## $\mathbf{A O N}_{\text {венніе }}$

## March 2012 Global Catastrophe

## Recap



Empower Results

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## Executive Summary

- U.S. severe weather outbreak leaves 41 people dead; insured losses top USD1.1 billion
- Magnitude-7.4 earthquake in Mexico causes more than USD163 million in insured losses
- Flooding leaves swath of damage in Australia's New South Wales and Victoria

A significant severe weather outbreak swept across parts of the Midwest, the Tennessee Valley and the Southeast in the United States during the first week of March, killing at least 41 people. According to the Storm Prediction Center (SPC), there were at least 65 confirmed tornado touchdowns, including two EF-4 tornadoes that caused extensive damage in parts of southern Indiana, Kentucky, Tennessee and southwest Ohio. Total economic losses were estimated at approximately USD2.0 billion, while various insurers reported that more than 170,000 claims had been filed with payouts in excess of USD1.1 billion.

Additional U.S. severe weather activity was recorded during the month, including a system that impacted the Great Lakes. In southeastern Michigan, an EF-3 tornado damaged or destroyed at least 207 homes in the town of Dexter. A few weeks later, another storm system spawned at least 46 tornado touchdowns across parts of the Plains, Midwest and the Southeast.

Tornadic activity was also recorded during the month in Indonesia and Australia.

A magnitude-7.4 earthquake rattled central and southern Mexico, causing damage and killing at least two people. The tremor's epicenter was located 25 kilometers ( 15 miles) east of Ometepec, Mexico, with the hardest-hit areas found in the states of Guerrero and Oaxaca. A combined 44,000 homes, businesses, hospitals and schools were damaged or destroyed. The Mexican Association of Insurance Institutions (AMIS) reported insured losses at approximately MXN2.07 billion (USD163 million).

In other earthquake activity, a magnitude-7.1 temblor struck central Chile though damage was largely minimal in Santiago and the regions of Maipu and Bio Bio. The tremor was labeled an aftershock from February 2010's magnitude-8.8 event. Total economic losses were expected to be below USD100 million.

In China's Xinjiang region, a magnitude-5.8 earthquake left 36,641 people homeless and caused direct economic losses of CNY523.5 million (USD82.7 million).

Flooding affected portions of Australia's New South Wales (NSW) and Victoria between the end of February and the first half of March as at least two people were killed. The Insurance Council of Australia declared a catastrophe for NSW Riverina, NSW Central West and northern Victoria as at least 8,914 claims were filed and payouts were listed at AUD108.2 million (USD112.5 million).

Additional flood events during the month were recorded in parts of the Philippines, Fiji, Ecuador, Chile, Colombia and the United States.

Cyclone Irina's landfall led to the deaths of at least 84 people in Madagascar, Mozambique and South Africa. More than 78,000 were left homeless and wide swaths of agriculture were submerged. Also in March, Cyclone Lua made landfall in Western Australia and caused minimal damage. Total economic losses of AUD217 million (USD230 million) came from lost business when Port Hedland briefly closed.

A wildfire in the U.S. state of Colorado left three people dead and destroyed at least 25 homes.

## United States

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures// <br> Claims $^{2,3}$ | Damage <br> Estimates ${ }^{2,4}$ <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $3 / 2-3 / 3$ | Severe Weather | Midwest, Southeast | $41+$ | $170,000+$ | $2.0+$ billion |

A significant severe weather outbreak swept across parts of the Midwest, the Tennessee Valley and the Southeast in the United States on the $2^{\text {nd }}$ and $3^{\text {rd }}$, killing at least 41 people and injuring more than 400 others. According to the Storm Prediction Center (SPC), there were at least 65 confirmed tornado touchdowns and nearly 900 additional reports of hail and damaging winds. The hardest-hit areas came in southern Indiana, Kentucky, Tennessee and southwest Ohio, where two EF-4 tornadoes touched down and caused extensive damage. Additional tornado damage occurred in Alabama, Mississippi, Georgia, Virginia and North Carolina. Total economic losses were estimated at USD2.0 billion, while various insurers reported that more than 170,000 claims had been filed with payouts in excess of USD1.1 billion.

Several consecutive days of torrential rains and strong thunderstorms in Hawaii between the $4^{\text {th }}$ and the $9^{\text {th }}$ led to widespread flash flooding and isolated reports of mudslides. A disaster was declared for the islands of Oahu and Kauai after damage occurred to homes, businesses and vehicles. Total economic losses were estimated in the millions of dollars (USD).

