

# Global Catastrophe Recap

November 2015



# **Table of Contents**

Executive Summary	3
United States	4
Remainder of North America	5
South America	5
Europe	5
Africa	6
Asia	6
Oceania	7
Appendix	8
Contact Information	15

## **Executive Summary**

- Extreme monsoon rains leave hundreds dead and multi-billion-dollar damage bill amid floods in India
- Early season winter storms lead to widespread damage in parts of the United States and Europe
- Rare cyclones Chapala and Megh make historic landfalls in Yemen

An enhanced North East Monsoon—impacted by the current El Niño—brought weeks of torrential rainfall to southern India and Sri Lanka for much of November into early December. Portions of Tamil Nadu and Andhra Pradesh states in India and Sri Lanka were heavily impacted by floods that claimed at least 386 lives. There were severe impacts to agricultural interests and infrastructure as rivers swelled into both rural and urban areas. The Chennai metropolitan region was particularly damaged by the event. Total economic losses in India were estimated to reach as high as INR200 billion (USD3.0 billion). India's General Insurance Corporation claims possibly reaching up to INR20 billion (USD300 million).

Elsewhere, noteworthy floods impacted portions of Southern Europe, China, and Saudi Arabia.

A series of early season United States winter storms brought periods of frigid temperatures, freezing rain, ice, heavy rainfall, and the season's first major snowfall to many areas. At least 18 people were killed. The events led to major disruption to travel and caused widespread reports of damage from the Rockies to the Midwest. Total economic losses from the events were expected to well exceed USD100 million.

Windstorms Heini and Nils (also known locally as "Barney" and "Clodagh") impacted parts of the United Kingdom and Western Europe in the latter part of the month. Total insured losses, primarily driven by Heini, were expected to exceed USD100 million.

Winter storms swept through northern China that led to minimal economic losses of USD268 million.

Multiple outbreaks of severe weather impacted parts of the United States and Canada. The most damaging occurred in the U.S. Pacific Northwest and Canada's British Columbia as hurricane-force winds led to extensive tree damage and power outages. A high volume of homes and vehicles were impacted. Also, nearly 100 tornadoes touched down in the U.S. in November across the Plains and Midwest.

Severe thunderstorms also prompted tens of millions of dollars' (USD) worth of damage in South Africa and Australia. Hail and straight-line winds were the primary cause of damage.

A pair of rare cyclones made historic landfalls in Yemen. Cyclones Chapala and Megh each came ashore on the Yemeni mainland within a period of 10 days, triggering torrential rainfall and gusty winds that left catastrophic damage in some areas. At least 26 fatalities were reported.

One of the worst droughts in decades intensified in South Africa as water shortages affected 2.7 million households. Total economic losses were estimated to exceed USD2.0 billion.

Multiple wildfires burned just to the north of South Australia's Adelaide, killing two people. Hundreds of homes and non-residential structures were damaged or destroyed, and the impact to the agricultural industry was significant. The Insurance Council of Australia preliminarily cited 1,344 filed insurance claims with payouts of AUD119.7 million (USD88 million). Total economic losses were higher.

A magnitude-5.5 earthquake struck southern Kyrgyzstan damaging almost 4,500 buildings in Osh Region.

#### **United States**

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
11/10-11/12	Severe Weather	Midwest, Southeast	0	Thousands	Millions
11/16-11/18	Severe Weather	Plains, Southeast	0	Thousands	Millions
11/16-11/18	Severe Weather	Pacific Northwest	3	Thousands	100+ million
11/20-11/22	Winter Weather	Plains, Midwest, Rockies	0	Hundreds	Millions
11/25-11/29	Winter Weather	Plains, Midwest, Rockies	18	Thousands	100+ million

A spring-like storm system brought severe thunderstorms to the central United States from November 10-12, causing widespread damage: the most significant of which occurred on November 11 as a broad swath of the Midwest and the Missouri Valley were impacted by an advancing cold front. Some of the worst-affected areas were in lowa, where at least 11 tornadoes touched down. Many homes and farmsteads were heavily damaged. Elsewhere, portions of Nebraska, Utah, New Mexico, Wyoming, Colorado, and Kansas were also impacted.

A strong low pressure system brought an outbreak of severe thunderstorms to southern and central portions of the United States from November 16-18, prompting damage in at least half a dozen states. The most significant damage occurred on November 16 in portions of Kansas, Oklahoma, and Texas. At least 47 tornadoes touched down. The same low pressure system also brought significant snowfall and gusty winds to portions of the Rockies and the High Plains.

