



Global Catastrophe Recap

January 2016

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Executive Summary

- Winter weather leaves USD4.0+ billion economic impact in the United States and Asia
- El Niño-influenced rainfall events lead to flooding around the globe
- M6.7 earthquake rattles India's Manipur state; USD75 million in estimated damage

A powerful winter storm brought prodigious snowfall, high winds, coastal flooding, freezing rain, ice, sleet, and severe thunderstorms to the Eastern United States during the second half of January, leaving 58 people dead and injuring dozens of others. States of emergency were declared in 11 states and Washington, D.C. as the storm's impacts led to widespread damage, business interruption, and substantial disruption to travel. The event was rated by NOAA as the fourth-largest winter storm in the Northeast and Mid-Atlantic since the 1950s. Total economic losses resulting from both physical damage and lost business were tentatively estimated to exceed USD2.0 billion. Insured losses from both private and public entities were projected to reach well into the hundreds of millions.

Elsewhere, a prolonged period of Arctic cold and snowfall covered much of East Asia that led to significant damage and travel impacts. At least 116 people were killed in Taiwan (85), Thailand (14), Japan (6), South Korea (6), and China (5). Total combined economic losses were nearly USD2.0 billion, with China incurring CNY10.6 billion (USD1.6 billion) of the cost.

Windstorm Marita—also known locally as Gertrude—brought hurricane-force wind gusts and heavy rain across northern portions of the United Kingdom, Ireland and Scandinavia. Among the hardest-hit areas came in Scotland as winds downed trees onto homes, businesses and vehicles. Total economic and insured losses were expected to exceed USD100 million.

A series of Pacific storm systems fueled by El Niño brought heavy rainfall, snow and isolated severe weather to portions of California in early January. The storms led to reports of flooding, mudslides and debris flow across the state. Total economic losses were estimated to exceed USD125 million; while public and private insurers listed payouts in excess of USD65 million.

Parts of South America continued to see heavy rains prompt flooding to start 2016. Parts of Brazil and Ecuador were particularly impacted as at least 12 people were killed and more than 15,000 homes were destroyed. Total combined economic losses were in excess of USD110 million.

Additional flooding events were noted in Burundi, China and Australia.

A magnitude-6.7 earthquake struck northeast India on January 3, also rattling nearby Bangladesh, Bhutan, China, Myanmar, and Nepal. At least 22 people were killed and nearly 300 others were injured. Damage was particularly heavy in the city of Imphal, where homes and several large structures collapsed. Total economic losses were beyond INR5.0 billion (USD75 million).

Other damaging earthquakes during the month were recorded in China and southern Spain.

The Waroona Fire in Western Australia left at least two people dead and 180 structures destroyed in the hardest-hit communities of Yarloop, Waroona, Hamel, and Cookenup. The Insurance Council of Australia declared cited insured losses minimally at AUD57 million (USD42 million).

Drought conditions in South Africa left agriculture damage nearing ZAR4.0 billion (USD250 million).

United States

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/04-01/08	Flooding	California	0	10,000+	125+ million
01/09	Severe Weather	Florida	0	200+	10+ million
01/17	Severe Weather	Florida	2	200+	20+ million
01/21-01/24	Winter Weather	Mid-Atlantic, Northeast, Southeast	58	25,000+	2.0+ billion
01/24	Earthquake	Alaska	0	Hundreds	Unknown

A series of Pacific storm systems fueled by El Niño brought heavy rainfall, snow and isolated severe weather to portions of California from January 4-8. The storms led to widespread reports of flooding, mudslides and debris flow across the state, particularly Southern California, as drought-stricken areas were deluged by the heavy precipitation. Damage to homes, businesses, vehicles and infrastructure was notable in Los Angeles, Ventura, Orange, and San Diego counties. Total economic losses were estimated to exceed USD125 million; while public and private insurers listed payouts in excess of USD65 million.

A cluster of severe thunderstorms tracked into Florida on January 9, spawning a tornado in the city of Cape Coral. No serious injuries or fatalities were reported. The EF2 twister with winds up to 132 mph (212 kph) damaged or destroyed at least 178 homes and other structures. Total economic losses were listed near USD10 million.

Severe thunderstorms spawned multiple EF2 tornado touchdowns in Florida during the early morning hours on January 17. The tornadoes were in an area just south of the Tampa metro region in Duette and Siesta Key. The Duette tornado was rated EF2 with winds up to 127 mph (204 kph) damaged several homes and left two people dead and four others injured. The Siesta Key twister with 132 mph (212 kph) winds damaged at least 45 properties. Total economic losses were listed near USD20 million.