Torrential rains fell in southern Louisiana on the $12^{\text {th }}$, causing flash flooding in parts of five parishes (Lafayette, Acadia, St. Landry, St. Martin and Vermilion). More than 1,500 homes and other structures were damaged after some areas registered as much as 15 to 20 inches ( 38 to 50 centimeters) of rain in only a few hours' time. The town of Carencro was amongst the hardest-hit, where local officials estimated that 60 percent of the region was underwater. City engineers labeled the floods as a 500 -year event. Total economic losses were preliminarily listed at USD2 million, but that figure was expected to rise.

Severe weather impacted the Great Lakes on the $14^{\text {th }}$ and $15^{\text {th }}$, including at least three tornadoes that touched down across southeastern Michigan. The most significant damage came in the town of Dexter, where an EF-3 tornado with winds up to $140 \mathrm{mph}(220 \mathrm{kph})$ damaged or destroyed at least 207 homes. Total economic losses were estimated at USD275 million, while various insurers received more than 20,000 claims with payouts in excess of USD150 million.

A slow-moving storm system brought heavy rain and periods of severe weather to a broad area of the central and southern U.S. between the $18^{\text {th }}$ and the $25^{\text {th }}$, leaving at least one person dead. Isolated flooding was reported in parts of Texas, Oklahoma, Arkansas, Louisiana, Missouri, and Mississippi, inundating hundreds of homes and businesses. The storm system also spawned rounds of severe weather across the Plains, Midwest and the Southeast. At least 46 confirmed tornadoes touched down.

A wildfire burned an area in the greater Denver, Colorado region between March $26^{\text {th }}$ and April $2^{\text {nd }}$, killing at least three people. The blaze, called the Lower North Fork Fire, was sparked from a controlled burn reigniting due to high winds. The fire burned 4,100 acres ( 1,659 hectares) of land, and destroyed at least 25 homes in the mountainous community of Conifer.

Rounds of severe weather led to widespread hail, wind and flood damage across portions of the Plains, Midwest and the Southeast between the $29^{\text {th }}$ and the $31^{\text {st }}$. Clusters of strong thunderstorms wrapping around the outer periphery of a ridge of high pressure spawned the activity. The Rio Grande Valley in Texas sustained the most notable impacts, where baseball-sized hail and street flooding occurred.

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

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates $^{2,4}$ <br> $($ USD $)$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $3 / 20$ | Earthquake | Mexico | $2+$ | $44,000+$ | $300+$ million |

A magnitude-7.4 earthquake rattled central and southern Mexico on the $20^{\text {th }}$, causing damage in areas closest to the epicenter and killing at least two people. The tremor struck at 12:02 PM local time (18:02 UTC) with an epicenter 25 kilometers ( 15 miles) east of Ometepec, Mexico at a depth of 20.0 kilometers ( 12.4 miles). The hardest-hit areas came in the states of Guerrero and Oaxaca, where a combined 44,000 homes, businesses, hospitals and schools were damaged or destroyed. In total, 56 municipalities were affected. Mexico City and Acapulco both were shaken by the temblor, but no major damage occurred. The Mexican Association of Insurance Institutions (AMIS) reported insured losses at approximately MXN2.07 billion (USD163 million). Total economic losses were anticipated to be well into the hundreds of millions of dollars (USD).

## South America

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates $^{2,}$ <br> ${ }^{2}($ USD |
| :--- | ---: | ---: | ---: | ---: | ---: |

Excessive rainfall throughout much of Ecuador prompted state of emergency declarations for five provinces (El Oro, Manabi, Guayas, Los Rios and Loja). The rains, which occurred between early January and the end of March, led to flooding that damaged 4,000 homes. At least 30 people died

Heavy rainfall prompted flooding and widespread damage across extreme northern and southern sections of Chile between the $11^{\text {th }}$ and the $16^{\text {th }}$. No injuries or fatalities were reported. In the northern regions of Arica, Parinacota and Tamarugal, more than 2,500 residents were rendered homeless after the San Jose River overflowed its banks. In the southern province of Magallanes, at least 4,000 residents were left homeless after excessive rains prompted the Las Minas River to swell and flood homes, businesses, schools, hotels and a casino. Clean-up costs were listed at CHP1.5 billion (USD3.1 million).

