

Global Catastrophe Recap

January 2018



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Executive Summary

- Windstorms Friederike, Eleanor and Carmen leave a multi-billion economic damage cost in Europe
- Early January winter storm and cold affects the Central & Eastern US; total impacts top USD1 billion
- Heavy snow and frigid temperatures in China cause nearly USD2 billion in aggregated damage

A meteorologically active January saw several Atlantic storm systems come ashore in Northern and Western Europe. The most significant was Windstorm Friederike, which left at least 13 people dead after hurricane-force wind gusts and heavy rainfall impacted Germany, the Netherlands, Belgium, France, and the United Kingdom. The German Insurance Association (GDV) reported that Friederike was the costliest windstorm in the country since 2007's Windstorm Kyrill, with preliminary payouts listed at approximately EUR1 billion (USD1.24 billion). Additional payouts exceeding EUR100 million (USD125 million) were reported by other regional insurance groups. Overall economic losses were even higher.

Windstorms Eleanor and Carmen also impacted Western and Central Europe, killing at least seven people and causing notable damage in the UK, Ireland, France, Germany, and Switzerland. Preliminary insured losses were listed in the hundreds of millions (EUR).

A powerful storm system and significant cold impacted much of the central and eastern United States during the first week of January. At least 22 people were killed. Heavy snowfall, freezing rain, sleet, ice, coastal flooding, and frigid temperatures were reported in association with the main storm as impacts were felt from the Gulf Coast to New England. Total economic damage was estimated at USD1.1 billion. Public and private insurers were expected to payout up to USD750 million in claims.

Numerous areas of low pressure and extended periods of frigid temperatures affected Northern and Eastern China. The greatest impacts were noted to the agricultural sector in Jiangsu, Anhui, Hebei, and Hunan. The Ministry of Civil Affairs (MCA) cited winter weather damage of at least USD1.8 billion.

Additional wintry weather led to casualties and damage in Japan, India, Nepal, Canada, and Lebanon.

Heavy rainfall swept across the state of California, prompting flash flooding, mudslides and debris flow in areas previously impacted by major December 2017 wildfires. At least 21 people were killed. An official assessment from Cal Fire cited that 129 single family residences and six commercial properties were destroyed and another 307 homes and 17 commercial properties were damaged. Total economic damage to property and infrastructure was expected to reach well into the hundreds of millions (USD).

Persistent heavy rainfall recorded in Northern and Eastern France led to flooding along numerous rivers and streams. Some of the most notable impacts occurred in the Île-de-France region. Preliminary damage assessments suggested that the cost of the current flooding may reach the hundreds of millions (EUR).

Other flood events were noted in Canada, Democratic Republic of Congo, Mozambique, and Philippines.

Two powerful cyclones in the South West Indian Ocean led to widespread damage. Cyclone Ava left at least 73 people left dead or missing in Madagascar; while Cyclone Berguitta caused extensive damage in Mauritius and La Reunion.

A magnitude-7.1 earthquake struck just offshore Peru's northern coast on January 14. At least two people were killed, 137 others were injured, and 2,541 homes and other structures were damaged or destroyed.

United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/03-01/05	Winter Weather	Eastern & Central U.S.	22	60,000+	1.1+ billion
01/08-01/09	Flooding	California	21	6,500+	100s of Millions+
01/14-01/17	Winter Weather	Plains, Midwest, Northeast, Southeast	16	Thousands	Millions
01/21-01/24	Winter Weather	Plains, Midwest	10	Hundreds	Millions

A powerful storm system and significant cold impacted much of the central and eastern United States during the first week of January. At least 22 people were killed. Heavy snowfall, freezing rain, sleet, ice, coastal flooding, and frigid temperatures were reported in association with the main storm as impacts were felt from the Gulf Coast to New England. States of emergency were declared in Georgia, North Carolina, Maryland, Virginia, New York, New Jersey, and Massachusetts. Total economic damage was estimated at USD1.1 billion, with impacts felt in nearly two-dozen states. Public and private insurers were expected to payout up to USD750 million in claims due to damage from burst pipes, downed trees, coastal flooding, and traffic accidents.

Heavy rainfall swept across the state of California on January 8-9, prompting flash flooding, mudslides and debris flow in areas previously impacted by major wildfires. At least 21 people were confirmed to have been killed and 28 others injured. Mandatory evacuation orders were issued in multiple areas, including the hardest-hit cities of Montecito and Carpinteria in Santa Barbara County, as several inches of rain fell. An official assessment from Cal Fire cited that 129 single family residences and six commercial properties were destroyed and another 307 homes and 17 commercial properties were damaged. Total economic damage to property and infrastructure was expected to reach well into the hundreds of millions (USD).

