

Impact Forecasting

May 2011 Monthly Cat Recap – Impact Forecasting

June 8, 2011

Table of Contents

Executive Summary	2
United States	3
Remainder of North America (Canada, Mexico, Caribbean Islands)	4
South America	5
Europe	5
Africa	6
Asia	6
Oceania (Australia, New Zealand, New Guinea, Micronesia, Guam, Northern Mariana Islands)	7
APPENDIX	8

Executive Summary

- Massive EF-5 tornado in Joplin, MO highlights very active month of severe weather in the U.S.
- Major flood events affect parts of Colombia, Canada and the U.S.
- Destructive wildfires rage across western Canada

Two separate major outbreaks of severe weather affected the United States, including a seven-day stretch that saw at least 164 people killed and more than 1,300 others injured. The Storm Prediction Center reported at least 275 unconfirmed tornado touchdowns across an area from southern Texas to New England. The period was highlighted by a massive EF-5 tornado that caused catastrophic damage throughout the city of Joplin, Missouri with winds in excess of 200 mph (325 kph). The tornado caused at least 141 fatalities and 1,150 injuries, making it the single deadliest U.S. tornado to occur since the National Weather Service started keeping official statistics in 1950. Total economic and insured losses from severe weather during the month of May were anticipated to reach into the billions of dollars (USD). The Joplin tornado will likely be one of the costliest single tornadoes ever recorded.

It should be noted that with five confirmed EF-5 tornadoes, 2011 becomes the first year that the U.S. has seen more than one EF-5 or F-5 tornado touchdown since 1998. According to official NOAA records, the most EF-5 or F-5 tornado touchdowns in a single year came in 1974 when six were recorded.

In other severe weather news this month, a powerful storm brought winds gusting to nearly 115 mph (185 kph) across parts of Scotland that left one person dead. Hundreds of homes and businesses were damaged in addition to more than GBP4 million (USD6.5 million) in crop losses.

Major ongoing flooding continued to affect Colombia, where the death toll reached 116. More than 1.06 million hectares (2.5 million acres) of land were submerged, and more than 372,000 homes were damaged. Total economic impacts were estimated to reach COP10.44 trillion (USD5.85 billion).

Flooding also persisted throughout the Mississippi River Valley, northern New England and the northern Rockies in the U.S. during the month. Along the Mississippi River, the American Farm Bureau Federation reported that over 3.6 million acres (1.45 million hectares) of farmland may have been damaged. Total economic losses reached USD5 billion, with insured crop losses totaling USD1 billion.

River flooding in Manitoba and Quebec provinces in Canada led at least five fatalities. In Manitoba, the Red and Assiniboine rivers both crested at record levels across western and southern sections of the province. Total damages to property, agriculture and infrastructure were likely to surpass CAD1 billion (USD1.03 billion). In Quebec, the Richelieu River Basin saw its worst flooding in at least 140 years.

A series of wildfires broke out across Alberta, Canada, including a massive fire that devastated the town of Slave Lake. At least 431 homes and other structures were damaged or destroyed in the town, with nearly 100 others affected in surrounding communities. Various insurers reported that the losses could become Canada's costliest wildfire event on record at more than CAD200 million (USD206 million).

Two moderate earthquakes rattled southern Spain, which left at least nine people dead and 400 others injured in the town of Lorca. At least 20,000 homes, buildings and other structures were damaged. Total economic losses were estimated at EUR88.4 million (USD125 million), while Spain's state-run Insurance Compensation Consortium noted that insured losses would top EUR70 million (USD99 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)
1/1-5/31	Drought	Texas	0	Unknown	1.5+ billion
4/15-5/15	Flooding	New England	0	2,000+	75+ million
4/25-5/31	Flooding	Mississippi Valley	9+	25,000+	5+ billion
5/10-5/13	Severe Weather	Midwest, Southeast	2+	10,000+	13.8+ million
5/15-5/31	Flooding	Rockies, Northern Plains	1+	1,000+	100+ million
5/21-5/27	Severe Weather	Plains, Midwest, Southeast	164+	25,000+	Billions+
5/28-5/30	Wildfires	Texas	0	12+	Unknown
5/28-6/1	Severe Weather	Plains, Midwest, Northeast	3+	Thousands+	Millions+

The Texas AgriLife Extension Service reported that economic losses from the long-standing drought had approached USD1.5 billion. The drought, which began in November 2010, had a significant impact on livestock and crop producers of wheat, cotton, grain, corn and sorghum throughout the state. The report also states that more than 90 percent of the acreage topsoil moisture was rated short or very short in almost every Texas district.

