

# June 2010 Monthly Cat Recap – Impact Forecasting

## Executive Summary

- Massive floods cause USD7.8 billion in economic losses in China; at least 239 people dead
- Heavy rains trigger significant flood events in parts of Brazil, France, Poland and the U.S.
- Several storm systems bring severe weather and widespread damage across sections of the U.S.

The month of June was dominated by several flood and severe weather events that impacted China, Brazil, the U.S., and parts of Central Europe. These natural catastrophes caused billions of dollars of economic losses during the period. In the U.S., parts of Texas, Nebraska and Iowa reported hail and flood damage with insurers reporting at least 25,000 claims filed totaling USD100 million and total economic losses were estimated at USD250 million. Furthermore, severe weather and tornado damage occurred across the Midwest and the Ohio Valley, including Iowa, Illinois, Michigan and Indiana, killing at least seven people. According to insurers, at least 20,000 claims were filed totaling USD100 million and total economic losses were estimated at USD250 million.

In North America, natural hazard activity in June included a storm system that brought severe weather to parts of Canada. Nearly a dozen states of emergency were declared as 500 homes and businesses were flooded. Total economic losses were listed at CAN66 million (USD64 million). The 2010 Atlantic Hurricane Season kicked off with Hurricane Alex making landfalls in Belize and Mexico late in the month. Alex, the earliest landfalling Category 2 hurricane since 1966, made landfall on the 30<sup>th</sup> with 105 mph (165 kph) sustained winds and flooding rains. One person was killed due to Alex's winds and rains.

In South America, excessive rains fell across northeastern sections of Brazil that triggered flooding and mudslides, resulting in at least 57 fatalities. The hardest hit states were Pernambuco and Alagoas. The Brazilian government reported that at least BRL1.55 billion (USD860 million) in economic damage had occurred due to the heavy rainfall.

In Central Europe, heavy rainfall returned to parts of the Czech Republic, Hungary, Slovakia and Croatia. Thousands of people were evacuated in each country as rivers rose. Poland's prime minister estimated that total economic losses from the heavy rains would approach EUR961 million (USD1.14 billion) and in Hungary, economic losses to the country's agricultural sector were listed at EUR300 million (USD366 million). In France, storms caused major flooding along the country's Mediterranean coast that killed at least 25 people and resulting in over 45,000 claims being filed that totaled EUR700 million (USD866 million). Total economic losses were anticipated to exceed EUR809 million (USD1 billion). Meanwhile, nearly eight straight days of heavy rains led to flash floods and river flooding across Romania and the Ukraine. At least 22 people were killed in Romania and the estimated total economic losses from the floods could amount to more than 0.6 percent of the country's gross domestic product.

In Asia, two weeks of torrential rains triggered flash floods and landslides throughout southern China, resulting in at least 239 deaths. Total economic losses from the event were estimated at CNY53.4 billion (USD7.84 billion). Also during the month, Cyclone Phet made landfalls in Oman and Pakistan, leaving at least 39 people dead. Economic losses from the Oman event were expected to top OMR300 million (USD776 million) and local insurers reported that claims payouts were OMR77 million (USD200 million).

## United States

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
6/1-6/3	Severe Weather	Northern Plains	0	25,000+	250+ million
6/4-6/6	Severe Weather	Midwest, Ohio Valley, Northeast	7+	20,000+	250+ million
6/6-6/9	Flooding	Utah	0	50+	1+ million
6/8-6/9	Flooding	Texas	1+	100+	Unknown
6/10-6/11	Flooding	Arkansas	20+	Unknown	Unknown
6/13-6/14	Flooding	Oklahoma	1+	Thousands+	Millions+
6/14	Earthquake	Southern California	0	50+	Unknown
6/17-6/20	Severe Weather	Midwest	5+	Thousands+	Millions+
6/21-6/24	Severe Weather	Midwest, Plains, Northeast	0	Thousands+	Millions+
6/25-6/28	Severe Weather	Midwest, Plains, Northeast	1+	Thousands+	Millions+

A storm system crossed parts of the Northern Plains on the 1<sup>st</sup> and 3<sup>rd</sup>, triggering rounds of severe thunderstorms and heavy rainfall. Parts of Texas, Nebraska and Iowa reported sporadic hail and flood damage with insurers reporting at least 25,000 claims filed totaling USD100 million. Total economic losses were estimated at USD250 million.