A winter storm brought accumulating snow and ice across southern sections of the US from January 14-17, becoming the third-such event to bring snow to the Deep South during the current winter season. Temperatures again plunged to well below normal levels across the Plains and Southeast, while cold also gripped parts of the Midwest and Northeast. At least 16 people died due to storm-related incidents, and several others were injured. The most significant impacts resulted from power outages, transportation interruptions due to closed roadways or airports, and automobile accidents. Total economic and insured losses were estimated in the millions (USD).

A strong winter storm tracked across a broad section of the United States from January 21 to 24, leaving at least 10 people dead in storm-related incidents. The heaviest snowfall – which included blizzard conditions – was recorded from Colorado to the northern Great Lakes as accumulations exceeded 12 inches (30 centimeters) in parts of at least nine states. Other areas in the Midwest and Northeast cited at least a 0.25-inch (0.6-centimeter) accumulation of freezing rain that left road travel very dangerous. Hundreds of car automobile accidents occurred. Total economic and insured losses were estimated in the millions (USD).

Remainder of North America (Non-US)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/11-0/14	Flooding	Canada	0	Hundreds+	Millions

The combination of record temperatures and heavy rainfall impacted parts of Eastern Canada from January 11-14, leading to widespread flooding and damage in Quebec, New Brunswick, Prince Edward Island, and Newfoundland. The mild air and rain led to flooding due to snowmelt, ice jams, and rising river levels. Homes and businesses were inundated, while sections of roads were left washed away. Both total economic and insured losses were each expected into the tens of millions of dollars (USD).

South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/14	Earthquake	Peru	2	2,541+	Millions

A magnitude-7.1 earthquake struck just offshore from the northern coast of Peru's Arequipa department on January 14. The tremor was recorded by the United States Geological Survey (USGS) at 04:19 AM local time (09:19 UTC) at a depth of 36.3 kilometers (22.6 miles). Tsunami warnings were immediately issued for multiple Pacific nations but later cancelled as no notable waves were observed. At least two people were killed and 137 others were injured; mostly in Caraveli province. The government reported that 2,541 homes and other structures were damaged or destroyed.

Europe

Date	Event	Location	Deaths	Structures/ Claims	Loss (USD)
01/01-01/04	WS Eleanor & Carmen	Western & Central Europe	7	200,000+	1.0+ billion
01/06-01/07	Severe Weather	Spain	0	Hundreds	60+ million
01/18	WS Friederike	Western & Central Europe	13	Thousands	2.0+ billion
01/20-02/01	Flooding	France	0	Thousands	100s of Millions+

Windstorm Eleanor (named Burglind by the Free University of Berlin) swept across Western and Central Europe from January 2-4, bringing hurricane-force wind gusts, heavy rainfall and coastal surge to several countries. At least seven people were killed and dozens more left injured in parts of the United Kingdom, Ireland, France, Germany, and Switzerland. The storm was preceded by Windstorm Carmen, with primary impacts from that storm in France. Preliminary reports by various European insurance associations cited payouts in the hundreds of millions (EUR). Overall economic losses were even higher.

Parts of coastal and central Spain were affected by an outbreak of severe weather and heavy snowfall from January 6-7. Multiple confirmed tornadoes resulted in damage to the local agricultural sector, with the strongest being rated F1 in El Ejido. Damage in that town alone was estimated in the tens of millions (EUR).

Windstorm Friederike impacted several countries in Western and Central Europe on January 18 with exceptionally high wind gusts and periods of heavy rainfall. At least 13 people were killed. Widespread damage was recorded in Germany, the Netherlands, Belgium, France, and the United Kingdom. The German Insurance Association (GDV) reported that Friederike was the costliest windstorm in the country since 2007's Windstorm Kyrill, with payouts listed at approximately EUR1 billion (USD1.24 billion). Additional payouts exceeding EUR100 million (USD125 million) were reported by other regional insurance groups. Overall economic losses were even higher.

Persistent heavy rainfall recorded in Northern and Eastern France during the December and January led to elevated river levels. The high rain accumulations resulted in flooding, particularly in the Seine River Basin, along numerous rivers and streams. Some of the most notable impacts occurred in the Île-de-France region as the Seine River crested at levels comparable to those reached in June 2016. Preliminary damage assessments suggested that the cost of the current flooding may reach the hundreds of millions of Euros, but not reach or exceed the cost of the 2016 flood event.

Middle East

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/19-01/20	Winter Weather	Lebanon	15	N/A	Negligible

At least 15 Syrians were killed after being caught in a snowstorm while trying to cross the Syrian-Lebanese border on January 19-20. The casualties were discovered near Masnaa. The snowfall was prompted by a winter storm that came in from the Mediterranean Sea and brought stormy conditions and wintery weather to portions of Israel, Lebanon, Gaza, Turkey, Syria, Iran, and Iraq.

Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/03-01/04	Flooding	Democratic Republic of Congo	44	Hundreds	Millions
01/12-01/13	CY Ava	Madagascar	73	4,800+	Millions
01/15-01/18	CY Berguitta	Mauritius, La Reunion	0	Thousands	10s of Millions
01/16-01/22	Flooding	Mozambique	11	15,000+	5.1+ million

Heavy rainfall on January 3-4 overwhelmed local infrastructure and spawned floods that left at least 44 people dead in Kinshasa, the capital of the Democratic Republic of Congo. Local officials noted that the neighborhood of Ngaliema, in the western part of the city, was hit particularly hard. The lack of urban planning, poor building standards and drainage, coupled with rapid population growth contributed to the high death toll.

Cyclone Ava left at least 73 people dead or missing after tracking along Madagascar's eastern coast on January 12-13. Heavy rain, flooding and high winds left 55,000 residents homeless across eastern sections of the island. The resultant flooding was reported as far away as the capital, Antananarivo, and affected more than 4,300 homes and 500 classrooms. Total damage and recovery costs were estimated well into the millions (USD).

Cyclone Berguitta impacted the Indian Ocean territories of Mauritius and La Reunion from January 15-18, bringing torrential rainfall and damaging winds. While there were no reports of casualties, the storm caused extensive damage to property and agriculture – largely as a result of flooding. Total economic losses were expected to reach into the tens of millions (USD).

Seasonal rainfall led to widespread flooding in northern sections of Mozambique from January 16-22, killing at least 11 people. Tens of thousands of residents were affected, with the hardest-hit provinces including Nampula, Niassa, Cabo Delgado, and Mozambique Island. More than 15,430 homes and other structures were damaged or destroyed. Additional impacts were noted to the electrical grid, roads, agriculture, and educational facilities. Total damage was minimally estimated at USD5.1 million.

Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/07	Winter Weather	India, Nepal	94+	N/A	Negligible
01/02-01/05	Winter Weather	China	21	3,500+	854+ million
01/13-01/17	Flooding	Philippines	11	1,900+	Millions
01/21-01/25	Winter Weather	Japan, China	5	Unknown	Millions
01/24-01/29	Winter Weather	China	2	2,500+	910+ million

An intense cold wave impacted northern India during the first week of January. At least 44 fatalities were cited in New Delhi alone after temperatures dropped to a low of 4.2°C (40°F). The inclement weather also led to dense fog that disrupted transportation throughout the city. At least 50 people were also killed by the cold weather in neighboring Nepal, with the worst affected districts being Saptari, Rautahat, and Siraha in the Central and Eastern regions.

Multiple provinces of China were impacted by a severe winter storm that brought blizzard-like conditions and heavy snowfall from January 2-5. The weather claimed at least 21 lives and caused damage to thousands of homes and a large swath of agricultural land. China's Ministry of Civil Affairs (MCA) listed economic losses at nearly CNY5.5 billion (USD854 million).

Southeastern portions of the Philippines were impacted by flooding and landslides as a strong surge in the Northeast Monsoon brought heavy rainfall to five regions from January 13-17. Bicol, Davao, Eastern Visayas, Northern Mindanao, and Western Visayas were the worst affected regions. At least 11 people were killed and almost 180,000 were affected as flooding and landslides caused damage to 1,863 homes and large areas of agricultural land. Economic losses were expected in the millions (USD).

A wintry weather pattern impacted eastern sections of Asia from January 21-25, bringing heavy snowfall and cold weather to parts of China and Japan. At least five people were killed and nearly 1,000 people were injured in primarily traffic-related incidents, including more than 976 alone in Japan. Snowfall was heaviest in Japan as widespread power outages and transportation delays were reported. Tokyo recorded its most snowfall since February 2014 and its lowest temperature in 48 years. Total economic and insured losses were expected well into the millions (USD).

Continued bouts of heavy snow and cold temperatures affected parts of Central and Eastern China from January 24-29, leaving at least two people dead. The wintry weather forced tens of thousands of people from their homes, and damaged at least 2,500 structures. Even more damage was reported to the agricultural sector in the hardest-hit provinces of Anhui, Hunan, Hubei, and Jiangsu. Total economic damage was listed by the MCA at CNY5.7 billion (USD910 million).

Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/31-02/02	Flooding	New Zealand	0	Thousands	10s of Millions

The extratropical remnants of Cyclone Fehi brought significant rainfall accumulations to New Zealand at the end of January into early February. The impacts caused localized flooding, tidal inundation, and wind damage. Elsewhere, Fehi caused minor flood-related damage in New Caledonia. The Insurance Council of New Zealand anticipated payouts being in the "multi-million dollar" scale.

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 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. Specific events may include modeled loss estimates determined from utilizing Impact Forecasting's suite of catastrophe model products.

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