A historic winter storm brought prodigious snowfall, high winds, coastal flooding, freezing rain, ice, sleet, and severe thunderstorms to the Eastern United States from January 21-24, leaving 58 people dead and injuring dozens of others. States of emergency were declared in Washington, D.C., Virginia, Maryland, Pennsylvania, New York, New Jersey, Tennessee, Kentucky, Delaware, West Virginia, Georgia, and North Carolina as the storm's impacts led to widespread damage, business interruption, and substantial disruption to travel. Most of the incurred damage was due to fallen trees, coastal flooding, hail and wind. The event was rated by NOAA as the fourth-largest winter storm in the Northeast and Mid-Atlantic based on an NESIS rating. Total economic losses were tentatively estimated to exceed USD2.0 billion; while insured losses were projected to reach well into the hundreds of millions.

A magnitude-7.1 earthquake struck southern Alaska on January 24, causing minor damage to homes and businesses. The USGS recorded the tremor at 1:30 AM local time (10:30 AM UTC) with an epicenter located 261 kilometers (162 miles) southwest of Anchorage. Most of the damage was due to fallen indoor contents and minor cracking, though some infrastructure was cracked. A gas leak in the town of Kenai led to two homes exploding. Four single-family homes were also destroyed due to fires.

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
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No significant natural disaster events occurred during the month of January.

South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/25	Flooding	Ecuador	9	2,000+	10+ million
01/09-01/15	Flooding	Brazil	3	25,000+	100+ million

Prolonged periods of heavy rainfall throughout January led to widespread flooding in Ecuador, leaving at least nine people dead. The hardest-hit provinces included Guayas, Bolívar, Esmeraldas, Cotopaxi, Los Ríos, Manabí, Imbabura, Santo Domingo de los Tsáchilas and El Oro. Local officials reported that nearly 2,000 homes and structures were damaged or destroyed by floodwaters. Total economic losses were estimated in excess of USD10 million.

An active weather pattern enhanced by El Niño led to rounds of strong thunderstorms and flooding across multiple Brazilian states from January 9-15. Among the hardest-hit states was Parana, where 45 separate cities reported damage to more than 10,100 homes due to flooding and mudslides. Elsewhere, at least three people were killed in Sao Paulo state following flooding. As many as 12 towns declared a state of emergency. Similar impacts were felt in Mato Grosso do Sul state, where 25 towns declared a state of emergency after mudslides damaged 24 bridges and 17 stretches of highways. Total combined economic losses were expected to well exceed USD100 million.

Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/08	Winter Weather	Central & Northern Europe	21	Unknown	Unknown
01/12-01/14	Winter Weather	Central & Northern Europe	3	Hundreds	Millions
01/25	Earthquake	Spain, Morocco	1	Hundreds	13+ million
01/29-01/30	WS Marita	UK, Scandinavia	0	Thousands	100s of Millions

An extended period of sub-freezing temperatures engulfed much of central and northern Europe during the first week of January. At least 21 people died in Poland alone due to the cold Arctic air mass. Other countries enduring the deep freeze included Germany, Finland, the Netherlands, Turkey, and Slovenia. Parts of Turkey also noted heavy snowfall as the cold air tracked over the milder waters of the Black Sea.

Heavy snow and bitter cold covered parts of Europe from January 12-14, leaving at least three people dead in France. The fatalities were blamed on a large avalanche which struck near the Italian border. In Russia, heavy snow led to widespread disruption around Moscow; while in Finland, train service was cancelled given too much snow and ice on tracks. Total economic losses resulting from damage and business interruption was expected into the millions (USD).

A magnitude-6.3 earthquake struck in the Alboran Sea on January 25, causing minor damage across southern Spain and northern Morocco. At least one person was killed and 26 others were injured. The tremor was registered at 5:22 AM local time (04:22 AM UTC) with an epicenter located 54 kilometers (34 miles) north-northeast of Al Hoceima, Morocco. The most significant damage occurred in the Spanish north-African enclave of Melilla, where slightly damaged homes and businesses incurred an estimated EUR12 million (USD13 million) economic cost.

Windstorm Marita – also known locally as Gertrude – brought hurricane-force wind gusts and heavy rain across northern portions of the United Kingdom, Ireland and Scandinavia on January 29-30. Among the hardest-hit areas came in Scotland, including the council areas of Dundee, Perth and Kinross, Fife, and Angus, as high winds downed trees onto homes, businesses and vehicles and also caused some roofs to partially tear. Total economic and insured losses were expected to exceed USD100 million.

Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/01-01/10	Heatwave	South Africa	11	Unknown	Unknown
01/01-02/01	Drought	South Africa	0	Unknown	250+ million
01/01-02/01	Flooding	Burundi	52	5,100+	13+ million

Extremely hot temperatures left sweltering conditions across parts of South Africa during the first 10 days of January. At least 11 people died and nearly 20 others were hospitalized as a result of heatstroke following temperatures that topped 45°C (113°F) in the North West Province.

