

March 2010 Monthly Cat Recap – Impact Forecasting

Executive Summary

- Severe weather and flooding causes damage in Australia
- Heavy rains cause flood damage in parts of the U.S. Northeast and the Northern Plains
- Tropical Storm Hubert leaves at least 83 people dead in Madagascar

Following the Chilean earthquake on February 27th, one of the strongest earthquakes ever recorded, the world experienced a lull in major natural catastrophic events during March. Latin America continued to be impacted by aftershocks as damages climbed upwards to USD30 billion. While the Chilean earthquake captured a majority of the attention for most of month, numerous other catastrophes occurred across the globe.

In the U.S., a slow-moving “Nor’easter” brought days of heavy rains and gusty winds across the Mid-Atlantic States and the Northeast between March 12th and 16th. At least 11 people died due to storm-related accidents and initial damages were estimated at USD25 million. River flooding in the Northern Plains between the 13th and the 22nd caused at least USD14.7 million in losses in Minnesota. At least 15 tornadoes touched down in the Carolinas and Florida on the 28th and 29th, causing at least USD4.4 million in damages.

Elsewhere in the Americas, a rare tornado touched down in Freeport, Grand Bahamas on the 29th, killing at least three people. In Bolivia, heavy rains between the 1st and 5th led to at least 16 deaths and BOB18 million (USD2.5 million) in damages.

In Africa, at least 86 people died after flooding and landslides damaged and destroyed villages in eastern portions of Uganda on March 2nd. Local markets were destroyed, many homes and some villages were buried by landslides and numerous roads were blocked. Heavy rains between the 6th and 12th killed at least 20 people in Kenya, Mozambique and Uganda. Tropical Storm Hubert made landfall on Madagascar’s eastern coast on the 10th, killing at least 83 people and damaging at least 7,000 structures.

Heavy snows from February 28th to March 1st caused damage of CYN1.87billion (USD274 million) across seven cities in the Shandong Province. A magnitude-6.4 earthquake occurred in southern portions of Taiwan on March 4th, injuring at least 96 people and damaging more than 1,000 homes. Damage was estimated at NT330 million (USD10.3 million).

A series of severe thunderstorms crossed the Australian state of Victoria on the 6th, bringing large hail up to tennis ball-size, high winds, lightning and flooding across the Melbourne area, causing economic and insured losses of more than AUD1 billion (USD910 million). In Western Australia, a cluster of severe thunderstorms struck the greater Perth metropolitan area on March 22nd, causing over AUD650 million (USD598 million) in losses.

United States

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/8	Severe Weather	Plains	0	Dozens+	Unknown
3/10-3/12	Severe Weather	Plains, Southeast	1+	Hundreds+	Unknown
3/12-3/16	Flooding	Northeast, Mid-Atlantic States	11+	Thousands	25+ million
3/13-3/22	Flooding	Northern Plains	0	Unknown	14.7+ million
3/28-3/29	Severe Weather	Southeast	0	2,368+	4.4+ million
3/28-3/30	Flooding	Northeast	0	Thousands	Unknown

A severe weather event occurred on the 8th ahead of an advancing cold front. The event was not widespread and was mainly concentrated in northern Texas and western Oklahoma, with wind reports and two tornadoes touching down in extreme western Oklahoma. According to the National Weather Service, an EF-2 tornado touched down in a rural area southwest of Hammon around 5:20 PM CST and damaged or destroyed dozens of homes and several barns.

A storm system developed on the 10th across the Plains, triggering large hail, damaging winds and tornadoes in the ArkLaTex region. Golfball-sized and baseball-sized hail was reported Pike, Garland and Conway counties. At least three tornadoes touched down, including an EF-1 tornado in Saline County, an EF-1 tornado in White County and an EF-2 tornado that killed one person near Cleburne County. On the 11th and the 12th, the same storm system brought severe weather to parts of the Lower Mississippi Valley and central Florida. In the greater Tampa Bay area in Florida, numerous trees and power lines were downed by storms on the 11th. Tornadoes moved through Polk and Citrus counties. The tornadoes caused damage to 28 condominium units at the Grenelefe Golf and Tennis Resort near Haines City. Another round of thunderstorms developed in the Lower Mississippi Valley during the early morning hours on the 12th. Numerous large hail reports occurred from extreme eastern Mississippi and northwestern Alabama.

