



# Global Catastrophe Recap

September 2014

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## Executive Summary

- Flooding in India and Pakistan becomes the costliest weather event of 2014
- Hurricane Odile causes billions of dollars of damage on Mexico's Baja Peninsula
- Severe thunderstorms lead to heavy damage across parts of the U.S., Bulgaria, and China

Torrential monsoon rains led to catastrophic flooding throughout parts of Pakistan and India, causing extensive damage and killing at least 648 people. A combined 375,000 homes and other structures were damaged or destroyed. In India's Jammu & Kashmir region, the local government tentatively estimated economic losses at INR1.0 trillion (USD16 billion) – though the total remains subject to change. The insurance industry estimated that payouts would reach INR40 billion (USD650 million). In Pakistan, government estimates cited economic losses in Punjab Province alone at PKR200 billion (USD2.0 billion).

This is the fifth consecutive year that Pakistan has endured a billion-dollar flood event.

Elsewhere across Asia, seasonal rains produced flooding across parts of Thailand, China, and northeastern India. About 200 fatalities were attributed to these events. An aggregated 300,000 structures were damaged and combined economic losses were in excess of USD2.1 billion.

Flooding was also prevalent in the United States, including one event that saw the remnants of Hurricane Norbert and Tropical Storm Dolly combine with the monsoonal moisture to generate flash floods in Arizona, Nevada and California. Some locations saw rainfall totals equal to a 1-in-1,000 year event. Total economic losses were near USD225 million, with insurers noting losses approaching USD100 million.

Hurricane Odile became the strongest storm on record to make landfall on Mexico's Baja Peninsula. The Category 3 storm with 125 mph (205 kph) winds left five people dead and injured 135 others when it came ashore near Cabo San Lucas. Tens of thousands of homes, structures and vehicles were damaged or destroyed. Total economic losses were expected to reach the low-digit billions (USD). The Mexican Association of Insurance Institutions reported that insured losses were at least MXN14.7 billion (USD1.1 billion).

Typhoon Kalmaegi made separate landfalls in the Philippines, China, and Vietnam with wind speeds of 130 kph (80 mph). A total of 31 deaths were attributed to the storm and combined economic losses reached almost USD3.0 billion.

Tropical Storm Fung-Wong brought torrential rains to the Philippines, Taiwan, and China, killing at least 21 people. The storm notably caused extensive flooding in parts of the Philippine capital of Manila. Aggregated economic losses from Fung-Wong were USD232 million.

Two stretches of severe weather impacted parts of the U.S. causing hundreds of millions of dollars (USD) in damage. Severe weather was also noted in Europe (Bulgaria, France, and Italy) and China.

Wildfires burned across northern California during the second part of the month damaging hundreds of structures. The cost of fighting the fires and economic damages were in excess of USD100 million.

Mount Ontake erupted in Japan's central Honshu Island, killing at least 48 people.

A magnitude-4.9 earthquake killed at least 8 people and damaged approximately 150 structures in Peru.

## United States

| Date      | Event          | Location                                 | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|--|--------|-----------------------|------------------------|
| 8/31-9/2  | Severe Weather | Plains, Midwest, Northeast, Mid-Atlantic | 1      | Thousands+            | Millions+              |
| 9/7-9/9   | Flooding       | Southwest                                | 2      | 15,000+               | 225+ million           |
| 9/14-9/25 | Wildfires      | California                               | 0      | 275+                  | 100+ million           |
| 9/27-9/30 | Severe Weather | Southwest, Rockies                       | 0      | 90,000+               | 1.0+ billion           |

Severe thunderstorms brought periods of heavy rain, large hail, tornadoes and straight-line winds to parts of the Plains, Midwest, Northeast and Mid-Atlantic from August 31 to September 2. One person was killed. Portions of Iowa, Nebraska, Kansas, Michigan, New Jersey and New York were most affected, as the storms downed trees and power lines while also damaging thousands of homes and vehicles. Flash floods were also noted in multiple states. Total economic losses were estimated in the millions (USD).

The remnants of Hurricane Norbert and Tropical Storm Dolly combined with the Southwest Monsoon to generate record-setting rains throughout the Desert Southwest from the 7th to the 9th. Two people were killed. The most substantial damage was recorded in Arizona, where officials deemed the floods as some of the worst since 1970 following rainfall totals that equaled a 1-in-1,000-year event in some areas. The cities of Phoenix, Tucson and Mesa were impacted, where thousands of vehicles and properties were inundated. Elsewhere, similar flooding occurred in parts of California and Nevada. Total economic losses were expected to top USD225 million, with insured losses in Arizona alone at nearly USD100 million.

