



# Global Catastrophe Recap

April 2019

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# Executive Summary

- Elevated U.S. tornado count contributes to multi-billion-dollar thunderstorm damage bill
- Cyclone Kenneth makes record landfall in Mozambique and enhances national humanitarian crisis
- Costly seasonal flooding impacts Eastern Canada; nearly 10,000 homes damaged in Quebec alone



250+

unofficial tally of US tornado touchdowns in April; highest number since 2011



140 mph

intensity of Cyclone Kenneth at landfall; the strongest storm to hit Mozambique on record



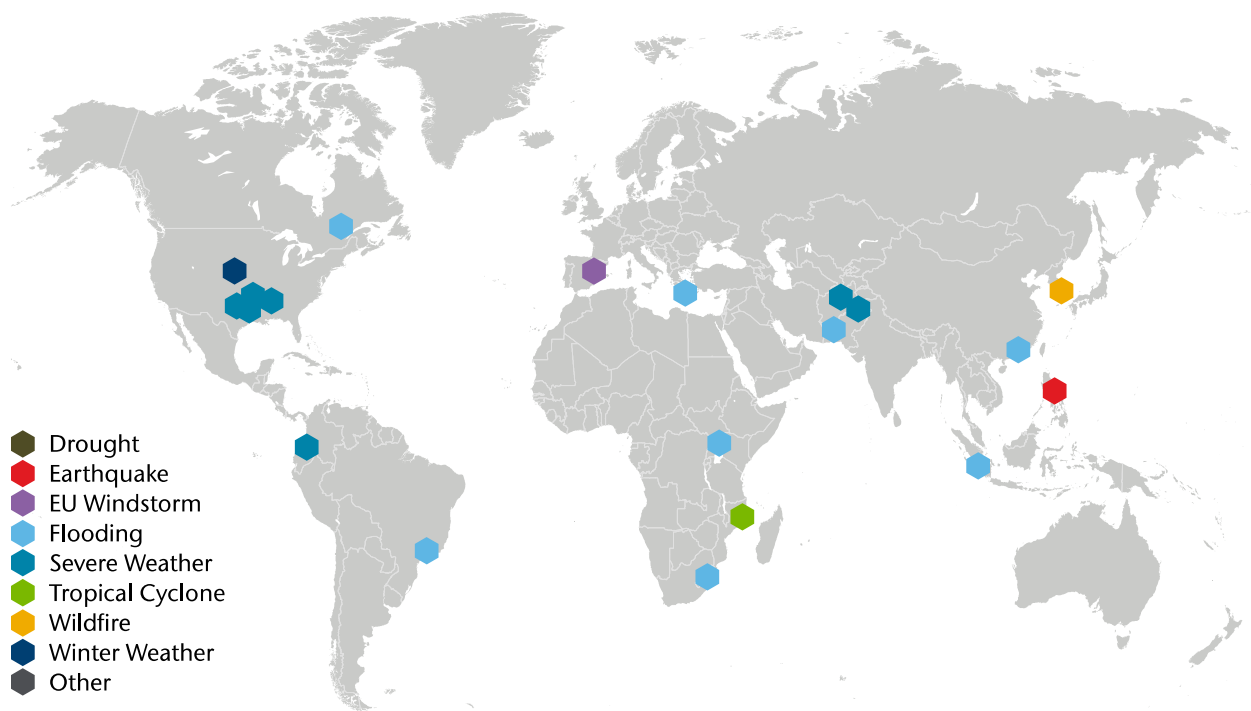
10K homes

preliminary total of homes inundated by seasonal flooding in Canada



374 deaths

number of fatalities reported globally due to flooding and severe weather events in April



