

Impact Forecasting

November 2011 Monthly Cat Recap – Impact Forecasting

December 6, 2011

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Executive Summary

- Death toll reaches 657 as Thailand floods begin to recede and assessments continue
- Floods in southern France and northern Italy spawn nearly USD1.1 billion insured loss
- Bushfire in Western Australia declared a catastrophe; dozens of homes destroyed

The worst flooding in decades continued across parts of Thailand for a fourth month as the death toll reached at least 657. Floodwaters continued to recede in most locations as official assessments remained underway. The floods, which affected more than 13.4 million people in at least 64 provinces, caused extensive damage to personal and commercial property. According to the World Bank, total economic losses were estimated at THB1.41 trillion (USD45 billion) – including THB661 billion (USD21.11 billion) in property damages and THB689 billion (USD22 billion) in lost productivity. The Office of Insurance Commission (OIC) released a preliminary insured loss estimate of THB200 billion (USD6.5 billion), though some industry estimates suggest that losses may approach and exceed the THB309 billion (USD10 billion) threshold.

Also in Southeast Asia, Vietnam saw the death toll from persistent flooding in the Mekong River Delta reach at least 100 as waters began to subside. The Central Committee for Storm and Flood Control reported that more than 175,000 homes were destroyed and 99,000 hectares (245,000 acres) of rice and other crops were submerged. Total economic losses were estimated at VND2.85 trillion (USD135 million).

Shifting to Europe, a slow-moving extratropical area of low pressure (named 'Rolf') in the Mediterranean Sea brought torrential rains and gusty winds across portions of France and Italy. French officials noted that 16 southern departments sustained impacts as several rivers overflowed their banks, killing at least three people. In northern Italy, several cities sustained various levels of flood inundation as seven people died. France's state-owned CCR group noted that total insured losses in the country alone were EUR800 million (USD1.09 billion).

Additional flood events during the month were recorded in Australia, Colombia and Sri Lanka.

A bushfire destroyed dozens of homes and structures in the Margaret River region of Western Australia. The fire was spawned after a prescribed burn spread out of control. The Insurance Council of Australia declared the event a catastrophe and preliminarily estimated losses in the tens of millions of dollars (USD).

Two moderate earthquakes occurred during the month, one in Turkey and the other in China. The Turkish tremor was registered at magnitude-5.6, which was an aftershock of a stronger magnitude-7.2 temblor that struck eastern Turkey in late October. At least 40 people were killed and hundreds of buildings were damaged in the earthquake whose epicenter was 16 kilometers (9 miles) south of the city of Van. In China, a magnitude-5.4 earthquake struck the northwestern province of Xinjiang with an epicenter 27.9 kilometers (17.3 miles) east-southeast of the city of Yining. According to the Ministry of Civil Affairs, the tremor damaged or destroyed at least 63,600 homes and caused CNY358 million (USD56.4 million) in economic losses. No fatalities were recorded.

A powerful winter storm affected parts of the U.S. state of Alaska, as high winds, heavy snow and a storm surge left damage in 37 native villages along the coastline.

United States

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
11/5	Earthquake	Oklahoma	0	Dozens+	Unknown
11/10-11/11	Winter Weather	Alaska	0	Hundreds+	Unknown
11/15-11/16	Severe Weather	Mississippi Valley, Southeast	6+	Thousands+	Millions+
11/30-12/1	High Winds	Southwest	0	Hundreds+	Unknown

A rare earthquake struck the state of Oklahoma on the 5th, causing isolated reports of damage and minor injuries. The magnitude-5.6 tremor occurred at 10:53 PM (3:53 UTC on the 6th) with an epicenter eight kilometers (five miles) northwest from Prague, Oklahoma at a shallow depth of 5 kilometers (3.1 miles). According to state officials, the earthquake caused façade damage at more than a dozen homes in Lincoln and Pottawatomie counties and four spires on top of Benedictine Hall at St. Gregory's University. This was the strongest earthquake ever recorded in Oklahoma's history.

One of the most powerful storms to affect western Alaska in at least 37 years pummeled the state on the 10th and the 11th. No injuries or fatalities were recorded, though flood and wind damage was prevalent in some areas. According to National Weather Service officials, the system sparked wind gusts in excess of 85 mph (140 kph) with blizzard conditions. A storm surge up to 7 feet (2.13 meters) in height inundated the coastline and left damage in the town of Nome and 36 other native village communities.

