

Impact Forecasting

July 2011 Monthly Cat Recap – Impact Forecasting

August 4, 2011

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Executive Summary

- Global tropical cyclone activity picks up as Atlantic Hurricane Season approaches peak months
- Monsoonal rains spawn billions (USD) in flood damage across sections of Asia
- New rounds of severe weather add nearly USD1 billion to U.S. insured loss total for the year

Global tropical cyclone activity increased during the month, with several storms making landfall. Typhoon Nock-ten was the most notable storm, which made separate landfalls in the Philippines, China and Vietnam. At least 72 people were killed and 53 others were injured, with most of the casualties coming in the Philippines. Total combined economic losses from Nock-ten's effects in the Philippines, China, Vietnam, Laos and Thailand were listed at USD103 million.

Typhoon Ma-on made a brief landfall on Japan's Shikoku Island, while spreading heavy rains and gusty winds throughout much of the country. At least five people were killed and dozens more were injured. Total economic losses were estimated at approximately JPY3.9 billion (USD50 million).

In the Atlantic Basin, Tropical Storm Don developed in the southern Gulf of Mexico and made landfall in southern Texas late in the month. The weak storm came ashore while dissipating and brought only minimal amounts of rainfall to the parched state. No injuries or fatalities were reported.

Monsoon rains prompted continued flooding throughout parts of Asia. In China, four separate periods of heavy rainfall and thunderstorms across 20 provinces led to the deaths of at least 122 people. Upwards of 300,000 homes were affected by the floods and landslides, in addition to tens of thousands of hectares (acres) of crops and the transportation infrastructure. Total combined direct economic losses were listed by the Ministry of Civil Affairs at CNY12.41 billion (USD1.73 billion).

Significant flooding and landslides also occurred in South Korea, where at least 62 people were killed and dozens more were injured in central sections of the country. According to the National Emergency Management Agency, at least 11,000 homes were inundated in addition to thousands of additional buildings, schools and vehicles. Total economic losses were anticipated to reach well into the hundreds of millions of dollars (USD). South Korea's Financial Supervisory Service noted that at least 5,839 auto claims had already been filed, with payouts expected to exceed KRW40.3 billion (USD38.3 million).

Additional notable flood events during the month were reported in Mexico, Brazil, Denmark and Australia.

The United States endured at least four periods of severe weather in July, particularly across parts of the Midwest, Plains and the Rockies. Total combined economic losses were preliminarily listed at USD1.3 billion, while insured losses were a combined USD900 million.

Severe weather damage was also found in parts of Australia and Russia's Far East.

A magnitude-6.1 earthquake struck the southern portions of Kyrgyzstan on the 19th. The tremor left at least 14 people dead near the intersection of the borders of Kyrgyzstan, Tajikistan and Uzbekistan. Total economic losses were KSG414 million (USD9.3 million).

United States

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
6/30-7/4	Severe Weather	Midwest	2+	70,000+	425+ million
7/10-7/14	Severe Weather	Midwest, Rockies, Plains	0	120,000+	900+ million
7/22-7/24	Severe Weather	Midwest	0	Thousands+	Millions+
7/29	TS Don	Texas	0	Unknown	Unknown
7/29-8/1	Severe Weather	Plains, Midwest, Northeast	0	Thousands+	Millions+

Several days of severe weather between June 30th and July 4th brought widespread damage throughout the Midwest, killing at least two people. In the greater Chicago, Illinois metropolitan region, powerful storms led to extremely gusty winds and hail as large as baseballs causing damage in the city. Additional damage occurred in parts of Minnesota and Wisconsin as tornadoes, large hail and straight-line winds (up to 100 mph (160 kph) in some locations) occurred. Two fatalities occurred in Burnett County, Wisconsin. Total economic losses were listed at USD425 million, with various insurers receiving at least 70,000 claims with payouts in excess of USD275 million.

Clusters of strong thunderstorms led to widespread damage across parts of the Midwest, Rockies and the Plains between the 10th and the 14th. Some of the most notable damage locations came in the Dakotas, Minnesota and Wisconsin on the 10th before shifting into the Great Lakes on the 11th as a powerful derecho crossed the region. In the greater Chicago metropolitan area, winds gusting to 80 mph (130 kph) led to widespread damage as trees were downed and power lines snapped. Also during the period, severe storms spawned golf ball-sized hail in the greater Denver, Colorado area which led to widespread home and vehicle damage. Total economic losses were estimated at USD900 million, while various insurers have recorded more than 120,000 claims with payouts in excess of USD625 million.