Multiple wildfires were ignited across northern parts of California during the second half of September that caused damage to hundreds of homes and structures. The most damaging blaze, the Boles Fire, was ignited in Siskiyou County and damaged or destroyed 154 homes and many other public buildings. Elsewhere, the Courtney Fire in Madera County damaged or destroyed 34 homes, 22 outbuildings, 15 vehicles, and four recreational vehicles. The King Fire east of Sacramento destroyed 10 homes and 22 other structures. The combined cost to fight the fires and actual damages were beyond USD100 million.

Severe thunderstorms brought heavy rain, large hail, tornadoes and strong winds to parts of the Southwest and Rockies from the 27th to the 30th. No serious injuries or fatalities were reported as the storms swept through Nevada, Arizona, Colorado, and New Mexico. The most significant damage was noted in the Phoenix, AZ region where damage was sustained to homes, buildings and the local airport. Elsewhere, major hail damage was reported in the Denver, CO. Total economic losses were estimated at roughly USD1.0 billion, with insured losses approaching USD700 million.

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

| Date      | Event      | Location | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|------------|----------|--------|-----------------------|------------------------|
| 9/2-9/3   | TS Dolly   | Mexico   | 0      | 500+                  | Unknown                |
| 9/4-9/8   | HU Norbert | Mexico   | 3      | 3,000+                | 25+ million            |
| 9/10-9/17 | HU Odile   | Mexico   | 5      | 50,000+               | 2.5+ billion           |

Tropical Storm Dolly made landfall near Tuxpan, Mexico on the 2nd with maximum sustained winds of 45 mph (75 kph). The system brought as much as 8.00 inches (203 millimeters) of rainfall to portions of northeastern Mexico, particularly the states of Tamaulipas and Veracruz. Local officials estimated that at least 500 homes were damaged by floodwaters, with even more damage sustained to infrastructure.

Hurricane Norbert brought tropical storm strength winds and torrential rain to parts of western Mexico, including the Baja Peninsula, from the 4th to the 8th. Three storm-related fatalities were reported after torrential rains caused rivers and creeks to overflow. Puerto San Carlos was worst affected more than 2,500 properties were damaged. Hundreds of additional homes reported flood inundation in the municipality of La Paz as well as the towns of Manzanillo, Jalisco, Nayarit, Mazatlan, and Chihuahua. Total economic damages were estimated at USD25 million.

Hurricane Odile became the strongest storm on record to make landfall in Mexico's Baja California Peninsula, killing at least five people and injuring 135 others. The Category 3 storm with 125 mph (205 kph) winds made landfall near Cabo San Lucas before riding the spine of the peninsula. Tens of thousands of homes, structures and vehicles were damaged or destroyed by Odile's high winds and flooding rains. Damage to infrastructure, two airports, and the electrical grid was heavy as well. The Mexican Association of Insurance Institutions reported that insured losses were at least MXN14.7 billion (USD1.1 billion). Total economic losses were expected in the low-digit billions (USD), with infrastructure losses alone listed at nearly MXN8.0 billion (USD596 million).

## South America

| Date | Event      | Location | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|------|------------|----------|--------|-----------------------|------------------------|
| 9/27 | Earthquake | Peru     | 8      | 150+                  | Unknown                |

A moderate magnitude-4.9 earthquake shook the Cuzco Region of southern Peru on the 27th, killing at least eight people. The tremor struck at 9:35 PM local time (02:35 UTC September 28) with an epicenter located 19 kilometers (12 miles) southwest of the city of Urcos. Authorities noted that 45 homes collapsed and 70 were damaged. At least five other public buildings and dozens of vehicles were destroyed. Infrastructure and utility supplies were also damaged.

## Europe

| Date      | Event          | Location                  | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|---------------------------|--------|-----------------------|------------------------|
| 9/4-9/6   | Severe Weather | Bulgaria                  | 3      | 2,000+                | 10+ million            |
| 9/7       | Flooding       | Italy                     | 2      | 2,000+                | 25+ million            |
| 9/10-9/14 | Flooding       | Croatia, Slovenia, Serbia | 3      | 5,000+                | Millions+              |
| 9/18      | Flooding       | France                    | 5      | Hundreds+             | Millions+              |
| 9/19      | Severe Weather | Italy                     | 0      | Hundreds+             | 20+ million            |

Severe thunderstorms and heavy rainfall led to flooding across Bulgaria from the 4th to 6th, killing at least three people. The most substantial damage occurred in nearly 80 villages along the Ropotamo River which overflowed its banks. Some of the towns and regions affected included Burgas, Lovetch, Harmanli, Simeongrad, Primorsko, Dimitrovgrad, Radnevo, and Misia. As many as 2,000 properties and vehicles were damaged or destroyed. Total economic losses were in excess of BGN15 million (USD10 million).

Flash floods swept through Italy's Puglia region on the 7th, killing at least two people. Roughly 6,000 people were evacuated from their homes and holiday residences around the city of Foggia as roads and other transport links were affected. Total economic losses were estimated in excess of EUR20 million (USD25 million).

