

# January 2012 Global Catastrophe Recap

Impact Forecasting



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## Executive Summary

- Windstorm Ulli sweeps across the United Kingdom and Scandinavia
- Rare January severe weather outbreak leaves trail of damage in the United States
- Flooding causes damage and fatalities in parts of Oceania, Africa, South America and Asia

Windstorm Ulli came ashore across portions of the United Kingdom and Scandinavia early in the month, killing at least two people and causing widespread damage. Ulli first made landfall in Scotland before later striking (and affecting) Scandinavia. Damage from the storm consisted primarily of high winds downing trees onto homes, businesses, public structures and vehicles across parts of Scotland, England, Wales, Germany and Denmark. Thousands of claims were filed to various insurers throughout the UK and Scandinavia, with total losses estimated at approximately GBP200 million (USD306 million).

Soon after Ulli exited, Windstorm Andrea affected the United Kingdom and portions of Northern Europe. Impacts from Andrea also included downed trees and power poles.

Also in Europe, an extended bout of frigid temperatures led to the deaths of at least 306 people in eastern sections of the continent.

In other winter weather news this month, heavy snowfall from a persistent series of winter storms affected parts of northern and western Japan throughout the month. At least 56 people were killed and 750 others were injured after more than 10 feet (3.04 meters) of snow fell in isolated locations. The hardest-hit prefectures included Akita, Niigata, Nagano and Aomori.

The United States endured multiple winter storms that affected nearly every section of the country. In the Pacific Northwest, an active pattern brought heavy snow, freezing rain and rain to parts of Oregon and Washington. Total damages were estimated to be well in excess of USD50 million, with a preliminary USD38 million estimate coming from Oregon's Emergency Management agency.

Additional storm systems triggered rounds of severe weather in the U.S. during the month. A rare January tornado outbreak left widespread damage to portions of Alabama, Arkansas and Mississippi. Total economic losses were anticipated to surpass USD100 million, with insured losses in Alabama alone expected to exceed USD30 million.

Severe weather was also prevalent in parts of Indonesia, where separate events led to widespread damage and fatalities. The first event swept through Jakarta, where total damages were listed at IDR270 billion (USD30 million). A second event saw a tornado kill at least 14 people and destroy more than 2,000 homes in the provinces of Jakarta, Central Java, East Java and West Java.

Flooding and landslides caused damage and fatalities in multiple continents, with the countries of Fiji, Papua New Guinea, Australia, Brazil, Mozambique and South Africa all sustaining effects.

Tropical Cyclone Funso brought torrential rains and gusty winds to Mozambique, though never officially making landfall. At least 30 people were killed and tens of thousands of homes were affected.

Tropical Cyclone Heidi came ashore in Western Australia's Pilbara region, though damage was minimal.

## United States

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/8-1/12	Winter Weather	Plains, Southeast, Northeast	0	Thousands+	Millions+
1/12-1/13	Winter Weather	Midwest, Ohio Valley, Northeast	0	Thousands+	Millions+
1/16-1/17	Severe Weather	Midwest, Southeast, Northeast	0	Thousands+	25+ million
1/17-1/22	Winter Weather	Pacific Northwest	3+	1,000+	50+ million
1/19-1/21	Wildfires	Nevada	0	29+	9.1+ million
1/22-1/23	Severe Weather	Southeast, Plains	3+	2,000+	100+ million

A strong winter storm affected a wide swath of the eastern United States between the 8<sup>th</sup> and the 12<sup>th</sup>, spawning heavy snow, rain and isolated severe weather. In the greater Houston, Texas metropolitan area, excessive rains prompted flash flooding while three tornadoes caused damage as well. On the western edge of the system, the city of Midland saw record snow. The system later impacted parts of the Southeast, the Tennessee Valley, the Mid-Atlantic and New England. In North Carolina, tornadoes led to 15 injuries and damaged or destroyed upwards of 100 structures.

The first major snowstorm of the season impacted parts of the Midwest, the Ohio Valley and New England on the 12<sup>th</sup> and 13<sup>th</sup>. Heavy snow accumulations, triggered by a quick-moving Alberta Clipper, led to extensive travel delays as on the roads and in the air, including the greater Chicago metro region.