A strong storm system spawned waves of severe weather across the southern United States on the 15th and 16th, leaving at least six people dead and dozens of others injured. Widespread damage to thousands of homes and structures was prevalent in several states as the storms triggered tornadoes, damaging winds and large hail. Tornado touchdowns occurred in parts of Texas, Louisiana, Mississippi, Alabama, Georgia and the Carolinas. Total economic losses were estimated in the millions of dollars (USD).

A slow-moving area of low pressure in the Southwest spawned fierce winds on November 30th into December 1st. The system prompted National Weather Service offices to issue high wind warnings across parts of California, Utah, Nevada, Arizona, New Mexico and Wyoming. In California, Santa Ana winds gusting in excess of 80 mph (130 kph) downed trees, cut electricity and caused flight delays.

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)
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There were no significant natural disaster events across the remainder of North America in November.

South America

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
11/5-11/6	Flooding	Colombia	55+	100+	Unknown

Days of heavy rainfall led to a massive mudslide in the Colombian city of Manizales on the 5th, killing at least 48 people and injuring dozens of others. The slide destroyed at least 14 homes in the Cervantes neighborhood. On the 6th, at least seven additional people were killed in the city of Cali after a swollen river burst its banks. Widespread damage was reported to dozens of homes in the region.

Europe

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
11/3-11/7	Flooding	Italy, France	10+	Thousands+	1.25+ billion
11/9	Earthquake	Turkey	40+	Hundreds+	Unknown

A slow-moving extratropical area of low pressure (named 'Rolf') in the Mediterranean Sea brought consecutive days of torrential rains and gusty winds across portions of France and Italy between the 3rd and the 7th. French officials noted that 16 southern departments sustained impacts as several rivers overflowed their banks and inundated homes, businesses and vehicles. Some of the notable affected cities were Vallerague, Sablières, Loubaresse, Draguignan, Arles and Cannes. At least three fatalities were recorded. In Italy, several cities (including Genoa, Milan, Venice and Turin) sustained various levels of flood inundation to hundreds of properties and vehicles. At least seven people died. France's state-owned CCR group noted that total insured losses in the country alone were EUR800 million (USD1.09 billion). Total economic losses were slightly higher.

A magnitude-5.6 aftershock rattled eastern Turkey on the 9th, killing at least 40 people and injuring dozens more. The tremor struck at 9:23 PM local time (19:23 UTC) with an epicenter 16 kilometers (9 miles) south of Van, Turkey. According to Turkish officials, at least 25 buildings collapsed in the city of Van with hundreds of others sustaining cracking. The tremor was an aftershock of the magnitude-7.2 earthquake which struck on October 23rd.

Africa

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
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There were no significant natural disaster events in Africa during November.

Asia

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
7/25-11/30	Flooding	Thailand	657+	4+ million	45+ billion
9/10-11/15	Flooding	Vietnam	100+	175,000+	135+ million
11/1	Earthquake	China	0	63,600+	56.4+ million
11/23-11/28	Flooding	Vietnam	3+	9,500+	Unknown
11/24-11/27	Flooding	Sri Lanka	22+	5,700+	Millions+

The worst flooding in decades continued to occur throughout much of Thailand during the month, as the death toll reached at least 657. In total, more than 13.4 million people were affected in at least 64 of Thailand's 77 provinces. Substantial damage was reported to personal and commercial property, with approximately 4 million homes and thousands of additional businesses sustaining various levels of flood inundation. The hardest-hit industries were to electrical appliances and equipment, medical equipment, automobiles and food and beverage manufacturers. The agricultural infrastructure was also impacted with more than 1.92 million hectares (4.74 million acres) of land having been damaged. According to the World Bank, total economic losses were THB1.41 trillion (USD45 billion) – including THB661 billion (USD21.11 billion) in property damages and THB689 billion (USD22 billion) in lost productivity. The Office of Insurance Commission (OIC) released a preliminary insured loss estimate of THB200 billion (USD6.5 billion), though some industry estimates suggest that losses may approach and exceed the THB309 billion (USD10 billion) threshold.