An active weather pattern brought a series of storm systems to the Pacific Northwest from November 16-18, leading to widespread damage and disruption. At least three people were killed as winds gusting to hurricane-force led to more than 500,000 power outages and severe tree damage in parts of Washington, Oregon and Idaho. Heavy rains also prompted flash flooding and mudslides in isolated locations. Total economic losses were expected to exceed USD100 million.

A powerful winter storm brought frigid temperatures and the season's first major snowfall to portions of the Plains and Midwest from November 20-22. Major disruption to travel and transportation was reported across the Northern Plains and Midwest. The greater Chicago, IL, metro region recorded its heaviest November snowfall since 1895.

Winter weather impacted much of the Central U.S. from November 25-29, as periods of heavy snow, freezing rain, ice, and heavy rain led to widespread damage in several states. At least 18 people were killed, primarily due to automobile accidents. Among the hardest-hit areas came in Texas, Kansas and Oklahoma, where excessive ice accumulation led to fallen trees and power lines onto homes, businesses and vehicles. Flooding also led to notable damage in several areas. Total economic losses were expected to exceed USD100 million.

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
11/16-11/17	Severe Weather	Canada	0	Hundreds	Millions

The same storm system which impacted the U.S. Pacific Northwest on November 16-18 also led to widespread damage in Canada's British Columbia. Hurricane-force winds, heavy snowfall and periods of heavy rain led to damage to many towns across the province. More than 110,000 power outages were also cited. Total economic losses were estimated well into the millions (USD).

#### South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)

No major natural disaster events were recorded in South America during the month of November.

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
11/01-11/03	Flooding	Portugal, Spain, Italy	7	Hundreds	Millions
11/17	WS Heini	UK, Western Europe	0	Thousands	225+ million
11/29-11/30	WS Nils	Ireland, U.K., Denmark, Sweden	0	Thousands	10s of Millions

At least seven people died due to flash floods generated by torrential rain throughout western portions of the Mediterranean. Portugal, Spain, and Italy were all impacted from November 1-3. Four individuals were killed in Spain as the Sio River overflowed its banks in the town of Agramunt. In Portugal, one person was killed in the Algarve region where the worst of the weather was experienced. In the Italian region of Calabria, numerous evacuations were carried out as floodwaters inundated the cities of Reggio Calabria and Catanzaro.

Windstorm Heini (also known locally as "Barney") impacted parts of the United Kingdom and Western Europe on November 17, bringing high winds, wintry showers, and localized flooding to some areas. No serious injuries were reported. Southern and southwestern portions of the UK were amongst the hardest-hit, where wind gusts downed trees and power lines while causing minor structural damage to properties in Wales. Flood warnings were issued across the UK as several rivers burst their banks. Total insured losses were estimated around EUR135 million (USD145 million). Overall economic losses were higher.

Windstorm Nils (also known locally as "Clodagh") impacted portions of Ireland, the United Kingdom, Denmark, and Sweden on November 29-30 bringing high winds and heavy rainfall. The storm caused disruption to travel throughout the affected countries as fallen trees and flash floods blocked roads and railways. Thousands of customers and some structures were damaged in Ireland. One local Swedish insurer cited 1,300 filed claims with payouts expected to top SEK50 million (USD6.0 million). An estimated 2.5 million cubic meters of forests were toppled in Sweden.

#### **Africa**

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
7/01-11/30	Drought	South Africa	0	Unknown	2.0+ billion
11/16	Severe Weather	South Africa	0	20,000+	75+ million

One of the worst droughts in decades intensified in South Africa during November. Some of the hardesthit areas included KwaZulu-Natal, Mpumalanga and Limpopo provinces. Water shortages affected 2.7 million households; while agricultural production plummeted. Total economic losses exceeded ZAR28 billion (USD2.0 billion).

Severe thunderstorms tracked across parts of South Africa's Gauteng region on November 16, leading to extensive hail damage in multiple communities. The city of Tshwane was particularly impacted by large hail that punctured holes in homes, businesses and vehicles. Local insurers received at least 20,000 claims with payouts expected to top ZAR55 million (USD40 million). Total economic losses were higher.

#### Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
11/03-11/04	CY Chapala	Yemen	8	Thousands	100s of Millions
11/08-11/09	CY Megh	Yemen, Somalia	18	3,000+	Unknown
11/09-12/08	Flooding	India, Sri Lanka	386+	100,000+	3.0+ billion
11/10-11/16	Flooding	China	0	Thousands	133+ million
11/13	Landslide	China	38	48	Unknown
11/17	Earthquake	Kyrgyzstan	0	4,371	Unknown
11/17	Flooding	Saudi Arabia	12	Hundreds	Unknown
11/22-11/25	Winter Weather	China	4	1,000	268+ million

Cyclone Chapala became the first storm on record to ever make landfall in Yemen at hurricane-strength on November 3. At least eight people were killed and more than 200 others were injured. The port city of Mukalla was impacted by severe flash flooding following as much as 24 inches (610 millimeters) of rain. Local media reports indicated substantial flood damage that had washed away cars and destroyed thousands of homes. Similar damage was reported in the Yemeni provinces of Hadramawt and Shabwa. Aid organizations reported that 1.1 million people were affected on Yemen and the Socotra archipelago.

At least 18 people were killed as Cyclone Megh lashed Yemen's Socotra Island with hurricane-force winds and torrential rainfall on November 8-9. Dozens of people were injured. Officials reported that at least 3,000 homes were damaged or collapsed. Hundreds of fishing vessels were damaged as the island's main port was rendered out of service, and 80 percent of Socotra's roads were deemed impassable. The storm rapidly weakened coming ashore along the western coast of the Yemen mainland.

An enhanced North East Monsoon – very likely impacted by the current El Niño – brought weeks of torrential rainfall to southern India and Sri Lanka for much of November into early December. Portions of Tamil Nadu and Andhra Pradesh states in India and Sri Lanka were heavily impacted by floods that claimed at least 386 lives. There were severe impacts to agricultural interests and infrastructure as rivers swelled into both rural and urban areas. The Chennai metropolitan region was especially damaged by the event. Total economic losses in India were estimated to reach as high as INR200 billion (USD3.0 billion). India's General Insurance Corporation cited claims possibly reaching INR20 billion (USD300 million).

Heavy rainfall in China's Hunan Province led to flooding from November 10-16 that affected 639,000 people. Floodwater depths of up to 1 meter (3.3 feet) were reported as the Xiangjiang River, a major tributary of the Yangtze, burst its banks. Significant damage to agricultural land was reported as 10,900 residents were evacuated. More than 700 homes were damaged or destroyed. China's Ministry of Civil Affairs listed total economic losses in at CNY850 million (USD133 million).

A landslide struck Lidong Village, Lishui City, in China's Zhejiang Province claiming 38 lives on November 13. The slide buried 27 homes and damaged 21 others. More than 300 residents were relocated as a result. According to local reports, insurance claims for 26 of the 27 buried properties had been settled.

A magnitude-5.5 earthquake struck southern Kyrgyzstan on November 17. The Kyrgyz Government reported that 4,244 homes and 127 social facilities in Osh Region had sustained damage.

Flash floods prompted by torrential rainfall claimed at least a dozen lives in Saudi Arabia on November 17. The cities of Jeddah, Mecca, Medina, Hail, and Arar were all affected. Schools and universities were closed for three days in some areas and several flights were delayed at King Abdulaziz Airport in Jeddah. Streets, roads, homes, and businesses were also inundated.

A series of winter storms swept through northeastern portions of China from November 22-25. Inner Mongolia, Beijing, and Tianjin provinces were worst affected as up to 25.0 centimeters (9.8 inches) of snow fell. At least 1,000 homes were destroyed or damaged. Major disruption to travel and transportation was reported throughout the affected provinces: dozens of highways through Beijing City and in Tianjin were closed; train services were subject to lengthy delays; and 150 flights at Beijing Capital Airport were cancelled. Economic losses were listed at CNY1.7 billion (USD268 million).

## Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
11/25-11/27	Wildfires	Australia (South Australia)	2	1,344+	150+ million
11/29-11/30	Severe Weather	Australia (QLD, NSW)	0	Hundreds	10s of Millions

Multiple wildfires burned in South Australia from November 25-27, killing at least two people and leaving 30 others injured. The worst fires were concentrated north of Adelaide in the North Mount Lofty Ranges. The Pinery Fire burned approximately 82,600 hectares (204,110 acres) and destroyed at least 35 homes and 166 outbuildings. A further 42 homes were damaged. Heavy damage was incurred to the agricultural sector. The Insurance Council of Australia reported that 1,344 claims had been filed with payouts of AUD119.7 million (USD88 million). Total economic losses were even higher.

Portions of Queensland and New South Wales were impacted by severe thunderstorms on November 29-30 that caused damage to numerous properties and agricultural interests. Some areas reporting damage included Warwick, Ipswich, and Brisbane. Total economic damage was estimated into the millions (USD).