A strong storm system brought severe weather and heavy snow to much of the eastern U.S. on the 16<sup>th</sup> and 17<sup>th</sup>. Numerous showers and thunderstorms accompanied a leading frontal boundary, including some that spawned hail and damaging winds in parts of Missouri, Illinois and Indiana. As the front pressed eastward, a long line of severe thunderstorms stretched from southern New England to the Gulf Coast. At least 15 tornadoes touched down, with the most notable tornado damage coming in portions of Indiana, Kentucky, Tennessee and Mississippi. Total economic losses were estimated in excess of USD25 million.

A series of powerful winter storms affected the Pacific Northwest between the 17<sup>th</sup> and the 22<sup>nd</sup>, leading to three fatalities. Areas from northern California to Washington sustained copious amounts of snowfall during the first storm, including Seattle and Portland. A second system saw freezing rain, ice and rain affect Oregon and Washington, which prompted flooding in many areas as the snowpack began to melt. Several rivers in Oregon crested at all-time heights. Total economic losses were estimated in excess of USD50 million, including USD38 million in storm damage from nine Oregon counties alone.

The combination of extremely dry air, gusty winds and available brush led to a wildfire that destroyed at least 29 homes just outside of Reno, Nevada between the 19<sup>th</sup> and the 21<sup>st</sup>. The Washoe Drive Fire burned nearly 3,200 acres (1,300 hectares) of sage brush, grass and pines in a valley along U.S. Highway 395. Total economic losses were listed at USD9.1 million.

A rare January severe weather outbreak swept across central and eastern sections of the United States on the 22<sup>nd</sup> and the 23<sup>rd</sup>, killing at least three people and injuring more than 120 others. At least 23 confirmed tornadoes touched down across the Southeast and the Tennessee/Mississippi Valleys. Alabama sustained the worst affects, where seven counties saw nearly 2,000 homes damaged or destroyed. The most costly tornado was an EF-3 with 150 mph (240 kph) winds that ripped through Birmingham suburbs. Total economic losses were anticipated to approach USD100 million, with various insurers anticipating insured losses in Alabama alone to reach USD30 million.

## Remainder of North America (Canada, Mexico, Caribbean Islands, Bermuda)

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
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No significant natural disaster events occurred in this region during the month of January.

## South America

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
12/24-1/6	Wildfires	Chile	7+	Hundreds+	200+ million
1/1-1/10	Flooding	Brazil	39+	25,000+	Millions+
1/30	Earthquake	Peru	0	858+	Unknown

Dozens of wildfires burned across southern sections of Chile between the end of December 2011 and the first week of January 2012, killing at least seven people (including six firefighters). According to Chilean officials, nearly 50 fires burned more than 50,000 hectares (123,000 acres) of woodland and brush during a two-week period. The most damaging fire came in the greater Bio Bio region, where the blaze charred 24,800 hectares (62,000 acres) of land and destroyed 160 homes. Total economic losses to forestry and tourism were estimated to reach into the hundreds of millions of dollars (USD).

Persistent heavy rainfall in association with a series of advancing cold fronts spawned flooding and mudslides in southeastern Brazil between the 1<sup>st</sup> and the 10<sup>th</sup>. The states of Minas Gerais and Rio de Janeiro were the most impacted, where at least 39 people were killed. Government officials in Minas Gerais declared a state of emergency after 127 separate towns sustained various levels of structural damage. Widespread effects were also prevalent to hundreds of highways, bridges as well as water and energy networks. Similar impacts were felt in Rio de Janeiro when entire neighborhoods were left underwater. In total, an estimated 25,000 homes were damaged.

A magnitude-6.3 earthquake struck near the coast of southern Peru on the 30<sup>th</sup>, injuring at least 145 people. The tremor occurred at 12:11 AM local time (5:11 UTC) with an epicenter 15 kilometers (9 miles) southeast of Ica. According to the Civil Defense Institute, 277 homes were destroyed and 581 other buildings were damaged across the cities of Ica, Chincha, Canete and Pisco.

## Europe

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/3-1/4	WS Ulli	UK, Scandinavia	2+	5,000+	306+ million
1/4-1/5	WS Andrea	UK, Northern Europe	0	Thousands+	Unknown
1/24-1/31	Winter Weather	Eastern Europe	306+	Unknown	Unknown

Windstorm Ulli developed and came ashore across portions of the United Kingdom and Scandinavia on the 3<sup>rd</sup> and 4<sup>th</sup>, killing at least two people and causing widespread damage. According to the UK MetOffice, Ulli first made landfall in Scotland before later striking (and affecting) Scandinavia. Damage reports from the storm resulted from high winds downing trees onto homes, businesses, public structures and vehicles across parts of Scotland, England, Wales, Germany and Denmark. Travel was also severely disrupted. Thousands of claims were filed throughout the UK and Scandinavia, with total losses estimated at approximately GBP200 million (USD306 million).