A low pressure system brought torrential rains to parts of the Balkans from the 10th to 14th, killing at least three people and injuring several others. Several rivers, including the river Danube, in Croatia, Slovenia, and Serbia burst their banks while inundating several villages and causing thousands of people to be evacuated. In Croatia, at least 20 houses were damaged; while in Slovenia 850 houses, 240 commercial buildings, and 18 schools were damaged. A high volume of vehicles were inundated as well. Infrastructure damage was also prevalent due to debris and landslides.

Strong thunderstorms led to flash flooding and landslides in southern France on the 18th, killing at least five people. The rains were most prevalent in the district of Herault, particularly the regions of Lamaloules-Bains, Aveyron and Gard. Hundreds of structures and vehicles were inundated.

Severe thunderstorms also tore through Tuscany, Italy, on the 19th with significant damage reported from rain, wind, and hail around Florence. At least 50 people were injured. Trees were uprooted and severe damage was sustained to hundreds of structures. The most significant damage sustained was to the agricultural industry as up to 200,000 quintals of grapes were lost estimated to be worth EUR20 million (USD25.7 million).

## Africa

| Date | Event | Location | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|------|-------|----------|--------|-----------------------|------------------------|
|------|-------|----------|--------|-----------------------|------------------------|

No major natural disaster events occurred in Africa during the month of September.

## Asia

| Date      | Event          | Location                    | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|-----------------------------|--------|-----------------------|------------------------|
| 8/26-9/12 | Flooding       | Thailand                    | 10     | 14,652+               | 10+ million            |
| 9/1-9/6   | Flooding       | China                       | 65     | 60,000+               | 570+ million           |
| 9/2-9/15  | Flooding       | India, Pakistan             | 648    | 375,000+              | 18+ billion            |
| 9/10-16   | TY Kalmaegi    | Philippines, China, Vietnam | 31     | 83,000+               | 3.0+ billion           |
| 9/10-9/17 | Flooding       | China                       | 50     | 213,000+              | 1.4+ billion           |
| 9/18-9/24 | TS Fung-Wong   | Philippines, Taiwan, China  | 21     | 12,000+               | 232+ million           |
| 9/20-9/25 | Flooding       | India                       | 73     | Thousands+            | 163+ million           |
| 9/25-9/26 | Severe Weather | China                       | 0      | Unknown               | 134+ million           |
| 9/27      | Volcano        | Japan                       | 47     | Unknown               | Unknown                |

Monsoonal rains led to widespread flooding in at least 28 Thai provinces from late August into September, killing at least 10 people. According to the Department of Disaster Prevention and Mitigation (DDPM) the floods affected 737 villages and 14,652 houses. Chiang Rai and Sukhothai were cited as two of the hardest-hit provincial regions following overflowing rivers where more than 10,000 hectares (24,710 acres) of cropland were submerged. Total economic losses were minimally THB320 million (USD10 million).

Torrential rainfall and strong thunderstorms across northern and southern China between the 1st and 6th left at least 65 people dead. According to the Ministry of Civil Affairs (MCA), the provincial regions of Guizhou, Sichuan and Chongqing were the hardest-hit, where high winds, landslides, and up to 140 millimeters (5.51 inches) of rain damaged or destroyed nearly 60,000 homes. Tens of thousands of hectares (acres) of cropland were also submerged. Total economic losses were listed at CNY3.5 billion (USD570 million).

Severe monsoon rains led to catastrophic flooding throughout eastern Pakistan and northern India between the 2nd and 15th, killing at least 648 people and injuring nearly 1,000 others. A combined 375,000 homes and other structures were damaged or destroyed across 6,000 villages. In Pakistan, at least 367 fatalities were reported, primarily in the states of Punjab, Azad Jammu & Kashmir, and Gilgit Baltistan after as much as 668 millimeters (26.30 inches) of rain fell. In India, at least 281 people died along the Jhelum River following similar rain totals. The local government in India's Jammu & Kashmir tentatively estimated economic losses at INR1.0 trillion (USD16 billion) – though this total remains subject to change; while insurance industry officials estimated payouts reaching INR40 billion (USD650 million). In Pakistan, Punjab officials cited economic losses at PKR200 billion (USD2.0 billion).

Typhoon Kalmaegi made separate landfalls in the Philippines, China, and Vietnam between the 10th and 16th, killing at least 31 people. The storm first came ashore in the Philippines' Luzon Island, where 12 people died and more than 1,500 homes were damaged. Total economic losses were listed at PHP619 million (USD14 million). In China, Kalmaegi affected multiple southern provinces and left nine people dead. Local officials noted that more than 78,800 homes and 880,000 hectares (2.17 million acres) of cropland were damaged or destroyed. Total economic losses were listed at CNY17.7 billion (USD2.9 billion). In Vietnam, 10 people were killed across northern sections of the country as at least 2,265 homes and other structures were damaged or destroyed by winds and floods. Total economic losses were listed at VND95 billion (USD4.5 million).

