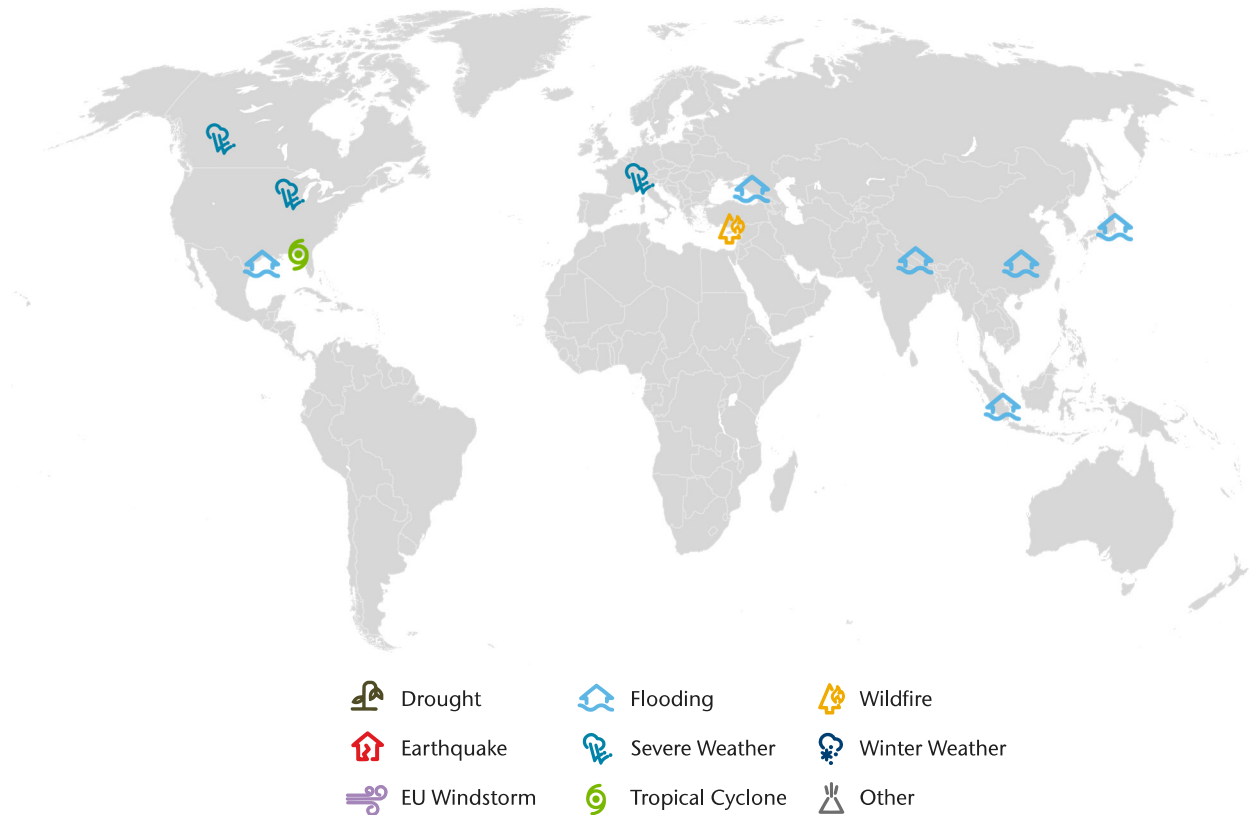




# Weekly Cat Report

July 9, 2021

## This Week's Natural Disaster Events



Event	Impacted Areas	Fatalities	Damaged Structures and/or Filed Claims	Preliminary Economic Loss (USD)*	Page
<b>Hurricane Elsa</b>	Caribbean/United States	5+	Thousands	100s of Millions	3
<b>Landslide</b>	Japan	9+	1,000+	Millions	8
<b>Severe Weather</b>	United States	0	Thousands	Millions	10
<b>Severe Weather</b>	Canada	0	Thousands	Millions	10
<b>Flooding</b>	Indonesia	0	2,040+	Unknown	10
<b>Flooding</b>	China	0	Hundreds	161+ million	10
<b>Flooding</b>	United States	0	Thousands	Millions	11
<b>Flooding</b>	Nepal	18+	Hundreds	Negligible	11
<b>Wildfire</b>	Cyprus	4	Dozens	Millions	11
<b>Flooding</b>	Russia	4	Hundreds	Millions	11

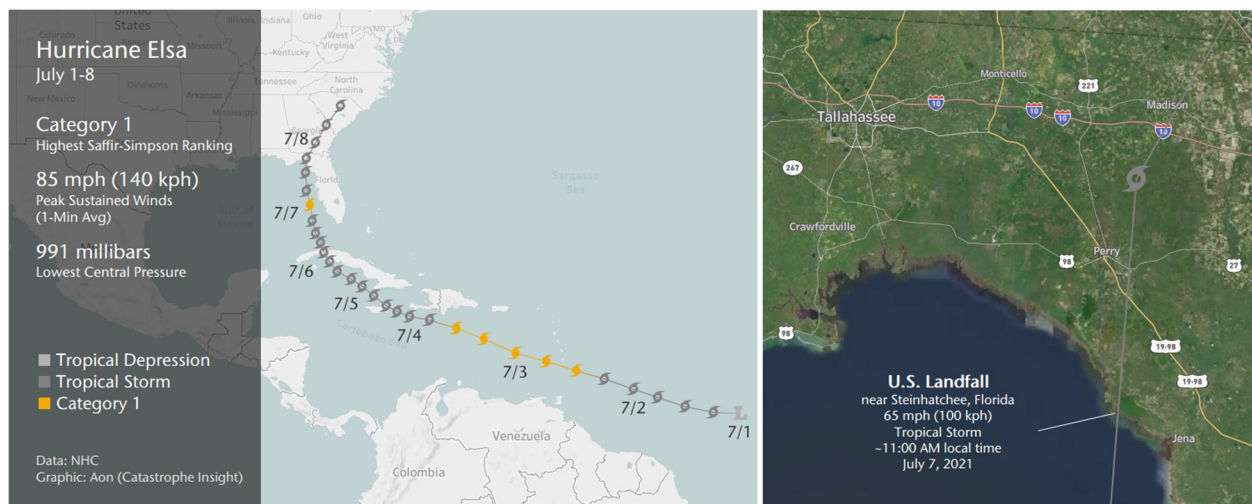
*\*Please note that these estimates are preliminary and subject to change. In some instances, initial estimates may be significantly adjusted as losses develop over time. This data is provided as an initial view of the potential financial impact from a recently completed or ongoing event based on early available assessments.*

Along with this report, we continue to welcome users to access current and historical natural catastrophe data and event analysis on Impact Forecasting's Catastrophe Insight website: <http://catastropheinsight.aon.com>

# Hurricane Elsa makes U.S. & Caribbean landfalls

*Hurricane Elsa became the first hurricane of 2021 Atlantic season and the earliest calendar year fifth-named storm on record. Elsa reached a peak intensity of 85 mph (140 kph) in the eastern Caribbean on July 2 – equivalent to a Category 1 storm on the Saffir Simpson Hurricane Wind Scale (SSHWS). Elsa generated significant impacts in the Caribbean and the southeastern United States between July 1-8. Notable losses were incurred to property and agriculture in Barbados, and the Windward Islands. In the United States, flash flooding was common across portions of Florida and Georgia on July 6-8 along with severe weather and isolated tornadoes. At least five storm related deaths were reported. Total economic losses along Elsa's track were expected to reach into the hundreds of millions (USD).*

## Meteorological Recap



The National Hurricane Center (NHC) began monitoring increased shower activity associated with a tropical wave several hundred miles southwest of the Cabo Verde Islands on June 29. As convection associated with the low-pressure area became better organized on June 30, the disturbance was designated Potential Tropical Cyclone Five as it tracked toward the Lesser Antilles. Hours later, as the elongated low-level circulation became better defined, Tropical Depression Five was officially recognized at 11:00 PM AST on June 30 (3:00 UTC July 1). The Tropical Depression continued to be steered quickly west-northwest around a strong sub-tropical ridge to its north.

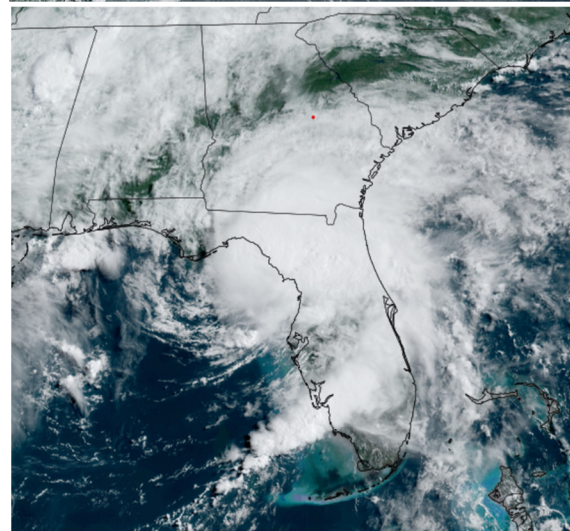
The storm hastily intensified into Tropical Storm Elsa by 5:00 AM AST (9:00 UTC) on July 1, with maximum sustained winds reaching 40 mph (65 kph) and moving westward at 25 mph (41 kph). Elsa became the earliest calendar year fifth-named Atlantic storm on record – breaking the previous record set by Edouard on July 6, 2020. The cyclone exhibited gradual strengthening while churning over a region of relatively warm sea-surface temperatures in an environment characterized by low vertical wind shear and high relative humidity.