A slow-moving Nor'easter brought days of heavy rains and gusty winds across the Mid-Atlantic States and the Northeast between the 12th and the 16th. Widespread damage was reported as homes and businesses suffered from flood and isolated wind damage. At least eleven people died due to storm-related accidents. According to officials from New Jersey to New Hampshire, heavy rainfall with totals ranging between three and ten inches (eight and 25 centimeters) fell and winds gusted to upwards of 70 mph (110 kph). Some of the hardest hit locations were residences and businesses along the Passaic River outside of New York City and the Aberjona River outside of Boston. Minor coastal flooding was prevalent along the Atlantic seaboard. The storm disrupted air, rail and road travel. Damages were estimated at USD25 million.

The combination of warmer temperatures, snowmelt and rain caused rivers to quickly swell and overflow their banks throughout the Northern Plains between the 13th and the 22nd. Several rivers approached and exceeded major flood stage status before receding. Over one million sandbags were filled and temporary clay levees were constructed to keep the Red River from flooding homes and buildings in the city of Fargo, North Dakota. Additional flooding occurred in parts of Minnesota, South Dakota and Iowa. Damages in Minnesota were listed at USD14.7 million.

A series of severe thunderstorms developed along an advancing frontal boundary across the Southeast on the 28th and the 29th. At least 15 tornadoes touched down across parts of the Carolinas and Florida. An EF-2 tornado in High Point, North Carolina damaged over 600 homes. Insurers in South Carolina received 1,768 claims from hail and high wind damage totaling USD4.4 million.

A slow-moving area of low pressure brought flooding rains to parts of the Northeast between the 28th and the 30th. Rainfall totals of three to eight inches (eight to 20 centimeters) were recorded across coastal sections of New England, which reignited river flooding in the region. The hardest hit areas occurred in Rhode Island, where the Pawtuxet River rose to 20.79 feet (6.34 meters), over twice its flood stage, in the town of Cranston. At least 1,000 homes sustained flood damage as water poured into basements and vehicles across Rhode Island and in parts of Massachusetts.

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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/29	Severe Weather	Bahamas	3+	Dozens+	Unknown

A rare tornado touched down in the city of Freeport on Grand Bahama Island on the 29th. At least three people were killed after the twister tossed around heavy equipment and damaged multi-million dollar cranes at an industrial site at the Freeport Container Port. The tornado caused widespread damage to dozens of homes and businesses throughout other Freeport communities.

South America

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/1-3/5	Flooding	Bolivia	16+	46,200+	2.5+ million

Days of heavy rains between the 1st and the 5th in Bolivia led to at least 16 deaths. Governmental officials noted that eight of the country's nine departments had been subject to flooding and landslides. At least 46,200 families were forced to evacuate their homes after they were damaged. The United Nations allocated BOB18 million (USD2.5 million) to cover damage costs and to provide relief.

Europe

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/30-3/31	Winter Weather	United Kingdom	1+	Unknown	Unknown

A winter storm struck northern sections of the United Kingdom on the 30th and 31st, causing the death of at least one person and injuring nearly a dozen more. Heavy snows with snowdrifts measured at up to 1.2 meters (four feet) combined with gale-force winds in Scotland and Northern Ireland, where at least 75,000 customers lost electricity. The inclement weather also forced the closure of several highways and train services.

Africa

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/2	Flooding	Uganda	86+	Hundreds+	1+ million
3/6-3/12	Flooding	Kenya, Mozambique, Uganda, Zimbabwe	20+	10,000+	Unknown
3/10	TS Hubert	Madagascar	83+	7,000+	Unknown

At least 86 people died after flooding and landslides damaged and destroyed villages in eastern portions of Uganda on the 2nd. Some villages were buried under more than five meters (16 feet) of mud. Local markets were destroyed, many homes were swept away by landslides and numerous roads were blocked. Total damages were listed at UGX2 billion (USD1 million).

Heavy rains affected parts of Kenya, Mozambique and Uganda between the 6th and the 12th, killing at least 20 people. In Kenya, at least eleven people were killed and 10,000 others abandoned their homes as flash floods and landslides occurred. In Mandera, at least 4,350 households were damaged, including 420 homes in Marsabit, due to the floods. Roads and bridges were also washed away. In Mozambique, two people were killed by flooding rains in three districts in the Zambezi Valley. Vast areas of agricultural land were completely flooded. Widespread flooding continued to affect eastern Uganda, where over 300,000 people were displaced. In Zimbabwe, floods destroyed at least 1,775 homes. In Angola, at least seven people were killed and at least 1,940 homes were damaged or destroyed.

Tropical Storm Hubert made landfall on Madagascar's eastern coast near the Port of Mananjary on the 10th with maximum sustained winds of 75 kph (45 mph). At least 83 people died and over 186,000 were affected by the storm's heavy rains. According to Madagascar's National Office for Disaster Preparedness, at least 7,000 homes, properties, roads and bridges were damaged by flooding. Over 90,000 hectares (222,394 acres) of rice paddies and crop fields were also submerged.