# **Appendix**

# Updated 2015 Data: January-October

### **United States**

Date Event	Location	Deaths	Claims	Economic Loss (USD)
1/01-9/30 Drought	Western U.S.	0	Unknown	4.5+ billion
1/06-1/11 Winter Weather M	Midwest, Northeast, Mid-Atlantic	15	Hundreds+	100+ million
1/26-1/28 Winter Weather	Northeast, Mid-Atlantic	2	5,000+	500+ million
1/31-2/04 Winter Weather	Midwest, Northeast, Southwest	22	10,000+	150+ million
2/06-2/08 Flooding	Northwest, Southwest	1	Hundreds	Millions+
2/07-2/11 Winter Weather	Northeast	2	25,000+	400+ million
2/13-2/15 Winter Weather M	Midwest, Northeast, Mid-Atlantic	30	45,000+	650+ million
2/16-2/17 Winter Weather	Southeast	10	10,000+	100+ million
2/16-2/22 Winter Weather I	Plains, Ohio Valley, Mid-Atlantic	8	215,000+	3.25+ billion
2/25-2/26 Winter Weather	Southeast, Mid-Atlantic	2	Thousands	Millions+
3/01-3/06 Winter Weather	Central & Eastern U.S.	13	10,000+	175+ million
3/25-3/26 Severe Weather	Plains, Midwest, Southeast	1	35,000+	500+ million
3/31-4/01 Severe Weather	Plains, Midwest, Southeast	0	20,000+	175+ million
4/02-4/03 Severe Weather	Plains, Midwest, Southeast	0	25,000+	250+ million
4/07-4/10 Severe Weather Pla	ins, Midwest, Mississippi Valley	3	160,000+	1.65+ billion
4/16-4/17 Severe Weather	Plains	1	Thousands	100s of Millions
4/18-4/21 Severe Weather	Plains, Southeast, Northeast	0	135,000+	1.4+ billion
4/24-4/28 Severe Weather	Plains, Southeast	4	115,000+	950+ million
5/03-5/05 Severe Weather	Plains, Midwest	1	15,000+	175+ million
5/06-5/13 Severe Weather	Plains, Midwest, Rockies	6	90,000+	1.0+ billion
5/10 TS Ana	South Carolina	0	Hundreds	Millions
5/15-5/19 Severe Weather	Plains, Midwest, Rockies	2	15,000+	150+ million
5/23-5/28 Severe Weather Plain	s, Midwest, Rockies, Southeast	32	150,000+	3.75+ billion
5/28-5/30 Severe Weather Plain	s, Midwest, Rockies, Southeast	0	20,000+	170+ million
6/03-6/08 Severe Weather	Rockies, Plains	0	60,000+	600+ million
6/09-6/11 Severe Weather	Great Lakes	0	10,000+	100+ million
6/16-6/18 TS Bill	Texas, Oklahoma	1	10,000+	100+ million
6/19-6/26 Severe Weather Rock	ies, Plains, Midwest, Mid-Atlantic	4	110,000+	1.3+ billion
6/28-6/30 Wildfires	Northwest	0	100+	150+ million
6/29-7/01 Severe Weather	Midwest, Northeast, Southeast	0	Thousands	Millions+
7/12-7/14 Severe Weather M	lidwest, Ohio Valley, Southeast	4	65,000+	600+ million
7/16-7/18 Severe Weather	Plains, Midwest	4	7,500+	75+ million
7/20-8/05 Flooding	Florida	0	2,000+	100+ million
7/29-8/13 Wildfires	California	1	150+	Millions
8/02-8/04 Severe Weather Midwe	est, Plains, Northeast, Mid-Atlantic	4	100,000+	750+ million
8/13-8/31 Wildfires	Northwest, Rockies	4	Thousands	150+ million
8/29-8/30 Severe Weather	Pacific Northwest	2	1,000+	Millions+

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
9/09-10/30	Wildfires	California	7	10,000+	2.0+ billion
9/13-9/15	Flooding	Southwest	19	Thousands	Millions
9/24-9/28	Flooding	Northeast, Mid-Atlantic, Southeast	1	Thousands	Millions
10/01-10/11	Flooding	Southeast, Mid-Atlantic	21	70,000+	2.0+ billion
10/03-10/04	Severe Weather	New Mexico	0	10,000+	90+ million
10/05-10/07	Severe Weather	Texas	0	10,000+	80+ million
10/15-10/16	Flooding	California	1	Hundreds	Millions
10/20-10/23	Severe Weather	New Mexico, Texas	0	20,000+	250+ million
10/24-10/26	Flooding	Texas, Southeast	0	17,500+	250+ million
10/29-11/03	Severe Weather	Texas, Southeast	6	25,000+	400+ million

