

# **Global Catastrophe Recap**

February 2015



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## **Executive Summary**

- Extended stretch of record cold and snow causes billions in economic loss to eastern United States
- Landfalls of Cyclones Lam and Marcia cause more than USD310 million of damage in Australia
- Global flood events minimally cause 37 fatalities

Periods of relentless winter weather engulfed the central and eastern United States throughout the month of February. No fewer than five separate stretches of heavy snow, frigid cold, freezing rain and ice impacted the Northeast, Mid-Atlantic, Midwest, Plains and Southeast. The inclement weather left at least a combined 72 people dead, as the snow and ice also caused major transportation disruption and business closures in major metropolitan areas including Boston and Chicago. Beyond the heavy snowfall, Arctic cold associated with the Polar Vortex prompted low temperatures dipping well below -20°F (-28.9°C) in many locations. Boston registered its snowiest (64.8 inches (164.6 centimeters)) and second-coldest February on record, and was poised to challenge the winter season of 1995/96 as the snowiest in its recorded history.

Based on preliminary estimates from local and state governments, businesses, and the insurance industry, it is expected that aggregated economic losses during February will be in the low-digit billions of dollars. Given the size, intensity and overlap of many events, it is going to take assessors additional weeks or longer to fully take stock of the incurred damage from each event. Insured losses are likely to exceed USD1.0 billion.

Elsewhere, two spells of winter weather impacted parts of Europe and Asia. In Europe, 19 people died as heavy snow fell across large swathes of the continent that left power outages and transport disruptions. In Asia, large avalanches left at least 286 people dead and 1,250 homes destroyed in Afghanistan.

Cyclones Lam and Marcia both made landfall in Australia within the space of six hours on February 20. Based on data from the Joint Typhoon Warning Center, Lam struck Northern Territory with 1-minute sustained winds of 185 kph (115 mph); while Marcia came ashore in Queensland with 1-minute sustained winds of 210 kph (130 mph). No casualties were noted from either system. As of this writing, nearly 15,000 insurance claims were lodged as insured losses from Marcia alone reached USD69 million. Combined economic losses from the storms preliminarily were listed at USD312 million.

Elsewhere, Tropical Storm Fundi brought torrential rain and strong winds to Madagascar, causing six fatalities and damaging almost 7,500 homes.

Floods affected all six inhabited continents during February. The costliest event came in Asia, where flooding swept across Indonesia and left six people dead. Total damages in Jakarta alone were listed at USD235 million.

Other flood damage and fatalities were noted in parts of Albania, Bulgaria, Greece, Macedonia, Turkey, Argentina, and the Dominican Republic.

A magnitude-5.2 earthquake struck China's Xinjiang Uygur Autonomous Region on February 22 at 02:43 PM local time near Shihezi City at a depth of 15.6 kilometers (9.7 miles). At least 3,000 homes sustained damage and economic losses were in excess of USD15 million.

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/31-2/4	Winter Weather	Midwest, Northeast, Southwest	22	Thousands+	100s of millions
2/6-2/8	Flooding	Northwest, Southwest	1	Hundreds	Millions+
2/7-2/11	Winter Weather	Northeast	2	Thousands	100s of Millions
2/13-2/15	Winter Weather	Midwest, Northeast, Mid-Atlantic	30	Thousands	100s of Millions
2/16-2/17	Winter Weather	Southeast	10	Thousands	100s of Millions
2/16-2/22	Winter Weather	Plains, Ohio Valley, Mid-Atlantic	8	Thousands	100s of millions
2/25-2/26	Winter Weather	Southeast, Mid-Atlantic	2	Thousands	Millions+

## **United States**

A major winter storm that impacted the Midwest, Southwest, Plains, and Northeast from January 31 through February 4, brought record snowfall to parts of Illinois and Michigan. At least 22 fatalities were blamed on the storm that caused widespread travel disruption throughout the region. Approximately 6,870 flights were cancelled and 100,000 customers were without power at the height of the storm. Total economic and insured losses were estimated into the hundreds of millions (USD).

A series of Pacific storms lashed western portions of the U.S. from the 6th to 8th. Parts of Washington received more than 12.0 inches (304.8 millimeters) of rain that triggered flash floods and landslides. Widespread power outages were reported in Washington, California, and Nevada. Air and rail travel were severely impacted as landslides covered rail tracks and high winds forced the closure of airports. At least one person died as a result of the storms.

Another major winter storm brought record snowfall to northeast portions of the United States from the 7th to 11th. At least two people died. Massachusetts was worst affected as snowfall totals reached 31.0 inches (78.7 centimeters) in the state. Several buildings collapsed under the weight of the snow and transport was severely disrupted as Boston closed down its public transport system. Air travel was also disrupted throughout the Northeast as airports reported thousands of cancellations and delays. Total economic and insured losses were estimated into the hundreds of millions (USD).