Asia

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
2/28-3/1	Winter Weather	China	0	5,883+	274+ million
3/4	Earthquake	Taiwan	0	1,000+	10.3+ million
3/8	Earthquake	Turkey	41+	Hundreds+	Unknown
3/11-3/13	Flooding	Kazakhstan	41+	2,000+	127,000+
3/27-3/28	Winter Weather	China	0	12,649+	530,000+
3/28-3/31	Severe Weather	India	7+	16,000+	Unknown

Heavy snows fell across Shandong Province in China on February 28th and March 1st, causing widespread damage. At least 5,883 homes were damaged or destroyed along with 66,310 hectares (163,855 acres) of crops. According to the Chinese government, the snows inflicted direct economic losses of CYN1.87 billion (USD274 million) across seven cities in the province.

A magnitude-6.4 earthquake occurred in southern portions of Taiwan on the 4th, injuring at least 96 people and causing minor damage. The tremor occurred at 8:20 AM local time (6:20 PM central time) and was centered approximately 40 kilometers (25 miles) northwest of Taitung. Over 1,000 homes were damaged, and cracks in buildings and bridges were observed. The most extensive damage was reported in Jiashian, where temporary housing units collapsed. At least five fires were reported following the earthquake, including a large fire at a textile factory in Tainan City. Total losses of NT\$330 million (US\$10.3 million) were reported.

An earthquake struck southeastern Turkey on the 8th, killing at least 41 people and injuring 74 others. The magnitude-5.9 tremor struck at 4:32 AM local time (2:32 UTC) with an epicenter 45 kilometers (30 miles) west of Bingol, Turkey. Damage reports from the region indicated that hundreds of homes were destroyed around the epicenter in several villages (including Okcular and Yukari Demirci) in the eastern province of Elazig. Local officials reported that the homes and barns that collapsed were poorly constructed made with mud-brick and stone. However, well-built structures such as schools, hospitals, museums and government buildings sustained only minor cosmetic damage. The earthquake reportedly toppled the minarets of three mosques in the Basyurt region of Elazig.

The combination of warm temperatures and snowmelt led to swollen rivers and two burst dams in Kazakhstan between the 11th and the 13th. At least 41 people were killed and thousands were forced to evacuate their homes. Officially, at least 2,000 homes and other structures were damaged or destroyed as floodwaters spilled over the walls of a dam in Aksuisky district and washed away a second dam in the nearby Karatalsky district. Major railroads and highway bridges across the country were also washed away. A bridge on a main highway connecting the capital Almaty with the northern city of Ust-Kamenogorsk near the border with Russia was destroyed. At least CHF134,500 (USD127,000) was allocated for relief efforts.

Heavy snows fell across parts of Xinjiang Province in China on the 27th and 28th, destroying at least 12,649 homes. The storm also forced the closure of a stretch along the Number 312 National Highway in Ili prefecture as over 50 centimeters (20 inches) of snow fell. Total economic losses were listed at CYN3.6 million (USD530,000).

A pre-monsoonal storm system brought days of heavy rains to eastern parts of India between the 28th and the 31st, killing at least seven people and injuring over 72 more. Heavy rainfall, gusty winds and lightning led to the damage or destruction of at least 16,000 homes across southern Assam. The storms also caused widespread crop damage.

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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
3/1-3/3	Flooding	Queensland	0	7,500+	123+ million
3/6	Severe Weather	Victoria	0	105,000+	910+ million
3/13-3/16	TC Tomas	Fiji	2+	4,000+	33+ million
3/15-3/21	TC Ului	Solomon Islands, Queensland	0	812+	Millions+
3/22	Severe Weather	Western Australia	0	89,000+	598+ million

Heavy rains affected parts of Queensland and New South Wales between the 1st and the 3rd. According to the NSW SES, an estimated AUD 6 million (USD 5.5 million) in damages occurred to over 650 kilometers (404 miles) of Queensland's road network due to the flooding. In Queensland, several rivers also reported their highest levels in decades in the towns of Theodore, Dirranbandi, Charleville, Roma and St George. Local SES offices reported receiving several thousand calls for assistance. The Insurance Council of Australia deemed the event a catastrophe as over 7,500 insurance claims were filed totaling AUD 135 million (USD 123 million).