As the storm passed south of Barbados, surface observations confirmed the cyclone had strengthened into Hurricane Elsa at 7:45 AM AST (11:45 UTC) on July 2, with maximum sustained winds of 75 mph (120 kph) – equivalent to a Category 1 hurricane on the Saffir-Simpson Hurricane Wind Scale (SSHWS), and the first hurricane of the 2021 Atlantic season. Hurricane Warnings were in effect for Barbados, St. Lucia, St. Vincent and the Grenadines as Elsa raced toward the Winward Islands.

At this time tropical storm force and higher winds were primarily confined to the storm's northern side. The center of Elsa subsequently passed near St. Vincent and St. Lucia in the afternoon hours on July 2.

Elsa briefly reached a peak intensity of 85 mph (140 kph) in the eastern Caribbean Sea on July 2 before beginning a weakening trend, which was aided by moderate northwesterly shear partially imparted due to the storm's rapid forward motion. Hurricane warnings remained in effect for portions of Haiti and the Dominican Republic despite data from NOAA Hurricane Hunter Aircraft which confirmed Elsa had weakened back to a Tropical Storm by the afternoon of July 3. By the morning of July 4, Elsa began turning northwestward around the western periphery of the subtropical ridge between Haiti and Jamaica, which was accompanied by a decrease in forward speed.

Tropical Storm Elsa made landfall along the southern Coast of Cuba, in Ciénaga de Zapata National Park, at 2:00 PM EDT (18:00 UTC) on July 5, with maximum sustained winds of 60 mph (96 kph). The storm brought rough seas to the southern Cuban Provinces, while producing strong winds and locally heavy rainfall. After undergoing temporary weakening, aided by interactions with rough terrain across Cuba, Elsa proceeded to strengthen on July 6 in open waters near the Florida Straits. Throughout the day, Elsa proceeded northward between an Atlantic subtropical ridge and a low-pressure system meandering in the northwestern Gulf of Mexico.



Elsa making landfall in Cuba (top) and Florida (bottom)  
Source: NOAA/RAMMB

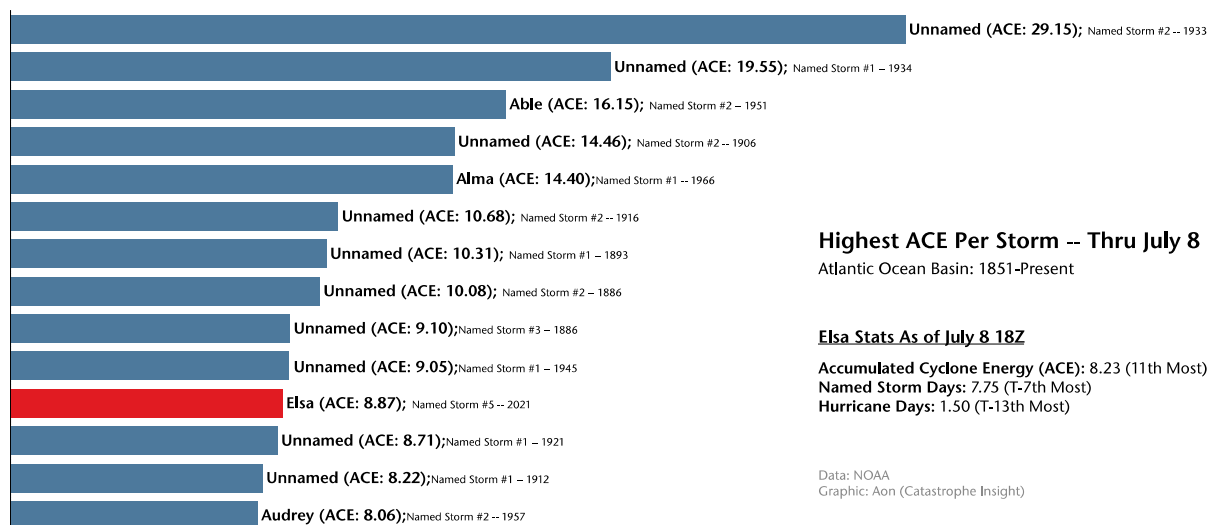
Elsa briefly regained hurricane status in the evening of July 6 at 8:00 PM EDT (0:00 UTC July 7) while southwest of Tampa Bay, supplemented with the development of an eyewall feature on radar imagery. During this time, Tropical Storm and Hurricane Warnings extended from the Florida Keys northward through the Big Bend region of Florida. Southwesterly shear in the Gulf of Mexico forced a majority of the heavy rainfall and deep convection associated with Elsa toward the eastern side of the storm and the western Florida coast. Having weakened back to a Tropical Storm, Elsa made a second landfall in rural regions of Taylor County, Florida (near Steinhatchee) at approximately 11:00 AM EDT (15:00 UTC) on July 7. At landfall, Elsa had maximum sustained winds of 65 mph (100 kph) and a minimum central pressure of 999 millibars.

The cyclone brought high storm surges, heavy rainfall, and tropical storm force winds to portions of the Florida Gulf coast between July 6-7. Elsa subsequently accelerated northeastward across the southeastern United States through July 7-8, where Tropical Storm Warnings were posted for coastal regions of Georgia and South Carolina, and eventually extended northward through New Jersey. Tropical Storm Elsa continued to produce localized severe weather and flooding rainfall across the Mid-Atlantic and Northeastern United States through July 9.



## Miscellaneous

While Elsa will not be a record-setting storm from a damage, loss, or impact perspective, it has placed itself as one of the most notable early season Atlantic tropical cyclones in the historical record. Looking at three metrics, the storm has placed itself in the top 12 of events occurring through the first full week of July: Accumulated Cyclone Energy (ACE) – which is a measure of storm intensity and longevity – it places 11<sup>th</sup>; Named Storm Days it places 7<sup>th</sup>; Hurricane Days it places 13<sup>th</sup>.



## Event Details

### Caribbean

In **Barbados**, the Meteorological Service reported a sustained wind of 74 mph (120 kph) gusting to 86 mph (138 kph) as Elsa neared the island on July 2, while sustained winds at the Barbados Airport reached 63 mph (101 kph). Locally heavy storm total rainfalls approached 6 to 8 inches (150 to 200 millimeters). Impacts from Elsa were primarily confined to southern portions of Barbados and included damaged roofs, downed trees, flash flooding, and island wide power disruptions. As of this writing, no less than 1,100 homes across Barbados sustained damage to varying degrees - of which at least 62 homes were collapsed. Fire Services received reports of no less than 500 pole fires throughout the duration of the storm. Suspension of flights to and from Grantley Adams International Airport lasted multiple days due to the anticipation of and lingering impacts from Hurricane Elsa.



**Hurricane Elsa impacts in Barbados**  
Source: Marsha Caddle, Parliament

In **St. Vincent and the Grenadines**, at least 43 homes and three police stations suffered damage, with the most extensive impacts occurring on the northern half of St. Vincent. This damage came as the Island of St. Vincent was still recovering from devastating eruptions of the Soufrière volcano which occurred earlier in the year. Elsa further compounded significant livestock and agriculture losses across the nation.

In **St. Lucia**, no less than 90 percent of St. Lucia Electricity Services Limited (LUCELEC) customers lost power during the peak of the storm. In addition to damages incurred to infrastructure and properties, Elsa resulted in significant impacts to the islands agricultural sector. According to the Prime Minister, damages to bananas and plantains were anticipated to exceed USD34 million alone. One storm related death on the island was confirmed.



**Debris from Elsa in the Dominican Republic**  
Source: MOPC, República Dominicana

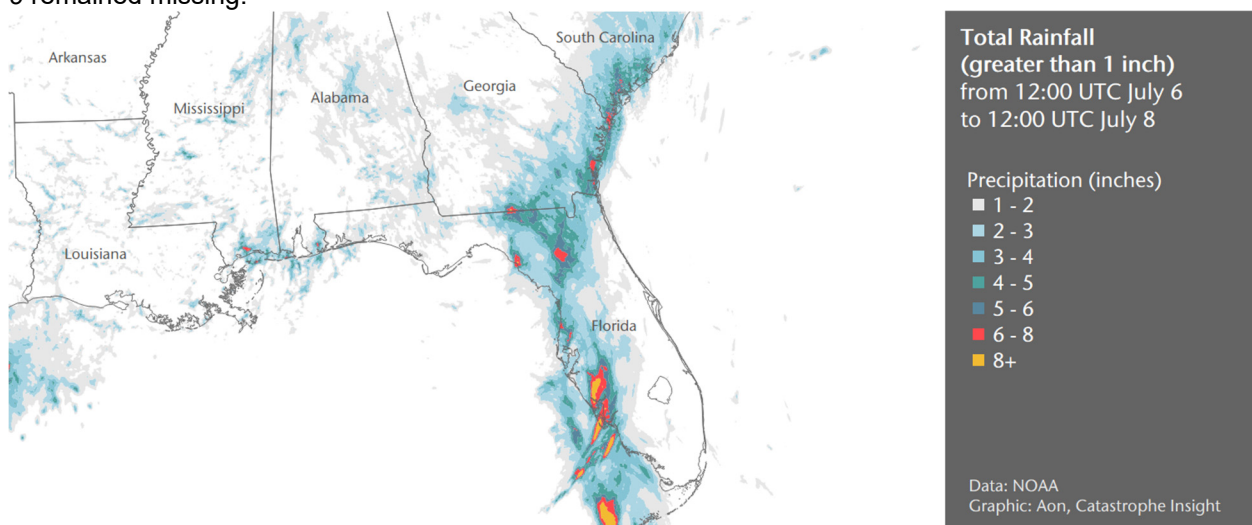
In the **Dominican Republic**, two deaths resulted from collapsed walls caused by the cyclone. No less than 16,000 customers across the country lost power throughout the duration of the storm. In the wake of the storm, at least 51 homes sustained damages, and no less than 157,000 customers temporarily lost electricity services.