After an active winter season and a record snowpack, recent heavy rains and snowmelt led to flooding from New York to Maine between the middle of April through mid-May. In Vermont, the state government reported that at least 500 homes had been destroyed or severely damaged around Lake Champlain. In New York, more than 1,000 homes were damaged by the floods. Based on individual state data, at least a combined USD75 million in damages have been recorded in the region.

Persistent heavy rains combined with snowmelt to bring major flooding throughout the Mississippi and Ohio River Valleys between April 25th and the end of May, prompting a federal disaster declaration in three states. At least nine people were killed in flood-related incidents. Flood damage was reported from southern Canada and the Dakotas through Illinois, Indiana, Missouri, Kentucky, Arkansas and Tennessee, Mississippi and Louisiana. The American Farm Bureau Federation reported that over 3.6 million acres (1.45 million hectares) of farmland had been damaged. The flooding, in combination with intentional levee explosions and the opening of spillways, led to damages of at least USD5 billion (primarily due to agricultural losses) up and down the Mississippi River Valley. The government's Risk Management Agency noted that publicly and privately insured crop losses would be at least USD1.1 billion.

Severe weather swept across parts of the central and eastern U.S. between the 10th and the 13th, leaving at least two people dead. According to the Storm Prediction Center, more than 1,000 storm reports were recorded during the four-day stretch. The most notable damage locations came in Minnesota, the Carolinas and parts of the Mississippi Valley primarily due to hail (up to baseball-size) and straight-line winds. The South Carolina Insurance News Service reported that more than 6,200 claims had been filed in the state, with early payouts estimated at USD13.8 million. Additional damage in parts of North Carolina, Minnesota, Nebraska, Missouri and Oklahoma was expected to reach well into the tens of millions of dollars (USD).

Persistent heavy precipitation beginning on the 15th combined with the highest snowpack in four decades across parts of the Northern Plains and the Rockies to spawn widespread flooding. Sections of southeastern Montana, northern Wyoming, northern Utah, Colorado and the western Dakotas all reported various levels of flooding. Montana was affected the most by the floods, where some locations were under as much as 6 feet (1.82 meters) of water. The transportation infrastructure was also impacted, and a statewide state of emergency was declared. Elsewhere in the Rockies, hundreds of flooded homes, businesses, roads and other infrastructure were reported. Preliminary economic losses in Utah were already listed at USD24 million, and combined with additional losses elsewhere in neighboring states, the overall total was expected to exceed USD100 million.

A series of storm systems spawned another wave of severe weather across parts of the United States between the 21st and the 27th, killing at least 164 people and injuring over 1,300 more. At least 141 fatalities, 1,150 injuries and catastrophic damage occurred in the city of Joplin, Missouri alone from the deadliest single U.S. tornado to occur since the National Weather Service started keeping official statistics in 1950. The twister was rated as an EF-5 with winds in excess of 200 mph (325 kph). A second EF-5 was confirmed in Oklahoma during the period as an area from southern Texas to New England sustained major damage due to the severe weather. The Storm Prediction Center received more than 3,500 damage reports, including at least 275 unconfirmed tornado touchdowns. Both the economic and insured loss totals from this event were anticipated to reach into the billions of dollars (USD).

Extremely dry conditions and winds gusting to 50 mph (85 kph) sparked additional wildfires across parts of Texas between the 28th and the 30th. Two fires just outside the greater Amarillo area combined to destroy at least 12 homes and more than 1,400 acres (557 hectares) of land.

