwest, Mid-Atlantic, Southeast	0	20,000+	200+ million
07/07-07/09	Severe Weather	Rockies, Midwest, Southeast	0	40,000+	375+ million
07/13-07/15	Severe Weather	Rockies, Plains, Midwest, Southeast	7	50,000+	450+ million
07/20-07/21	Severe Weather	Midwest	0	10,000+	140+ million
07/22-08/01	Wildfire	California	2	140+	50+ million
07/28-07/29	Severe Weather	Rockies, Plains	0	100,000+	1.0+ billion
07/30-08/01	Flooding	Mid-Atlantic, Northeast	2	15,000+	500+ million

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-02/29	Drought	Haiti	0	Unknown	84+ million
02/23-02/25	Winter Weather	Canada	0	Thousands	Millions
02/28	Flooding	Haiti	5	10,000+	Unknown
03/09-03/10	Severe Weather	Canada	1	Thousands	Millions
03/13	Severe Weather	Canada	0	Thousands	Millions
03/24-03/25	Winter Weather	Canada	0	Thousands	100+ million
04/23-04/24	Flooding	Haiti	6	4,400+	Unknown
04/27-05/01	Flooding	Haiti, Dominican Republic	1	2,500+	Millions
05/02-06/01	Wildfire	Canada	0	20,000+	5.0+ billion
05/07-05/08	Flooding	Haiti, Dominican Republic	5	890+	Unknown
05/26-05/31	Flooding	Haiti	1	2,901+	Unknown
06/09	Earthquake	Nicaragua, Honduras	0	3,200+	Unknown
06/24-06/25	Severe Weather	Canada	0	Thousands	50+ million
06/28-06/30	Severe Weather	Canada	0	Thousands	50+ million
07/08	Severe Weather	Canada	0	Thousands	10s of millions
07/08-07/11	Severe Weather	Canada	0	Thousands	10s of millions
07/15-07/16	Severe Weather	Canada	0	Thousands	10s of millions
07/18-07/20	Severe Weather	Canada	0	Thousands	10s of millions
07/27	Severe Weather	Canada	0	Thousands	10s of millions
07/30-08/01	Severe Weather	Canada	0	Thousands	10s of millions

South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/25	Flooding	Ecuador	9	2,000+	10+ million
01/09-01/15	Flooding	Brazil	3	25,000+	100+ million
02/20-02/25	Flooding	Peru	1	2,000+	Millions
03/10-03/11	Flooding	Brazil	30	5,000+	100+ million
04/10-04/14	Flooding	Argentina, Uruguay	0	7,500+	1.3+ billion
04/15-04/18	Flooding	Chile	12	5,000+	100+ million
04/15-04/25	Severe Weather	Uruguay	10	5,000+	25+ million
04/16	Earthquake	Ecuador	660	10,000+	3.0+ billion
05/18	Earthquake	Ecuador	1	Hundreds	Unknown

Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/08	Winter Weather	Central & Northern Europe	21	Unknown	Unknown
01/12-01/14	Winter Weather	Central & Northern Europe	3	Hundreds	Millions
01/25	Earthquake	Spain, Morocco	1	Hundreds	13+ million
01/29-01/30	WS Marita	UK, Scandinavia	0	Thousands	275+ million
02/01-02/02	WS Norkys	United Kingdom	0	Thousands	75+ million
02/08	WS Ruzica	UK, France, Scandinavia	0	Thousands	275+ million
02/27-02/28	Severe Weather	Italy	6	Thousands	Millions
03/06-03/08	Flooding	Serbia, Croatia, Montenegro	0	2,000+	100+ million
03/09-03/10	Flooding	United Kingdom	0	1,000+	Millions
03/27-03/29	WS Jeanne	UK, Scandinavia	1	Thousands	300+ million
04/08-04/15	Flooding	Saudi Arabia, Yemen, Oman	47	Thousands	Millions
04/16-04/22	Flooding	Russia	0	8,000+	Millions
05/26-06/06	Flooding	Germany, France, Austria, Poland	17	250,000+	5.5+ billion
06/04-06/06	Severe Weather	Russia	0	2,732+	Unknown
06/23-06/24	Severe Weather	Netherlands	0	Thousands	1.1+ billion
07/22	Flooding	Luxembourg	0	Thousands	50+ million

Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/10	Heatwave	South Africa	11	Unknown	Unknown
01/01-03/01	Drought	South Africa	0	Unknown	250+ million
01/01-02/01	Flooding	Burundi	52	5,100+	13+ million
01/01-03/01	Drought	Zimbabwe	0	Unknown	1.6+ billion
02/29	Flooding	Angola	54	Thousands	Unknown
03/06-03/09	Flooding	Angola	6	551+	Unknown
03/10	Flooding	Kenya	3	1,000+	Unknown
04/02-04/07	Flooding	Ethiopia	28	1,000+	Unknown
04/06-04/11	Flooding	Somalia, Malawi	19	10,000+	Millions

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/13-04/17	Flooding	Uganda	0	5,000+	2.7+ million
04/16-04/22	Flooding	Angola	19	2,500+	Unknown
04/29-05/02	Flooding	Kenya	39	2,000+	Unknown
05/07-05/08	Landslide	Rwanda	50	500+	Unknown
05/09	Landslide	Ethiopia	100	Unknown	Unknown
06/13	Flooding	Ghana	10	Unknown	Unknown
06/01-07/31	Flooding	Niger	14	2,000+	Unknown
07/12-08/09	Flooding	Mali, Burkina Faso	26	9,900+	Unknown
07/13-07/15	Flooding	Sudan	13	2,000+	Unknown
07/27	Severe Weather	South Africa	7	Thousands	250+ million

Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-06/30	Drought	India	0	Unknown	5.0+ billion
01/01-06/30	Drought	Vietnam	0	Unknown	675+ million
01/01-06/30	Drought	Thailand	0	Unknown	285+ million
01/03	Earthquake	India	22	1,000+	75+ million
01/21	Earthquake	China	0	2,200+	15+ million
01/20-01/26	Winter Weather	China, Taiwan, Korea, Japan, Thailand	116	25,000+	2.0+ billion
01/26-01/29	Flooding	China	11	1,000+	20+ million
02/03	Winter Weather	India	10	Unknown	Unknown
02/05-02/09	Flooding	Indonesia	6	4,000+	Millions
02/06	Earthquake	Taiwan	117	Thousands	750+ million
02/18-02/19	Severe Weather	China	0	1,600+	62+ million
02/19-02/24	Flooding	Indonesia, Malaysia	1	7,200+	Millions
02/21-02/26	Winter Weather	China	0	1,000+	15+ million
03/03-03/09	Severe Weather	China	0	4,000+	315+ million
03/07-03/08	Flooding	Indonesia	6	3,500+	Unknown
03/07-03/11	Winter Weather	China	0	1,000+	140+ million
03/09	Severe Weather	United Arab Emirates, Oman	0	10,000+	500+ million
03/09-03/29	Flooding	Pakistan	141	1,058+	Millions
03/13	Flooding	Indonesia	5	5,900+	Unknown
03/19-03/22	Severe Weather	China	13	82,000+	170+ million
03/25-03/28	Severe Weather	China	0	2,000+	77+ million
03/26-03/29	Winter Weather	China	0	Unknown	146+ million
04/01-04/08	Flooding	China	10	30,000+	45+ million
04/01-04/30	Heatwave	India	300	Unknown	Unknown
04/02-04/08	Flooding	Pakistan, Afghanistan	152	5,000+	Millions
04/10-04/12	Severe Weather	China	8	22,000+	130+ million
04/13	Earthquake	Myanmar, Bangladesh, India	2	Hundreds	Unknown
04/14 & 04/16	Earthquake	Japan	95	260,000+	30+ billion
04/16-04/17	Flooding	Afghanistan	31	Unknown	Unknown
04/20-04/28	Flooding	China	20	16,000+	97+ million