# United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/05-04/08	Severe Weather	Southeast	0	25,000+	250+ million
04/10-04/12	Winter Weather	Rockies, Plains, Midwest, Southeast	0	Thousands	100+ million
04/13-04/15	Severe Weather	Plains, Southeast, Midwest, Northeast	9	90,000+	925+ million
04/17-04/19	Severe Weather	Plains, Southeast, Midwest	4	Thousands	100sof Millions
04/23-04/25	Severe Weather	Plains, Southeast	5	Thousands	100sof Millions
04/30-05/02	Severe Weather	Plains, Midwest, Southeast	2	Thousands	100sof Millions

Thunderstorms spawned up to softball-sized hail – 4.50 inches (11.4 centimeters) in diameter – and damaging straight-line winds across the Southeast from April 5-8. The most significant hail damage occurred in Texas. Other states citing damage included parts of Louisiana, Mississippi, and Alabama. Total economic losses were listed at upwards of USD250 million, with insurers covering roughly USD190 million of the cost.

A powerful late season winter storm swept across much of the United States from April 10-12. Among the hardest-hit areas included parts of Colorado, Nebraska, South Dakota, and Minnesota. Total economic losses were expected to top USD100 million.

The first of two major tornado outbreaks of the month swept across southern and eastern sections of the U.S. from April 13-15, killing at least nine people and causing widespread damage. The outbreak was marked by 70 tornado touchdowns, up to baseball-sized hail, and damaging straight line winds gusting to 100 mph (160 kph) across the hardest-hit states of Texas, Louisiana, Arkansas, Mississippi, and further eastward into the Midwest, Southeast, and Mid-Atlantic. Total economic losses were estimated at up to USD925 million, with insurers covering approximately USD700 million of the cost.

The second major tornado outbreak in less than a week impacted central and eastern sections of the U.S. between April 17-19, killing at least four people. The outbreak spawned at least 96 tornadoes across a dozen states. Nearly half of the twisters were recorded in Mississippi; while widespread reports of damaging straight-line winds and large hail also occurred. Total economic losses were expected to reach into the hundreds of millions (USD). A majority of these costs will be insured.

Another wave of severe weather struck parts of the Plains and Southeast from April 23-25, killing at least five people following a series of tornadoes (17), damaging winds, and flash flooding. The most substantial impacts were felt in Texas and Louisiana, where a statewide state of emergency was declared. Total economic losses were expected to reach into the hundreds of millions (USD). A majority of these costs will be insured.

A stubborn weather pattern prompted dozens of tornado touchdowns and torrential flooding rain across parts of the Plains, Midwest, and Southeast from April 30 to May 2. At least five people were killed. More than 41 confirmed tornadoes were cited in Oklahoma, Texas, Missouri, and Arkansas. A Flash Flood Emergency was declared in Davenport, Iowa after a levee failed along the Mississippi River; while additional flooding was cited in Illinois, Missouri, and Kansas. Total economic losses were expected to reach into the hundreds of millions (USD). A majority of the non-flood damage costs will be insured.

## Remainder of North America (Non-US)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/16-05/05	Flooding	Canada	1	10,000+	100s of Millions

The combination of increasing temperatures and heavy rainfall during the second half of April and extending into May exacerbated the seasonal spring flood situation across the St. Lawrence, Ottawa, and St. John River Basins in Canada. These river overflows led to up to 10,000 homes incurring flood inundation, with most of the worst impacts registered in Southern Quebec. Total economic losses were expected to minimally reach into the hundreds of millions (USD). Due to relatively low overland flood insurance take-up, a sizeable portion of the economic cost was expected to be uninsured.

## South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/08-04/09	Flooding	Brazil	10	Hundreds	Millions
04/20-04/22	Severe Weather	Colombia	30	Dozens	Unknown

Torrential rainfall swept across parts of Rio de Janeiro, Brazil on April 8-9, killing at least 10 people. Many residential and commercial properties were damaged, along with vehicles and swaths of infrastructure. Total economic damage was expected to reach well into the millions (USD).

Heavy rains led to a large landslide on April 21 in the Barbacoas Municipality in Nariño Department, Colombia. At least 30 people were killed and dozens of homes were swept away.

