Global Catastrophe Recap

January 2015
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Executive Summary

- Four windstorms impact western Europe causing hundreds of millions of Euros worth of damage
- Powerful Nor'easter brings record snow to parts of the United States
- At least 346 people killed by massive floods in southeast Africa

Parts of Western Europe were struck by four powerful windstorms in a seven-day span during January. Windstorms Elon, Felix, Gunter, and Hermann impacted Ireland, the United Kingdom, Norway, Denmark, Germany, and Poland causing tens of thousands of power outages, and severe disruption to travel and transport. Economic and insured losses were expected to reach into the hundreds of millions of Euros.

As a reminder, Impact Forecasting has developed a windstorm model that currently covers Belgium, France, Denmark, Germany, Ireland, Luxemburg, Netherlands, and the United Kingdom.

Two separate winter weather events impacted northeastern parts of the United States in January. Most notably, one of the strongest Nor'easters in recent memory brought record snowfall totals to parts of the Northeast. In Massachusetts, some locations reported up to 36.0 inches (91.4 centimeters) of snow. Major cities in the region were brought to a virtual standstill as transit systems were closed. Total economic damage and losses (including business interruption) were minimally estimated at USD500 million.

Winter weather also impacted parts of the Middle East and Asia. Parts of Egypt, Israel, Jordan, Lebanon, and Syria registered heavy snow and bitter cold temperatures, killing at least nine people. Economic losses were nearly USD100 million. In China, separate winter storm events affected Yunnan, Hubei, Hunan, and Jiangsu provinces during the month. Combined economic losses to property and agriculture were listed at more than USD250 million.

Massive seasonal floods inundated vast areas of Malawi, Mozambique and Zimbabwe, claiming at least 346 lives. More than 31,000 homes were destroyed as nearly 300,000 people were displaced. The agricultural industry was severely affected as the floods submerged more than 148,900 hectares (179,000 acres) of land.

Elsewhere, flood events were noted in Bolivia, Peru, Indonesia and Malaysia.

Multiple tropical cyclones made landfall in January. Of note, Tropical Cyclone Chedza struck Madagascar and left at least 89 people dead and nearly 5,000 homes damaged or destroyed. Total economic losses were listed at USD36 million. In the Philippines, Typhoon Mekkhala made landfall and left at least two people dead.

Wildfires in southeastern Australia destroyed more than 150 properties at the start of the month triggering nearly 1,000 insurance claims that amounted to USD30 million.

Two mid-January earthquakes struck China's Xinjiang region and Yunnan province causing damage to 17,500 homes. No fatalities were reported and combined economic losses were listed at USD16.1 million.

Southeastern Brazil continued to deal with its worst drought since 1930. Water rationing in the city of Sao Paulo was implemented to preserve the city's water supplies.
United States

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/6-1/11</td>
<td>Winter Weather</td>
<td>Midwest, Northeast, Mid-Atlantic</td>
<td>15</td>
<td>Hundreds+</td>
<td>100+ million</td>
</tr>
<tr>
<td>1/26-1/28</td>
<td>Winter Weather</td>
<td>Northeast, Mid-Atlantic</td>
<td>2</td>
<td>5,000+</td>
<td>500+ million</td>
</tr>
</tbody>
</table>

An Arctic air outbreak and an “Alberta Clipper” impacted central and eastern parts of the U.S. from the 6th until 11th. Strong winds, frigid temperatures, and significant lake effect snowfall led to the deaths of at least 15 people in Illinois, Wisconsin and Pennsylvania. Wind chill temperatures plummeted to -30°F (-34°C) across large portions of the country prompting numerous local authorities to close schools and open emergency warming centers. Total economic losses to property, business interruption and agriculture were estimated at roughly USD100 million.

A powerful Nor’easter impacted the Northeast from January 26-28. The storm brought record snowfalls to some areas (36.0 inches (91.44 centimeters) of snow was recorded in Massachusetts) and prompted a virtual shutdown of transit in the Northeast’s major cities. At least two people died. States of emergency were declared in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, and Rhode Island. Strong winds caused power outages, while the storm surge inundated several coastal towns. Total economic damages and losses (including business interruption) were estimated minimally at USD500 million. New York City alone cited an estimated USD200 million lost in economic activity.

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
</table>

No major natural disaster events occurred in the remainder of North America (Non-U.S.) during the month of January.
South America

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/1-1/31</td>
<td>Drought</td>
<td>Brazil</td>
<td>0</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>1/15-1/31</td>
<td>Flooding</td>
<td>Bolivia, Peru</td>
<td>16</td>
<td>10,780+</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Parts of Brazil are suffering their worst drought since records began 84 years ago. The southeastern states of Sao Paulo, Rio de Janeiro, and Minas Gerais are all enduring their driest conditions since 1930. Water rationing is taking place in Sao Paulo where local officials warned that further measures may be rolled out to conserve meager water supplies.