In **Cuba**, heavy rains and strong winds resulted in agricultural losses and mudslides in the eastern Cuban province of Granma, where several homes were damaged by the storm. Wind gusts in Cabo Cruz reached 100 kph (62 mph). At least 180,000 residents in vulnerable areas were evacuated as Elsa neared landfall. In the Matanzas

Province, heavy rains and overflowing rivers resulted in extensive flooding particularly in the Cities of Cárdenas and Matanzas - where floodwaters covered roadways and entered residences.

## United States

A boat heading from Cuba toward the United States carrying 22 passengers capsized on the evening of July 5 in rough seas enhanced by the approach of Elsa. As of this writing, 13 people were rescued while 9 remained missing.



In **Florida**, the Governor declared a State of Emergency in anticipation of the impacts from Elsa, which covered 33 counties by July 6. On the same day, lightning and strong winds from the storm temporarily delayed search and rescue efforts at the Champlain Towers condo collapse site in Surfside, Florida. Tampa International and Sarasota Bradenton Airports suspended operations due to the expected strong winds forecast from the storm. At the peak on July 7, approximately 30,000 customers across the state were without power.

A maximum wind gust of 70 mph (112 kph) was reported in Monroe County at Key West on July 6, while a gust of 64 mph (102 kph) was measured in Pinellas County on Sand Key. A storm surge of 2.6 feet (0.8 meters) above mean high higher water (MHHW) was measured in Cedar Key (Levy County) in the afternoon of July 7. A 30-hour rainfall total ending at noon (EDT) on July 7 of 11.04 inches (280 millimeters) was measured in Charlotte County near Punta Gorda. The western coastal counties of Florida were particularly impacted by strong winds, rough seas, and flooding tropical rains generated by Elsa.

In Baker County, portions of Interstate-10 were blocked by fallen trees near Osceola National Forest. In Duval County, one death was confirmed due to a tree which fell on vehicles.

In **Georgia**, an EF-2 tornado with maximum winds of 128 mph (205 kph) was surveyed in Camden County near Eagle Hammock RV Park and the Naval Submarine Base in Kings Bay. The tornado damaged and flipped multiple RVs with debris scattered throughout the area. According to the Naval Submarine Base, at least nine injuries were reported and twelve recreational vehicles were impacted as the storm passed. Further north in Glynn County, Flash Flood Warnings were in effect for Brunswick and St. Simmons Island, where the National Weather Service (NWS) reported dangerous flooding along multiple roadways.



**Tornado impacts in Camden County, GA on July 7**  
Source: Naval Submarine Base Kings Bay

## Financial Loss

With (now) Tropical Storm Elsa continuing to track through the U.S. Northeast as of this writing and is forecast to eventually quickly track across portions of Atlantic Canada, it remains too preliminary to provide any specific economic or insured loss event estimates at this time.

Early damage reports out of the Caribbean do indicate notable damage to agriculture and infrastructure – as well as residential and commercial property – on several islands. Based on preliminary data already released by various governmental agencies, the economic loss from the Caribbean portion of Elsa's track is likely to exceed USD100 million. A sizeable portion of the damage is likely to be uninsured.

Preliminary damage reports from the United States suggest notable flood and severe thunderstorm damage from Florida into the Northeast. However, the overall scope of early damage suggests a very manageable event for the insurance industry.

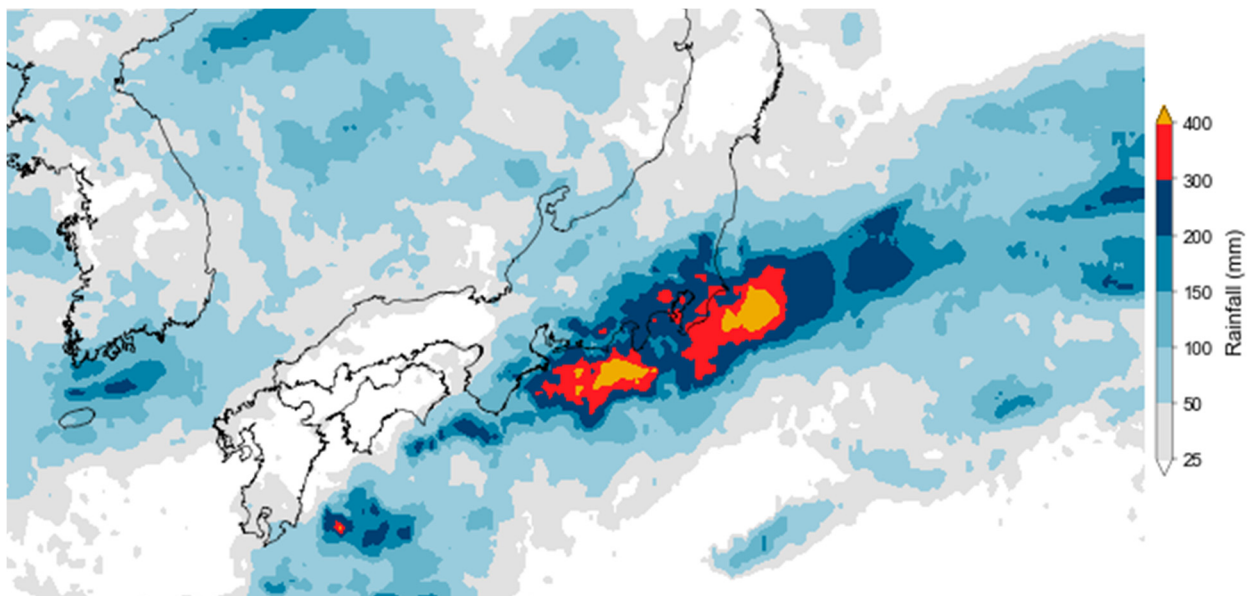
# Seasonal rains spawn landslides & flooding in Japan

*Excessive seasonal rainfall generated multiple instances of flooding and landslides across portions of eastern Japan during the first days of July. The rainfall aided in triggering a large and deadly landslide which swept through portions of Atami City in the Shizuoka Prefecture on July 3. The landslide resulted in extensive damage and left nine people dead and several others missing. Nationwide, flooding and landslides resulted in hundreds of structures being damaged or inundated. Total economic and insured losses were anticipated to reach well into the millions (USD).*

## Meteorological Recap

Torrential seasonal rains associated with the quasi-stationary Baiu front significantly impacted portions of western and Pacific eastern Japan during the first days of July – particularly the Tōkai region. According to the Japanese Meteorological Agency (JMA), 72-hour rainfall totals in the Kanagawa Prefecture in Hakone reached 790 millimeters (31.1 inches) by the morning of July 3. During the same period, 550 millimeters (26.1 inches) were reported in the Shizuoka Prefecture in Gotemba. The nearby seaside town of Atami recorded a 48-hour rainfall total of 313 millimeters (12.3 inches) by the morning of July 3 – higher than the climatological average for the entire month of July. This prompted numerous mudslides and landslides. In total, at least thirty locations in five prefectures set new 48-hour rainfall records for July.

*The seasonal Baiu front (also known as “Meiyu” or “plum rains” in China) is an east-west oriented quasi-stationary boundary which extends over the western Pacific and Japan towards its eastern end. Heavy convective rain bands propagate along the front and produce heavy to very heavy rainfall in tandem to their movement. Throughout the rainy season, the Baiu front pushes northward across Japan, reaching as far north as Sakhalin Island by late-July.*



**Satellite derived precipitation estimates between June 30 – July 4**  
Source: NASA/GPM



## Event Details

In **Shizuoka Prefecture**, a deadly landslide washed mud and debris nearly 2 kilometers (1.2 miles) down steep terrain in the Izusan area of Atami City before reaching the coast in the morning of July 3. The swift movement of the landslide swept away vehicles, buried homes and covered roadways. The Mayor of Atami indicated as many as 300 households were impacted to varying degrees, with numerous homes destroyed. At least nine fatalities were confirmed, though several other people remained listed as missing. Search and rescue operations and damage assessments were ongoing. In the wake of the event, evacuation alerts were issued for at least 21,000 households in Atami. Service on the Central Japan Railway Co. between Shinkansen Line between Odawara and Atami were briefly suspended, impacting 20,000 passengers.



**Aerial photograph outlining debris flow damage in Atami**  
Source: Ministry of Land, Infrastructure, Transport and Tourism

Beyond the major landslide at Atami City, flooding rains led to additional damage across several prefectures, including elsewhere in Shizuoka (460 structures). Other affected prefectures included Shimane (73 structures), Kanagawa, Tottori, and Chiba. In total, Japan's Fire and Disaster Management Agency had cited 626 structures flooded or inundated in preliminary statistics – which excludes the presumed totals at Atami City.