Torrential rainfall and strong thunderstorms southwestern China between the 10th and 17th left at least 50 people dead or missing. According to the Ministry of Civil Affairs (MCA), the provincial regions of Sichuan, Shaanxi, Hubei, Chongqing, and Guizhou were the hardest-hit, as torrential rains caused widespread flooding and landslides. Nearly 213,000 homes were damaged or destroyed and at least 339,000 hectares (838,000 acres) of crops were also impacted. Total economic losses were estimated at CNY8.53 billion (USD1.4 billion).

Tropical Storm Fung-Wong made multiple landfalls in the Philippines, Taiwan and China between the 18th and 24th, bringing periods of heavy rains and gusty winds. At least 21 people were killed. In the Philippines, extreme rainfall led to severe flooding in the capital of Manila. Nearly 11,600 homes were damaged or destroyed and wide swaths of infrastructure and agriculture were heavily impacted. Total economic losses were listed at PHP3.4 billion (USD76 million). In Taiwan, heavy rains led to isolated reports of flood damage and travel delays. Total losses to agriculture were TWD12 million (USD400,000). In China, 250 homes were inundated in Zhejiang Province as rivers overflowed their banks and also submerged cropland. Total economic losses were listed at CNY950 million (USD155 million).

Multiple days of torrential monsoon rains impacted northeast India between the 20th and 25th, leading to the deaths of at least 73 people. The rains led to major flooding and landslides across portions of Assam and Meghalaya states after several rivers overflowed their banks. Hundreds of thousands of residents were forced to evacuate their homes as the floods also led to extensive damage to infrastructure and agriculture. The Assam government estimated flood costs at INR100 million (USD163 million).

Severe thunderstorms swept across China's Gansu, Shanxi, and Inner Mongolia on the 25th and 26th, bringing large hail and damaging winds to dozens of counties. Local officials cited that the most significant damage was registered to the agricultural sector, with the MCA citing economic damages at CNY821 million (USD134 million).

Japan's Mount Ontake erupted on the 27th, killing at least 47 people and injuring 69 others. The volcano erupted at 11:53 AM local time (02:53 UTC) and mainly comprised of steam, volcanic ash, and rocks. The majority of the fatalities were as a result of flying rocks. Local reports suggested that ash accumulations up to 50 centimeters (20 inches) thick were widespread around the volcano.

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

| <b>Date</b> | <b>Event</b> | <b>Location</b> | <b>Deaths</b> | <b>Structures/<br/>Claims</b> | <b>Economic<br/>Loss (USD)</b> |
|-------------|--------------|-----------------|---------------|-------------------------------|--------------------------------|
| <hr/>       |              |                 |               |                               |                                |

No major natural disaster events occurred in Oceania during the month of September.