Rounds of heavy rains inundated the greater Chicago metropolitan area between the 22nd and the 24th. The rains prompted significant flooding in some areas, where thousands of homes sustained inundation in basements. The transportation infrastructure was also impacted, where nearly every main highway corridor was affected with floodwaters. Regional insurers reported receiving a high volume of claims from policyholders, suggesting that losses would reach into the millions of dollars (USD).

Tropical Storm Don developed in the southern Gulf of Mexico and made landfall in southern Texas on the 29th. The weak storm came ashore while dissipating and brought only minimal amounts of rainfall to the parched state. No injuries or fatalities were reported.

Rounds of severe thunderstorms accompanied a frontal boundary which traversed through parts of the northern Plains, Midwest and the Northeast between July 29th and August 1st. Large hail (up to golf ball and baseball-sized) and damaging straight-line winds (in excess of 100 mph (160)) were found in some of the most severe storm cells. Torrential rains also spawned flash flooding in some locations. Total economic and insured losses were expected to reach well into the millions of dollars (USD).

Remainder of North America (Canada, Mexico, Caribbean Islands)

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/5-7/7	Flooding	Dominican Republic	0	1,900+	Unknown
7/15-7/17	Flooding	Mexico, Guatemala	5+	40,000+	Unknown
7/17-7/19	Severe Weather	Canada	2+	1,000+	Millions+

Tropical rains in the Caribbean Sea spawned flooding throughout the Dominican Republic between the 5th and 7th. At least one person was killed after the heavy rains spawned flash flooding and mudslides. More than 1,900 homes in central and southern sections of the country were damaged or destroyed.

Remnant moisture from what would become Major Hurricane Dora in the Pacific Ocean brought heavy rainfall between the 15th and the 17th to southern sections of Mexico and Guatemala. At least five people were killed and dozens more were injured. The Mexican state of Oaxaca was most impacted as an emergency declaration was made for 42 of the state's 570 municipalities. Flash floods and landslides were the largest culprit of the damage and fatalities, though several rivers and streams overflowed their banks in the Isthmus of Tehuantepec region. As many as 200,000 residents were left homeless by the floods, which correlates to nearly 40,000 homes affected.

Rounds of severe weather affected four Canadian provinces between the 17th and the 19th, leaving at least two people dead. The storms brought damaging winds in excess of 120 kph (75 mph) and large hail (up to baseball-sized) to parts of eastern Ontario, western Quebec, eastern Alberta and Saskatchewan. Saskatchewan was particularly affected, including the communities of Waskesiu, Big River, Emma Lake, Glaslyn and Candle Lake. According to provincial insurers, more than 1,000 home and auto claims had already been filed. Total losses were anticipated to be well into the millions of dollars (USD).

South America

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/16-7/18	Flooding	Brazil	10+	1,000+	Unknown
7/23-7/28	Flooding	Brazil	3+	Thousands+	Unknown

Persistent heavy rains between the 16th and the 18th led to widespread flooding in northeastern Brazil, leaving at least 10 people dead in the states of Pernambuco and Paraiba. The Brazilian government declared a state of emergency in 28 separate towns as more than 1,000 homes were damaged from flooding and mudslides. A water supply station and 16 dams were also severely damaged. In terms of the transportation infrastructure, high water levels and debris led to the closure of several main roadways.

Heavy rainfall between the 23rd and the 28th in Brazil's Rio Grande do Sul state led to the deaths of at least three people. At least 27 towns within 16 municipalities declared a state of emergency and damage during the event. State officials reported that more than 123,000 residents were affected, particularly after six rivers had breached flood stage.

Europe

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/2-7/3	Flooding	Denmark	0	1,700+	Millions+
7/8	Flooding	Scotland	0	100+	1+ million

Some of the heaviest rains in at least 25 years fell in the Denmark capital of Copenhagen and surrounding areas on the 2nd and 3rd. No injuries or fatalities were reported. In terms of damage, at least 1,700 separate residential homes and hundreds of other businesses reported flood inundation. Danish police were forced to close four major highways surrounding Copenhagen and also the city's main train station – Hovedbanegården – due to downed switching signals, muddy tracks and washed out roads.