Periods of heavy rainfall swept across 25 separate departments in Colombia during the last week of March, leading to the deaths of at least five people. The heavy rains prompted multiple rivers to overflow their banks as more than 5,000 homes were damaged or destroyed. Additional damage was reported to dozens of bridges and roads in the Andean Region.

A magnitude-7.1 earthquake central Chile on the $25^{\text {th }}$, with an epicenter located 27 kilometers ( 16 miles) north-northwest of Talca at a depth of 34.8 kilometers ( 21.6 miles). According to Chilean officials, at least 25,000 people were briefly evacuated from their homes. Damage was largely minimal, though there were reports of cracked walls and fallen ceilings in some homes, businesses and churches in Santiago and also the regions of Maipu and Bio Bio. Total economic losses were expected to be below USD100 million.

## Europe

| Event <br> Date | Event Name <br> Or Type $^{1}$ | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates $^{2,}$ <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $3 / 26$ | Earthquake | Turkey | 0 | Hundreds + | Unknown |

A magnitude-5.2 earthquake rattled eastern Turkey's Mus province on the $26^{\text {th }}$, damaging mud-brick homes and other outbuildings in the villages of Sultani and Bulanik. No injuries or fatalities were recorded.

## Africa

| Event <br> Date | Event Name <br> Or Type ${ }^{1}$ | Event <br> Location | \# of <br> Deaths |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $2 / 26-3 / 7$ | CY Irina | Madagascar, Mozambique | \# of <br> Structures <br> Claims $^{2,3}$ | Damage <br> Estimates $^{2,}$ <br> 4 <br> (USD) |

Excessive rainfall from Cyclone Irina led to the deaths of at least 84 people across parts of Madagascar, Mozambique and South Africa between February $26^{\text {th }}$ and March $7^{\text {th }}$. According to the Madagascar government, at least 72 people were killed, more than 78,000 were left homeless and wide swaths of agriculture were submerged by Irina's rains and winds. In Mozambique and South Africa, a combined 12 people died due to storm-related incidents.

## Asia

| Event <br> Date | Event Name <br> Or Type $^{1}$ | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates ${ }^{2,4}$ <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $3 / 4$ | Winter Weather | Afghanistan | $50+$ | $100+$ | Unknown |
| $3 / 9$ | Earthquake | China | 0 | $20,000+$ | $82.7+$ million |
| $3 / 12$ | Winter Weather | Afghanistan | $45+$ | $50+$ | Unknown |
| $3 / 15-3 / 18$ | Severe Weather | Thailand | 0 | $200+$ | Unknown |
| $3 / 16-3 / 20$ | Severe Weather | Indonesia | 0 | $12,000+$ | Unknown |
| $3 / 17$ | Flooding | China | 0 | $578+$ | Unknown |
| $3 / 20$ | Flooding | India | $3+$ | $15,862+$ | $1+$ million |
| $3 / 27$ | Flooding | Philippines | $11+$ | $10,000+$ | $2.1+$ million |

A large avalanche buried an entire village in northeastern Afghanistan's Badakhstan province on the $4^{\text {th }}$, killing at least 50 people and leaving dozens of others missing. Rescue officials noted that every home in the Dasty village of 200 residents had been destroyed.

A magnitude-5.8 earthquake struck China's Xinjiang region on the $9^{\text {th }}$, causing widespread damage in 16 counties though no injuries or fatalities were recorded. The tremor struck at 6:50 AM local time (22:50 UTC Thursday) with an epicenter 214 kilometers (132 miles) south-southeast of Aksu, China. According to the Ministry of Civil Affairs, the earthquake left 36,641 people homeless and caused direct economic losses of CNY523.5 million (USD82.7 million).

At least 45 people were killed in eastern Afghanistan's Nuristan Province after a large avalanche struck the region on the $12^{\text {th }}$. According to local officials, the avalanche crushed dozens of homes and blocked roads leading into the affected district of Mandol.

Strong thunderstorms affected multiple provinces in Thailand provinces between the $15^{\text {th }}$ and the $18^{\text {th }}$. In Surin Province, storms destroyed at least 87 homes; while multiple southern provinces reported that inclement weather led to more than 100 homes being destroyed and 20 people sustaining injuries.

At least three tornadoes struck Indonesia between the $16^{\text {th }}$ and the $20^{\text {th }}$. Tornado and other storm damage were recorded in the provinces of East Nusa Tenggara, West Nusa Tenggara and South Kalimantan. A combined 12,000 homes were damaged or destroyed and at least 17 people were injured.