A severe weather and tornado outbreak occurred across the Midwest and the Ohio Valley between the 4<sup>th</sup> and the 6<sup>th</sup>, killing at least seven people and injuring dozens more. Severe damage was across parts of Iowa, Illinois, Ohio, Michigan and Indiana, with the most significant tornado damage being reported across central Illinois and northwest Ohio. In Illinois, an EF2 tornado with 130 mph (210 kph) winds touched down in the town of Streator, while separate EF2 tornadoes struck the nearby towns of Dwight and Elmwood. As a squall line strengthened and shifted eastward through Indiana, southern Michigan and northwest Ohio, several additional tornadoes were spawned. The hardest hit area was in Lake Township in Wood County, Ohio, as an EF4 tornado touched down and caused catastrophic damage. As the storm system entered the Northeast on the 6<sup>th</sup>, severe thunderstorms brought torrential rains and damaging winds throughout the region. According to insurers, at least 20,000 claims were filed totaling USD100 million. Total economic losses were estimated at USD250 million.

A slow moving storm system brought excessive rains across the greater San Antonio, Texas metropolitan area on the 8<sup>th</sup> and 9<sup>th</sup>, leaving at least one person dead. According to the National Weather Service, the heaviest rains were recorded across Comal and Guadalupe counties as damage occurred to dozens of homes in the Rivercrest neighborhood in the New Braunfels region as rivers overflowed their banks. Additional significant business damage was also reported in the Gruene and Seguin areas.

Between the 6<sup>th</sup> and the 9<sup>th</sup>, flooding was reported in northern Utah (primarily just south of Salt Lake City in both Salt Lake and Summit counties) after warm temperatures and rainfall combined to expedite snowmelt runoff. Over 50 homes sustained flood damage after multiple rivers overflowed their banks. State officials reported that total economic losses were at least USD1 million.

Torrential rains led to flash flooding and the rapid rise of the Caddo and Little Missouri rivers in Arkansas on the 10<sup>th</sup> and the 11<sup>th</sup>. At least 20 people were killed and dozens more were injured in Caddo Gap at the Albert Pike Recreation Area within the Ouachita National Forest. All of the fatalities occurred after fast moving floodwaters raged through a campsite area.

Heavy rains fell across parts of Oklahoma on the 13<sup>th</sup> and 14<sup>th</sup>, triggering widespread flash flooding throughout the greater Oklahoma City metropolitan area. At least one person was killed and 136 others were injured after being swept up in floodwaters. According to regional officials, the situation was deemed a 100-year storm event for Oklahoma City and a state of emergency was declared for 59 of Oklahoma's 77 counties. The majority of the damage was a result of localized flash flooding, though several rivers, lakes, and creeks overflowed their banks and flooded neighborhoods. In the Oklahoma City downtown area, nearly every building in the state Capitol complex sustained flood damage. Additional damage was reported in the nearby town of Edmund, and the transportation infrastructure sustained widespread effects throughout central Oklahoma.

A magnitude-5.7 earthquake rattled southern California on the 14<sup>th</sup> with an epicenter five miles (eight kilometers) east-southeast of Ocotillo, California. Residents throughout the region (including residents in the city of San Diego) reported shaking during the main tremor, though damage reports were minimal. Approximately 50 homes and businesses sustained minor damage, primarily due to fallen indoor contents.