A torrential rainstorm on the 8th led to widespread flooding in southern and western sections of Edinburgh in Scotland. According to officials from Lothian and Borders Fire and Rescue, the flash floods damaged at least 40 homes and flooded dozens of cars. Multiple businesses were damaged as well. The Edinburgh Chamber of Commerce reported that damage costs were anticipated to reach well into the hundreds of thousands of pounds (GBP), likely reaching at least USD1 million.

Africa

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/22-7/29	Flooding	Benin	0	1,000+	Unknown

Excessive rainfall spawned major flooding across the communities of Lokossa, Athiémé Bopa and Cotonou Littoral in Benin between the 22nd and the 29th. The local Red Cross reported that at least 1,000 homes were destroyed and several roads were submerged. There were no immediate reports of fatalities or injuries.

Asia

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
5/15-7/15	Flooding	Nepal	75+	500+	Millions+
6/1-7/31	Drought	China	0	Unknown	283+ million
7/1-7/8	Flooding	China	49+	100,000+	989+ million
7/9-7/11	Flooding	South Korea	9+	500+	Millions+
7/11-7/14	Flooding	China	6+	5,000+	54.1+ million
7/18-7/20	TY Ma-on	Japan	5+	Hundreds+	50+ million
7/19	Earthquake	Kyrgyzstan, Tajikistan, Uzbekistan	14+	1,500+	9.3+ million
7/22-7/25	Flooding	China	54+	150,000+	962+ million
7/26-7/29	Flooding	South Korea, North Korea	100+	20,000+	200+ million
7/27-7/30	TY Nock-ten	Philippines, China, Vietnam	72+	25,000+	113+ million
7/27-7/31	Flooding	Japan	3+	3,000+	Millions+

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/28-7/31	Flooding	China	13+	25,000+	52.7+ million
7/31	Severe Weather	Russia	1+	250+	3+ million

In Nepal, nearly continuous rainfall since May 15 led to widespread flooding and landslides across most sections of the country. According to the National Emergency Operation Center, at least 75 people died and more than 80 others were injured in the flooding. More than 500 homes were destroyed.

A severe drought persisted in southwest China throughout the month of July after starting in early June. Government officials reported that the drought had damaged 550,000 hectares (1.35 million acres) of crops and left 1.8 million residents without plentiful drinking water. Total economic losses were listed at CNY1.82 billion (USD283 million).

Fresh rounds of torrential rainfall between the 1st and the 8th brought renewed flooding to 20 separate Chinese provincial regions. At least 49 people were killed and many others were injured as the heavy rains prompted flooding and landslides. Damage was widespread as more than 100,000 homes were damaged or destroyed in addition to hundreds of schools and other structures. The transportation infrastructure was seriously impacted as several state and national highways and bridges were washed away, submerged or covered in debris. Wide swaths of cropland were submerged as well. According to the Ministry of Civil Affairs, direct economic losses were listed at CNY6.39 billion (USD989 million).

Three consecutive days of heavy monsoonal rains across South Korea between the 9th and the 11th left at least nine people dead and several others injured. The country's National Emergency Management Agency reported that the provinces of South Gyeongsang, Chungcheong and Jeolla saw flash flooding. In Seoul, isolated reports of flooding were prevalent across the city. Damage was reported to hundreds of homes in addition to bridges and roads being destroyed. The floods also submerged thousands of hectares (acres) of farmland and forced the suspension of some train services.

Heavy rainfall between the 11th and the 14th led to flooding and landslides across eight separate provinces in China. At least six people were killed and thousands of homes were damaged or destroyed by the inclement weather. Farmland was also submerged. According to the Ministry of Civil Affairs, direct economic losses were listed at CNY350 million (USD54.1 million).

Typhoon Ma-on made a brief landfall on Japan's Shikoku Island on the 19th while spreading heavy rains and gusty winds throughout much of the country. At least five people were killed and dozens more were injured. Prior to the storm's arrival, Japanese officials were forced to take safety precautions to protect earthquake-damaged areas at the Fukushima Daiichi nuclear power plant. Heavy rains and gusty winds from the cyclone forced airlines and express trains to cancel hundreds of flights and routes. The storm damaged a centuries-old castle in Kyoto, and submerged agricultural areas. Total economic losses were estimated at JPY3.9 billion (USD50 million).