## Appendix

### Updated 2014 Data: January – August

#### United States

| Date      | Event          | Location                         | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|----------------------------------|--------|-----------------------|------------------------|
| 1/1-9/1   | Drought        | Western U.S.                     | 0      | Unknown               | 4.0+ billion           |
| 1/1-1/5   | Winter Weather | Midwest, Ohio Valley, Northeast  | 16     | 10,000+               | 200+ million           |
| 1/5-1/8   | Winter Weather | Midwest, Northeast, Southeast    | 21     | 150,000+              | 3.0+ billion           |
| 1/11      | Severe Weather | Southeast                        | 2      | 5,000+                | 50+ million            |
| 1/20-1/22 | Winter Weather | Central and Eastern U.S.         | 4      | Thousands+            | 100+ million           |
| 1/26-1/29 | Winter Weather | Southeast, Midwest, Mid-Atlantic | 13     | Thousands+            | 250+ million           |
| 2/3-2/6   | Winter Weather | Midwest, Plains, Northeast       | 9      | 30,000+               | 250+ million           |
| 2/11-2/14 | Winter Weather | Southeast, Northeast             | 25     | 50,000+               | 900+ million           |
| 2/20-2/21 | Severe Weather | Midwest, Southeast, Mid-Atlantic | 1      | 20,000+               | 175+ million           |
| 2/28-3/4  | Winter Weather | Nationwide                       | 12     | Thousands+            | Millions+              |
| 3/1-3/31  | Flooding       | Montana, Wyoming                 | 0      | Hundreds+             | 10+ million            |
| 3/6-3/7   | Winter Weather | Southeast, Mid-Atlantic          | 0      | 12,500+               | 100+ million           |
| 3/22      | Mudslide       | Washington                       | 41     | 50+                   | 10+ million            |
| 3/27-3/29 | Severe Weather | Midwest, Plains, Southeast       | 0      | 100,000+              | 800+ million           |
| 3/28      | Earthquake     | California                       | 0      | Hundreds+             | 25+ million            |
| 4/2-4/4   | Severe Weather | Plains, Midwest, Southeast       | 0      | 160,000+              | 1.5+ billion           |
| 4/12-4/14 | Severe Weather | Plains, Midwest, Southeast       | 0      | 100,000+              | 950+ million           |
| 4/27-5/1  | Severe Weather | Central/Eastern U.S.             | 39     | 115,000+              | 1.6+ billion           |
| 5/7-5/9   | Severe Weather | Plains, Midwest                  | 0      | 25,000+               | 250+ million           |
| 5/10-5/15 | Severe Weather | Plains, Midwest, Mid-Atlantic    | 0      | 100,000+              | 950+ million           |
| 5/11-5/20 | Wildfires      | Texas, California                | 2      | 400+                  | 100+ million           |
| 5/18-5/23 | Severe Weather | Midwest, Rockies, Northeast      | 0      | 400,000+              | 3.75+ billion          |
| 5/24-5/28 | Severe Weather | Southwest                        | 0      | 25,000+               | 200+ million           |
| 6/3-6/9   | Severe Weather | Midwest, Plains, Rockies         | 3      | 115,000+              | 1.9+ billion           |
| 6/10-6/12 | Severe Weather | Midwest, Plains, Rockies         | 0      | 20,000+               | 150+ million           |
| 6/12-6/13 | Severe Weather | Texas                            | 0      | 40,000+               | 550+ million           |
| 6/14-6/19 | Severe Weather | Midwest, Plains, Rockies         | 2      | 75,000+               | 775+ million           |
| 6/24-6/25 | Severe Weather | Colorado, Wyoming, Kansas        | 0      | 30,000+               | 275+ million           |
| 6/29-7/1  | Severe Weather | Midwest, Plains, Ohio Valley     | 4      | 55,000+               | 550+ million           |
| 7/1-7/6   | HU Arthur      | Eastern Seaboard                 | 0      | Hundreds+             | 10+ million            |
| 7/7-7/9   | Severe Weather | Central & Eastern U.S.           | 5      | 45,000+               | 350+ million           |
| 7/14-8/15 | Wildfire       | Washington                       | 1      | 300+                  | 75+ million            |
| 7/26-7/28 | Severe Weather | Central & Eastern U.S.           | 0      | 30,000+               | 225+ million           |
| 8/3       | Flooding       | California                       | 1      | 100+                  | Millions+              |
| 8/8-8/10  | HU Iselle      | Hawaii                           | 1      | 278+                  | 66+ million            |
| 8/11-8/13 | Flooding       | Midwest, Northeast, Mid-Atlantic | 1      | 70,000+               | 2.0+ billion           |
| 8/19      | Flooding       | Arizona                          | 0      | 100+                  | 10+ million            |

| Date     | Event          | Location                   | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|----------|----------------|----------------------------|--------|-----------------------|------------------------|
| 8/24     | Earthquake     | California                 | 0      | Thousands+            | 2.0+ billion           |
| 8/31-9/2 | Severe Weather | Midwest, Plains, Northeast | 0      | Thousands+            | Millions+              |

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

| Date      | Event          | Location           | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|--------------------|--------|-----------------------|------------------------|
| 1/13      | Earthquake     | Puerto Rico        | 0      | Hundreds+             | Unknown                |
| 1/1-3/31  | Drought        | Haiti              | 0      | Unknown               | Millions+              |
| 3/26      | Winter Weather | Canada             | 0      | Thousands+            | Millions+              |
| 4/10      | Earthquake     | Nicaragua          | 1      | 2,354+                | Millions+              |
| 4/18      | Earthquake     | Mexico             | 0      | 2,500+                | Millions+              |
| 5/30-6/2  | TS Boris       | Mexico, Guatemala  | 6      | Hundreds+             | Unknown                |
| 6/17      | Severe Weather | Canada             | 0      | 100+                  | 50+ million            |
| 6/28-7/10 | Flooding       | Canada             | 0      | Thousands+            | 745+ million           |
| 7/5-7/7   | HU Arthur      | Canada             | 0      | Hundreds+             | 15+ million            |
| 7/7       | Earthquake     | Mexico, Guatemala  | 9      | 20,000+               | 25+ million            |
| 8/1-8/4   | HU Bertha      | Caribbean, Bahamas | 0      | Hundreds+             | Unknown                |
| 8/4       | Flooding       | Canada             | 0      | 2,300+                | 250+ million           |
| 8/7-8/8   | Severe Weather | Canada             | 0      | 25,000+               | 600+ million           |
| 6/1-10/1  | Drought        | Guatemala          | 0      | Unknown               | 58+million             |