Flooding in the departments of Chuquisca, Cochabamba, La Paz, Oruro, Potosi, and Santa Cruz affected 50,000 people in Bolivia as heavy rain began to fall on January 15. At least 16 individuals died and 10,600 homes sustained various degrees of damage. In Peru, 3,000 people were displaced as 69 properties were destroyed and a further 611 sustained damage. Across both countries, more than 10,800 hectares (26,700 acres) of crops were destroyed.

Europe

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/9-1/16</td>
<td>EU Windstorms</td>
<td>Northern/Central/Western Europe</td>
<td>2</td>
<td>Thousands</td>
<td>650+ million</td>
</tr>
</tbody>
</table>

Four windstorms – Elon, Felix, Gunter, and Hermann – tracked into northwestern Europe from January 9-16, leaving at least two people dead in the United Kingdom and causing tens of thousands of power outages in Ireland, the UK, Norway, Germany, and Poland. The most damaging of the storms was Hermann. Travel and transport was severely affected across the region as powerful wind gusts downed trees blocking roads and railway lines and whipped up huge waves causing the cancellation of hundreds of ferry services. Tornadoes, large hail, heavy snow, thundersnow, hurricane-force winds, and floods were all reported. Perils AG estimated insured losses from Elon and Felix alone at EUR328 million (USD375 million). Total combined economic losses were even higher.

Africa

<table>
<thead>
<tr>
<th>Date</th>
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<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/1-1/31</td>
<td>Flooding</td>
<td>Malawi, Mozambique, Zimbabwe</td>
<td>346</td>
<td>550,000+</td>
<td>550+ million</td>
</tr>
<tr>
<td>1/2-1/4</td>
<td>Severe Weather</td>
<td>Malawi, Zimbabwe</td>
<td>15</td>
<td>Hundreds</td>
<td>Unknown</td>
</tr>
<tr>
<td>1/16-1/18</td>
<td>TS Chedza</td>
<td>Madagascar</td>
<td>89</td>
<td>5,000+</td>
<td>36 million</td>
</tr>
</tbody>
</table>

Seasonal floods, which began in December 2014, worsened in Malawi, Mozambique, and Zimbabwe during January 2015. Malawi was worst affected as the death toll climbed to at least 176 and more than half of the country’s districts declared in a state of disaster following 63,976 hectares (158,100 acres) of land being inundated. Minimally, more than 520,000 houses were destroyed. In Mozambique, 159 people died and at least 11,000 homes were destroyed. An estimated 85,000 hectares (21,000 acres) of land was submerged in the south. In Zimbabwe, the death toll rose to 11. The agricultural sector was seriously impacted, particularly in Malawi. Combined economic losses were estimated at USD550 million, of which at least USD500 million were incurred in Malawi.
Powerful thunderstorms that struck Malawi and Zimbabwe from 2nd through 4th claimed ten lives in Zimbabwe and five more in Malawi. The storms brought gusty winds and torrential rainfall that triggered flash floods and caused several rivers to burst their banks. At least 95 homes in Zimbabwe and 70 in Malawi were completely destroyed.

Madagascar was struck by Tropical Storm Chedza on 16th. The storm brought strong winds and torrential rainfall that caused widespread flooding and landslides that claimed 89 lives across the island. Approximately 53,000 people were made homeless as the storm damaged or destroyed nearly 5,000 homes. Total economic damages were listed at MGA100 billion (USD36 million).

### Asia

<table>
<thead>
<tr>
<th>Date</th>
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<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1-1/23</td>
<td>Flooding</td>
<td>Indonesia</td>
<td>8</td>
<td>13,050+</td>
<td>Unknown</td>
</tr>
<tr>
<td>1/6-1/10</td>
<td>Winter Weather</td>
<td>Egypt, Israel, Jordan, Lebanon, Syria</td>
<td>9</td>
<td>Unknown</td>
<td>100+ million</td>
</tr>
<tr>
<td>1/9-1/12</td>
<td>Winter Weather</td>
<td>China</td>
<td>1</td>
<td>5,300+</td>
<td>226+ million</td>
</tr>
<tr>
<td>1/10-1/14</td>
<td>Earthquakes</td>
<td>China</td>
<td>0</td>
<td>17,500+</td>
<td>16+ million</td>
</tr>
<tr>
<td>1/14-1/20</td>
<td>Flooding</td>
<td>Malaysia</td>
<td>1</td>
<td>Thousands</td>
<td>Unknown</td>
</tr>
<tr>
<td>1/17-1/18</td>
<td>TY Mekkhala</td>
<td>Philippines</td>
<td>2</td>
<td>538+</td>
<td>1.0+ million</td>
</tr>
<tr>
<td>1/19</td>
<td>Severe Weather</td>
<td>Oman</td>
<td>0</td>
<td>5,000+</td>
<td>221+ million</td>
</tr>
<tr>
<td>1/23-1/25</td>
<td>Flooding</td>
<td>Indonesia</td>
<td>1</td>
<td>2,750+</td>
<td>Unknown</td>
</tr>
<tr>
<td>1/28-1/31</td>
<td>Winter Weather</td>
<td>China</td>
<td>0</td>
<td>1,000+</td>
<td>28+ million</td>
</tr>
<tr>
<td>1/31</td>
<td>Severe Weather</td>
<td>China</td>
<td>0</td>
<td>Unknown</td>
<td>80+ million</td>
</tr>
</tbody>
</table>

Throughout January, flooding in Indonesia damaged or destroyed approximately 13,050 homes and prompted the evacuation of more than 48,550 residents on Sumatra and Sulawesi islands. Eight people died as heavy seasonal rains inundated large swathes of land and triggered landslides. Northern Sumatra and North Sulawesi were worst affected.