A strong storm system spawned tornadoes, damaging winds and hail between the 17<sup>th</sup> and the 20<sup>th</sup> across the Midwest and Great Lakes, killing at least five people and injuring dozens more. In Minnesota on the 17<sup>th</sup>, significant tornado damage was reported in the towns of Wadena, Almora and Mentor as dozens of tornadoes (including at least three EF4 twisters) touched down in association with a squall line along an advancing cold front. Additional damage was reported as the line swept through parts of Iowa and Wisconsin. On the 18<sup>th</sup> and the 19<sup>th</sup>, another significant severe weather event occurred across the Midwest and Great Lakes. Two separate intense lines of thunderstorms moved through Iowa, northern Illinois, southern Wisconsin, Indiana and Michigan, causing widespread damage. In downtown Chicago, damage occurred to dozens of highrise buildings and skyscrapers as winds gusted to 77 mph (125 kph). On the 20<sup>th</sup>, another round of severe weather erupted in the northern Rockies, where an EF2 tornado struck Billings, Montana and caused significant damage to homes, businesses, an arena and a casino.

Additional severe weather was spawned across the Plains, Midwest, Great Lakes and western New England between the 21<sup>st</sup> and the 24<sup>th</sup> as multiple areas of low pressure developed along a stationary frontal boundary. On the 21<sup>st</sup>, severe thunderstorms stretching from the Plains through the Ohio Valley along the boundary caused widespread damage. Insurers in Wisconsin processed at least 1,000 claims from one tornado in southern parts of the state. On the 22<sup>nd</sup>, new clusters of severe weather spawned tornadoes, large hail and straight-line wind damage from the Plains to southern New England. By the afternoon hours on the 23<sup>rd</sup>, the city of Chicago dealt with winds gusting to 75 mph (125 kph) and flooding rains. As the main squall line advanced through Illinois, Indiana, Michigan and Ohio, additional rounds of damage reports came into local emergency management offices. By the 24<sup>th</sup>, the storm system entered the Northeast as extremely gusty winds (including a gust of 78 mph (125 kph)) were recorded with golf ball-sized hail found in parts of Queens, New York. In Bridgeport, Connecticut, injuries were reported after a tornado caused heavy damage to several areas of the city.

Rounds of severe weather continued to inundate parts of the U.S. between the 25<sup>th</sup> and the 28<sup>th</sup>, leaving at least one person dead and dozens of others injured across the Plains and the Midwest. On the 25<sup>th</sup>, tornadoes touched down in parts of Nebraska, Iowa and Minnesota, though most of the damage was confined to farmland. On the 26<sup>th</sup>, additional showers and thunderstorms caused hail up to golfball-sized and high wind damage throughout the Plains and Midwest. On the 27<sup>th</sup>, tornado touchdowns were recorded in Wisconsin, Michigan, Ohio, Pennsylvania and New York, with southwest Michigan sustaining the brunt of the damage. At least one person was killed in St. Clair County as an EF1 tornado destroyed dozens of motor homes and vehicles. On the 28<sup>th</sup>, two tornadoes caused damage in the state of New York.

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

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2, 4</sup> (USD)
6/17	Severe Weather	Canada	0	500+	64+ million
6/23	Severe Weather	Canada	0	400+	25+ million
6/23	Earthquake	Canada	0	Hundreds+	16.3+ million
6/26-6/30	HU Alex	Mexico, Belize	1	Unknown	Unknown

A storm system brought severe weather to parts of Canada on the 17<sup>th</sup>, as torrential rains triggered widespread flooding in southern sections of Alberta and Saskatchewan provinces. Nearly a dozen states of emergency were declared as 500 homes and businesses were flooded. Extensive damaged was also reported to large stretches of roads and bridges, including parts of the Trans-Canada Highway, throughout each province. Total economic losses were listed at CAN66 million (USD64 million).

Severe weather on the 23<sup>rd</sup> caused a state of emergency to be declared in Ontario province, Canada after two tornadoes touched down in the town of Midland and destroyed at least 50 homes. According to the Insurance Bureau of Canada, losses from filed claims were expected to total CAN15 million (USD14.5 million) with total economic losses approaching CAN26 million (USD25 million).