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/06	Flooding	Greece	0	Hundreds	Millions
04/18-04/20	Severe Weather	Spain	0	Hundreds	10s of millions

Notable flooding impacted the eastern sections of the Greek island of Crete on April 6. Notable losses worth millions of EUR were reported due to damage to infrastructure, agriculture, and property.

An outbreak of severe weather hit portions of the Comunidad Valenciana region in eastern Spain between April 18- 20. Localized flooding ensued in Alicante and Valencia. Among the hardest-hit areas were in Xàbia and Dénia, where the emergency services responded to 300 calls due to flooded streets and homes. Further effects were caused by strong winds and waves along the Costa Blanca coastline.

## Middle East

There were no significant disasters in the Middle East during the month of April.

## Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/22-04/24	Flooding	South Africa	87	1,000+	100+ million
04/23	Flooding	Uganda	17	Unknown	Unknown
04/24-04/26	Cyclone Kenneth	Comoros, Mozambique	48+	60,000+	100+ million

The South African provinces of KwaZulu-Natal, Eastern Cape and the Free State were hit by widespread flooding and mudslides following heavy rainfall between April 22-24. Hundreds of houses collapsed or were washed away by fast-moving flood waters and mudslides. At least 87 people died, and local infrastructure suffered notable damage. The economic cost in Durban alone was ZAR660 million (USD50 million). The overall tally will be even higher.

At least 17 people were killed in Uganda due to flash flooding on April 23. The event hit Buyende and Kamuli districts, particularly the villages of Kabugundo, Nabeyo and Itanwa.

Cyclone Kenneth made landfall in Northern Mozambique on April 25 as a 220 kph (140 mph) Category 4 storm on the Saffir Simpson Scale – the strongest storm to strike the country in recorded history. Widespread wind, flood and surge damage, along with at least 48 fatalities in Mozambique and Comoros was recorded. The worst impacts were felt in Mozambique's Cabo Delgado Province. Total economic damage was expected to reach well into the millions (USD).

## Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
04/04-04/05	Wildfire	South Korea	2	1,400+	Millions
04/09	Severe Weather	Pakistan	8	Dozens	Unknown
04/11-04/12	Flooding	China	11	Unknown	Unknown
04/13-04/14	Flooding	Pakistan	20	Dozens	Unknown
04/15-04/17	Severe Weather	Afghanistan, Pakistan, India	146	Hundreds	Millions
04/22-04/23	Earthquake	Philippines	21	5,100+	50+ million
04/25-04/27	Flooding	Indonesia	44	1,200+	15+ million

A wildfire affected the mountainous province of Gangwon, South Korea on April 4-5. The coastal fire killed two people and injured at least 35 more. The blazes destroyed more than 1,400 homes, green houses, farm facilities, and other structures.

A storm brought heavy rain and strong winds to parts of Northwest Pakistan on April 9. Rainfall triggered flash floods that inundated roads and residential areas. At least eight people were killed and 54 injured.

A strong storm system brought heavy rainfall to parts of southern China on April 11-12. The most notable impacts were felt in Guangdong Province. The heavy rainfall triggered significant flooding in Shenzhen, where at least 11 people were killed.

Heavy rains and flash flooding impacted northwestern and southern Pakistan on April 13-14. At least 20 people were killed in Balochistan and South Waziristan.

A storm system – known locally as a western disturbance – spawned numerous clusters of thunderstorms across parts of Afghanistan, Pakistan, and northern India from April 15-17. At least 146 people were killed. Extensive damage to residential and commercial property, infrastructure, and cropland was reported. Economic losses were expected to reach into the millions of dollars (USD).

A magnitude-6.1 earthquake struck the Philippines' Central Luzon on April 22. The tremor left at least 21 people dead or missing in the province of Pampanga after more than 5,100 homes and other structures were damaged or destroyed. The total economic cost was estimated at up to USD50 million.