A powerful winter storm swept into the Middle East on 6th bringing cold temperatures, strong winds, high coastal surf, and significant snowfall to many parts of the region. The storm caused widespread disruption to transport as roads, airports, and numerous ports throughout the region were closed. Many authorities declared a state of emergency. At least nine people died as a result of the weather. Total combined economic losses were estimated near USD100 million.

China’s Yunnan province was affected by freezing rain and heavy snow from 9th to 11th that lead to flooding in some areas. Local authorities announced that more than 600,000 people were affected one person died as 100 homes collapsed. Up to 5,200 more homes were damaged. Telecommunications, utilities, and agriculture were also severely affected. China’s Ministry of Civil Affairs announced that direct economic losses from the winter weather were CNY1.4 billion (USD226 million).

A moderate magnitude-5.1 struck China’s Xinjiang Uyghur Autonomous Region on the 10th. The tremor struck at 02:51 PM local time (06:51 UTC) approximately 108 kilometers (67 miles) east-northeast of Arzak at a depth of 41.3 kilometers (25.6 miles) according to the United States Geological Survey (USGS). China’s Ministry of Civil Affairs (MCA) reported that more than 2,100 people were affected and at least 1,100 homes sustained varied degrees of damage. No fatalities or serious casualties were reported. Combined economic losses were estimated at CNY19 million (USD3.1 million).
A moderate magnitude-5.3 earthquake struck China’s Yunnan province on 14th at 01:21 PM local time (05:21 UTC). The epicenter was registered 13 kilometers (8 miles) northeast of Hepingyizu. The MCA reported that 11 people were injured as a result of the tremor which caused varying amounts of damage to at least 16,349 properties. Total economic losses were estimated at CNY82 million (USD13 million).

The Malaysian state of Sarawak, on the island of Borneo, suffered severe flooding from 14th to 20th as days of relentless rainfall caused several rivers to burst their banks prompting the evacuation of 6,805 residents. Several landslides were triggered and at least one person was reported to have died.

Typhoon Mekkhala, the first typhoon of the season in the North West Pacific, made landfall in Philippines on 17th. 114,591 residents were evacuated prior to the storm’s arrival. Two people died as torrential rainfall from the storm triggered widespread floods and numerous landslides. The Philippines National Disaster Risk Reduction and Management Center reported economic losses of PHP30 million (USD680,690) to agriculture.

A strong storm system prompted flooding rains, high winds and hail across parts of Oman on the 19th. Thousands of homes and vehicles were impacted in addition to the electrical grid and infrastructure. Government officials estimated economic damages at OMR85 million (USD221 million), while insurers listed claims payouts for vehicles at OMR10 million (USD26 million).

Further flooding occurred in Indonesia following torrential rainfall from January 23-35 in West Sumatra. 21 villages were inundated and one individual died as a result. Three properties were destroyed and a further 2,748 sustained damage.

A winter storm brought periods of heavy snow to portions of central China from January 28-31. The provinces of Hubei, Jiangsu, and Hunan were hardest-hit, where accumulating snow, freezing rain and ice led to the collapse or damage of at least 1,000 homes. Swaths of agriculture were damaged as well. The MCA cited economic losses at CNY172 million (USD28 million).

Thunderstorms spawned hail in China’s Yunnan Province on the 31st, causing widespread agricultural damage. Officials noted that Changning County sustained the most damage, and the MCA cited economic crop damages at CNY500 million (USD80 million).
Oceania (Australia, New Zealand, South Pacific Islands)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Deaths</th>
<th>Structures/Claims</th>
<th>Economic Loss (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2-1/8</td>
<td>Wildfires</td>
<td>Australia</td>
<td>0</td>
<td>996+</td>
<td>50+ million</td>
</tr>
</tbody>
</table>

Multiple wildfires were ignited across portions of southeastern Australia on 2nd and 3rd as the combination of above normal temperatures, wind gusts of 75 kph (47 mph), and severe rainfall deficiencies over the past six months led to ideal fire conditions. Thousands of hectares of land across South Australia and Victoria were charred and over 150 homes or structures were damaged as local authorities claimed that the fires around Adelaide were the worst since the Ash Wednesday wildfires of 1983. The Insurance Council of Australia reported that 996 claims had been lodged amounting to insured losses of AUD37 million (USD30 million). Economic losses were even higher.

**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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