A rare earthquake struck southeastern sections of Canada on the 23<sup>rd</sup> causing minor damage. The magnitude-5.0 tremor struck at 1:41 PM local time (17:41 UTC) with an epicenter approximately 56 kilometers (35 miles) north-northeast of Ottawa, Canada. The temblor was felt throughout southern Canada and in the Great Lakes and New England in the United States. In Canada, the tremors shook buildings in Ottawa and Toronto, as well as government offices in Gatineau, Quebec. One of the hardest hit areas occurred in the small town of Gracefield, Quebec, where hundreds of buildings reportedly sustained cracks. Damage to Canadian roads and bridges was initially estimated at CAD17 million (USD16.3 million), with that number expected to rise as further assessments are made.

Hurricane Alex, the first tropical cyclone of the 2010 Atlantic Hurricane Season, made an initial landfall just north of Belize City, Belize as a tropical storm on the 26<sup>th</sup> before later traversing through the southwestern Gulf of Mexico and making a second and final landfall in northeast Mexico late on June 30<sup>th</sup>. According to officials in Belize, Alex did not cause widespread damage though heavy rainfall led to power outages and several roads to be submerged due to flooding. Alex strengthened up to Category 2 status before making its final landfall in northeast Mexico, making Alex the strongest hurricane to make landfall in June since 1966. One fatality was blamed directly on Alex in Mexico.

### South America

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2, 4</sup> (USD)
6/17-6/21	Flooding	Brazil	57+	50,000+	860+ million

Excessive rains (up to 400 millimeters (13 inches)) fell between the 17th and the 21st across northeastern sections of Brazil which triggered significant flooding and mudslides, killing at least 57 people. The hardest hit states were Pernambuco and Alagoas, where states of emergency were declared in at least 42 separate cities. At least 50,000 homes were damaged or destroyed in the two states as dozens of rivers burst their banks and mudslides collapsed poorly built dwellings. Civil defense officials also reported that the transportation infrastructure had been devastated as roads and bridges were washed away. The government reported that at least BRL1.55 billion (USD860 million) in economic damages had occurred.

## Europe

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
6/2-6/10	Flooding	Central Europe	4+	25,000+	1.5+ billion
6/5-6/9	Flooding	France, Spain	27+	45,000+	1+ billion
6/19-6/21	Flooding	Bosnia	0	4,000+	1.5+ million
6/22-6/30	Flooding	Romania, Ukraine	22+	3,200+	Millions+

Heavy rainfall returned across parts of the Czech Republic, Hungary, Slovakia and Croatia between the 2<sup>nd</sup> and the 10<sup>th</sup>, areas which were saturated from a major flooding event two weeks prior. At least three people in the Czech Republic and one person in Slovakia were killed after getting swept up in floodwaters. Several thousands of people were evacuated in the each country as rivers rose and dykes threatened to burst. At least 25,000 homes reported sustained flood damage as additional damage occurred to railroad tracks and roads. Poland's prime minister estimated that total economic losses from the event would approach EUR961 million (USD1.14 billion). In Hungary, economic losses to the country's agricultural sector were listed at EUR300 million (USD366 million).

An active weather pattern prompted several rounds of torrential rains in parts of Spain and France between the 5<sup>th</sup> and the 9<sup>th</sup>. In Spain, heavy rains triggered widespread flooding in the northern regions of Galicia and Asturias, killing at least two people. Damage was reported to homes, vehicles, the transportation infrastructure and an aluminum smelting plant in the town of Aviles. In France, storms caused the major flooding along the country's Mediterranean coast as the towns of Draguignan, Frejus, Figanieres and Roquebrune were the most affected. At least 25 people were killed in flash floods that swept away cars, trees and parts of homes and businesses in the Var department. Several highways, airports and railways were also severely impacted during the event. According to the French Federation of Insurance Companies (FFSA), at least 45,000 claims were filed totaling EUR700 million (USD866 million). Total economic losses were anticipated to exceed EUR809 million (USD1 billion).

Days of heavy rains between the 19<sup>th</sup> and the 21<sup>st</sup> led to river flooding throughout northern and western sections of Bosnia. At least 4,000 homes, bridges, roads were damaged along with wide swaths of crops as several rivers overflowed their banks in the towns of Banja Luka, Tuzla and Brcko. Total economic losses were reported by the government at BAM2.4 million (USD1.5 million).