Severe drought conditions and wildfires enhanced by effects from El Niño continued across South Africa during the start of 2016. Western Cape province reported that new damage to the agricultural industry was anticipated to reach ZAR4.0 billion (USD250 million). The fruit sector alone had incurred damage in excess of ZAR720 million (USD45 million).

Recent heavy rains and strong thunderstorms have left at least 52 people dead in Burundi since November 2015. The El Niño enhanced weather pattern contributed to more than 5,100 homes, businesses, schools, and public facilities being damaged or destroyed. The government requested BIF20 billion (USD13 million) to help in the recovery process.

Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/03	Earthquake	India	22	1,000+	75+ million
01/21	Earthquake	China	0	2,200+	15+ million
01/20-01/26	Winter Weather	China, Taiwan, Korea, Japan, Thailand	116	25,000+	2.0+ billion
01/26-01/29	Flooding	China	11	1,000+	20+ million

A magnitude-6.7 earthquake struck northeast India on January 3, also rattling nearby Bangladesh, Bhutan, China, Myanmar, and Nepal. At least 22 people were killed and nearly 300 others were injured. The tremor struck at 04:35 AM IST local time (23:05 UTC January 3) approximately 29 kilometers (18 miles) west of Imphal, India. Damage was particularly heavy in the city of Imphal, where homes and several large structures collapsed. Total economic losses were beyond INR5.0 billion (USD75 million).

A magnitude-5.9 earthquake struck northwest China's Qinghai province on January 21, causing widespread damage to Hui Autonomous County of Menyuan. The tremor struck at 1:13 AM local time January 21 (17:13 UTC January 20) with an epicenter located 63 kilometers (39 miles) east-southeast of Hongtu, China. The Ministry of Civil Affairs (MCA) cited that 2,200 homes were damaged in Qinghai and Gansu provinces, with an economic cost of CNY88 million (USD15 million).

A prolonged period of Arctic cold and snowfall covered much of East Asia from January 20-26, leading to significant damage and travel impacts. At least 116 people were killed in Taiwan (85), Thailand (14), Japan (6), South Korea (6), and China (5). Some of the coldest temperatures in 60 years were reported as snow also fell in areas that had not seen measurable snow in decades – if ever. Total combined economic losses were nearly USD2.0 billion, with China incurring CNY10.6 billion (USD1.6 billion) of the cost. Taiwan's agriculture industry sustained its highest losses resulting from winter weather in 17 years at TWD4.2 billion (USD127 million).

Heavy rains fell across south China between January 26-29, leading to the deaths of at least 11 people. The MCA noted that the hardest-hit provincial regions were Guangdong, Fujian, and Guangxi after up to 375 millimeters (14.76 inches) of rain caused parts of the Yangtze River to overflow its banks. Nearly 1,000 homes were damaged or destroyed; while thousands of hectares (acres) of crops were submerged. Total economic losses were listed at CNY129 million (USD20 million).

Oceania (Australia, New Zealand, South Pacific Islands)

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
01/03-01/05	Flooding	Australia (NSW)	0	Hundreds	Millions
01/06-01/13	Bushfire	Australia (WA)	2	616+	100+ million
01/14	Severe Weather	Australia (NSW)	1	Hundreds	Millions

Heavy rains spawned by a slow-moving storm system off the coast of Australia's New South Wales brought heavy rainfall to central coastal regions of the state. Overflowing rivers and flash floods led to damage in a number of communities, with the most pronounced damage in the Hunter Valley area located to the north of Sydney. Total economic losses were estimated in the millions (USD).

A large bushfire was spawned by a lightning strike on January 6 in Western Australia, killing at least two people. The Waroona Fire charred 71,357 hectares (176,327 acres) of land, with the hardest-hit areas in the communities of Yarloop, Waroona, Hamel, and Cookenup. In total, at least 162 homes and 18 other structures were destroyed. The Insurance Council of Australia declared a catastrophe as more than 616 claims were filed totaling AUD57 million (USD42 million). Economic losses were even higher.

Powerful thunderstorms impacted Australia's New South Wales on January 14, leaving at least one person dead. The hardest-hit areas were in the greater Sydney metro region and the Central Coast as up to baseball-sized hail and winds gusting in excess of 122 kph (76 mph) were recorded. The NSW State Emergency Service noted that 2,812 calls for disaster assistance were filed by homeowners. The communities of Penrith, Emu Plains, Blacktown, Mount Druitt, Bankstown, Fairfield, Liverpool, Sutherland, and Wyong sustained the most damage. Total economic losses were estimated into the millions (USD).

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.

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