## South America

| Date      | Event          | Location                    | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|-----------------------------|--------|-----------------------|------------------------|
| 1/1-2/28  | Flooding       | Bolivia                     | 64     | 25,000+               | 100+ million           |
| 1/1-4/30  | Drought        | Brazil                      | 0      | Unknown               | 4.3+ billion           |
| 1/12      | Flooding       | Brazil                      | 24     | 500+                  | Unknown                |
| 2/15-3/31 | Flooding       | Brazil, Bolivia, Peru       | 0      | 29,500+               | 200+ million           |
| 4/1       | Earthquake     | Chile                       | 7      | 13,000+               | 100+ million           |
| 4/12-4/16 | Wildfire       | Chile                       | 15     | 2,900+                | 34+ million            |
| 5/19-5/23 | Severe Weather | Brazil                      | 0      | Thousands+            | Millions+              |
| 6/7-6/30  | Flooding       | Brazil, Paraguay, Argentina | 15     | 25,000+               | 300+ million           |
| 8/12      | Earthquake     | Ecuador                     | 3      | Hundreds+             | Unknown                |
| 8/24      | Earthquake     | Peru                        | 0      | 200+                  | Millions+              |

## Europe

| Date      | Event        | Location                | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|--------------|-------------------------|--------|-----------------------|------------------------|
| 12/23-3/1 | Flooding     | United Kingdom          | 0      | 420,000+              | 1.5+ billion           |
| 1/2-1/3   | WS Anne      | United Kingdom, France  | 0      | Thousands+            | 100+ million           |
| 1/5-1/7   | WS Christina | UK, France, Scandinavia | 3      | Thousands+            | 500+ million           |

| Date      | Event            | Location                  | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|------------------|---------------------------|--------|-----------------------|------------------------|
| 1/26-1/30 | Winter Weather   | Central/Western Europe    | 4      | 5,000+                | Millions+              |
| 1/26-2/3  | Earthquakes      | Greece                    | 0      | 1,000+                | Millions+              |
| 2/1-2/8   | WS Nadja & Petra | Western/Central Europe    | 1      | Thousands+            | 410+ million           |
| 2/11-2/13 | WS Tini          | Western Europe            | 1      | Thousands+            | 700+ million           |
| 2/14-2/15 | WS Ulla          | Western Europe            | 5      | Thousands+            | 100+ million           |
| 4/19-4/22 | Flooding         | Romania, Serbia, Bulgaria | 4      | Hundreds+             | 10+ million            |
| 5/13-5/21 | Flooding         | Southeast Europe          | 80     | 150,000+              | 4.5+ billion           |
| 5/24      | Earthquake       | Greece, Turkey            | 0      | Hundreds+             | Millions+              |
| 5/27-5/31 | Flooding         | Russia                    | 0      | 16,000+               | 15+ million            |
| 6/8-6/10  | Severe Weather   | France, Germany, Belgium  | 0      | 400,000+              | 3.5+ billion           |
| 6/19-6/20 | Flooding         | Bulgaria                  | 15     | 5,500+                | 38+ million            |
| 7/8-7/11  | Severe Weather   | Western & Central Europe  | 5      | 25,000+               | 500+ million           |
| 7/26-7/30 | Flooding         | Western & Central Europe  | 3      | 5,000+                | 135+ million           |
| 8/2       | Flooding         | Italy                     | 4      | Hundreds+             | Millions+              |
| 8/30-8/31 | Flooding         | Denmark, Sweden           | 0      | Thousands+            | Millions+              |

## Africa

| Date      | Event      | Location            | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|------------|---------------------|--------|-----------------------|------------------------|
| 1/21      | Flooding   | Tanzania            | 1      | 4,086+                | Millions+              |
| 1/20-2/10 | Flooding   | Zimbabwe            | 0      | 6,393+                | 20+ million            |
| 2/9-2/10  | Flooding   | Burundi             | 77     | 3,790+                | Millions+              |
| 3/2-3/20  | Flooding   | South Africa        | 32     | Thousands+            | 85+ million            |
| 3/29-4/1  | CY Hellen  | Madagascar, Comoros | 17     | 2,000+                | Millions+              |
| 6/28      | Flooding   | Nigeria             | 15     | Thousands+            | Unknown                |
| 7/25-8/4  | Flooding   | Sudan               | 17     | 3,000+                | Unknown                |
| 8/1       | Earthquake | Algeria             | 6      | Thousands+            | Unknown                |
| 8/5       | Earthquake | South Africa        | 1      | 400+                  | Unknown                |
| 8/1-8/31  | Flooding   | Niger               | 18     | 5,511+                | Millions               |