In Vietnam, continued flooding in the Mekong River Delta caused the deaths of at least 100 people. The Central Committee for Storm and Flood Control reported that more than 175,000 homes were destroyed and 99,000 hectares (245,000 acres) of rice and other crops were submerged. At least 1,455 kilometers (904 miles) of dykes and 1,300 kilometers (808 miles) of roads were damaged as well. Total economic losses were estimated at VND2.85 trillion (USD135 million).

A magnitude-5.4 earthquake struck the northwestern province of Xinjiang in China at 8:21 AM local time (00:21 UTC) on the 1st, with an epicenter 27.9 kilometers (17.3 miles) east-southeast of the city of Yining. According to the Ministry of Civil Affairs, the tremor damaged or destroyed at least 63,600 homes and caused CNY358 million (USD56.4 million) in economic losses. No fatalities were recorded.

Five consecutive days of heavy rains between the 23rd and the 28th led to three fatalities in central Vietnam. According to the Flood and Storm Control Center, flooding affected multiple provinces (including Quang Ngai and Binh Dinh) that destroyed more than 9,500 homes. The transportation infrastructure was also impacted.

Heavy rains and high winds impacted southern sections of Sri Lanka on the 24th and 27th, killing at least 22 people and injuring 41 others. The storm system particularly affected the coastal areas of Galle and Matara, where more than 7,137 homes were damaged or destroyed by flooding and gale-force winds.

Oceania (Australia, New Zealand and the South Pacific Islands)

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
11/9	Severe Weather	Australia (Victoria)	0	1,200+	Millions+
11/22-11/30	Flooding	Australia (New South Wales)	2+	1,034+	20+ million
11/23-11/24	Bushfire	Australia (Western Australia)	0	61+	Millions+

A strong frontal boundary passed through the Australian state of Victoria on the 9th, triggering golf ball-sized hail, gusty winds and flooding rains. Widespread damage was reported across the greater Melbourne metropolitan area, though no injuries or fatalities were recorded. According to the Victoria State Emergency Service, more than 1,200 calls for help were recorded. In Melbourne, at least 340 calls were received for flood and wind damage; while another 200 were recorded in Frankston. The suburbs of Brimbank, Doncaster and Narre Warren also sustained damage as well.

Consecutive days of heavy rainfall impacted the Australia's New South Wales, spawning both flash floods and river flooding in several communities between the 22nd and the 30th. According to the NSW State Emergency Service, more than 1,034 damage reports were received in areas including Wee Waa, Moree, Garah, Bingara and Wagga Wagga after the Mehi and Namoi rivers burst their banks. At least two fatalities were recorded. Total damages in Moree alone were listed in excess of AUD20 million (USD20 million).

A bushfire destroyed dozens of homes and structures in Western Australia on the 23rd and 24th. The fire was spawned after a prescribed burn spread out of control in the Margaret River region. According to the Department of Environment and Conservation, 31 homes, nine holiday chalets and four sheds were destroyed in the fire, while 16 houses and a shop were damaged at Prevelly, Gnarabup and Redgate. The Insurance Council of Australia declared the event a catastrophe and preliminarily estimated losses in the tens of millions of dollars (USD).