Fresh rounds of severe weather impacted central and eastern sections of the country between May 28th and June 1st, leaving at least three people dead. The powerful thunderstorms spawned tornadoes, large hail and damaging winds that affected parts of the Plains, Midwest, Ohio Valley and the Northeast. The most notable effects came in western and central Massachusetts on June 1st as at least 18 separate communities reported widespread damage from multiple tornado touchdowns.

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)
4/14-5/31	Flooding	Canada	5+	10,000+	1.03+ billion
5/15-5/18	Wildfires	Canada	0	522+	206+ million

River flooding in Manitoba and Quebec provinces in Canada throughout the month led to widespread damage and leaving at least five people dead. In Manitoba, the Red and Assiniboine rivers both crested at record levels across western and southern sections of the province – which led to a 1-in-300 year flood event. Nearly 4,000 homes were affected in the province by the floods and provincial officials reported that total damages to property, agriculture and the transportation infrastructure was likely to surpass CAD1 billion (USD1.03 billion). In Quebec, the Richelieu River saw its worst floods in at least 140 years as more than 3,000 homes were damaged in 20 separate municipalities along the river. The floods along the Richelieu River were also enhanced by Lake Champlain maintaining a record height as well. The provincial government reported having paid out at least CAD4 million (USD4.11 million) to flood victims.

Dozens of wildfires broke out across Alberta, Canada between the 15th and the 18th, following a period of very dry conditions with gusty winds. One particular wildfire in the northern town of Slave Lake led to nearly 40 percent of the town being completely destroyed, including at least 374 homes (57 others severely damaged) and the town's city hall, library, radio station and numerous other businesses. In the nearby Municipal District of Lesser Slave River, 59 additional homes were destroyed and 32 others were damaged. Various insurers reported that the losses could become Canada's costliest wildfire event on record with more than CAD200 million (USD206 million) in damages, surpassing the 2003 Kelowna wildfires.

South America

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	Flooding	Colombia	116+	375,000+	5.85+ billion

Major ongoing flooding continued to affect Colombia, which was inundated with persistent rainfall since April 2010. At least 1,027 out of 1,100 municipalities within 28 of the nation's 32 provinces sustained significant flood and landslide damage. According to official government statistics, at least 116 fatalities recorded in 2011. More than 1.06 million hectares (2.5 million acres) of land were submerged, and more than 12,000 homes were destroyed and nearly 360,000 others were damaged. Tens of thousands of additional schools, businesses, medical facilities and other structures were been directly impacted. Agriculture was particularly hit hard, with many farmers sustaining complete crop losses. The transportation infrastructure was also decimated by landslides that covered national roads and municipal highways; and also swollen rivers destroyed dozens of major bridges and levee/dyke systems. The Colombian government noted that the floods from 2011 alone would have a COP10.44 trillion (USD5.85 billion) economic impact.

Europe

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
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

Two earthquakes rattled southern Spain on the 12th, leaving at least nine people dead and 400 others injured in the town of Lorca. According to the United States Geological Survey, the first tremor (a magnitude-4.5) struck at 5:05 PM local time (15:05 UTC) with an epicenter 55 kilometers (34 miles) southwest of Murcia, Spain. The second temblor, a stronger magnitude-5.1, struck shortly after at 6:47 PM local time (16:47 UTC) with an epicenter 50 kilometers (31 miles) southwest of Murcia, Spain. At least 20,000 homes, buildings, churches and other structures sustained various levels of damage (approximately 10 percent of all homes). The transportation infrastructure was also affected, with numerous roads showing large cracks. Additional damage was reported in the areas of Totana, Albacete and Velez-Rubio in Almeria, though not as nearly as significant or widespread as what occurred in Lorca. Total economic losses were estimated at EUR88.4 million (USD125 million), while Spain's state-run Insurance Compensation Consortium noted that insured losses would top EUR70 million (USD99 million).