Windstorm Andrea affected the United Kingdom and portions of Northern Europe on the 4<sup>th</sup> and 5<sup>th</sup>, causing widespread effects. Impacts from Andrea included downed trees and power poles onto vehicles, homes, businesses and other structures across parts of the UK, Belgium, France, Germany, Denmark, Sweden, Amsterdam, and the Netherlands. Evacuations were ordered for low lying residents along the Rhine and Meuse rivers in the Netherlands as heavy rains prompted water levels to rise.

Bitter cold and snow engulfed Eastern Europe between January 24<sup>th</sup> and early February, leading to the deaths of at least 306 people. Nearly all of the fatalities were blamed on hypothermia, including in Ukraine (150), Poland (53), Romania (34), Italy (17), Bulgaria (16), Lithuania (14), Latvia (10), Serbia (9), Bosnia (7), Czech Republic (5), France (5), Hungary (3), Austria, Slovakia and Greece (2), and Estonia (1).

## Africa

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/16-1/17	Flooding	Mozambique, South Africa	10+	5,000+	Unknown
1/20-1/26	CY Funso	Mozambique, Malawi	30+	10,000+	Unknown

Multiple days of heavy rainfall from a tropical disturbance led to widespread flooding across portions of Mozambique and South Africa on the 16<sup>th</sup> and 17<sup>th</sup>, leaving at least 10 people dead. According to government officials in Mozambique, major damage was recorded in the southern provinces of Maputo, Gaza and Inhambane to upwards of 5,000 homes and other structures. Swollen rivers also led to further damage to infrastructure, power poles and coal mines.

Excessive rains from a slow-moving Tropical Cyclone Funso led to widespread flash flooding throughout Mozambique and Malawi between the 20<sup>th</sup> and the 26<sup>th</sup>, killing at least 30 people. The hardest-hit areas of Mozambique came in central and northern provinces, where the National Disaster Management Institute reported that more than 8,000 homes were lost. The transportation, agricultural and electrical infrastructures were also severely impacted. In neighboring Malawi, torrential rains from Funso led to multiple rivers and lakes overflowing their banks. More than 5,000 people were forced to flee their homes.

## Asia

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/1-1/31	Winter Weather	Japan	56+	Thousands+	Millions+
1/5	Landslide	Philippines	42+	100+	Unknown
1/5	Severe Weather	Indonesia	0	500+	30+ million

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/8	Earthquake	China	0	9,000+	Unknown
1/16-1/17	Winter Weather	Afghanistan	46+	Unknown	Unknown
1/21	Earthquake	Indonesia	0	450+	1.3+ million
1/21-1/24	Winter Weather	China	0	1,000+	4.4+ million
1/25	Severe Weather	Indonesia	14+	2,000+	1+ million

Heavy snowfall in association with a persistent series of winter storms affected parts of northern and western Japan throughout the month of January. At least 56 people were killed and 750 others were injured after more than 3.04 meters (10 feet) of snow fell in isolated locations. The hardest-hit prefectures included Akita, Niigata, Nagano, Kyoto and Aomori. Damage from the excessive snow was widespread to homes, buildings and other structures, in addition to parts of the transportation infrastructure.

Days of persistent rainfall led to a massive landslide in the Philippines' Compostela Valley Province on the 5<sup>th</sup>, killing at least 42 people and seriously injuring 16 others. The slide occurred in the Napnapan Village after a mountainside collapsed in the middle of the night, which destroyed at least 60 homes and dozens of other buildings.

A severe thunderstorm swept through parts of Jakarta, Indonesia on the 5<sup>th</sup>, causing widespread damage to homes, businesses and vehicles primarily due to downed trees and power poles. Total economic losses were estimated at IDR270 billion (USD30 million), while Indonesian insurers anticipated only minimal losses.

A moderate magnitude-5.0 earthquake struck China's Xinjiang Province at 2:20 PM local time on the 8<sup>th</sup> (6:20 UTC), with an epicenter 106 kilometers (65 miles) east-northeast of the city of Korla. No injuries or fatalities were recorded, though more than 9,000 homes were damaged.