A magnitude-6.1 earthquake struck the southern portions of Kyrgyzstan on the 19th. The tremor struck with an epicenter 404 kilometers (251 miles) southwest of Bishkek, Kyrgyzstan at a depth of 16 kilometers (9.9 miles). At least 14 deaths were reported near the epicenter, which was near the intersection of the borders of Kyrgyzstan, Tajikistan and Uzbekistan. Government statistics indicated that more than 1,500 homes and buildings were damaged or destroyed throughout the region. Total economic losses were KSG414 million (USD9.3 million).

Torrential rains and strong thunderstorms pelted 267 counties in 18 separate provincial regions in China between the 22nd and the 27th. At least 54 people were killed and dozens more were injured as flooding, landslides, damaging winds and hail all contributed to the casualties. According to the Ministry of Civil Affairs, at least 150,000 homes were damaged or destroyed in addition to tens of thousands of hectares (acres) of crops being submerged. The transportation infrastructure was also affected during the event. Direct economic losses were listed at CNY4.07 billion (USD632 million).

At least 62 people were killed and dozens more were injured in central sections of South Korea after excessive rains between the 26th and 29th prompted widespread flooding and landslides. According to the National Emergency Management Agency, at least 11,000 homes were inundated in addition to thousands of additional buildings, schools and vehicles. Severe damage was also evident to main roads, subway stations, rail lines and underground walkways. Total economic losses were anticipated to reach well into the hundreds of millions of dollars (USD). South Korea's Financial Supervisory Service noted that at least 5,839 auto claims had already been filed, with payouts expected to exceed KRW40.3 billion (USD38.3 million). It should be noted that dozens of people were killed and at least 3,000 homes were destroyed in North Korea.

Typhoon Nock-ten developed and made landfall in the Philippines, China and Vietnam between the 27th and the 30th, bringing torrential rains and gusty winds. At least 72 people were killed and 53 others were injured, with most of the casualties coming in the Philippines. Nock-ten's arrival in the Philippines in Aurora province on the 27th prompted flash floods and landslides. More than 16,974 homes were damaged or destroyed in the country, with economic losses listed at PHP2.18 billion (USD51.6 million). In southern China's Hainan province, the storm killed at least two people as heavy rains spawned isolated reports of flooding. Direct economic losses were listed at CNY377 million (USD58 million). In Vietnam, a weakened Nock-ten made its third and final landfall while coming ashore in Thanh Hoa and Nghe An provinces and shifting into Laos and Thailand (USD3 million in damages). At least three people were killed and thousands of homes were inundated with floodwaters in both countries.

Four consecutive days of torrential rainfall in Japan prompted widespread flooding across central Honshu Island between the 27th and the 31st, leaving at least three people dead. The prefectures of Niigata and Fukushima were particularly affected, where Japanese Meteorological Agency recorded upwards of 1,186 millimeters (47 inches) of rain. More than 3,000 homes were damaged, with government officials ordering the evacuation of at least 470,000 people for precautionary measures.

Persistent rains fell across China's Inner Mongolia Autonomous Region and Shaanxi province between the 28th and the 31st; prompting flooding that killed at least 13 people. According to the Ministry of Civil Affairs, more than 25,000 homes were damaged or destroyed during the event in addition to nearly 75,000 hectares (185,000 acres) of crops being submerged. Combined direct economic losses were listed at CNY1.6 billion (USD52.7 million).

A rare tornado touched down in Russia's Far East region on the 31st, killing at least one person and injuring 30 more. The twister, which struck the city of Blagoveshchensk, damaged or destroyed at least 250 homes and vehicles. Total economic losses were listed at RUB80 million (USD3 million).

Oceania (Australia, New Zealand, New Guinea, Micronesia, Guam, Northern Mariana Islands)

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/5	Severe Weather	Australia (New South Wales)	0	1,700+	Unknown
7/19-7/22	Flooding	Australia (NSW, Victoria)	0	1,273+	Unknown
7/27-7/28	Severe Weather	Australia (Western Australia)	0	60+	Unknown

A strong storm struck rural and coastal sections of New South Wales on the 5th. Winds gusting in excess of 140 kph (85 mph) downed trees, snapped power lines, damaged roofs and impacted infrastructure. According to the NSW State Emergency Service, more than 1,700 damage reports were filed following the event. The NSW government declared the Blue Mountains, Oberon and the Shoalhaven and Wingecarribee shires as natural disaster zones.