A moderate earthquake rattled western sections of Turkey on the 19th, leaving at least three people dead and more than 125 others injured. The magnitude-5.8 tremor struck at 11:15 pm local time (20:15 UTC) with an epicenter 80 kilometers (50 miles) west-southwest from Kutahya, Turkey at a depth of 9.1 kilometers (5.7 miles). Widespread significant damage was not reported, though upwards of 2,500 buildings in the town of Simav sustained structural effects. Most of Simav lost electricity and telecommunications in the hours that followed.

Iceland's Grímsvötn volcano erupted on the 21st, sending ash and steam as high as 20 kilometers (12.4 miles) into the air. In the four days that followed, the ash plume crossed the Atlantic into western and central Europe. Parts of Scotland, northern England, Germany, Poland, Russia and Scandinavia reported volcanic ash, which led to temporary flight cancellations and airport closures. Approximately 1,600 flights were cancelled (mostly in Scotland and airports in Hamburg, Bremen and Berlin in Germany) before the ash began to clear on Wednesday and air traffic resumed to normal operation levels. Airlines noted that total business interruption losses were approximately EUR35 million (USD50 million).

A powerful storm brought winds gusting to nearly 115 mph (185 kph) across parts of Scotland on the 23rd, killing at least one person. According to government officials, the storm tore the roofs off of hundreds of homes and businesses and also caused a large number of trees to topple. In addition to property damage, soft fruit producers throughout the country noted that the storm had caused significant losses to hundreds of acres (hectares) of crops and other farming equipment. Crop damages were listed at GBP4 million (USD6.5 million).

Africa

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
------------	---------------------------------	----------------	--------------------------	--	---------------------------------------

There were no major natural disaster events in Africa during the month of May.

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
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

Severe drought conditions persisted throughout the month of May, as areas in central and southern China along the Yangtze River Basin sustained continued effects. According to the Ministry of Civil Affairs, the severe drought impacted more than 6.96 million hectares (17.2 million acres) of land in the provinces of Anhui, Hubei, Hunan, Zhejiang, Jiangxi, Jiangsu and Shanghai. The Chinese government reported that total economic losses to the agricultural infrastructure had exceeded CNY14.9 billion (USD2.3 billion).

Strong thunderstorms affected China's Guizhou and Guangdong provinces between April 30th and May 2nd. The combination of torrential rains and golf ball-sized hail damaged or destroyed thousands of homes and also more than 10,500 hectares (26,000 acres) of farmland. According to the Ministry of Civil Affairs, total economic losses were listed at CNY134 million (USD20.5 million).

Flooding and landslides were recorded in southern sections of China between the 7th and the 9th, killing at least 19 people. Heavy rains led to a series of large landslides in the Guangxi Zhuang Autonomous Region, causing the fatalities. In neighboring Guangdong Province, heavy rains damaged nearly 1,000 homes, bridges and roadways. Thousands of hectares (acres) of cropland were also submerged. Total damages were estimated in the millions of dollars (USD).

Tropical Storm Aere made separate landfalls in parts of the Philippines on the 8th and 9th, bringing torrential rains and flooding. At least 35 people were killed and 11 others were injured. Aere made its first landfall over northern Catanduanes before making a second, and final, landfall over northern Casiguran, Luzon Island. According to the Philippines' National Disaster Coordinating Council, the cyclone caused widespread flooding and landslides that submerged roads and bridges. More than 9,420 homes were damaged or destroyed and the agricultural infrastructure saw nearly 10,000 hectares (24,700 acres) of crops damaged. Total economic losses were listed at PHP1.37 billion (USD31.6 million).