APPENDIX

Updated Jan. 2011 – Oct. 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+
1/1-11/30	Drought	Southwest	0	Unknown	10+ 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+	2+ 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+	275,000+	2.8+ billion
4/8-4/11	Severe Weather	Midwest, Southeast, Plains	0	290,000+	2.25+ billion
4/8-4/14	Flooding	Red River Valley	3+	Hundreds+	20+ million
4/9-4/30	Wildfires	Texas	2+	310+	200+ 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	150,000+	1.25+ billion
4/22-4/28	Severe Weather	Southeast, Plains, Midwest	344+	700,000+	10.2+ billion
4/15-5/15	Flooding	New England	0	2,000+	75+ million
4/25-6/15	Flooding	Mississippi Valley	9+	25,000+	4+ 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+	1+ billion
5/21-5/27	Severe Weather	Plains, Midwest, Southeast	185+	715,000+	9.1+ billion
5/25-7/5	Flooding	Souris River Basin	0	5,000+	1+ billion
5/28-5/30	Wildfires	Texas	0	12+	Unknown
5/28-6/1	Severe Weather	Plains, Midwest, Northeast	3+	30,000+	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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
6/8-6/10	Severe Weather	Midwest, Northeast, Plains	0	35,000+	300+ million
6/14-6/15	Severe Weather	Southern Plains	0	20,000+	125+ million
6/16-6/22	Severe Weather	Midwest, Plains, Southeast	0	180,000+	1.5+ billion
6/26-6/30	Wildfires	New Mexico, Texas	0	100+	512+ million
6/30-7/4	Severe Weather	Midwest	2+	85,000+	700+ million
7/10-7/14	Severe Weather	Midwest, Rockies, Plains	0	120,000+	1.25+ billion
7/22-7/24	Severe Weather	Midwest	0	25,000+	200+ million
7/29	TS Don	Texas	0	Unknown	Unknown
7/27-8/9	Wildfires	Oklahoma	2+	136+	20+ million
7/29-8/1	Severe Weather	Plains, Midwest, Northeast	0	50,000+	300+ million
8/7-8/10	Severe Weather	Plains, Midwest, Northeast	1+	Thousands+	Millions+
8/13-8/14	Severe Weather	Midwest, Mid-Atlantic	7+	Thousands+	Millions+
8/13-8/14	Flooding	Northeast, Ohio Valley	0	Thousands+	20+ million
8/18-8/19	Severe Weather	Plains	0	110,000+	1.1+ billion
8/22	Earthquake	Colorado, New Mexico	0	Hundreds+	Unknown
8/23	Earthquake	Mid-Atlantic States	0	1,500+	250+ million
8/23-8/24	Severe Weather	Midwest, Ohio Valley	0	Thousands+	Millions+
8/26-8/28	HU Irene	Mid-Atlantic, Northeast	46+	835,000+	7.3+ billion
8/30-9/1	Wildfires	Texas, Oklahoma	0	77+	Millions+
9/1-9/15	Wildfires	Texas	4+	7,000+	600+ million
9/1-9/3	Severe Weather	Great Lakes	0	15,000+	125+ million
9/4-9/8	TS Lee	Southeast, Northeast	13+	80,000+	1+ billion
10/19	Severe Weather	Florida	0	80+	Unknown
10/28-10/30	Winter Weather	Northeast	29+	Thousands+	3+ billion

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+

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+
8/3-8/7	TS Emily	Hispaniola, Puerto Rico	5+	10,000+	60+ million
8/9	Flooding	Canada	0	405+	8.03+ million
8/21-8/24	Severe Weather	Canada	1+	500+	Millions+
8/22-8/26	HU Irene	Caribbean, Bahamas, Canada	9+	Thousands+	1+ billion
9/19	Earthquakes	Guatemala	3+	388+	Unknown
10/11-10/12	HU Jova	Mexico	6+	Hundreds+	27.7+ million
10/11-10/21	TD 12-E	Central America	140+	25,000+	Unknown

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
7/16-7/18	Flooding	Brazil	10+	1,000+	Unknown
7/23-7/28	Flooding	Brazil	3+	Thousands+	Unknown
9/6-9/9	Flooding	Brazil	3+	48,000+	Millions+
10/28	Earthquake	Peru	0	200+	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	17,000+	15+ 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+	33,000+	250+ million
5/19	Earthquake	Turkey	3+	2,500+	260+ million

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
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+
7/2-7/3	Flooding	Denmark	0	60,000+	1+ billion
7/8	Flooding	Scotland	0	100+	1+ million
8/18	Severe Weather	Belgium	5+	Unknown	105+ million
9/12-9/13	PT Katia	United Kingdom	1+	Hundreds+	175+ million
10/23-10/26	Flooding	Italy, Ireland, Spain	10+	Hundreds+	92+ million
10/23	Earthquake	Turkey	604+	15,000+	750+ million

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
7/22-7/29	Flooding	Benin	0	1,000+	Unknown
8/10-8/31	Flooding	Uganda	43+	30,000+	Unknown
8/20-8/31	Flooding	Nigeria	102+	10,000+	Unknown
10/2	Severe Weather	South Africa	1+	1,000+	Unknown
10/20-10/28	Flooding	Nigeria	10+	25,000+	Unknown