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/01-12/31	Drought	Canada	0	Unknown	1.0+ billion
2/20-2/21	Flooding	Dominican Republic	2	4,190+	Unknown
3/26-3/28	Severe Weather	Mexico	14	1,000+	Millions
4/04-4/05	Flooding	Haiti	6	8,832+	Unknown
5/26	Severe Weather	Mexico	14	1,000+	Unknown
6/01-7/31	Drought	El Salvador	0	Unknown	100 million
6/08	HU Blanca	Mexico	0	Hundreds	Thousands
6/12	Severe Weather	Canada	0	5,000+	75+ million
6/22	Severe Weather	Canada	0	5,000+	40+ million
6/27-7/09	Flooding	Costa Rica	0	3,308+	Unknown
7/01-7/10	Wildfire	Canada	1	Hundreds	Unknown
7/21-7/22	Severe Weather	Canada	0	25,000+	375+ million
8/04-8/05	Severe Weather	Canada	0	17,700+	150+ million
8/13-8/21	Wildfires	Canada	0	Hundreds	193+ million
8/27-8/30	TS Erika	Caribbean Islands	36	5,000+	300+ million
8/29-8/30	Severe Weather	Canada	0	2,100+	50+ million
9/22-9/28	Flooding	Central America, Caribbean	5	1,700+	Millions
10/01	Landslide	Guatemala	304	125	Unknown
10/01-10/04	MHU Joaquin	Bahamas, Bermuda	35	Thousands	100+ million
10/11-10/12	Severe Weather	Canada	0	Thousands	Millions
10/22-10/25	MHU Patricia	Mexico	14	5,000+	410+ million

#### South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
12/01-1/31	Drought	Brazil	0	Unknown	Unknown
1/15-1/31	Flooding	Bolivia, Peru	16	10,780+	Unknown
2/15	Flooding	Argentina	8	1,500	17.2 million
3/01-3/06	Flooding	Argentina, Bolivia, Brazil, Ecuador, Peru	47	30,000+	Millions+
3/20-4/05	Severe Weather	Colombia, Ecuador, Peru	23	802+	Unknown
3/25-4/08	Flooding	Chile	25	14,000+	1.5+ billion
4/20	Severe Weather	Brazil	2	2,188+	2.0+ million
4/22-4/23	Volcano	Chile	0	Thousands	600+ million
4/27	Landslide	Brazil	15	Hundreds	Unknown
5/17	Flooding	Colombia	83	Hundreds	Unknown
8/06-8/10	Flooding	Argentina, Chile	9	Thousands	Unknown
9/16	Earthquake	Chile	14+	10,000+	1.0+ billion
10/08-10/20	Flooding	Brazil	3	40,700+	Millions

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/09-1/16	EU Windstorms	Northern/Central/Western Europe	2	Thousands	650+ million
1/29-2/01	Winter Weather	Western/Northern Europe	12	Hundreds	Millions+
1/30-2/02	Flooding	Balkans, Turkey	13	2,170+	13+ million
2/03-2/08	Winter Weather	Spain, France, Italy, Slovenia, Croatia	7	Thousands	Millions+
3/04-3/07	Winter Weather	Italy, Balkans	7	Thousands	Millions+
3/29-4/01	WS Mike & Niklas	Western & Central Europe	9	10,000+	1.0+ billion
4/12-4/13	Wildfire	Russia	33	1,476+	140+ million
5/05-5/06	Severe Weather	Germany, Belgium	1	Thousands	10s of millions
6/01-8/31	Drought	Romania, Poland, Czech Republic	0	100,000+	2.7+ billion
6/27-7/01	Heatwave	Western Europe	0	Unknown	Unknown
7/24-7/25	Severe Weather	Netherlands, Germany, Poland, Slovakia	3	Thousands	25+ million
8/01-8/14	Heatwave/Wildfires	Central & Southern Europe, Middle East	109+	Unknown	9.0+ million
9/05	Severe Weather	Italy	0	Thousands	Millions
9/07	Flooding	Spain	4	1,000+	Millions
10/03-10/04	Flooding	France	19	60,000+	1.0+ billion
10/14-10/16	Flooding	Italy, Balkans	5	Hundreds	10s of Millions

## Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
12/01-1/31	Flooding	Malawi, Mozambique, Zimbabwe	307	550,000+	550+ million
1/02-1/04	Severe Weather	Malawi, Zimbabwe	15	Hundreds	Unknown
1/16-1/18	TS Chedza	Madagascar	89	5,000+	36 million
2/07-2/08	TS Fundi	Madagascar	6	8,091	10+ million
2/13-2/14	Flooding	Angola	5	2,862+	Unknown
2/27-3/01	Flooding	Madagascar	24	642	Unknown
3/04	Flooding	Tanzania	47	634	Unknown
3/09-3/12	Flooding	Angola	69	2,500+	Unknown
3/28-3/29	Flooding	Burundi, Angola, Congo	24	500+	Unknown
4/04-4/10	Flooding	Kenya	13	Hundreds	Unknown
4/28	Flooding	Kenya	16	300+	Unknown
6/01-6/21	Flooding	Côte d'Ivoire	16	Unknown	Unknown
6/01-8/31	Drought	Botswana	0	Unknown	44+ million
8/08-8/09	Severe Weather	Sudan	20	Unknown	Unknown
8/13-8/15	Heatwave	Sudan	16	Unknown	Unknown
8/14	Flooding	Niger	4	2,170+	Unknown
7/15-9/10	Flooding	Burkina Faso	8	15,000+	31+ million
9/05-9/24	Flooding	Nigeria	53	53,000+	25+ million
10/16-10/25	Flooding	Algeria	0	Thousands	Unknown

### Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/01-12/31	Wildfires	Indonesia	19	Unknown	14+ billion
1/01-12/31	Drought	China	0	Unknown	1.8+ billion
1/01-4/30	Drought	Thailand	0	Unknown	428+ million
1/01-1/23	Flooding	Indonesia	8	13,050+	6+ million
1/01-12/31	Wildfires	Indonesia	0	Unknown	4.0+ billion
1/06-1/10	Winter Weather	Egypt, Israel, Jordan, Lebanon, Syria	9	Unknown	100+ million
1/09-1/12	Winter Weather	China	1	5,300+	226+ million
1/10-1/14	Earthquakes	China	0	17,500+	16+ million
1/14-1/20	Flooding	Malaysia	1	Thousands	Unknown
1/17-1/18	TY Mekkhala	Philippines	2	538+	1.0+ million
1/19	Severe Weather	Oman	0	5,000+	221+ million
1/23-1/25	Flooding	Indonesia	1	2,750+	Unknown
1/28-1/31	Winter Weather	China	0	1,000+	28+ million
1/31	Severe Weather	China	0	Unknown	80+ million
1/31-2/2	Flooding	Indonesia	2	5,050+	Unknown
2/08-2/13	Flooding	Indonesia	6	Thousands	235+ million
2/15-2/28	Winter Weather	Afghanistan, India	230	6,013	Unknown
2/22	Earthquake	China	0	3,000+	15+ million
2/24-3/3	Flooding	Pakistan	32	Unknown	Unknown

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
3/01	Earthquake	China	0	16,300+	19+ million
3/07-3/08	Winter Weather	Afghanistan, Pakistan	26	150+	Unknown
3/11-3/15	Severe Weather	India, Iran	20	1,140+	Unknown
3/14	Earthquake	China	2	11,234+	Millions+
3/16	Flooding	Indonesia	0	1,600+	Unknown
3/23-3/27	Flooding	Saudi Arabia	11	1,000+	Millions+
3/24-3/25	Severe Weather	China	0	1,000+	275+ million
3/25-4/5	STY Maysak	Micronesia, Philippines	9	2,000+	8+ million
3/28	Flooding	Indonesia	12	Unknown	Unknown
3/29-3/31	Winter Weather	China	0	1,000+	108+ million
3/29-3/31	Flooding	India	17	Thousands	38+ million
3/30	Earthquake	China	0	6,260+	20+ million
3/30-4/04	Severe Weather	China	6	19,300+	209 million
4/01-4/03	Severe Weather	India, Pakistan, Tajikistan, Afghanistan	33	1,000+	Millions
4/04-4/05	Severe Weather	China	7	14,500+	20+ million
4/04-4/05	Severe Weather	Bangladesh, India, Myanmar	40	46,033+	4.3+ million
4/06-4/09	Severe Weather	China	1	5,000+	130+ million
4/08-4/12	Flooding	Kazakhstan	2	1,760+	5.3+ million
4/11-4/13	Winter Weather	China	0	Unknown	174+ million
4/19-4/21	Severe Weather	China	0	2,000+	350+ million
4/21	Severe Weather	India	42	25,000+	158+ million
4/25 & 5/12	Earthquake	Nepal, India, Bangladesh, China	9,120	850,000+	8+ billion
4/27	Landslide	Afghanistan	52	100	Unknown
4/27-4/28	Severe Weather	Pakistan	49	Hundreds	Unknown
4/27-4/29	Severe Weather	China	2	36,500	485+ million
5/02-5/03	Severe Weather	Bangladesh	13	Unknown	Unknown
5/07-5/12	Severe Weather	China	4	26,600+	461+ million
5/10-5/12	STY Noul	Micronesia, Philippines, Japan	2	Unknown	24+ million
5/12	Flooding	China	0	2,000+	290+ million
5/13-5/17	Flooding	China	20	20,000+	254+ million
5/15	Severe Weather	Armenia	0	Hundreds+	10+ million
5/18-5/22	Flooding	China	48	87,000+	1.15+ billion
5/21-5/28	Heatwave	India	2,500+	Unknown	Unknown
5/23-5/27	Flooding	China, Taiwan, Hong Kong	7	2,500+	282+ million
5/28-6/01	Flooding	China	16	20,000+	500+ million
5/29-6/01	Severe Weather	China	0	10,000+	325+ million
6/01-8/01	Drought	China	0	Unknown	1.8+ billion
6/01-6/04	Flooding	China	9	20,000+	625+ million
6/02-6/29	Volcano	Indonesia	0	Unknown	61+ million
6/05	Earthquake	Malaysia	19	Dozens	Thousands
6/06-6/11	Flooding	India, Nepal	21	1,000+	Unknown
6/06-6/11		China	16		2.0+ billion
	Flooding			20,000+	
6/12	CY Ashobaa	Oman	1 265+	Dozens	Thousands
6/18-6/24	Heatwave	Pakistan	1,265+	Unknown	Unknown