Super Typhoon Songda became the first Category 5 cyclone of 2011 prior to weakening and skirting parts of the Philippines and Japan between the 26th and 29th. In the Philippines, Songda left at least four people dead, more than 131 homes damaged or destroyed and caused widespread damage to agriculture and other infrastructure. As the cyclone impacted Japan, it brought torrential rains that spawned flooding and landslides to several southern prefectures. At least 13 people were killed, hundreds of homes, businesses and schools were damaged and more than 219 roads and bridges were swept away across the country. Preliminary economic losses in the Philippines were listed at PHP130 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)
5/3	Severe Weather	New Zealand	1+	100+	7.9+ million

A strong tornado touched down in Auckland, New Zealand's North Shore region on the 3rd, killing at least one person and injuring 14 others. The EF-2 tornado with 200 kph (125 mph) winds traversed along a 5-kilometer (3.1-mile) path in the Auckland suburbs of Albany, Birkenhead, Glenfield and Kaipatiki. Damage was reported to at least 50 residential homes in addition to dozens of commercial properties, vehicles and trees. The Insurance Council of New Zealand estimated insured losses to be in excess of NZD10 million (USD7.9 million).

APPENDIX

Updated Jan. 2011 – Apr. 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+
1/7-1/12	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+	1+ 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+ billion
4/19-4/21	Severe Weather	Plains, Southeast, Midwest	0	100,000+	575+ million
4/22-4/28	Severe Weather	Southeast, Plains, Midwest	354+	650,000+	7+ 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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/7	Winter Weather	Canada	0	Hundreds+	20.6+ million
4/7	Earthquake	Mexico	0	Unknown	Unknown
4/14-4/30	Flooding	Canada	2+	2,500+	73.2+ million

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
1/1-5/30	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

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

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

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
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

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+	52,683+	5.6+ billion
1/13-1/18	Flooding	Victoria	1+	6,713+	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+	65,200+	1.8+ billion
2/4-2/6	Severe Weather	Australia	0	41,247+	360+ 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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
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

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.

About Impact Forecasting[®] LLC: Impact Forecasting[®] LLC is a catastrophe model development center of excellence within Aon Benfield whose seismologists, meteorologists, hydrologists, engineers, mathematicians, GIS experts, finance, risk management and insurance professionals analyze the financial implications of natural and man-made catastrophes around the world. Impact Forecasting's experts develop software tools and models that help clients understand underlying risks from hurricanes, tornadoes, earthquakes, floods, wildfires and terrorist attacks on property, casualty and crop insurers and reinsurers. Impact Forecasting is the only catastrophe model development firm integrated into a reinsurance intermediary. To find out more about Impact Forecasting[®] LLC, visit www.impactforecasting.com.

About Aon Benfield: As the industry leader in treaty, facultative and capital markets, Aon Benfield is redefining the role of the reinsurance intermediary and capital advisor. Through our unmatched talent and industry-leading proprietary tools and products, we help our clients to redefine themselves and their success. Aon Benfield offers unbiased capital advice and customized access to more reinsurance and capital markets than anyone else. As a trusted advocate, we provide local reach to the world's markets, an unparalleled investment in innovative analytics, including catastrophe management, actuarial, and rating agency advisory, and the right professionals to advise clients in making the optimal capital choice for their business. With an international network of more than 4,000 professionals in 50 countries, our worldwide client base is able to access the broadest portfolio of integrated capital solutions and services. Learn more at aonbenfield.com.

Cat Alerts use publicly available data from the internet and other sources. Impact Forecasting[®] LLC summarizes this publicly available information for the convenience of those individuals who have contacted Impact Forecasting[®] LLC and expressed an interest in natural catastrophes of various types. To find out more about Impact Forecasting or to sign up for the Cat Reports, visit Impact Forecasting's webpage at www.impactforecasting.com.

Copyright © by Impact Forecasting[®] L.L.C. No claim to original government works. The text and graphics of this publication are provided for informational purposes only. While Impact Forecasting[®] LLC has tried to provide accurate and timely information, inadvertent technical inaccuracies and typographical errors may exist, and Impact Forecasting[®] LLC does not warrant that the information is accurate, complete or current. The data presented at this site is intended to convey only general information on current natural perils and must not be used to make life-or-death decisions or decisions relating to the protection of property, as the data may not be accurate. Please listen to official information sources for current storm information. This data has no official status and should not be used for emergency response decision-making under any circumstances.

Copyright © by Aon Corporation. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise. Impact Forecasting[®] is a wholly owned subsidiary of Aon Corporation.