## Financial Loss

As relief and recovery efforts remain in Atami City, and assessments continue across several Japanese prefectures, it remains too early to provide any financial loss guidance at this time. However, the scale of this recent event is substantially less than the floods of July 2020 in Kyushu that resulted in an insured loss of USD2.6 billion (2021 USD).

# Natural Catastrophes: In Brief

## *Severe Weather (United States)*

Multiple rounds of severe weather evolved across the central and eastern United States between July 6-7 in the vicinity of a pre-frontal trough and slowly moving west to east oriented frontal boundary draped across the Upper Midwest, Great Lakes, and Northeast. The storms were enhanced by rich low-level moisture and ample daytime heating. On July 6, straight-line wind gusts approaching and topping 60 mph (96 kph) impacted the New York City Metropolitan Area. The storms disrupted flight traffic, while resulting in numerous reports of downed trees and power lines - particularly in regions of Michigan, Ohio, Pennsylvania, New Jersey, New York, Connecticut, and Massachusetts. Thousands of customers in northern New Jersey and New York City lost power on July 6, while severe storms in southern Michigan on July 7 resulted in at least 120,000 power outages. Total economic losses were anticipated to be in the millions (USD).

## *Severe Weather (Canada)*

Severe thunderstorms across the Canadian Prairies developed in a warm and humid environment ahead of an approaching cold front between July 2-3. The most notable impacts occurred in southern Alberta, where several rounds of severe storms impacted the Calgary Metropolitan Region on July 2. In southwest Calgary large hail, approaching 5.4 centimeters (2.1 inches), generated numerous reports of broken windows, damaged siding, dented vehicles, and downed tree limbs. Additionally, heavy rainfall resulted in flash flooding which inundated many roadways across Downtown Calgary. The most extensive flooding occurred in eastern sections of the city, including the Marlborough Mall. Sewer backups in multiple residences and commercial buildings were reported. Total economic losses were anticipated to be in the tens of millions (USD).

## *Flooding (Indonesia)*

Heavy rainfall triggered flooding and landslides in parts of Aceh Yaya Regency of Indonesia on July 5-7. Among the worst affected were subdistricts Teunom, Panga, Darul Hikmah, Setia Bakti, Krueng Sabee, Sampoiniet, and Jaya. The National Board for Disaster Management (BNPB) noted more than 2,000 flooded homes.

## *Flooding (China)*

Extensive flooding in China's Jiangxi Province between June 28 and July 2 resulted in notable economic loss. Authorities noted hundreds of damaged homes and at least 70,300 hectares (174,000 acres) of crops inundated throughout the province. Some 55 county-level areas (out of 97) were collectively impacted, affecting more than 1 million people. Economic losses were listed at CNY1.0 billion (USD161 million).

#### *Flooding (United States)*

Incessant rainfall associated with a cut off low pressure system, an abundance of tropical moisture from the Gulf of Mexico, and lack of upper level steering flow affected portions of Southern Texas between July 7-8. During this period the Weather Prediction Center (WPC) issued a High Risk of excessive rainfall along the lower to middle Texas Coast. In Aransas County, a Flash Flood Emergency was issued for the City of Rockport and surrounding communities on July 7. Data from the National Weather Service (NWS) indicated 10.52 inches (267 millimeters) of rainfall were measured in Rockport over a 24-hour period ending the morning of July 8. Floodwaters were reported entering residences and buildings, while numerous roadways became impassable. Multiple stream gages in nearby rivers were anticipated to crest in the moderate to major flooding stages. Total economic losses were expected to reach into the millions (USD).

#### *Flooding (Nepal)*

Renewed rounds of monsoonal heavy rain triggered flooding and landslides in parts of Nepal from June 30 to July 5. At least 18 people were killed, eight were initially listed as missing and at least 31 were injured. Among the notably affected districts were Sarlahi, Tanahu, Udayapur, Rautahat or Solukhumbu. Initial information from disaster management authorities suggested dozens of homes damaged or destroyed and economic loss listed at minimally NPR18 million (USD150,000).

#### *Wildfire (Cyprus)*

Four people were killed as an extensive wildfire swept through the Limassol district of Cyprus on July 3-4 and burnt at least 5,000 hectares (12,350 acres) of forest and shrubland in the area. The event was described as one of the worst wildfires in the country's history. Economic losses due to the fire were under assessment.

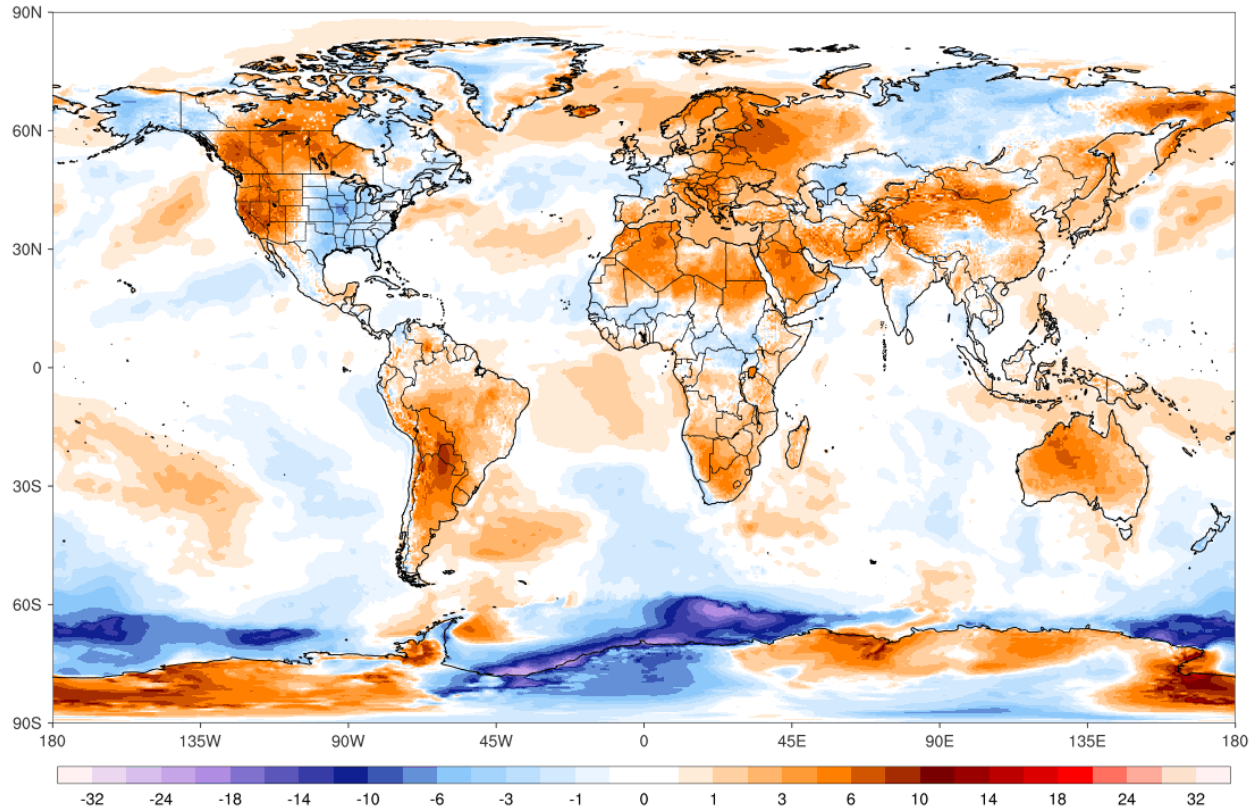
#### *Flooding (Russia)*

Notable flooding occurred in Krasnodar Krai in the southern part of the European Russia after a period of torrential rain on July 4-6. Four people were killed, while hundreds of homes and plots were inundated. Further damage was reported on local infrastructure. The worst affected were Tuapse, Slavyansky, Seversky, Sochi, Goryachy Klyuch, and Gelendzhik.