Severe thunderstorms crossed the Australian state of Victoria on the 6th, bringing large hail, high winds, lightning and flooding across the greater Melbourne area. According to the Bureau of Meteorology, over 45 millimeters (1.8 inches) of rain fell in just 30 minutes in Melbourne and its eastern and southeastern suburbs. Hailstones the size of tennis balls (ten centimeters (3.93 inches)) were reported in the suburbs of Taylors Lakes and Ferntree Gully, and winds gusted to nearly 100 kph (65 mph) at several locations as the squall line passed through. No fatalities were reported, though several dozen people sustained minor injuries from hailstones. The Victorian State Emergency Service (SES) received at least 7,400 phone calls for help, as the large hailstones punctured holes in roofs and windows of homes and vehicles while flash floods caused streets to become submerged and rivers to quickly fill. The Victoria SES reported that this was the largest hailstorm event in Melbourne's recorded history. According to the Insurance Council of Australia, at least 105,000 insurance claims were filed, totaling AUD 800 million (USD 735 million). Total losses (both economic and insured) well exceeded AUD 1 billion (USD 910 million).

Tropical Cyclone Tomas skirted the Fiji Islands on the 15th and 16th, killing at least two people and causing widespread damage. According to Fijian governmental officials and personnel from the National Disaster Management Office, the northern Lau and Lomaiviti island groups and the island of Vanua Levu both reported sustained winds of upwards of 175 kph (110 mph) with houses destroyed, trees uprooted and roads blocked. Forecasters at Fiji's Tropical Cyclone Center reported storm surges of up to seven meters (23 feet) in some spots on the Lau Island group. Reports indicated that at least 4,000 homes were destroyed along with seven of the 14 villages on the island of Koro. Nearly every home on Cikobia Island was damaged and up to 50 percent of all buildings on the Lau Island group sustained some damage as well. Total damages were estimated at FJD67 million (USD33 million).

Tropical Cyclone Ului affected the Solomon Islands and parts of Queensland in Australia between the 15th and the 21st. On the Solomon Islands, Ului affected the provinces of Isabel, Malaita, Guadalcanal, Temotu, Makira and Uluawa, and Rennel and Bellona with strong winds, rough seas, a storm surge and heavy rains. Damage assessments from the islands noted that at least 152 homes were damaged or destroyed and that several thousands of hectares (acres) of crops (primarily banana and pawpaw) had been damaged. In Queensland, Australia, Ului made landfall at approximately 1:00 AM on the 21st near Airlie Beach. Limited structural damage was reported in the communities affected by Ului (Mackay, Finch Hatton, Whitsundays and Midge Point). Sugar cane producers in Proserpine estimated that the industry lost approximately AUD20 million (USD18 million) from the cyclone. In terms of losses, Queensland's Premier reported that the total cost was expected to run into the 'millions of dollars (AUD)' with tourism, boating, dairy, sugar and mining industries taking hits. Insurers in the region reported receiving 660 claims.

Severe thunderstorms struck the greater Perth metropolitan area in Australia on the 22nd, causing widespread extensive damage. No fatalities were reported, though dozens of residents sustained minor injuries from hailstones and debris. The storm brought winds gusting to upwards of 120 kph (75 mph), tennis ball-sized hail to some locations and nine-hour rain totals of 40 millimeters (1.57 inches). Some of the damage included 15 schools which were forced to close, 11 hospitals and hail and flood damage at the University of Western Australia campus in Crawley. At a luxury apartment complex at the base of Jacob's Ladder in Kings Park, a mudslide struck two apartments and filled them with 1.5 meters (five feet) of mud. The storm also delayed trains and flights (after damage occurred at the domestic airport terminal). Nearly 200,000 Western Power customers lost electricity at the height of the event, with company officials noting that up to 500 power lines were downed. Representatives from Vegetables WA also noted that lettuce and tomato crops in the Carabooda-west Gingin area had seen major damage from the large hail stones. The Insurance Council of Australia received over 89,000 insurance claims which totaled AUD650 million (USD598 million).

APPENDIX

Updated Jan. 2010 – Feb. 2010 Data

United States

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/2-1/13	Winter Weather	Southeast, Plains, Midwest, Northeast	25+	25,000+	1.38+ billion
1/9	Earthquake	Northern California	0	463+	43+ million
1/17-1/22	Severe Weather	California, Arizona, Pacific Northwest	10+	50,000+	113+ million
1/20-1/24	Severe Weather	Southeast, Tennessee Valley	1+	500+	Unknown
1/27-1/30	Winter Weather	Plains, Southeast, Mid-Atlantic	13+	1,000+	Millions+
2/4-2/6	Winter Weather	Mid-Atlantic, Northeast	15+	35,000+	300+ million
2/6	Flooding	California	0	43+	31+ million
2/9-2/11	Winter Weather	Midwest, Mid-Atlantic, Northeast	6+	110,000+	800+ million
2/10	Earthquake	Illinois	0	Unknown	Unknown
2/10-2/11	Winter Weather	Southeast	0	Unknown	Unknown
2/23-2/28	Winter Weather	Northeast, Mid-Atlantic, Midwest	10+	90,000+	500+ million