Nearly eight straight days of heavy rains ending on the 30<sup>th</sup> led to flash floods and river flooding across northeastern sections of Romania and western Ukraine. At least 22 people were killed in Romania as the hardest hit areas came in the Suceava, Botosani, Iasi and Sendreni departments. At least 3,200 homes, bridges and roads were damaged or destroyed as floodwaters rose along several rivers and tributaries in the Dunabe River Delta. In Ukraine, the majority of the damage occurred to submerged railway lines in the Chernivtsi region. Romania's prime minister estimated that total economic losses from the floods could potentially amount to more than 0.6 percent of the country's gross domestic product. Insurance losses were expected to be minimal due to low penetration.

## Africa

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
6/20	Flooding	Ghana	35+	17,458+	Unknown

Heavy rains in southern Ghana on the 20<sup>th</sup> led to the flooding and landslide deaths of at least 35 people. Local officials reported that at least 17,458 homes were destroyed along with crops in the Greater Accra, Central and Volta regions.

## Asia

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
6/4-6/5	CY Phet	Oman, Pakistan	39+	20,000+	857+ million
6/13-6/26	Flooding	China	239+	879,000+	7.8+ billion
6/14-6/16	Flooding	Myanmar, Bangladesh	121+	20,000+	Unknown
6/16	Earthquakes	Indonesia	17+	3,922+	Unknown
6/16	Flooding	Singapore	0	Dozens+	22+ million
6/28	Landslide	China	99+	1,000+	Unknown

Cyclone Phet made separate landfalls in Oman and Pakistan on the 4<sup>th</sup> and 5<sup>th</sup>, leaving at least 39 people dead and dozens more injured. The cyclone brought torrential rains, gusty winds, flash flooding and storm surge flooding to coastal locations. As Phet came ashore in Oman, the cyclone destroyed thousands of homes, bridges, roads, desalination plants, electricity and water pipes and a fishery plant along the eastern coast. At least 24 people were killed due to flash floods prompted by the excessive rains. According to officials from the Civil Defense Department, economic losses from the event were expected to top OMR300 million (USD776 million) and local insurers reported that claims payouts were OMR77 million (USD200 million). In Pakistan, Phet came ashore and affected both the Balochistan and Sindh provinces. At least 15 people were killed as torrential rains fell and triggered widespread flash flooding. The heavy rains also combined with a storm surge to destroy homes (10,000 alone in the town of Gwadar), buildings, long stretches of roads (including the Makran Coastal Highway) and the electricity network. Total damages were estimated at PKR7 billion (USD81 million).

Two weeks of torrential rains between the 13<sup>th</sup> and 26<sup>th</sup> triggered flash floods and landslides throughout southern China as dozens of rivers swelled and burst their banks. Official reports from the Chinese government indicated that at least 879,000 homes had been damaged or destroyed. The government also reported that over two million hectares (4.9 million acres) of farmland had been flooded, with 16.5 percent of all crops being destroyed. Total economic losses from the event were estimated at a staggering CNY53.4 billion (USD7.84 billion).

At least 121 people were killed in Bangladesh and Myanmar between the 14<sup>th</sup> and the 16<sup>th</sup> as heavy rains inundated the border region of each country. The majority of the fatalities occurred as a combined 20,000 homes, monasteries, and schools were destroyed by several large landslides and flash floods.

An isolated severe thunderstorm struck parts of Singapore on the 16th, damaging dozens of businesses and hotels in just one hour's time. Government officials blamed debris build-up in local drainage systems for the flooding. Economic loss estimates were SGD30 million (USD22 million) with insured losses listed at SGD6 million (USD4.3 million).

A series of strong earthquakes rattled eastern sections of Indonesia on the 16<sup>th</sup>, leaving at least 17 people dead and dozens more injured. The three earthquakes with magnitudes 6.2, 7.0 and 6.6 struck in quick succession near the north coast of Papua during the middle part of the day. The hardest hit area was in Papua province, as over 3,422 homes were damaged or destroyed. Additional damage was reported on Yapen Island (at least 500 homes) and throughout central and southern sections of Sulawesi Province.