# Global Temperature Anomaly Forecast

GFS/CFSR 5-day Avg 2m T Anomaly (°C) [1979-2000 base]  
Thursday, Jul 08, 2021

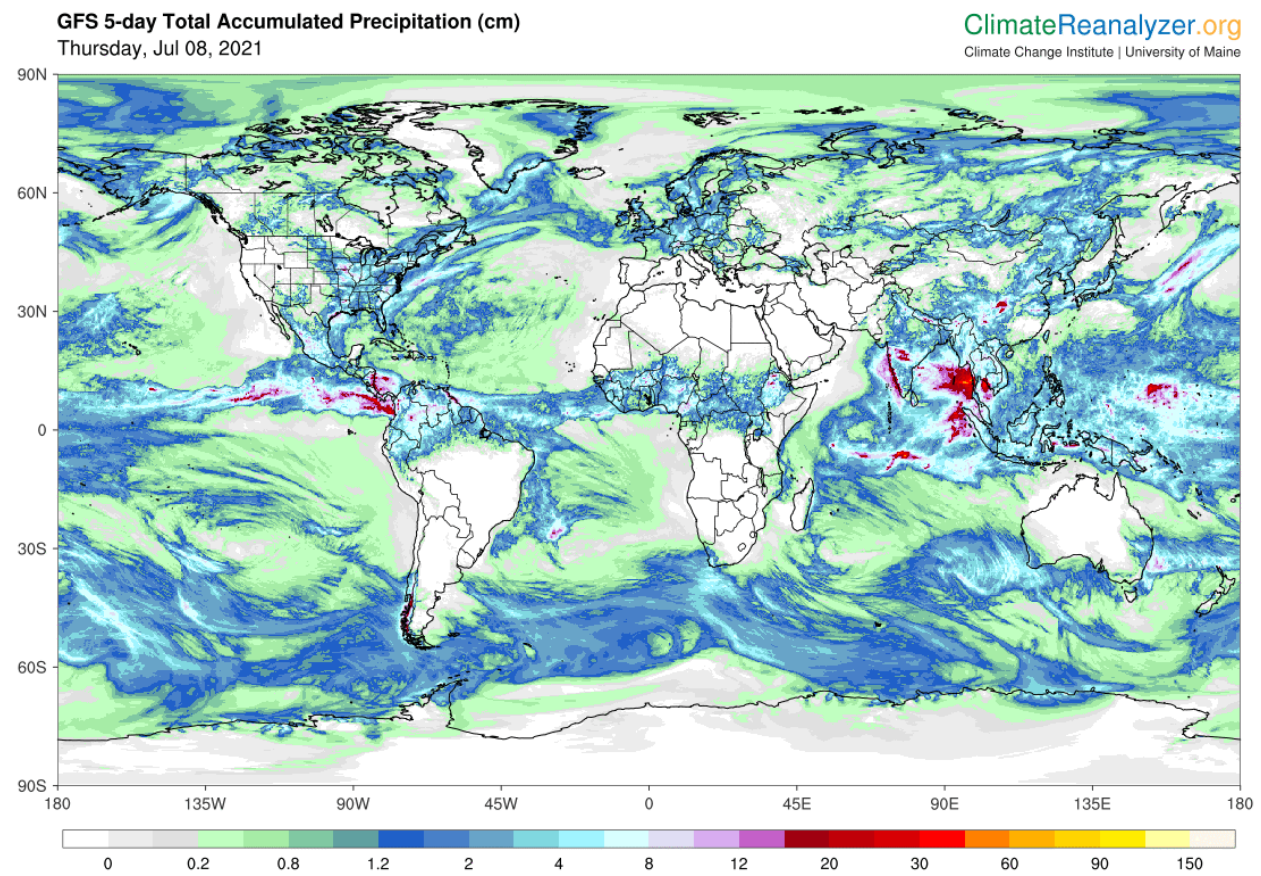
ClimateReanalyzer.org  
Climate Change Institute | University of Maine



Source: Climate Reanalyzer, Climate Change Institute, University of Maine, USA



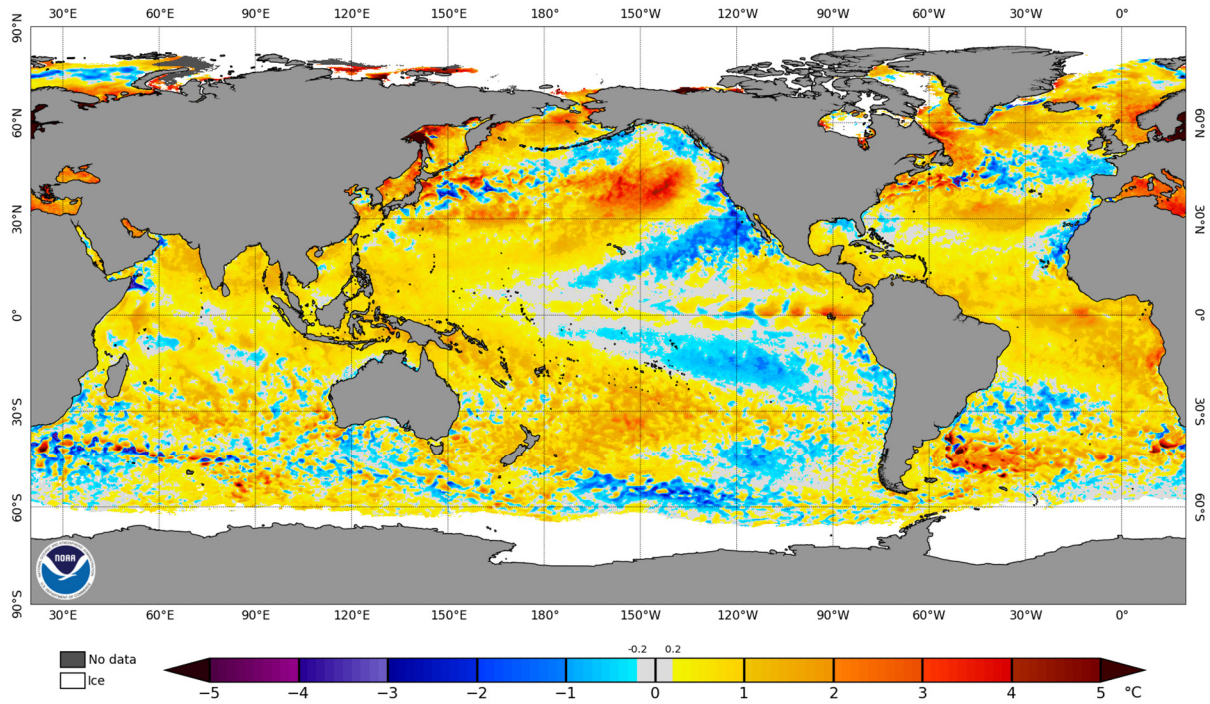
# Global Precipitation Forecast



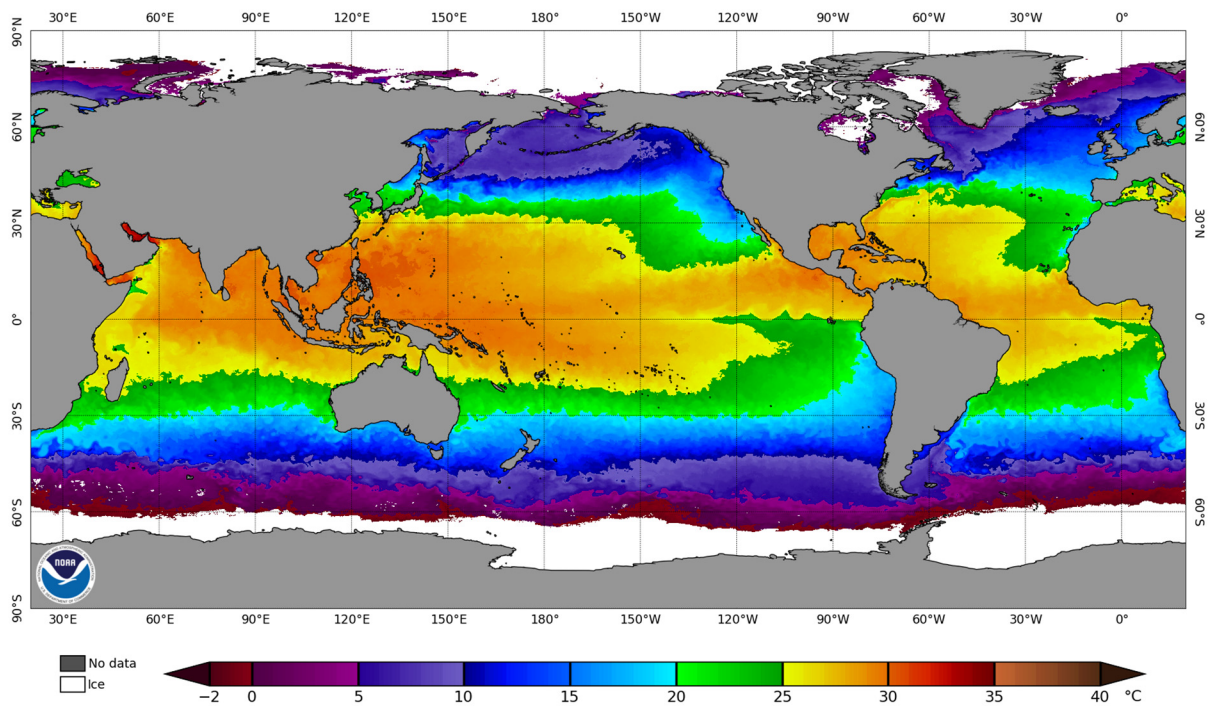
Source: Climate Reanalyzer, Climate Change Institute, University of Maine, USA