Heavy rains combined with melting snow in northwest China's Xinjiang Province to cause flooding on the $17^{\text {th }}$. At least 578 homes and swaths of farmland were damaged in Ili Prefecture, in addition to the deaths of 687 heads of livestock.

At least three people were killed in India's Kashmir region on the $20^{\text {th }}$, after strong winds and heavy rains prompted flooding and avalanches. An additional 17 injuries were recorded as the inclement weather was blamed on damaging 15,862 homes and other structures in the city of Srinagar. Total economic losses were estimated at INR47 million (USD1 million).

Heavy rainfall on the $27^{\text {th }}$ led to widespread flooding across central and southern sections of the Philippines. At least 11 people were killed as floods led to impacts in at least 19 municipalities in six separate provinces. More than 10,000 homes were damaged or destroyed in addition to the transportation infrastructure. Total economic losses were listed at PHP89.5 million (USD2.1 million).

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

| Event <br> Date | Event Name <br> Or Type $^{1}$ | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates $^{2,4}$ <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $2 / 24-3 / 16$ | Flooding | Australia (NSW, Victoria) | $2+$ | $8,914+$ | $1.58+$ billion |

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Flooding affected portions of Australia's New South Wales (NSW) and Victoria between February $24^{\text {th }}$ and March $16^{\text {th }}$, leading to the deaths of at least two people. Flash flooding and rivers overflowing their banks were the biggest causes of the damage, and natural disaster declarations were made for dozens of regions and shires. Total combined economic losses were estimated by various state officials at upwards of AUD1.5 billion (USD1.58 billion), including damage costs to personal property, infrastructure and agriculture. The Insurance Council of Australia declared a catastrophe for NSW Riverina, NSW Central West and northern Victoria as at least 8,914 claims were filed and payouts were listed at AUD108.2 million (USD112.5 million).

Cyclone Lua made landfall in Western Australia (WA) on the $17^{\text {th }}$, bringing periods of heavy rain and gusty winds. No injuries or fatalities were recorded, and damage reports were largely minimal. The cyclone came ashore close to Pardoo Roadhouse, Tavern and Caravan Park, with the vast majority of the impacts coming from precautionary shutdowns of mining fields and oil production in the Pilbara region. The Port of Dampier and Port Hedland were also temporarily closed. The total economic impact from lost business during the temporary shutdown at Port Hedland was listed at AUD217 million (USD230 million).

An EF-2 tornado damaged the Queensland, Australia community of Townsville on the $17^{\text {th }}$, causing widespread damage and injuring at least 13 people. A natural disaster was declared for the region, after it was determined that more than 115 homes were damaged or destroyed in addition to a number of businesses in the Garbutt area. Total economic damages were listed at AUD20 million (USD21 million).

Multiple days of torrential rainfall between the $27^{\text {th }}$ and the $31^{\text {st }}$ led to flooding across the Western, Central and Eastern Divisions of Fiji's Viti Levu Island and prompting a natural disaster declaration. At least seven people were killed and more than 12,000 residents were forced to evacuate their homes as several towns saw floodwaters reach up to 7.0 feet ( 2.1 meters) in height. Both flash flooding and river flooding were blamed on the damage. Total economic losses were estimated to enter the millions of dollars (USD).

## APPENDIX

Updated Jan. - Feb. 2012 Data

## United States

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1 / 8-1 / 12$ | Winter Weather | Plains, Southeast, Northeast | 0 | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates ${ }^{2}, 4$ <br> (USD) |
| $1 / 12-1 / 13$ | Winter Weather | Midwest, Ohio Valley, Northeast | 0 | Thousands + | Millions + |
| $1 / 16-1 / 17$ | Severe Weather | Midwest, Southeast, Northeast | 0 | Millions + |  |
| $1 / 17-1 / 22$ | Winter Weather | Pacific Northwest | $3+$ | $1,000+$ | $100+$ million |
| $1 / 19-1 / 21$ | Wildfires | Nevada | 0 | $29+$ | $9.1+$ million |
| $1 / 22-1 / 23$ | Severe Weather | Southeast, Plains | $3+$ | $10,000+$ | $175+$ million |
| $2 / 17-2 / 18$ | Severe Weather | Plains, Southeast | 0 | Hundreds + | Unknown |
| $2 / 20$ | Severe Weather | Plains | $1+$ | Thousands + | Millions + |
| $2 / 22$ | Severe Weather | Southeast | $1+$ | $250+$ | $1.6+$ million |
| $2 / 24$ | Severe Weather | Southeast, Mid-Atlantic | 0 | Hundreds + | Millions + |
| $2 / 28-2 / 29$ | Severe Weather | Midwest, Plains, Southeast | $14+$ | $25,000+$ | $475+$ million |