Sections of New South Wales and Victoria in Australia recorded torrential rains between the 19th and the 22nd. The heavy rainfall and gusty winds prompted 1,213 damage reports into the NSW State Emergency Service. In Victoria, at least 60 additional properties reported damage. Most of the damage was confined to leaking roofs and flooded homes. Natural disaster declarations were made for the cities of Lithgow, Kiama and Wollongong. In addition to the property damage, regional officials noted that creeks and rivers overflowed their banks at localized points.

A series of strong thunderstorms came ashore in the southwest region of Western Australia on Wednesday night into early Thursday. The WA SES office recorded 60 reports of damage in the greater Perth metropolitan area (primarily Rockingham) to repair homes, roofs and to remove fallen trees. Isolated flooding also occurred. The inclement weather prompted road closures and power outages.

APPENDIX

Updated Jan. 2011 – June 2011 Data

United States

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
12/31-1/1	Severe Weather	Midwest, Southeast	8+	10,000+	Millions+
1/1-6/30	Drought	Texas	0	Unknown	2.5+ billion
1/7-1/12	Winter Weather	Midwest, Southeast, Northeast	11+	Thousands+	Millions+
1/17-1/24	Winter Weather	Plains, Midwest, Northeast, Tennessee Valley	10+	Thousands+	Millions+
1/24-1/26	Winter Weather	Southeast, Northeast, Mid-Atlantic	0	Thousands+	Millions+
1/31-2/2	Winter Weather	Midwest, Southeast, Northeast	36+	100,000+	3.9+ billion
2/2-2/6	Winter Weather	Plains, Southeast, Southwest	4+	45,000+	650+ million
2/20-2/21	Winter Weather	Midwest, Ohio Valley, Northeast	1+	4,000+	Millions+
2/24-2/25	Winter Weather	Midwest, Southeast, Northeast	4+	20,000+	225+ million
2/27-3/4	Wildfires	Texas	1+	241+	14.5+ million
2/27-2/28	Severe Weather	Southeast, Midwest, Mid-Atlantic	4+	45,000+	250+ million
3/5-3/7	Winter Weather	Southeast, Midwest, Northeast	1+	Thousands+	Millions+
3/7-3/9	Wildfires	New Mexico	0	60+	Unknown
3/8-3/11	Winter Weather	Southeast, Midwest, Northeast	4+	20,000+	200+ million
3/11	Tsunami	West Coast, Hawaii	1+	Hundreds+	88.4+ million
3/12-3/13	Wildfires	Oklahoma, Texas	0	67+	3+ million
3/20-3/23	Severe Weather	West, Southeast, Northeast	3+	Thousands+	27+ million
3/26-3/28	Severe Weather	Southeast	0	25,000+	225+ million
3/29-3/31	Severe Weather	Southeast	0	37,500+	350+ million
4/3-4/5	Severe Weather	Midwest, Southeast, Plains	9+	225,000+	2+ billion
4/8-4/11	Severe Weather	Midwest, Southeast, Plains	0	275,000+	2.25+ billion
4/8-4/14	Flooding	Red River Valley	3+	Hundreds+	20+ million
4/9-4/30	Wildfires	Texas	2+	310+	183+ million
4/14-4/16	Severe Weather	Plains, Southeast, Midwest	48+	150,000+	2.5+ billion
4/19-4/21	Severe Weather	Plains, Southeast, Midwest	0	125,000+	1+ billion
4/22-4/28	Severe Weather	Southeast, Plains, Midwest	344+	650,000+	10+ billion
4/15-5/15	Flooding	New England	0	2,000+	75+ million
4/25-6/15	Flooding	Mississippi Valley	9+	25,000+	5+ billion
5/10-5/13	Severe Weather	Midwest, Southeast	2+	50,000+	300+ million
5/15-6/30	Flooding	Missouri River Basin	1+	5,000+	200+ million
5/21-5/27	Severe Weather	Plains, Midwest, Southeast	182+	550,000+	7+ billion
5/28-5/30	Wildfires	Texas	0	12+	Unknown
5/28-6/1	Severe Weather	Plains, Midwest, Northeast	3+	25,000+	500+ million
5/29-6/23	Wildfires	Arizona, New Mexico, Texas	2+	300+	160+ million
6/1-6/2	Severe Weather	Central Plains	0	10,000+	75+ million
6/8-6/10	Severe Weather	Midwest, Northeast, Plains	0	35,000+	300+ million