Days of torrential rainfall led to flooding and a large landslide in Guizhou Province in China on the 28<sup>th</sup>. At least 99 people were presumed dead after at least 1,000 homes were affected by debris from the landslide in Dazhai Village.

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

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
6/3-6/4	Severe Weather	New South Wales	0	392+	1.04+ million

Severe thunderstorms spawned rare winter season tornadoes along the northern coast town of Lennox Head and in Sydney in New South Wales (NSW) on the 3<sup>rd</sup> and the 4<sup>th</sup>. There were no fatalities, though six people were hospitalized due to injuries. A tornado in Lennox Head swept through a neighborhood area with 150 kph (90 mph) winds as the NSW State Emergency Service (SES) reported 110 damage incidents from the tornado, including 12 homes that were destroyed. A natural disaster was declared as damage estimates were AUD1.25 million (USD1.04 million). In other parts of NSW on the 3<sup>rd</sup> (primarily in the Hunter district), the SES responded to 162 additional damage requests from other thunderstorms. On the 4<sup>th</sup>, another weak tornado touched down in the eastern suburbs of Sydney. The SES received 120 calls for assistance due to roof damage and fallen tree debris.

# APPENDIX

Updated Jan. 2010 – Apr. 2010 Data

## United States

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/2-1/13	Winter Weather	Southeast, Plains, Midwest, Northeast	25+	25,000+	1.38+ billion
1/9	Earthquake	Northern California	0	463+	43+ million
1/17-1/22	Severe Weather	California, Arizona, Pacific Northwest	10+	50,000+	150+ million
1/20-1/24	Severe Weather	Southeast, Tennessee Valley	1+	500+	Unknown
1/27-1/30	Winter Weather	Plains, Southeast, Mid-Atlantic	13+	1,000+	Millions+
2/4-2/6	Winter Weather	Mid-Atlantic, Northeast	15+	35,000+	300+ million
2/6	Flooding	California	0	43+	31+ million
2/9-2/11	Winter Weather	Midwest, Mid-Atlantic, Northeast	6+	150,000+	1.5+ billion
2/10	Earthquake	Illinois	0	Unknown	Unknown
2/10-2/11	Winter Weather	Southeast	0	Unknown	Unknown
2/23-2/28	Winter Weather	Northeast, Mid-Atlantic, Midwest	10+	93,000+	500+ million
3/8	Severe Weather	Plains	0	Dozens+	Unknown
3/10-3/12	Severe Weather	Plains, Southeast	1+	Hundreds+	Unknown
3/13-3/15	Flooding	Northeast, Mid-Atlantic States	11+	175,000+	1.5+ billion
3/13-3/22	Flooding	Northern Plains	0	Unknown	Unknown
3/28-3/29	Severe Weather	Southeast	0	2,368+	4.4+ million
3/28-3/30	Flooding	Northeast	0	45,000+	350+ million
4/4	Earthquake	California	0	Unknown	91+ million
4/4-4/7	Severe Weather	Plains, Midwest, Northeast	0	60,000+	450+ million
4/22-4/25	Severe Weather	Mississippi Valley, Southeast	12+	31,000+	500+ million
4/20-6/30	Oil Spill	Gulf of Mexico	0	Unknown	Billions+
4/30-5/3	Severe Weather	Mississippi Valley, Tennessee Valley, Southeast	32+	20,000+	3+ billion
5/7-5/8	Severe Weather	Ohio Valley, Northeast	0	17,500+	200+ million
5/10	Severe Weather	Oklahoma, Kansas	5+	87,500+	600+ million
5/12-5/16	Severe Weather	Plains, Midwest, Northeast, Tennessee Valley	0	195,000+	1.5+ billion
5/22-5/26	Severe Weather	Plains, Midwest, Northeast	0	50,000+	225+ million