# Weekly Sea Surface Temperature (SST) Maps (°C)

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 6 Jul 2021

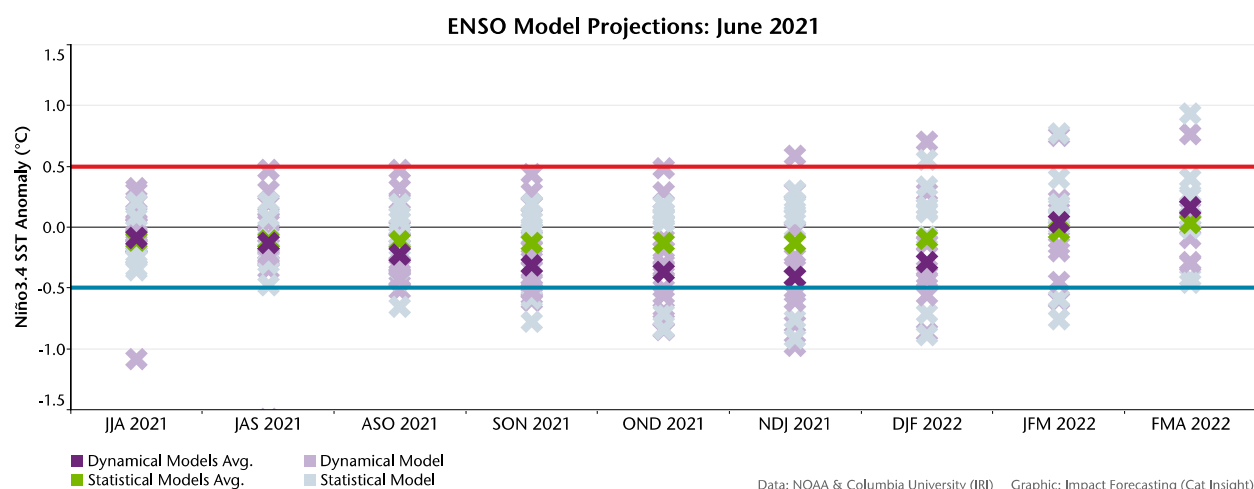
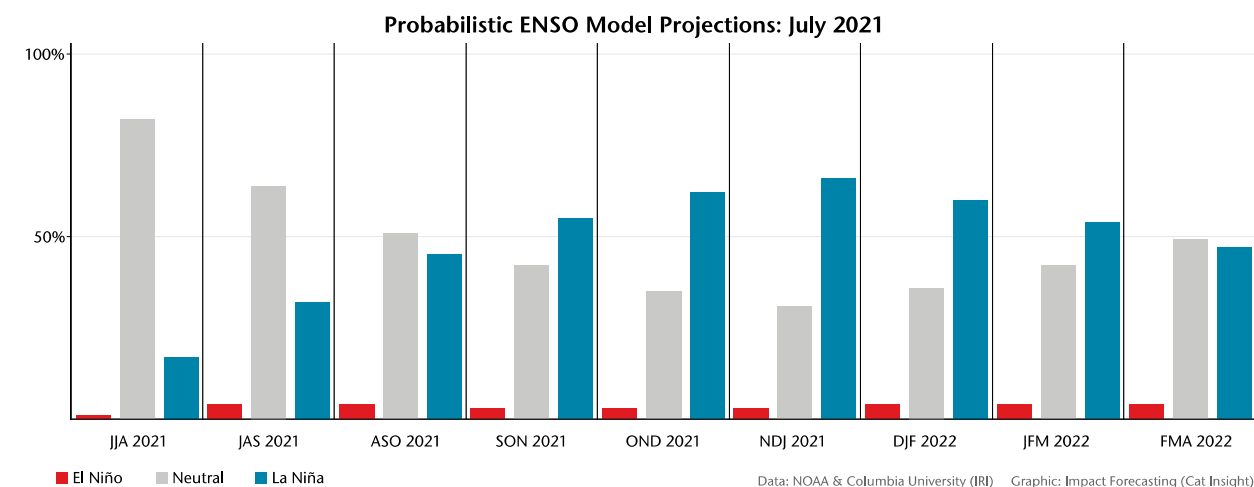


NOAA Coral Reef Watch Daily 5km Sea Surface Temperatures (v3.1) 6 Jul 2021



# El Niño-Southern Oscillation (ENSO)

ENSO-neutral conditions are currently present, though NOAA has issued a La Niña Watch. NOAA notes a 78 percent chance that these neutral conditions will persist through the Northern Hemisphere summer (June-August), and a 50 percent chance of ENSO neutral lasting into boreal fall (September-November).



**El Niño** refers to the above-average sea-surface temperatures ( $+0.5^{\circ}\text{C}$ ) that periodically develop across the east-central equatorial Pacific. It represents the warm phase of the ENSO cycle.

**La Niña** refers to the periodic cooling of sea-surface temperatures ( $-0.5^{\circ}\text{C}$ ) across the east-central equatorial Pacific. It represents the cold phase of the ENSO cycle.

El Niño and La Niña episodes typically last nine to 12 months, but some prolonged events may last for years. While their frequency can be quite irregular, El Niño and La Niña events occur on average every two to seven years. Typically, El Niño occurs more frequently than La Niña.

**ENSO-neutral** refers to those periods when neither El Niño nor La Niña conditions are present. These periods often coincide with the transition between El Niño and La Niña events. During ENSO-neutral periods the ocean temperatures, tropical rainfall patterns, and atmospheric winds over the equatorial Pacific Ocean are near the long-term average.

El Niño (La Niña) is a phenomenon in the equatorial Pacific Ocean characterized by a five consecutive 3-month running mean of sea surface temperature (SST) anomalies in the Niño 3.4 region that is above the threshold of  $+0.5^{\circ}\text{C}$  ( $-0.5^{\circ}\text{C}$ ). This is known as the Oceanic Niño Index (ONI).



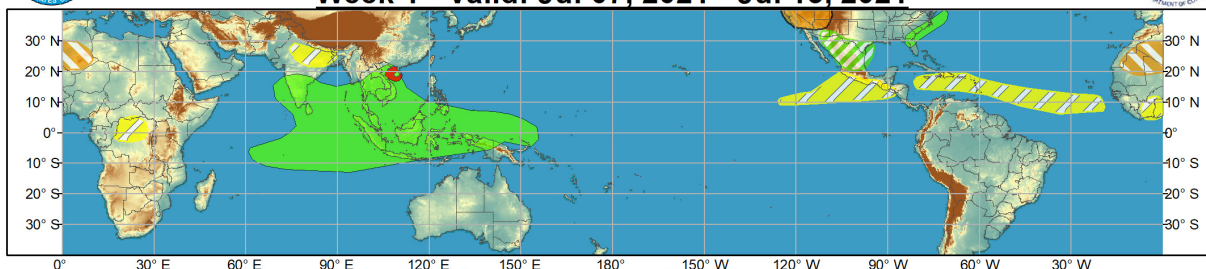
# Global Tropics Outlook



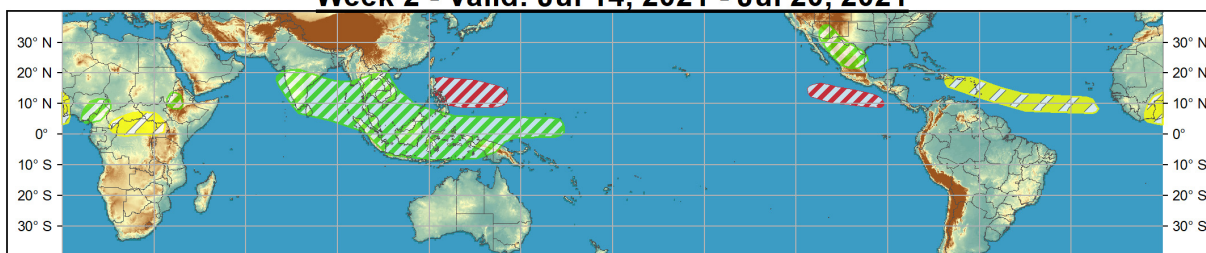
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 07, 2021 - Jul 13, 2021



Week 2 - Valid: Jul 14, 2021 - Jul 20, 2021



Produced: 07/06/2021

Forecaster: Pugh

Confidence		
High	Moderate	
		<b>Tropical Cyclone Formation</b> Development of a tropical cyclone (tropical depression - TD, or greater strength).
		<b>Above-average rainfall</b> Weekly total rainfall in the upper third of the historical range.
		<b>Below-average rainfall</b> Weekly total rainfall in the lower third of the historical range.
		<b>Above-normal temperatures</b> 7-day mean temperatures in the upper third of the historical range.
		<b>Below-normal temperatures</b> 7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



中央氣象局  
Central Weather Bureau



UNIVERSITY AT ALBANY  
State University of New York



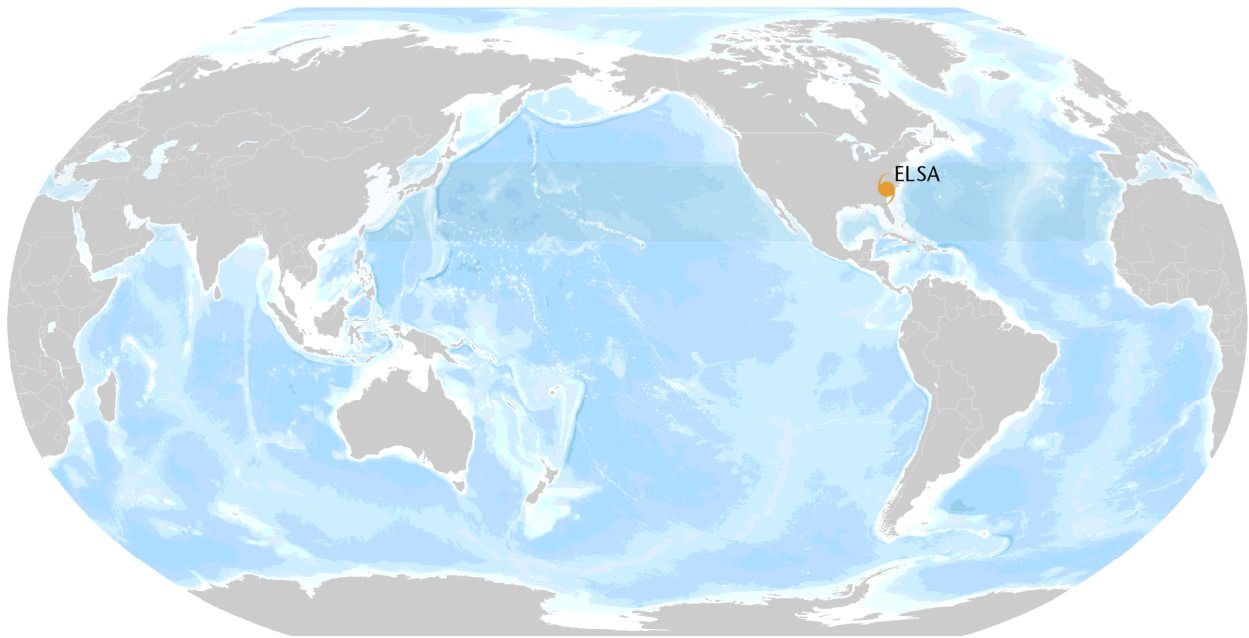
Australian Government  
Bureau of Meteorology