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
6/19-6/25	Flooding	India	41	Thousands	100+ million
6/20-6/24	Flooding	China	9	8,700+	187+ million
6/21-6/23	Severe Weather	China	0	Hundreds	145+ million
6/22-6/24	TS Kujira	China, Vietnam	7	223+	11+ million
6/23-6/30	Flooding	Bangladesh, Myanmar, India	63	Thousands	Unknown
6/25-6/29	Flooding	China	0	6,200+	58+ million
6/26-7/02	Flooding	China	16	50,000+	645+ million
7/01-7/05	Flooding	China	6	23,300+	345+ million
7/03	Earthquake	China	4	12,000+	3.2+ million
7/03-7/07	Severe Weather	China	1	2,000+	169+ million
7/04-7/13	TY Chan-hom	China, Guam, Japan, Taiwan, Korea	0	4,700+	1.6+ billion
7/04-7/10	TY Linfa	Philippines, China	5	493+	214+ million
7/07-7/13	Flooding	India, Pakistan	35	Thousands	Unknown
7/08-7/13	Flooding	Philippines	16	10+	Unknown
7/13-7/14	Severe Weather	China	1	600+	85+ million
7/13-7/14	Flooding	China	3	8,500+	71+ million
7/16	STY Nangka	Japan	2	288+	200+ million
7/17-7/25	Flooding	Pakistan	18	Thousands	Unknown
7/17-8/11	Heatwave	Japan	59	Unknown	Unknown
7/20-7/24	Flooding	China	28	42,900+	1.2+ billion
7/22-7/27	Flooding	Pakistan, Myanmar, Afghanistan, Bangladesh	162	39,000+	25+ million
7/24-8/06	Flooding	Vietnam	42	2,028+	204+ million
7/25-8/07	Flooding	Myanmar	121	50,000+	109+ million
7/26-8/06	Flooding	India, Pakistan, Bangladesh	303	350,000+	500+ million
8/01-8/05	Flooding	North Korea	21	968+	Unknown
8/01-8/07	Flooding	Nepal	90	1,000+	Unknown
8/01-8/15	Flooding	Laos	0	2,200+	10+ million
8/02-8/04	Flooding	China	15	15,000+	418+ million
8/02-8/08	STY Soudelor	China, Taiwan, Saipan	41	150,000+	3.2+ billion
8/07-8/12	Severe Weather	China	1	1,000+	59+ million
8/15-8/26	TY Goni	Japan, Philippines, Korea Peninsula	70	20,000+	900+ million
8/16-8/19	Flooding	China	23	25,800+	220+ million
8/19-8/26	Severe Weather	China	1	10,000+	281+ million
8/28-9/01	Flooding	India, Myanmar	47	50,000+	100+ million
9/06	Severe Weather	India	32	Unknown	Unknown
9/08-9/10	Sandstorm	Middle East	12	Thousands	Unknown
9/08-9/10	Flooding	Japan	8	25,000+	500+ million
9/15-9/23	Flooding	China	14	4,000+	473+ million
9/25	Earthquake	Indonesia	0	2,500	Unknown
9/25-9/28	TY Dujuan	Taiwan, China, Japan, Philippines	3	Thousands	687+ million
9/30-10/1	Winter Weather	China	1	Unknown	177 million
10/02-10/04	TY Mujigae	China, Philippines	22	26,800	4.2+ billion
10/06-10/11	Severe Weather	China	14	5,200	43 million
10/08-10/12	Flooding	Myanmar	39	Hundreds	Unknown
.0/00 10/12	i looding	Myalillai		i idilal cas	CHRIOWII