Heavy rainfall triggered flooding and landslides in the Indonesian provinces of Bengkulu and Lampung, as well as Jakarta from April 25-27. At least 36 people were left dead or missing in Bengkulu alone after more than 1,200 homes were damaged. A further eight people died in flood-related events in Jakarta and Lampung. Total economic losses in Bengkulu alone were listed at IDR200 billion (USD15 million).

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

There were no significant disasters in Oceania during the month of April.

# Appendix

## Updated 2019 Data: January-March

### United States

Date	Event	Location	Deaths	Structures / Claims	Economic Loss (USD)
01/05-01/06	Winter Weather	West	0	7,500+	125+ million
01/11-01/14	Winter Weather	Plains, Midwest, Mid-Atlantic	13	Thousands	Millions
01/16-01/18	Winter Weather	West	0	12,000+	275+ million
01/18-01/24	Winter Weather	Midwest, Northeast	10	22,000+	300+ million
01/29-01/31	Winter Weather	Midwest, Northeast, Southeast	22	45,000+	950+ million
02/01-02/03	Flooding	California	0	11,000+	250+ million
02/05-02/08	Winter Weather	Midwest	4	Hundreds	Millions
02/09-02/12	Winter Weather	Northwest, Midwest, Northeast	0	Hundreds	Millions
02/10	Severe Weather	Hawaii	1	Hundreds	10s of Millions
02/18-02/21	Winter Weather	Northern Plains, Southeast	3	Hundreds	Millions
02/22-02/26	Severe Weather	Central/Eastern U.S.	4	175,000+	1.35+ billion
02/26-02/28	Flooding	California	1	6,000+	175+ million
03/03-03/04	Severe Weather	Southeast, Mid-Atlantic, Northeast	23	13,000+	190+ million
03/08-03/09	Severe Weather	Plains, Midwest, Southeast	1	Thousands	Millions
03/12-03/28	Flooding	Central & Western U.S.	5	125,000+	5.0+ Billion
03/23-03/25	Severe Weather	Plains, Midwest	0	100,000+	1.1+ billion
03/27	Severe Weather	Florida	0	22,000+	225+ Million

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

Date	Event	Location	Deaths	Structures / Claims	Economic Loss (USD)
01/27	Severe Weather	Cuba	6	Hundreds	Millions
02/03-02/05	Flooding	Canada	0	4,500+	110+ million
02/24-02/25	Winter Weather	Canada	0	8,000+	105+ million
03/09-03/11	Flooding	Canada	0	6,000+	110+ million
03/13-03/16	Flooding	Canada	0	11,000+	225+ million



## South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/20	Flooding	Argentina, Uruguay	5	Thousands	2.3+ billion
01/27	Landslide	Peru	15	100+	Negligible
02/01-02/10	Flooding	Chile	6	5,700+	91+ million
02/02-02/05	Landslide	Bolivia	23	Unknown	Unknown
02/07	Landslide	Peru	10	Dozens	Unknown
02/22	Flooding	Colombia	0	4,000+	Millions
03/10-03/12	Flooding	Brazil	13	Hundreds	Millions
03/15-04/05	Flooding	Peru, Paraguay, Bolivia, Colombia	5	Thousands	10s of millions

## Europe

Date	Event	Location	Deaths	Structures / Claims	Economic Loss (USD)
01/01-01/02	Windstorm Alfrida	Northern Europe	0	15,000+	50+ million
01/01-01/14	Winter Weather	Central Europe	26	Thousands	100s of Millions
01/22-01/24	Flooding	Spain	4	3,600+	46+ million
01/29	Windstorm Gabriel	France	0	4,000+	Millions+
02/08-02/09	Windstorm Erik	United Kingdom, Ireland	1	Thousands	10s of Millions
02/10-02/11	Windstorm Isaias	France, Germany	0	Thousands	10s of Millions
02/23-02/26	Severe Weather	Italy, Greece, Malta, Croatia	8	Hundreds	250+ million
03/03-03/05	Windstorm Freya	Central & Western Europe	2	Thousands	100s of Millions
03/10	Windstorm Eberhard	Central & Western Europe	2	100,000+	1.5+ billion