Source: Climate Prediction Center



# Current Tropical Systems



 Tropical Depression 
  Tropical Storm 
  Category 1 
  Category 2 
  Category 3 
  Category 4 
  Category 5

## Location and Intensity Information

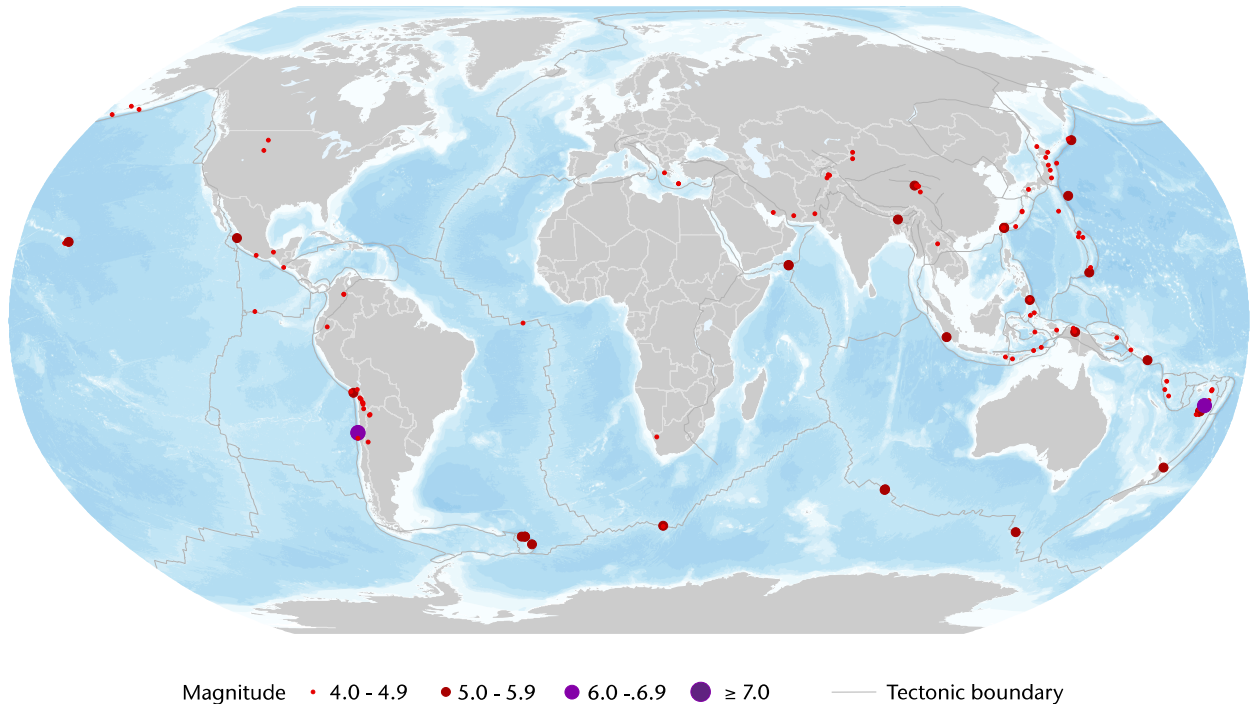
Name*	Location	Winds	Storm Reference from Land	Motion**
TS Elsa	34.2°N, 80.5°W	45 mph	25 miles (40 kilometers) E from Columbia, United States	NE at 18 mph

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

\*\* N = North, S = South, E = East, W = West, NW = Northwest, NE = Northeast, SE = Southeast, SW = Southwest

Sources: National Hurricane Center, Joint Typhoon Warning Center, Central Pacific Hurricane Center

## Global Earthquake Activity ( $\geq M4.0$ ): July 2 – 8

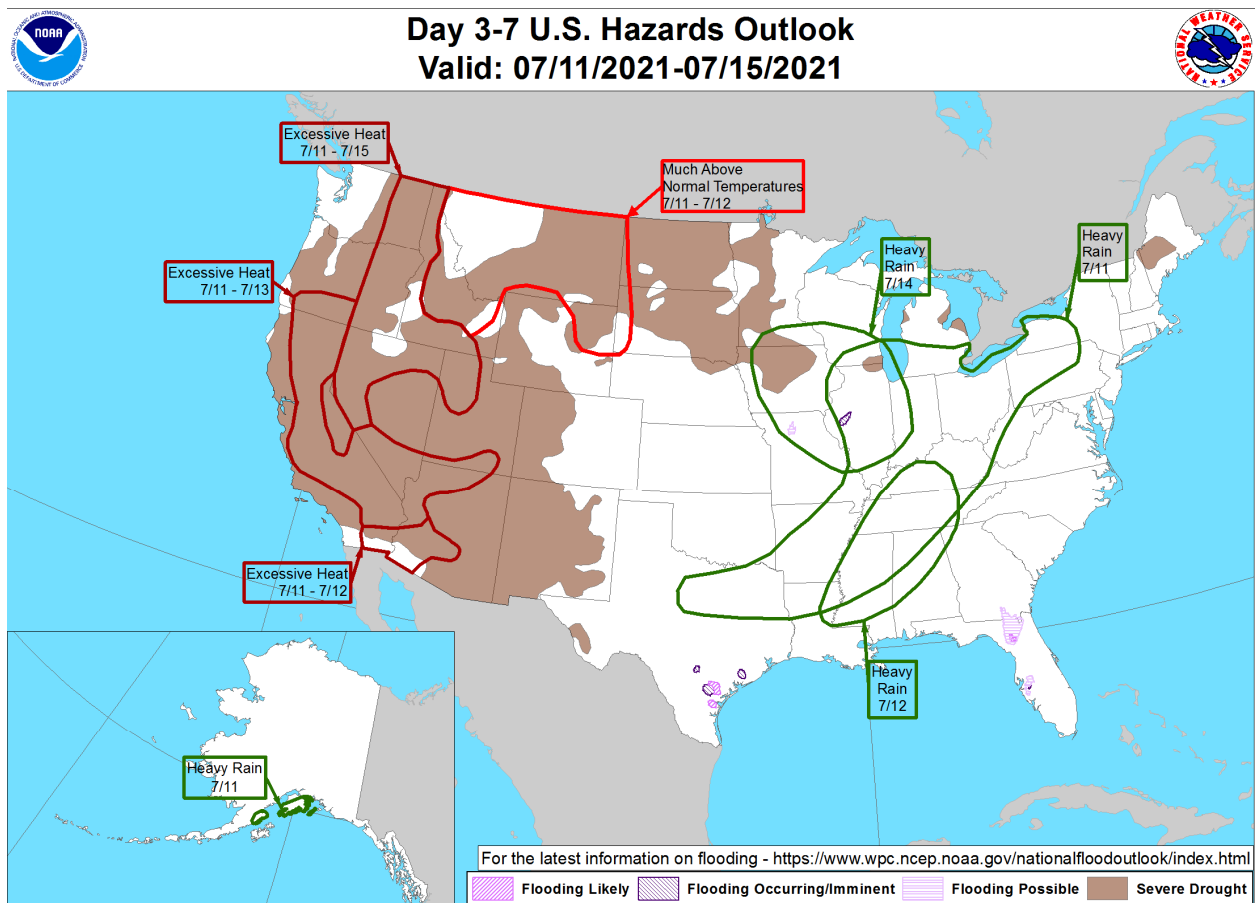


### Significant EQ Location and Magnitude ( $\geq M6.0$ ) Information

Date (UTC)	Location	Magnitude	Depth	Epicenter
07/02/2021	21.83°S, 179.36°W	6.1	606 km	Fiji region
07/04/2021	28.76°S, 71.65°W	6.0	10 km	89 kilometers (55 miles) WSW of Vallenar, Chile
07/04/2021	28.73°S, 71.66°W	6.0	10 km	89 kilometers (55 miles) W of Vallenar, Chile

Source: United States Geological Survey

# U.S. Weather Threat Outlook



Weather Prediction Center

Made: 07/08/2021 3PM EDT

Follow us: 