## Asia

| Date      | Event          | Location    | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|-------------|--------|-----------------------|------------------------|
| 1/1-2/1   | Volcano        | Indonesia   | 32     | Unknown               | 83+ million            |
| 1/1-4/30  | Drought        | Pakistan    | 180    | Unknown               | 18+ million            |
| 1/2       | Earthquake     | Iran        | 1      | Thousands+            | Millions+              |
| 1/11-1/20 | Flooding       | Philippines | 79     | 3,500+                | 13+ million            |
| 1/12-1/15 | Winter Weather | China       | 0      | Unknown               | 89+ million            |
| 1/14-1/17 | Flooding       | Indonesia   | 20     | 10,844+               | 153+ million           |
| 1/14-1/21 | Flooding       | Indonesia   | 12     | 38,762+               | 430+ million           |
| 1/15-1/31 | Winter Weather | Thailand    | 63     | Unknown               | Unknown                |
| 1/17-1/20 | Winter Weather | India       | 25     | Unknown               | Unknown                |

| Date      | Event          | Location                | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|-------------------------|--------|-----------------------|------------------------|
| 1/17-1/22 | Winter Weather | China                   | 0      | Unknown               | 79+ million            |
| 1/19-1/22 | Flooding       | Indonesia               | 13     | 4,000+                | 515+ million           |
| 1/24-1/28 | Flooding       | Indonesia               | 26     | 100+                  | 173+ million           |
| 1/31-2/1  | TD Kajiki      | Philippines             | 6      | 427+                  | 3.2+ million           |
| 1/1-8/31  | Drought        | Sri Lanka               | 0      | Unknown               | 25+ million            |
| 2/1-2/7   | Winter Weather | Afghanistan, Kyrgyzstan | 46     | Hundreds+             | Unknown                |
| 2/4-2/5   | Winter Weather | China                   | 0      | 10,000+               | 115+ million           |
| 2/7-2/14  | Winter Weather | China                   | 10     | 20,000+               | 675+ million           |
| 2/8-2/16  | Winter Weather | Japan                   | 95     | 288,000+              | 6.25+ billion          |
| 2/12      | Earthquake     | China                   | 0      | 90,000+               | 350+ million           |
| 2/13-2/20 | Flooding       | Malaysia                | 2      | 5,000+                | 25+ million            |
| 2/14      | Volcano        | Indonesia               | 7      | 12,447+               | 103+ million           |
| 2/17      | Winter Weather | South Korea             | 10     | Unknown               | 11+ million            |
| 2/17-2/21 | Winter Weather | China                   | 0      | 5,000+                | 140+ million           |
| 2/22      | Flooding       | Indonesia               | 11     | 2,000+                | Millions+              |
| 3/10-3/12 | Winter Weather | India                   | 17     | 1,922+                | Unknown                |
| 3/12-3/14 | Winter Weather | China                   | 0      | 2,000+                | 50+ million            |
| 3/19-3/20 | Severe Weather | China                   | 1      | 5,000+                | 118+ million           |
| 3/23-3/27 | Severe Weather | China                   | 0      | 15,000+               | 95+ million            |
| 3/27-4/4  | Severe Weather | China                   | 27     | 80,000+               | 161+ million           |
| 4/5       | Earthquake     | China                   | 0      | 15,000+               | 80+ million            |
| 4/7-4/9   | Severe Weather | China                   | 0      | 1,000+                | 230+ million           |
| 4/11-4/12 | Flooding       | Tajikistan              | 15     | 500+                  | Millions+              |
| 4/14-4/16 | Severe Weather | China                   | 0      | 1,000+                | 155+ million           |
| 4/16-4/20 | Severe Weather | China                   | 3      | 20,000+               | 156+ million           |
| 4/18      | Winter Weather | Nepal                   | 16     | Unknown               | Unknown                |
| 4/22-4/28 | Severe Weather | China                   | 9      | 10,000+               | 452+ million           |
| 4/24-5/15 | Flooding       | Afghanistan             | 2,665  | 15,000+               | Unknown                |
| 4/27-4/28 | Severe Weather | Bangladesh              | 16     | 1,000+                | Unknown                |
| 5/3-5/7   | Winter Weather | China                   | 0      | Unknown               | 417+ million           |
| 5/5       | Earthquake     | Thailand                | 1      | 4,000+                | 62+ million            |
| 5/8-5/15  | Flooding       | China                   | 3      | 15,000+               | 450+ million           |
| 5/24      | Earthquake     | China                   | 0      | 45,000+               | 60+ million            |
| 5/24-5/28 | Flooding       | China                   | 37     | 95,000+               | 1.2+ billion           |
| 5/30      | Earthquake     | China                   | 0      | 22,000+               | Millions+              |
| 5/30-5/31 | Severe Weather | India                   | 15     | Hundreds+             | Unknown                |
| 6/1-6/7   | Flooding       | China                   | 33     | 74,000+               | 675+ million           |
| 6/2       | Flooding       | Sri Lanka               | 27     | 1,487+                | Millions+              |
| 6/6-6/7   | Flooding       | Afghanistan             | 150    | 2,000+                | Unknown                |
| 6/9-6/10  | Severe Weather | China                   | 1      | 5,000+                | 193+ million           |
| 6/14-6/16 | TS Hagibis     | China                   | 0      | 1,000+                | 131+ million           |
| 6/16-6/18 | Severe Weather | China                   | 11     | 5,000+                | 94+ million            |
| 6/17-6/21 | Flooding       | China                   | 30     | 85,000+               | 925+ million           |
| 6/23-6/25 | Flooding       | China                   | 4      | 5,000+                | 75+ million            |