A powerful Nor'easter blanketed parts of the Midwest, Northeast, and Mid-Atlantic with heavy snowfall from the 13th through 15th. Eight people died as a result of the inclement weather. Heavy winds also took their toll as widespread disruption to transportation was reported throughout the affected region. Minimally, 250,000 power outages and damage to homes and businesses were reported. Economic losses to businesses in Massachusetts alone were expected to exceed USD265 million; overall economic and insured losses were expected to be even higher.

A strong winter storm prompted heavy snowfall, freezing rain and ice across portions of the Southeast, Tennessee Valley and the Mid-Atlantic on the 16th and 17th. At least 10 people were killed. The storm left significant power outages and travel restrictions as the snow and ice prompted dangerous conditions on the roadways. Total economic and insured losses were each estimated in excess of USD100 million.

Portions of the Plains, Ohio Valley, and Mid-Atlantic received more than 12.0 inches (30.5 centimeters) of snow, sleet and freezing from the 16th to 22nd as a winter storm moved across the region. At least 30 people died. States of emergency were declared in six states while Washington D.C. declared a snow emergency. In the wake of the precipitation, record cold with temperatures dropping in some areas below -20°F (-28.9°C) engulfed the Eastern U.S. for several days. Total economic and insured losses were estimated to reach well into the millions (USD).

A mixture of heavy snow, rain, freezing rain and ice affected parts of the Southeast and Mid-Atlantic on the 25th and 26th, killing at least two people. Portions of Alabama, Georgia and the Carolinas were worst-affected as damage and power outages were widespread. Also, strong thunderstorms caused home and tree damage across the Florida panhandle and extreme southern Georgia. Total economic and insured losses were estimated in the millions (USD).

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
2/20-2/21	Flooding	Dominican Republic	2	4,190+	Unknown

More than 20,000 people were evacuated in Dominican Republic on the 20th and 21st as torrential rain triggered flash floods that killed two individuals, destroyed 20 homes, and damaged a further 4,170.

## South America

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
2/15	Flooding	Argentina	8	1,500	17.2 million

Torrential rain in central Argentina's Cordoba Province led to flash floods that claimed at least eight lives and damaged up to 1,500 homes on the 15th. Power outages were noted throughout the region while businesses and infrastructure also suffered damages. The local government made more than ARS150 million (USD17.2 million) available for the victims.

## Europe

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/29-2/1	Winter Weather	Western/Northern Europe	12	Hundreds	Millions+
1/30-2/2	Flooding	Balkans, Turkey	13	2,170+	13+ million
2/3-2/8	Winter Weather	Spain, France, Italy, Slovenia, Croatia	7	Thousands	Millions+

Winter weather swept into western and northern parts of Europe, bringing heavy snowfall and freezing temperatures to Ireland, the United Kingdom, France, Spain, Switzerland, Germany, and Slovakia from January 29 until February 1. At least 12 people died as the heavy snow triggered avalanches in the Swiss Alps and the Pyrenees. Travel disruption and power outages were widely reported throughout the affected territories.

An area of low pressure, named "Mischka", brought heavy rain and strong winds to parts of Albania, Bulgaria, Greece, Macedonia, and Turkey from January 30 until February 2. Eight people died in Turkey and a further five perished in Bulgaria as a result of the weather. Several major rivers in the Balkan Peninsula overflowed their banks inundating thousands of properties. Damage was also noted to several major structures in the region including two dams in Macedonia and two historical bridges in Greece. Damage in Bulgaria was announced to be minimally BGN22 million (USD12.6 million). A low pressure system brought heavy snowfall to Mediterranean parts of Europe from the 3rd through the 8th. The system, named "Norbert", tracked across the Iberian Peninsula, Italy, and then into the Balkans before dissipating. At least seven people died in Italy. Widespread disruption to travel was reported throughout the affected countries.

## Africa

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
2/7-2/8	TS Fundi	Madagascar	6	8,091	10+ million
2/13-2/14	Flooding	Angola	5	2,862+	Unknown

Tropical Storm Fundi tracked near Madagascar on the 7th and 8th, prompting torrential rainfall. Six fatalities were reported and the storm led to flood damage to 7,376 homes – 1,686 of which were completely destroyed. Businesses and infrastructure also suffered damages. Total economic losses were estimated at nearly MGA28 billion (USD10 million).

Flash floods were triggered in northern parts of Angola from 13th through 14th. At least five individuals died in the province of Luanda. 187 homes collapsed while a further 2,675 sustained damage.

## Asia

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/31-2/2	Flooding	Indonesia	2	5,050+	Unknown
2/8-2/13	Flooding	Indonesia	6	Thousands	235+ million
2/15-2/27	Winter Weather	Afghanistan	286+	1,250	Unknown
2/22	Earthquake	China	0	3,000+	15+ million

The Indonesian islands of Java, Bali, and West Nusa Tenggara were impacted by floods triggered by heavy rainfall from January 31 through February 2. Two people were killed in Bali while approximately 4,000 homes were submerged on West Nusa Tenggara by floodwaters that reached up to 4.0 meters (31.1 feet) in depth. On Java, about 1,000 homes were inundated in the greater Jakarta Metro Region and 50 homes were damaged in the district of Bojonegoro.