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

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/2	Winter Weather	Canada	3+	Unknown	Unknown
1/12	Earthquake	Haiti	220,000+	350,000+	8+ billion
1/18-1/22	Flooding	Mexico	3+	800+	5+ million
2/4-2/10	Flooding	Mexico	43+	6,500+	15+ million
2/5	Winter Weather	Canada	0	Dozens+	80,000+
2/25-2/26	Winter Weather	Canada	0	Unknown	Unknown
3/29	Severe Weather	Bahamas	3+	Dozens+	Unknown
4/4	Earthquake	Baja California	2+	5,000+	1+ billion
5/16	Earthquake	Puerto Rico	0	Dozens+	Unknown
5/26-5/31	Volcano	Guatemala	3+	Unknown	Unknown
5/28-5/31	Volcano	Ecuador	0	Unknown	Unknown
5/29-5/30	TS Agatha	Guatemala, Honduras, El Salvador	205+	110,000+	532+ million

### South America

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/1-1/7	Flooding	Brazil	201+	10,000+	145+ million
1/21-1/27	Flooding	Peru, Bolivia	30+	35,312+	300+ million
2/5-2/8	Flooding	Bolivia	15+	36,163+	138,000+
2/8-2/9	Flooding	Uruguay	0	Unknown	Unknown
2/11	Flooding	Peru	0	20,150+	Unknown
2/17	Flooding	Argentina	0	Hundreds+	Unknown
2/27	Earthquake	Chile	500+	1.5+ million	30+ billion
3/1-3/5	Flooding	Bolivia	16+	46,200+	2.5+ million
4/1-4/2	Flooding	Peru	28+	120+	Unknown
4/5-4/7	Flooding	Brazil	256+	25,000+	13.1+ billion
4/19-4/20	Severe Weather	Nicaragua, Ecuador	1+	411+	Unknown

## Europe

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/1-1/31	Winter Weather	UK, Central Europe, Northern Europe	276+	1,100+	4.63+ billion
1/1-1/15	Flooding	Albania, Bosnia, Croatia	0	2,489+	8+ million
2/1-2/2	Flooding	Canary Islands	1+	Hundreds+	Unknown
2/1-2/12	Winter Weather	Austria	15+	Unknown	Unknown
2/13-2/17	Flooding	Southern Europe	4+	Hundreds+	9.6+ million
2/20	Flooding	Madeira	43+	560+	1.89+ billion
2/23-2/24	Flooding	Spain	2+	400+	Unknown
2/27-2/28	Windstorm Xynthia	France, Portugal, Spain, Belgium, Germany	62+	5,000+	4+ billion
3/30-3/31	Winter Weather	United Kingdom	1+	Unknown	Unknown
4/15-4/26	Volcano	Central and Northern Europe	0	Unknown	2.8+ billion
5/12-5/28	Flooding	Central Europe	22+	100,000+	3.7+ billion
5/24	Severe Weather	Germany	1+	Dozens+	Unknown

## Africa

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/1-1/15	Flooding	Kenya	35+	30,000+	57+ million
1/17-1/18	Flooding	Egypt	15+	1,856+	36.2+ million
2/16	Flooding	South Africa	4+	Hundreds+	5.3+ million
2/22	Flooding	Zambia	9+	1,000+	Unknown
3/2	Flooding	Uganda	86+	Hundreds+	1+ million
3/6-3/12	Flooding	Kenya, Mozambique, Uganda, Zimbabwe	20+	10,000+	Unknown
3/10	TS Hubert	Madagascar	83+	7,000+	Unknown
5/7	Winter Weather	South Africa	6+	10+	Unknown