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
6/14-6/15	Severe Weather	Southern Plains	0	20,000+	125+ million
6/16-6/22	Severe Weather	Midwest, Plains, Southeast	0	160,000+	1.25+ billion
6/26-6/30	Wildfires	New Mexico, Texas	0	100+	512+ million

Remainder of North America (Canada, Mexico, Caribbean Islands)

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/10-1/13	Winter Weather	Canada	0	Hundreds+	Unknown
1/11-1/15	Winter Weather	Mexico	16+	Unknown	Unknown
1/27-1/28	Winter Weather	Canada	0	Hundreds+	Unknown
2/1-2/2	Winter Weather	Canada	0	Dozens+	Unknown
2/15-2/16	Winter Weather	Canada	0	Dozens+	Unknown
3/7	Winter Weather	Canada	0	Hundreds+	20.6+ million
4/7	Earthquake	Mexico	0	Unknown	Unknown
4/14-5/31	Flooding	Canada	5+	10,000+	1.03+ billion
5/15-5/18	Wildfires	Canada	0	522+	800+ million
6/1-6/10	Flooding	Hispaniola, Jamaica	31+	Hundreds+	Unknown
6/8	Severe Weather	Canada	1+	Thousands+	Unknown
6/20-6/21	HU Beatriz	Mexico	3+	100+	Unknown
6/21-6/30	Flooding	Canada	0	Hundreds+	Unknown
6/30	TS Arlene	Mexico	25+	50,000+	Millions+

South America

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
12/25-1/6	Flooding	Brazil	35+	30,000+	Unknown
1/1-3/5	Flooding	Bolivia	52+	25,000+	20+ million
1/1-5/31	Flooding	Colombia	116+	375,000+	5.85+ billion
1/10-1/14	Flooding	Brazil	902+	21,500+	1.2+ billion
1/20-1/31	Flooding	Brazil	6+	21,000+	Unknown
2/27	Landslides	Bolivia	0	400+	Unknown
3/10-3/14	Flooding	Brazil	10+	25,000+	Millions+
3/11	Tsunami	Chile, Peru	0	500+	Unknown
4/3-21	Flooding	Peru	9+	5,500+	Unknown
4/25-4/26	Severe Weather	Brazil	1+	5,000+	255+ million
6/1-6/6	Flooding	Brazil	0	1,000+	9.4+ million
6/4-6/15	Volcano	Chile	0	Unknown	Unknown
6/7	Severe Weather	Chile	0	100+	Unknown

Europe

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/9-1/14	Flooding	Germany, Poland, Czech Republic	5+	Thousands+	Millions+
1/29	Earthquake	Hungary	0	8,481+	5+ million
2/1-2/28	Winter Weather	Poland	29+	Unknown	Unknown
4/8-4/10	Severe Weather	Iceland, Norway	0	500+	Unknown
5/12	Earthquakes	Spain	9+	20,000+	125+ million
5/19	Earthquake	Turkey	3+	2,500+	Unknown
5/21-5/25	Volcano	Western & Central Europe	0	Unknown	50+ million
5/23	Severe Weather	Scotland	1+	Hundreds+	6.5+ million
6/28	Severe Weather	Netherlands	0	Hundreds+	Millions+

Africa

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-1/31	Flooding	South Africa, Mozambique	136+	38,000+	495+ million
2/14-2/16	CY Bingiza	Madagascar, Mozambique	22+	35,729+	Unknown
3/27-3/31	Flooding	Namibia	62+	30,000+	15+ million
6/21-6/22	Flooding	Nigeria	24+	1,000+	4.5+ million

Asia

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-5/31	Drought	China	0	Unknown	2.3+ billion
1/1-1/28	Flooding	Philippines	75+	5,729+	46.6+ million
1/1-1/24	Winter Weather	China	2+	150,000+	1.77+ billion
1/2-1/15	Flooding	Sri Lanka	43+	50,000+	500+ million
1/19	Earthquake	Pakistan	0	200+	Unknown
1/29-1/31	Flooding	Malaysia	5+	25,000+	Unknown
1/31-2/7	Flooding	Philippines	22+	2,598+	12.3+ million
2/1-2/10	Flooding	Sri Lanka	18+	27,497+	450+ million
2/1	Earthquake	China	0	678+	Unknown
2/3-2/17	Winter Weather	Afghanistan	25+	3,000+	Unknown
2/11-2/13	Winter Weather	South Korea	0	1,000+	70+ million
3/10	Earthquake	China	26+	68,000+	16+ million
3/11	Earthquake	Japan	15, 930+	425,000+	198- 309 billion
3/17-3/31	Flooding	Indonesia	13+	5,000+	Unknown
3/21-4/8	Flooding	Thailand	61+	609,679+	880+ million
3/24	Earthquake	Myanmar, Thailand	75+	3,194+	3.6+ million
4/4	Severe Weather	Bangladesh	17+	500+	Unknown
4/7	Earthquake	Japan	4+	Hundreds+	Unknown