Heavy snowfall led to a series of avalanches in the mountainous terrain of northeastern Afghanistan on the 16<sup>th</sup> and 17<sup>th</sup>. At least 46 people were killed and 60 others injured as the avalanches struck remote areas in Badakhshan province. With several roads and highways being closed, as many as 12 districts were unreachable.

A magnitude-6.3 earthquake rattled Indonesia's West Manggarai region on the 21<sup>st</sup>, damaging at least 450 homes and other structures. The tremor struck at 5:32 AM local time (20:32 UTC on the 20<sup>th</sup>) with an epicenter located approximately 48 kilometers (29 miles) southwest of West Manggarai. No injuries or fatalities were reported, and total economic losses were listed at IDR11.6 billion (USD1.3 million).

Heavy snow and freezing rain affected more than 256,000 people in central China's Hunan Province between the 21<sup>st</sup> and the 24<sup>th</sup>. No injuries or fatalities were reported, though 1,000 homes were damaged and more than 5,100 hectares (12,600 acres) of crops were affected. According to the Ministry of Civil Affairs, total economic losses were estimated at CNY28 million (USD4.4 million).

A powerful thunderstorm spawned at least one tornado on Indonesia's main island of Java on the 25<sup>th</sup>, killing at least 14 people and injuring 60 others. According to local officials, the tornado ripped through 23 regencies and cities in the provinces of Jakarta, Central Java, East Java and West Java. More than 2,000 homes were damaged or destroyed. Total damages were listed in excess of IDR8.9 billion (USD1 million).

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

Event Date	Event Name Or Type <sup>1</sup>	Event Location	# of Deaths <sup>2</sup>	# of Structures/ Claims <sup>2,3</sup>	Damage Estimates <sup>2,4</sup> (USD)
1/12	TC Heidi	Australia (Western Australia)	0	Unknown	Unknown
1/22-1/31	Flooding	Fiji	7+	Thousands+	17+ million
1/24	Landslide	Papua New Guinea	40+	Unknown	Unknown
1/24-1/31	Flooding	Australia (NSW, Queensland)	0	3,000+	Millions+

Tropical Cyclone Heidi developed and made landfall in Western Australia's Pilbara region on the 12<sup>th</sup>, bringing periods of heavy rains and gusty winds. No injuries or fatalities were recorded, and damage reports were generally minor. According to the Joint Typhoon Warning Center, the cyclone came ashore at approximately 4:30 AM local time (20:30 UTC on the 11<sup>th</sup>) as an 85 kph (50 mph) storm just east of Port Hedland. The vast majority of the damage reports were confined to downed trees, partial roof collapses due to excessive water and minor flash flooding in isolated spots.

More than a week of heavy rainfall led to widespread flooding and landslides in Fiji, killing at least seven people. According to government officials, the worst-hit areas came on the islands of Viti Levu and Vanua Levu as floodwaters reached as high as 1.22 meters (4 feet) in some locations. A natural disaster was declared as more than 3,500 people were left homeless. Extensive crop damage, primarily to the sugar industry, was recorded. Total economic damages were listed at FJD30 million (USD17 million).

A large landslide struck the Southern Highlands region of Papua New Guinea on the 24<sup>th</sup>, killing at least 40 people. According to the National Disaster Office, the landslide destroyed an area nearly 2 kilometers (1.24 miles) long in the Komo area. At least two villages reportedly were completely engulfed.

Persistent rounds of rainfall spawned isolated reports of flooding across coastal sections of New South Wales and Queensland in Australia between the 24<sup>th</sup> and the 31<sup>st</sup>. According to local State Emergency Service officials, more than 1,050 damage calls were received in NSW and more than 1,800 calls along the east coast of Queensland. At least 11 regions of NSW were extended natural disaster declarations. The Insurance Council of Australia reported that it anticipated receiving "thousands" of claims for damage to homes, businesses and vehicles that would enter into the millions of dollars (USD).

<sup>1</sup> TD = Tropical Depression, TS = Tropical Storm, HU = Hurricane, TY = Typhoon, STY = Super Typhoon, CY = Cyclone

<sup>2</sup> As reported by public news media sources and official government agencies

<sup>3</sup> **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.

<sup>4</sup> Damage estimates obtained from various public media sources, including news websites, publications from insurance companies, financial institution press releases and official government agencies. These estimates can include insured or economic losses.

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