## Asia

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/1-5/1	Drought	China	0	Unknown	3.5+ billion
1/2	Earthquake	Tajikistan	0	1,098+	1.5+ million
1/2-1/12	Winter Weather	China, South Korea, India	43+	100,000+	29+ million
1/3-1/9	Earthquake	Solomon Islands	0	1,857+	Unknown
1/4	Landslide	Pakistan	19+	332+	50,000+
1/9	Flooding	Indonesia	3+	5,713+	Unknown
1/17-1/18	Flooding	Israel, Jordan	2+	163+	Millions+
1/17-1/23	Winter Weather	China	21+	38,000+	96+ million
1/21	Flooding	Indonesia	8+	2,000+	Unknown
1/31	Earthquake	China	1+	4,910+	4.4+ million
2/5	Winter Weather	Iran	8+	10+	Unknown
2/8-2/11	Winter Weather	India	21+	Unknown	Unknown
2/9	Winter Weather	Afghanistan	204+	3,800+	Unknown
2/13-2/19	Flooding	Indonesia	0	2,469+	215+ million
2/18	Winter Weather	Pakistan	116+	652+	Unknown
2/25	Winter Weather	China	7+	Unknown	Unknown
2/25	Earthquake	China	0	3,172+	882,000+
2/28-3/1	Winter Weather	China	0	5,883+	274+ million
3/4	Earthquake	Taiwan	0	1,000+	10.3+ million
3/8	Earthquake	Turkey	41+	Hundreds+	Unknown
3/11-3/13	Flooding	Kazakhstan	41+	2,000+	127,000+
3/27-3/28	Winter Weather	China	0	12,649+	530,000+
3/28-3/31	Severe Weather	India	7+	16,000+	Unknown
4/6	Earthquake	Indonesia	0	1,005+	Unknown
4/13	Severe Weather	India, Bangladesh	137+	300,000+	30+ million
4/14	Earthquake	China	2,698+	61,000+	4.7+ billion
4/14-4/19	Heatwave	India	107+	Unknown	Unknown
4/17-4/26	Flooding	China	1+	4,600+	65+ million
4/18-4/19	Severe Weather	India	1+	980+	Unknown
4/19	Earthquake	Afghanistan	11+	300+	Unknown
4/19-4/22	Flooding	China	2+	1,275+	10+ million
4/21	Severe Weather	India	4+	2,000+	Unknown
4/24-4/26	Sandstorm	China	7+	21,369+	117+ million
3/15-5/3	Flooding	China	0	8,321+	Unknown
5/1-5/2	Severe Weather	Bangladesh	23+	1,000+	Unknown
5/5-5/10	Flooding	Tajikistan	40+	4,500+	5.3+ million
5/5-5/24	Flooding	China	115+	95,000+	2.23+ billion
5/6	Severe Weather	China	36+	10,980+	17.7+ million
5/7	Severe Weather	India	54+	Hundreds+	Unknown
5/14-5/16	Severe Weather	China	7+	2,365+	Unknown
5/15-5/18	Severe Weather	Sri Lanka	20+	1,270+	100+ million
5/16-5/20	Severe Weather	India	13+	1,000+	Unknown
5/20	CY Laila	India	36+	23,000+	106+ million
5/30-6/3	Flooding	China	53+	11,000+	176+ million

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

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/1-1/15	Flooding	New South Wales, Queensland	2+	Unknown	3.2+ million
1/22	CY Magda	Western Australia	0	Unknown	Unknown
1/24-1/30	CY Olga	Queensland	0	Unknown	Unknown
2/4-2/5	CY Oli	French Polynesia	1+	1,000+	70+ million
2/5-2/7	Flooding	New South Wales, Queensland	5+	3,000+	Unknown
2/11	CY Pat	Cook Islands	0	504+	10+ million
2/12-2/15	Flooding	New South Wales	2+	1,538+	16+ million
2/14	CY Rene	Tonga	1+	263+	Unknown
3/1-3/3	Flooding	Queensland	0	7,500+	123+ million
3/6	Severe Weather	Victoria	0	105,000+	1.25+ billion
3/13-3/16	TC Tomas	Fiji	2+	4,000+	33+ million
3/15-3/21	TC Ului	Solomon Islands, Queensland	0	812+	18+ million
3/22	Severe Weather	Western Australia	0	143,000+	1.25+ billion
4/20	Earthquake	Western Australia	0	100+	4.6+ million

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

<sup>2</sup> As reported by public news media sources

<sup>3</sup> **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.

<sup>4</sup> 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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