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/21-04/23	Severe Weather	Myanmar	8	10,000+	Millions
04/22-04/25	Flooding	India	18	Thousands	150+ million
04/24-04/27	Severe Weather	China	0	2,000+	216+ million
02/01-05/02	Wildfires	India, Nepal	18	Unknown	Unknown
04/28-05/03	Flooding	China	3	6,000+	31+ million
04/29-05/03	Severe Weather	Myanmar	18	17,584+	2.6+ million
05/01-05/05	Severe Weather	China	4	31,500+	115+ million
05/04-05/11	Flooding	China	66	79,200+	820+ million
05/09-05/12	Flooding	Tajikistan, Afghanistan	10	2,550+	Unknown
05/12-05/14	Severe Weather	Bangladesh, India, Myanmar	67	Unknown	Unknown
05/13-05/16	Flooding	China	0	2,900	200+ million
05/14-05/15	Severe Weather	China	1	1,300	93+ million
05/14-05/21	CY Roanu	Sri Lanka, Southern Asia	135	125,000+	1.7+ billion
05/18-05/21	Flooding	China	12	14,700+	447+ million
05/19	Severe Weather	China	0	Unknown	91+ million
05/22	Landslide	India	10	Unknown	Unknown
05/22	Landslide	Yemen	20	Unknown	Unknown
05/22	Earthquake	China	0	46,166+	Unknown
05/22-05/23	Winter Weather	China	0	Unknown	61+ million
05/21-05/29	Flooding	China	17	Hundreds	69+ million
05/24-05/30	Severe Weather	China	0	5,000+	354+ million
05/31-06/02	Flooding	China	6	12,800+	403+ million
06/01	Severe Weather	Pakistan	15	Unknown	Unknown
06/02-6/08	Severe Weather	China	12	50,000+	768+ million
06/04-06/07	Flooding	China	0	Thousands	213+ million
06/06-06/16	Severe Weather	China	7	32,100+	822+ million
06/08-06/11	Flooding	Myanmar	12	4,500+	Unknown
06/09-06/16	Flooding	China	25	84,800+	664+ million
06/12	Severe Weather	India	11	Unknown	Unknown
06/16-06/23	Severe Weather	China	102	25,000+	500+ million
06/17-06/21	Flooding	Indonesia	62	2,000+	25+ million
06/18-06/23	Flooding	China	68	55,000+	2.3+ billion
06/20-06/21	Severe Weather	India	93	Unknown	Unknown
06/20-06/21	Flooding	Japan	7	2,000+	Millions
06/23-06/30	Flooding	China	34	50,000+	675+ million
06/25-07/01	Flooding	India	55	Thousands	Millions
06/26-06/29	Severe Weather	China	1	2,000+	165+ million
06/30-07/01	Flooding	Indonesia	0	14,109+	Unknown
05/01-08/01	Flooding	China	475+	500,000+	28+ billion
06/30-07/05	Flooding	Nepal	25	172	Unknown
07/01-07/03	Severe Weather	China	0	0	117+ million
07/01-07/06	Flooding	India	62	Unknown	Unknown
07/02-07/03	Flooding	Pakistan	46	100+	Unknown
07/08-07/09	STY Nepartak	Philippines, Taiwan, China	111	38,000+	1.5+ billion

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
07/08-07/11	Severe Weather	China	4	5,700+	41+ million
07/09-07/17	Flooding	India	44	19,600+	Unknown
07/16-07/24	Flooding	China	289+	300,000+	5.0+ billion
07/19	Flooding	Afghanistan	17	Unknown	Unknown
07/21-07/27	Flooding	Nepal	122+	4,782	Unknown
07/22-07/24	Flooding	North Korea	14	246	Unknown
07/24	Flooding	Indonesia	4	2,600+	Unknown
07/24	Severe Weather	China	4	9,700+	50+ million
07/24-07/29	Flooding	China	14	24,500	91 million
07/27-07/28	TS Mirinae	China, Vietnam	5	2,000+	20+ million
07/28-07/31	Flooding	China	4	7,000	91 million

Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/03-01/05	Flooding	Australia (NSW)	0	Hundreds	Millions
01/06-01/13	Bushfire	Australia (WA)	2	1,358+	100+ million
01/14	Severe Weather	Australia (NSW)	1	2,000+	25+ million
02/14	Earthquake	New Zealand	0	7,165+	Millions+
02/16-02/22	TC Winston	Fiji, Tonga	44	46,000+	1.0+ billion
03/23-03/24	Flooding	New Zealand	0	2,000+	25+ million
04/04-04/07	CY Zena	Fiji	2	1,000+	Millions
06/04-06/06	Severe Weather	Australia	4	45,522+	450+ million
07/16-07/17	Severe Weather	Australia (South Australia & Victoria)	0	Thousands	15+ million

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 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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