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

$\left.\begin{array}{lrrrr}\begin{array}{l}\text { Event } \\ \text { Date }\end{array} & \begin{array}{r}\text { Event Name } \\ \text { Or Type }^{1}\end{array} & \begin{array}{r}\text { Event } \\ \text { Location }\end{array} & \begin{array}{r}\text { \# of } \\ \text { Deaths }^{2}\end{array} & \begin{array}{r}\text { \# of } \\ \text { Structures/ } \\ \text { Claims }^{2,3}\end{array}\end{array} \begin{array}{r}\text { Damage } \\ \text { Estimates }{ }^{2,4} \\ \text { (USD) }\end{array}\right]$

South America

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths ${ }^{2}$ | Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates <br> (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 |
| $2 / 8-2 / 9$ | Flooding | Peru | $14+$ | $11,000+$ | Unknown |
| $2 / 10-2 / 29$ | Flooding | Brazil, Bolivia | $1+$ | $37,300+$ | $10+$ million |

## Europe

| Event <br> Date | Event Name <br> Or Type $^{1}$ | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates ${ }^{2,4}$ <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1 / 3-1 / 4$ | WS Ulli | UK, Scandinavia | $2+$ | $5,000+$ | $306+$ million |


| Event <br> Date | Event Name <br> Or Type $^{1}$ | Event <br> Location | \# of <br> Deaths $^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates $^{2,4}$ <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1 / 4-1 / 5$ | WS Andrea | UK, Northern Europe | 0 | Thousands+ | $350+$ million |

## Africa

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths ${ }^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1 / 16-1 / 17$ | Flooding | Mozambique, South Africa | $10+$ | $5,000+$ | Unknown |
| $1 / 20-1 / 26$ | CY Funso | Mozambique, Malawi | $40+$ | $10,000+$ | $100+$ million |
| $2 / 13$ | Severe Weather | Nigeria | $15+$ | $3,000+$ | $1+$ million |
| $2 / 14$ | CY Giovanna | Madagascar | $35+$ | $50,000+$ | $100+$ million |

Asia

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths | \# of <br> Structures/ <br> Claims | Damage <br> Estimates, <br> (USD) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $1 / 1-1 / 31$ | Winter Weather | Japan | $56+$ | Thousands + | Millions + |

## Oceania (Australia, New Guinea, New Zealand, Micronesia, Guam, Northern Mariana Islands)

| Event <br> Date | Event Name <br> Or Type | Event <br> Location | \# of <br> Deaths ${ }^{2}$ | \# of <br> Structures/ <br> Claims $^{2,3}$ | Damage <br> Estimates <br> (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 |
| $1 / 24-2 / 15$ | Flooding | Australia (NSW, Queensland) | $1+$ | $5,657+$ | $920+$ million |

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## About Impact Forecasting ${ }^{\text {® }}$ LLC

Impact Forecasting ${ }_{\circledR}$ LLC is a catastrophe model development center of excellence within Aon Benfield whose seismologists, meteorologists, hydrologists, engineers, mathematicians, GIS experts, finance, risk management and insurance professionals analyze the financial implications of natural and man-made catastrophes around the world. Impact Forecasting's experts develop software tools and models that help clients understand underlying risks from hurricanes, tornadoes, earthquakes, floods, wildfires and terrorist attacks on property, casualty and crop insurers and reinsurers. Impact Forecasting is the only catastrophe model development firm integrated into a reinsurance intermediary. To find out more about Impact Forecasting ${ }^{\circledR}$ LLC, visit impactforecasting.com.

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[^0]:    ${ }^{1}$ TD = Tropical Depression, TS = Tropical Storm, HU = Hurricane, TY = Typhoon, STY = Super Typhoon, CY = Cyclone
    ${ }^{2}$ As reported by public news media sources and official government agencies
    ${ }^{3}$ 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.
    ${ }^{4}$ 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.