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
10/18-10/22	STY Koppu	Philippines	58	150,000+	235+ million
10/26	Earthquake	Afghanistan, Pakistan	403+	95,000+	100+ million
10/28-10/30	Flooding	Iran, Iraq, Saudi Arabia	70	Unknown	Millions

#### Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/02-1/08	Wildfires	Australia	0	996+	50+ million
2/20	Cyclone Lam	Australia	0	Hundreds	78+ million
2/20	Cyclone Marcia	Australia	0	36,483+	650+ million
3/11-3/15	CY Pam	Vanuatu, South Pacific Islands	16	30,000+	443 million
3/13-3/15	CY Olwyn	Australia (WA)	0	500+	76+ million
3/20-3/24	CY Nathan	Australia (QLD, NT)	0	Hundreds	Millions
4/19-4/22	Severe Weather	Australia (NSW)	4	119,935+	925+ million
4/25	Severe Weather	Australia (NSW)	0	14,239+	500+ million
4/30-5/03	Flooding	Australia (QLD, NSW)	6	27,825+	400+ million
5/14-5/15	Flooding	New Zealand	1	Thousands	100+ million
5/14	STY Dolphin	Northern Mariana Islands	0	Hundreds	Unknown
6/20	Flooding	New Zealand	0	2,839+	171+ million
6/30-7/05	CY Raquel	Solomon Islands	1	150+	Millions
8/25-8/26	Severe Weather	Australia (NSW)	0	1,600+	Millions
7/1-10/31	Drought	Papua New Guinea	0	Unknown	60+ million
10/27-10/28	Severe Weather	Australia (QLD)	0	Hundreds	Millions

## Additional Report Details

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

Fatality estimates as reported by public news media sources and official government agencies.

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

Damage estimates are obtained from various public media sources, including news websites, publications from insurance companies, financial institution press releases and official government agencies. Damage estimates are obtained from various public media sources, including news websites, publications from insurance companies, financial institution press releases and official government agencies. Economic loss totals include any available insured loss estimates, which can be found in the corresponding event text.

## **Contact Information**

#### **Adam Podlaha**

Head of Impact Forecasting Aon Benfield Analytics Impact Forecasting +44 (0) 20 7522 3820 adam.podlaha@aonbenfield.com

#### **Steve Bowen**

Associate Director (Meteorologist)
Aon Benfield Analytics
Impact Forecasting
+1.312.381.5883
steven.bowen@aonbenfield.com

#### **Claire Darbinyan**

Senior Analyst (Meteorologist)
Aon Benfield Analytics
Impact Forecasting
+65 6645 0110
claire.darbinyan@aonbenfield.com

#### **About Aon Benfield**

Aon Benfield, a division of Aon plc (NYSE: AON), is the world's leading reinsurance intermediary and full-service capital advisor. We empower our clients to better understand, manage and transfer risk through innovative solutions and personalized access to all forms of global reinsurance capital across treaty, facultative and capital markets. As a trusted advocate, we deliver local reach to the world's markets, an unparalleled investment in innovative analytics, including catastrophe management, actuarial and rating agency advisory. Through our professionals' expertise and experience, we advise clients in making optimal capital choices that will empower results and improve operational effectiveness for their business. With more than 80 offices in 50 countries, our worldwide client base has access to the broadest portfolio of integrated capital solutions and services. To learn how Aon Benfield helps empower results, please visit aonbenfield.com.

### Copyright © by Impact Forecasting®

No claim to original government works. The text and graphics of this publication are provided for informational purposes only. While Impact Forecasting® has tried to provide accurate and timely information, inadvertent technical inaccuracies and typographical errors may exist, and Impact Forecasting® 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.

Cat Alerts use publicly available data from the internet and other sources. Impact Forecasting<sup>®</sup> summarizes this publicly available information for the convenience of those individuals who have contacted Impact Forecasting<sup>®</sup> 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 <a href="impactforecasting.com">impactforecasting.com</a>.

#### Copyright © by Aon plc.

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 plc.