## Middle East

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/27-01/29	Flooding	Saudi Arabia	12	1,000+	Millions
01/24-01/26	Severe Weather	Turkey	2	4,100+	20+ million
03/09-03/10	Flooding	Iran	0	Hundreds	80+ million
03/17-04/09	Flooding	Iran	77	85,000+	8.3+ billion*
03/24-03/29	Flooding	Iraq, Syria	10	Unknown	Unknown

\*Global free market currency conversion; unofficial local free market conversion cost is USD2.6 billion

## Africa

Date	Event	Location	Deaths	Structures / Claims	Economic Loss (USD)
01/01-01/31	Flooding	Mozambique, Malawi, Zambia	22	Hundreds	Millions
01/17-01/21	Flooding	Burundi	10	Hundreds	Unknown
01/19	Flooding	Madagascar	9	Unknown	Unknown
02/10	Cyclone Gelena	Mauritius	0	Hundreds	Millions+
02/12-02/18	Flooding	Zimbabwe	26	Unknown	Unknown
02/21-02/22	Flooding	Angola	4	711+	Unknown
03/04-03/22	Cyclone Idai	Southern Africa	1,100+	150,000+	2.0+ billion
03/10-03/12	Flooding	South Africa	10	7,000+	7.0+ million
03/16-03/19	Flooding	Angola	27	Hundreds	Millions

## Asia

Date	Event	Location	Deaths	Structures / Claims	Economic Loss (USD)
01/03-01/05	Tropical Storm Pabuk	Thailand, Vietnam, Malaysia	9	2,300+	150+ million
01/06	Flooding	Afghanistan	30	0	Negligible
01/21-02/01	Flooding	Indonesia	80	22,500+	Millions
02/01-02/28	Winter Weather	China	3	N/A	95+ million
02/20-02/21	Flooding	Pakistan	26	Hundreds	Millions
02/24-02/25	Earthquake	China	2	11,000+	37+ million
02/25-02/27	Severe Weather	India	6	Hundreds	Millions
03/01-03/04	Flooding	Afghanistan, Pakistan	65	6,000+	Unknown
03/07-03/10	Flooding	Indonesia	8	Dozens	Unknown
03/16-03/18	Flooding	Indonesia	200	Hundreds	Millions
03/18	Flooding	Afghanistan	13	Dozens	Unknown
03/19-03/21	Flooding	China	0	2,500+	40+ million
03/29-03/30	Flooding	Afghanistan	45	13,000+	10s of Millions
03/30-04/09	Wildfire	China	31	N/A	N/A
03/31	Severe Weather	Nepal, India	35	2,400+	Millions
03/31	Severe Weather	Bangladesh	15	Hundreds	Unknown

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

Date	Event	Location	Deaths	Structures / Claims	Economic Loss (USD)
01/01-01/31	Heatwave	Australia	N/A	Unknown	Unknown
01/28-02/07	Flooding	Australia	3	27,355+	1.75+ billion
02/04-02/27	Wildfire	New Zealand	0	Dozens	Millions
02/11-02/25	Flooding	Papua New Guinea	4	Hundreds	Unknown
03/01-03/20	Wildfire	Australia	0	432+	40+ million
03/24-03/25	Flooding	New Zealand	1	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 public and private insurance entities 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 determined based on various public media sources, including news websites, publications from insurance companies, financial institution press releases, and official government agencies. Economic loss totals are separate from any available insured loss estimates. An insured loss is the portion of the economic loss covered by public or private insurance entities. In rare instances, specific events may include modeled loss estimates determined from utilizing Impact Forecasting's suite of catastrophe model products.

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