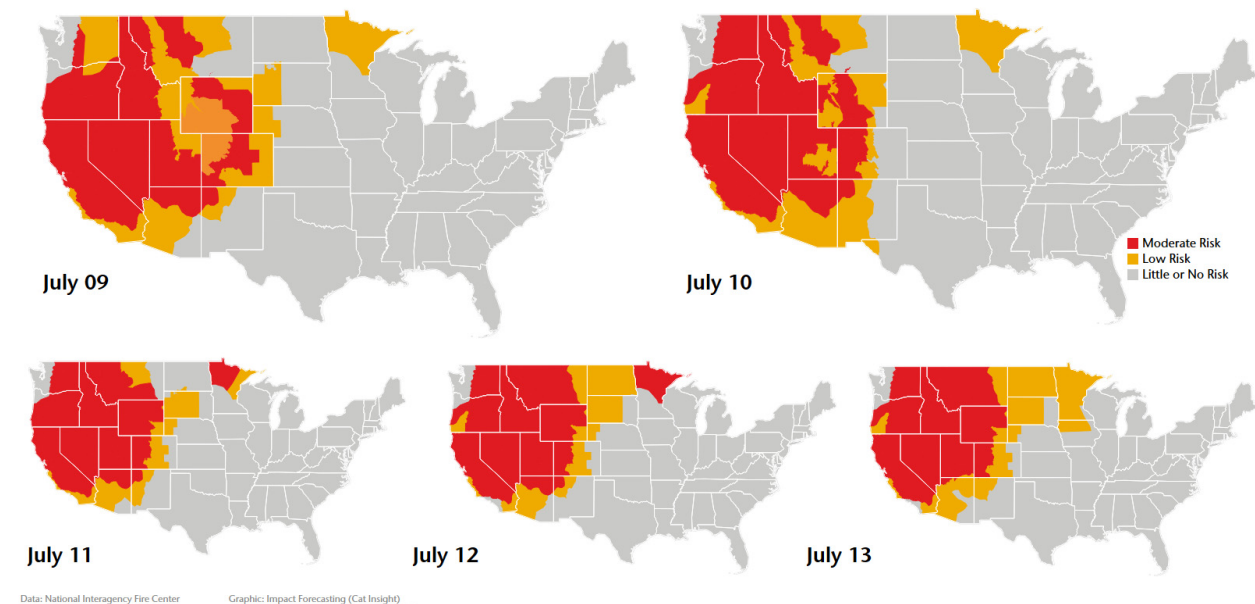
[www.wpc.ncep.noaa.gov](https://www.wpc.ncep.noaa.gov)

## Potential Threats

- A persistent upper level ridge across the Western United States will continue to generate much above normal temperatures and excessive heat through July 15, further enhancing wildfire and ongoing severe drought concerns in the West.
- Heavy rains are expected across portions of Mississippi Valley, the Great Lakes, the Ohio Valley, the Tennessee Valley, and the Southern Plains between July 10-12, as a low-pressure system and associated frontal boundaries sweep through the region.
- Heavy rainfall is possible across the Middle and Upper Mississippi Valley on July 14.
- Following recent bouts of heavy rainfall, flooding remains a concern across localities in Texas and the Southeastern United States.

# U.S. Wildfire: Significant Fire Risk Outlook & Activity

The National Interagency Fire Center has highlighted an expansive risk area for significant wildfire activity across much of the U.S. West and the Northern Tier. A return of extremely above normal temperatures is poised to return to the majority of the U.S. West is anticipated next week, which will amplify the ongoing historic drought and subsequent fire weather conditions in these areas. Dozens of fires continue to burn as of this writing.



## Annual YTD Wildfire Comparison: July 9

Year	Number of Fires	Acres Burned	Acres Burned Per Fire
2017	32,494	3,372,927	103.80
2018	31,219	3,270,089	104.75
2019	21,433	1,530,905	71.43
2020	26,774	1,566,959	58.53
2021	32,798	1,729,732	52.74
<b>10-Year Average (2011-2020)</b>	<b>29,008</b>	<b>2,619,724</b>	<b>90.31</b>

Source: National Interagency Fire Center

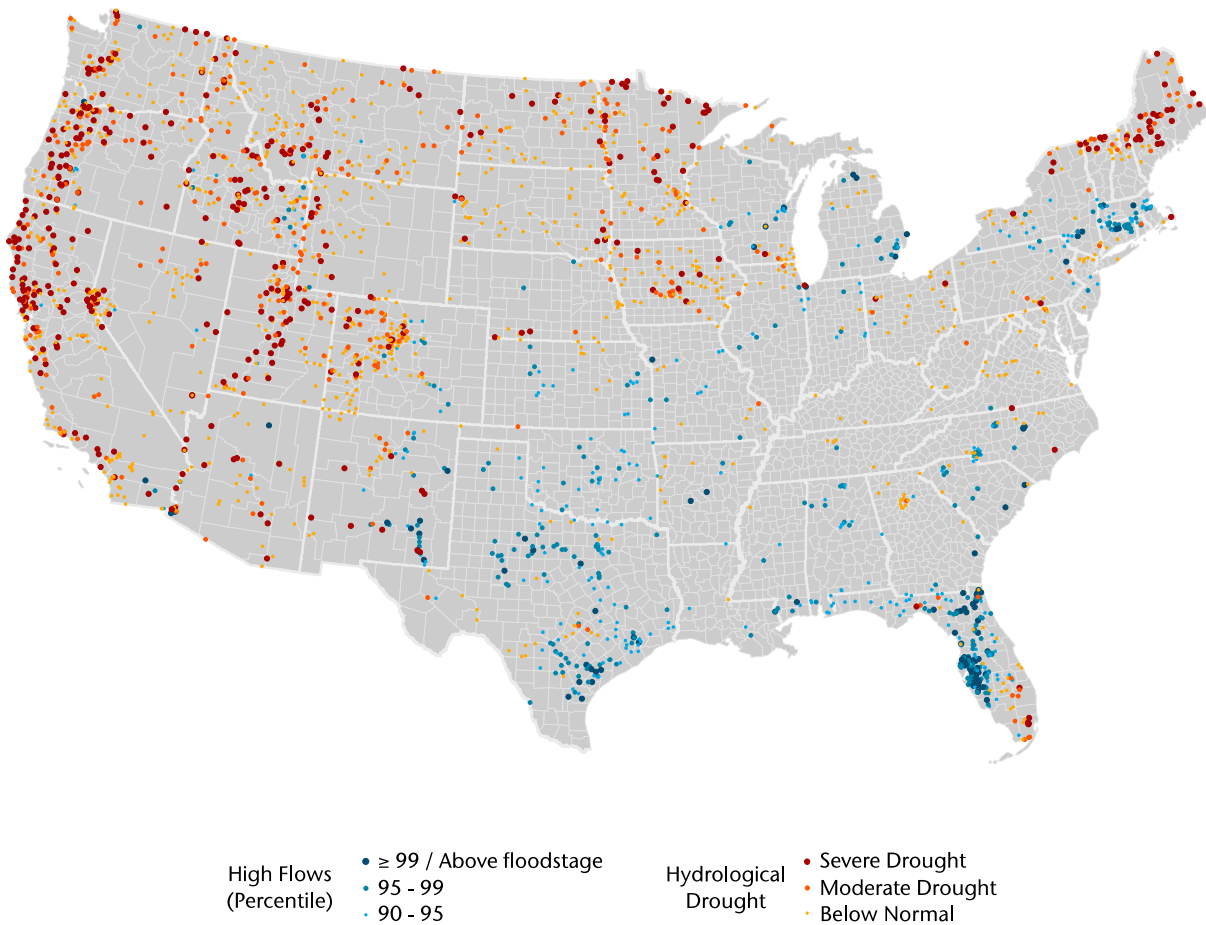
## Top 5 Most Acres Burned by State: July 9

State	Number of Fires	Acres Burned	Acres Burned Per Fire
Arizona	1,173	572,942	488.44
Alaska	283	143,481	507.00
New Mexico	433	121,277	280.09
California	5,046	85,867	17.02
Oklahoma	1,019	84,038	82.47

Source: National Interagency Fire Center



## Current U.S. Streamflow Status



A  $\geq 99^{\text{th}}$  percentile indicates that estimated streamflow is greater than the 99<sup>th</sup> percentile for all days of the year. This methodology also applies for the other two categories. A stream in a state of severe drought has 7-day average streamflow of less than or equal to the 5<sup>th</sup> percentile for this day of the year. Moderate drought indicates that estimated 7-day streamflow is between the 6<sup>th</sup> and 9<sup>th</sup> percentile for this day of the year and 'below normal' state is between 10<sup>th</sup> and 24<sup>th</sup> percentile.

## Top 5 Rivers Currently Nearing or Exceeding Flood Stage

Location	Current Stage (ft)	Flood Percentile
Kankakee River at Momence, Illinois	3.71	99.07
Current River at Doniphan, Missouri	4.11	99.00
Kankakee River at Shelby, Indiana	9.95	98.97
St. Marys River near MacClenny, Florida	14.56	98.94
Hockanum River near East Hartford, Connecticut	6.85	98.88

Source: United States Geological Survey

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## Hurricane Elsa makes U.S. & Caribbean landfalls

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## Seasonal rains spawn landslides & flooding in Japan

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## Natural Catastrophes: In Brief

U.S. National Weather Service

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Catastrophe Indices and Quantification (CatIQ)

*Severe thunderstorm floods roads in Calgary*, CBC

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Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

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