| Date      | Event          | Location                    | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|-----------------------------|--------|-----------------------|------------------------|
| 6/25-6/30 | Flooding       | China                       | 24     | 30,000+               | 483+ million           |
| 6/26-6/28 | Flooding       | India                       | 27     | Thousands+            | Millions+              |
| 6/20-8/31 | Drought        | China                       | 0      | Unknown               | 5.2+ billion           |
| 7/3-7/7   | Flooding       | China                       | 36     | 10,000+               | 547+ million           |
| 7/8-7/11  | STY Neoguri    | Japan                       | 7      | 1,000+                | 100+ million           |
| 7/13-7/18 | Flooding       | China                       | 66     | 80,000+               | 1.25+ billion          |
| 7/15-7/20 | STY Rammasun   | Philippines, China, Vietnam | 206    | 1.0+ million          | 7.2+ billion           |
| 7/16-7/22 | Flooding       | India, Nepal                | 34     | Thousands+            | Unknown                |
| 7/19-7/20 | Severe Weather | China                       | 5      | 5,000+                | 275+ million           |
| 7/22-7/24 | TY Matmo       | Taiwan, China, Philippines  | 15     | 30,000+               | 570+ million           |
| 7/30      | Landslide      | India                       | 209    | 44+                   | Unknown                |
| 7/30-8/31 | Flooding       | Cambodia                    | 45     | 11,590+               | Millions+              |
| 8/2       | Landslide      | Nepal                       | 156    | 129+                  | 15+ million            |
| 8/3       | Earthquake     | China                       | 617    | 225,000+              | 6.3+ billion           |
| 8/3-8/4   | Flooding       | India                       | 35     | 25,000+               | 100s of Millions       |
| 8/3-8/6   | TS Nakri       | South Korea, Japan          | 14     | 2,000+                | Millions+              |
| 8/4-8/8   | Flooding       | Southeast Asia              | 9      | Thousands+            | Millions+              |
| 8/9-8/11  | Flooding       | Indonesia                   | 3      | 2,638+                | Unknown                |
| 8/10-8/12 | STY Halong     | Japan                       | 10     | 7,218+                | 100s of Millions       |
| 8/11-8/16 | Flooding       | India, Nepal                | 214    | 35,000+               | 82+ million            |
| 8/12-8/13 | Flooding       | China                       | 27     | 30,000+               | 487+ million           |
| 8/15      | Flooding       | Pakistan                    | 16     | 500+                  | Unknown                |
| 8/15-9/10 | Flooding       | Bangladesh                  | 14     | 275,000+              | 150+ million           |
| 8/16-8/20 | Flooding       | Japan                       | 73     | 2,500+                | Millions+              |
| 8/18      | Earthquake     | Iran                        | 0      | 17,000+               | 44+ million            |
| 8/22-8/28 | Flooding       | China                       | 10     | 10,000+               | 700+ million           |
| 8/25      | Flooding       | South Korea                 | 13     | Thousands+            | Millions+              |

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

| Date      | Event          | Location                | Deaths | Structures/<br>Claims | Economic<br>Loss (USD) |
|-----------|----------------|-------------------------|--------|-----------------------|------------------------|
| 1/10-1/12 | CY Ian         | Tonga                   | 1      | 1,130+                | 48+ million            |
| 1/12-1/19 | Wildfires      | Australia (WA, VIC, SA) | 2      | 350+                  | 25+ million            |
| 1/20      | Earthquake     | New Zealand             | 0      | 4,004+                | Millions+              |
| 1/30-1/31 | CY Dylan       | Australia (QLD)         | 0      | Unknown               | Unknown                |
| 2/25-2/28 | Flooding       | Fiji                    | 0      | Hundreds+             | 2.1+ million           |
| 3/4-3/5   | Flooding       | New Zealand             | 0      | 1,000+                | 30+ million            |
| 3/9-3/12  | CY Lusi        | Vanuatu                 | 12     | Hundreds+             | Millions+              |
| 4/3-4/4   | Flooding       | Solomon Islands         | 23     | Thousands+            | 24+ million            |
| 4/10-4/14 | CY Ita         | Australia               | 0      | 680+                  | 1.0+ billion           |
| 4/17      | Severe Weather | New Zealand             | 0      | 10,000+               | 65+ million            |
| 6/10-6/11 | Severe Weather | New Zealand             | 0      | 6,000+                | 45+ million            |
| 7/8-7/11  | Severe Weather | New Zealand             | 0      | 3,000+                | 20+ 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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