Indonesia's capital, Jakarta, succumbed to the floods that have been plaguing the country since December, on February 8. Torrential rainfall across the city caused widespread flooding that impacted nearly 10,000 residents and 75,000 businesses. Six people died. Total economic damages were listed at IDR3.0 trillion (USD235 million).

A series of avalanches in northeast Afghanistan claimed at least 286 lives and destroyed 1,250 homes during the second part of February. Avalanches were triggered following local reports of heavy snowfall. Panjshir, Badakhshan, and Bamyan Provinces were worst affected as some of the slides wiped out entire villages.

A moderate magnitude-5.2 earthquake struck China's Xinjiang Uygur Autonomous Region on February 22 at 02:43 PM local time (06:43 UTC), 37 kilometers (23 miles) southwest of Shihezi at a depth of 15.6 kilometers (9.7 miles). No casualties were reported but 3,000 homes sustained damage and economic losses were in excess of CNY92 million (USD15 million).

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
2/20	Cyclone Lam	Australia	0	Hundreds	78+ million
2/20	Cyclone Marcia	Australia	0	13,950+	233+ million

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

Cyclone Lam made landfall in Australia's Northern Territory with 1-minute sustained winds of 185 kph (115 mph) early on the 20th. The cyclone brought torrential rainfall to large portions of the Northern Territory and Western Australia for consecutive days that prompted local officials to declare states of emergency for some regions. Communities on Elcho Island were worst affected as approximately 16 homes were destroyed and a further 130 sustained damage there. Economic damages were minimally noted at AUD100 million (USD78 million).

Cyclone Marcia struck Australia's Queensland coast with 1-minute sustained winds of 210 kph (130 mph) on the 20th and just six hours after Cyclone Lam struck the Northern Territory. Marcia made a morning landfall at Shoalwater Bay and brought torrential rain to southern Queensland and northern portions of New South Wales. Approximately 1,500 homes in Queensland sustained damage due to the strong winds, flying debris, and flash floods, and the agricultural sector was also impacted. As many as 100,000 properties endured power outages. Total economic losses were preliminarily estimated at AUD300 million (USD233 million). The Insurance Council of Australia declared a catastrophe, and as of this writing, had received 13,950 claims that totaled AUD88 million (USD69 million).

# Appendix

## Updated 2015 Data: January

## **United States**

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/6-1/11	Winter Weather	Midwest, Northeast, Mid-Atlantic	15	Hundreds+	100+ million
1/26-1/28	Winter Weather	Northeast, Mid-Atlantic	2	Thousands	500+ million
Remaind	er of North Am	erica (Non-U.S.)			
Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
South Am	nerica				
Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
12/1-1/31	Drought	Brazil	0	Unknown	Unknown
1/15-1/31	Flooding	Bolivia, Peru	16	10,780+	Unknown
Europe <sub>Date</sub>	Event	Location	Deaths	Structures/	Economic
1/9-1/16	EU Windstorms	Northern/Central/Western Europe	2	Claims Thousands	Loss (USD) 650+ million
1/9-1/10	EO WINdStoffins	Normen/Central/Western Europe	2	Thousanus	030+ 11111011
Africa				Structures	Foonemia
Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
12/1-1/31	Flooding	Malawi, Mozambique, Zimbabwe	307	31,000+	450+ million
1/2-1/4	Severe Weather	Malawi, Zimbabwe	15	Hundreds	Unknown
1/16-1/18	TS Chedza	Madagascar	89	5,000+	36 million
Asia					
Asia <sub>Date</sub>	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
_	<b>Event</b> Flooding	<b>Location</b> Indonesia	Deaths 8		
Date				Claims	Loss (USD)
<b>Date</b> 1/1-1/23	Flooding	Indonesia	8	<b>Claims</b> 13,050+	Loss (USD) 6+ million
<b>Date</b> 1/1-1/23 1/6-1/10	Flooding Winter Weather	Indonesia Egypt, Israel, Jordan, Lebanon, Syria	8	Claims 13,050+ Unknown	Loss (USD) 6+ million 100+ million
Date 1/1-1/23 1/6-1/10 1/9-1/12	Flooding Winter Weather Winter Weather	Indonesia Egypt, Israel, Jordan, Lebanon, Syria China	8 9 1	Claims 13,050+ Unknown 5,300+	Loss (USD) 6+ million 100+ million 226+ million
Date 1/1-1/23 1/6-1/10 1/9-1/12 1/10-1/14	Flooding Winter Weather Winter Weather Earthquakes	Indonesia Egypt, Israel, Jordan, Lebanon, Syria China China	8 9 1 0	Claims 13,050+ Unknown 5,300+ 17,500+	Loss (USD) 6+ million 100+ million 226+ million 16+ million

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

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

Date	Event	Location	Deaths	Structures/ Claims	Economic Loss (USD)
1/2-1/8	Wildfires	Australia	0	936+	50+ million

#### 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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