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
4/9-4/15	Flooding	Kazakhstan	2+	9,000+	5.97+ million
4/10	Earthquake	Japan	3+	Dozens+	Unknown
4/11	Earthquake	China	0	5,900+	6.1+ million
4/17	Flooding	Indonesia	10+	Dozens+	Unknown
4/17-4/18	Severe Weather	China	0	3,200+	26.2+ million
4/22	Flooding	Philippines	14+	50+	Unknown
4/28-4/30	Sandstorm	China	0	21,000+	Unknown
4/30-5/2	Severe Weather	China	0	5,000+	20.5+ million
5/7-5/9	Flooding	China	19+	1,000+	Millions+
5/8-5/9	TS Aere	Philippines	35+	9,420+	31.6+ million
5/26-5/29	STY Songda	Philippines, Japan	17+	1,000+	3+ million
6/1-6/24	Flooding	China	199+	500,000+	5.41+ billion
6/1-6/19	Flooding	Philippines	10+	1,000+	9.4+ million
6/4-6/11	TS Sarika	Philippines, China	32+	15,000+	248+ million
6/5	Flooding	Singapore	0	Dozens+	Unknown
6/11-6/12	Flooding	Tajikistan	0	500+	Unknown
6/19-6/24	TS Haima	China, Philippines, Vietnam	23+	5,000+	50+ million
6/20	Earthquake	China	0	12,094+	9.2+ million
6/25-6/30	TS Meari	Philippines, China, Korea	17+	5,000+	44+ million
6/27-6/28	Flooding	India	31+	25,750+	Unknown
6/28	Flooding	Philippines	30+	500+	Unknown

Oceania (Australia, New Guinea, New Zealand, Micronesia, Guam, Northern Mariana Islands)

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-1/14	Flooding	Queensland	35+	57,191+	5.6+ billion
1/13-1/18	Flooding	Victoria	1+	7,500+	125+ million
1/23-1/24	Flooding	New Zealand	0	500+	11.4+ million
1/25-1/29	CY Wilma	Tonga, New Zealand	3+	1,000+	22+ million
2/3	STC Yasi	Australia	1+	69,497+	1.8+ billion
2/4-2/6	Severe Weather	Australia	0	48,000+	418+ million
2/5-2/6	Bushfire	Australia	0	410+	40+ million
2/16-2/22	STC Carlos	Australia	0	4,000+	15+ million
2/16-2/17	STC Dianne	Australia	0	Unknown	Unknown
2/22	Earthquake	New Zealand	172+	159,572+	12+ billion
2/28	Severe Weather	Australia	0	170+	1.02+ million
3/20-3/21	Flooding	New South Wales	1+	800+	3.7+ million
4/26-4/27	Flooding	New Zealand	0	Hundreds+	8.3+ million
5/3	Severe Weather	New Zealand	1+	100+	8.3+ million
6/9-6/16	Flooding	Australia (New South Wales)	1+	1,500+	38+ million
6/13	Earthquake	New Zealand	1+	22,000+	Unknown

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
6/19	Severe Weather	New Zealand	0	50+	810,500+

¹ TD = Tropical Depression, TS = Tropical Storm, HU = Hurricane, TY = Typhoon, STY = Super Typhoon, CY = Cyclone

² As reported by public news media sources

³ **Structures** defined as any building – including barns, outbuildings, mobile homes, single or multiple family dwellings, and commercial facilities – that is damaged or destroyed by winds, earthquakes, hail, flood, tornadoes, hurricanes or any other natural-occurring phenomenon. **Claims** defined as the number of claims (which could be a combination of homeowners, commercial, auto and others) reported by various insurance companies through press releases or various public media outlets.

⁴ Damage estimates obtained from various public media sources, including news websites, publications from insurance companies and financial institution press releases. These estimates can include insured or economic losses.

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