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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/2	Winter Weather	Canada	3+	Unknown	Unknown
1/12	Earthquake	Haiti	220,000+	350,000+	8+ billion
1/18-1/22	Flooding	Mexico	3+	800+	5+ million
2/4-2/10	Flooding	Mexico	43+	6,500+	15+ million
2/5	Winter Weather	Canada	0	Dozens+	80,000+
2/25-2/26	Winter Weather	Canada	0	Unknown	Unknown

South America

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-1/7	Flooding	Brazil	201+	10,000+	145+ million
1/21-1/27	Flooding	Peru, Bolivia	30+	35,312+	300+ million
2/5-2/8	Flooding	Bolivia	15+	36,163+	138,000+
2/8-2/9	Flooding	Uruguay	0	Unknown	Unknown
2/11	Flooding	Peru	0	20,150+	Unknown
2/17	Flooding	Argentina	0	Hundreds+	Unknown
2/27	Earthquake	Chile	500+	1.5+ million	30+ billion

Europe

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-1/31	Winter Weather	UK, Central Europe, Northern Europe	276+	1,100+	4.63+ billion
1/1-1/15	Flooding	Albania, Bosnia, Croatia	0	2,489+	8+ million
2/1-2/2	Flooding	Canary Islands	1+	Hundreds+	Unknown
2/1-2/12	Winter Weather	Austria	15+	Unknown	Unknown
2/13-2/17	Flooding	Southern Europe	4+	Hundreds+	9.6+ million
2/20	Flooding	Madeira	43+	560+	1.89+ billion
2/23-2/24	Flooding	Spain	2+	400+	Unknown
2/27-2/28	Windstorm Xynthia	France, Portugal, Spain, Belgium, Germany	62+	5,000+	4+ billion

Africa

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-1/15	Flooding	Kenya	35+	30,000+	57+ million
1/17-1/18	Flooding	Egypt	15+	1,856+	36.2+ million
2/16	Flooding	South Africa	4+	Hundreds+	5.3+ million
2/22	Flooding	Zambia	9+	1,000+	Unknown

Asia

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/2	Earthquake	Tajikistan	0	1,098+	1.5+ million
1/2-1/12	Winter Weather	China, South Korea, India	43+	100,000+	29+ million
1/3-1/9	Earthquake	Solomon Islands	0	1,857+	Unknown
1/4	Landslide	Pakistan	19+	332+	50,000+
1/9	Flooding	Indonesia	3+	5,713+	Unknown
1/17-1/18	Flooding	Israel, Jordan	2+	163+	Millions+
1/17-1/23	Winter Weather	China	21+	38,000+	96+ million
1/21	Flooding	Indonesia	8+	2,000+	Unknown
1/31	Earthquake	China	1+	4,910+	4.4+ million
2/5	Winter Weather	Iran	8+	10+	Unknown
2/8-2/11	Winter Weather	India	21+	Unknown	Unknown
2/9	Winter Weather	Afghanistan	204+	3,800+	Unknown
2/13-2/19	Flooding	Indonesia	0	2,469+	215+ million
2/18	Winter Weather	Pakistan	116+	652+	Unknown
2/25	Winter Weather	China	7+	Unknown	Unknown
2/25	Earthquake	China	0	3,172+	882,000+

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

Event Date	Event Name Or Type ¹	Event Location	# of Deaths ²	# of Structures/ Claims ^{2,3}	Damage Estimates ^{2,4} (USD)
1/1-1/15	Flooding	New South Wales, Queensland	2+	Unknown	3.2+ million
1/22	CY Magda	Western Australia	0	Unknown	Unknown
1/24-1/30	CY Olga	Queensland	0	Unknown	Unknown
2/4-2/5	CY Oli	French Polynesia	1+	1,000+	70+ million
2/5-2/7	Flooding	New South Wales, Queensland	5+	3,000+	Unknown
2/11	CY Pat	Cook Islands	0	504+	10+ million
2/12-2/15	Flooding	New South Wales	2+	1,538+	16+ million
2/14	CY Rene	Tonga	1+	263+	Unknown

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

² As reported by public news media sources

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 and financial institution press releases. These estimates can include insured or economic losses.

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