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	2.67+ billion
1/1-1/28	Flooding	Philippines	75+	5,729+	46.6+ million
1/1-1/24	Winter Weather	China	2+	150,000+	1.17+ 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+	290+ million
3/11	Earthquake	Japan	15,840+	1+ million	210+ billion
3/17-3/31	Flooding	Indonesia	13+	5,000+	Unknown

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
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
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	27+	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
5/15-7/15	Flooding	Nepal	75+	500+	Millions+
5/26-5/29	STY Songda	Philippines, Japan	17+	1,000+	3+ million
6/1-6/24	Flooding	China	239+	500,000+	6.65+ billion
6/1-6/19	Flooding	Philippines	10+	1,000+	9.4+ million
6/1-8/12	Drought	China	0	Unknown	923+ 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
6/29-10/31	Flooding	Laos	34+	140,000+	174+ 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
7/25-7/27	Flooding	China	54+	150,000+	962+ million
7/25-11/30	Flooding	Thailand	615+	4+ million	45+ billion
7/26-7/29	Flooding	South Korea, North Korea	100+	20,000+	200+ million
7/27-7/30	TY Nock-ten	Philippines, China, Vietnam	94+	340,000+	126+ million
7/27-7/31	Flooding	Japan	3+	3,000+	Millions+
7/28-8/2	Flooding	China	13+	25,000+	52.7+ million
7/31	Severe Weather	Russia	1+	250+	3+ million
8/8-8/10	TY Muifa	China, Philippines, Korea	22+	20,000+	658+ million
8/9	Earthquake	China	0	22,800+	Millions+
8/11	Earthquake	China	0	318+	Unknown

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
8/12-9/30	Flooding	Pakistan	456+	1.6+ million	2+ billion
8/13-8/17	Flooding	China	10+	Thousands+	323+ million
8/20-8/29	Flooding	India	47+	Thousands+	275+ million
8/22	Flooding	China	0	300+	9.22+ million
8/27-8/31	TY Nanmadol	Philippines, Taiwan, China	37+	10,000+	250+ million
9/1-9/22	Flooding	China	101+	250,000+	4.25+ billion
9/2-9/4	TS Talas	Japan	68+	25,117+	500+ million
9/5-9/15	Flooding	India	42+	25,000+	432+ million
9/6	Earthquake	Indonesia	10+	1,000+	5.85+ million
9/10-10/31	Flooding	Cambodia	250+	250,00+	521+ million
9/10-10/31	Flooding	Vietnam	69+	175,000+	135+ million
9/18	Earthquake	India, Bhutan, Tibet	116+	140,000+	204+ million
9/21-9/22	TY Roke	Japan	13+	5,000+	1.25+ billion
9/23-9/28	Flooding	India	51+	50,000+	568+ million
9/23-9/25	Flooding	Turkey	1+	Hundreds+	Unknown
9/27-9/30	TY Nesat	Philippines, China, Vietnam	88+	65,000+	1.57+ billion
9/30-10/6	STY Nalgae	Philippines, China, Vietnam	13+	20,000+	Millions+
10/8-10/11	Flooding	Turkey	7+	500+	Unknown
10/11-10/12	TS Banyan	Philippines	10+	Hundreds+	Unknown
10/13	Earthquake	Indonesia	0	Hundreds+	Unknown
10/19-10/21	TS 02B	Myanmar	215+	8,000+	1.7+ million

Oceania (Australia, New Zealand and the South Pacific Islands)

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
12/21-1/14	Flooding	Australia (Queensland)	35+	57,731+	30+ billion
1/13-1/18	Flooding	Australia (Victoria)	1+	7,791+	150+ 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+	71,345+	1.8+ billion
2/4-2/6	Severe Weather	Australia	0	48,962+	420+ million
2/5-2/6	Bushfire	Australia	0	410+	50+ 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	182+	156,522+	20+ billion
2/28	Severe Weather	Australia	0	170+	1.02+ million
3/20-3/21	Flooding	Australia (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+	54,247+	3+ billion
6/19	Severe Weather	New Zealand	0	50+	810,500+

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
8/13	Severe Weather	Western Australia	0	10+	1.05+ million
9/17	Severe Weather	Australia (Western Australia)	0	114+	Unknown

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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