



Para la versión en español, escanee este código QR. NOAA Satellite and2025Information Service
(NESDIS) Calendar





Great Lakes Ice Cover in 2014 and 2024

These two images captured by the Suomi NPP and NOAA-20 satellites show the difference between ice coverage on the Great Lakes in 2014 and 2024. In 2024, for the second consecutive year, ice cover was significantly below average, with totals across all the Great Lakes measuring 2.7 percent. This record low was attributed to unusually warm temperatures in December, paired with the generally short duration of Arctic air blasts. (Image credit: NOAA)



Jason Cooper

Archivist NCEI Data Stewardship Division

NOAA has a long history of collecting environmental observations and is planning for the decades to come. NOAA's National Centers for Environmental Information (NCEI) increases the return on investment of these observing systems and missions, making the data findable, accessible, interoperable, and reusable by researchers, decision-makers and the public.



January 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
			New Year's Day			GOES-18 becomes operational in 2023
5	0 6	7	8	9	10	11
12	0 13	14	15 GOES-16 sends first image in 2017	16	17 JASON-3 launches in 2016	18
19	20 Martin Luther King, Jr.'s Birthday / Inauguration Day	• 21	22	23	24	25
26	27	28	• 29	30	31 NASA launches Explorer 1 in 1958	

Satellite Image of Sea Ice in the East Greenland Current

The NOAA-20, NOAA-21, and Suomi NPP satellites captured this image of sea ice off the coast of Greenland on July 12, 2024, using the Visible Infrared Imaging Radiometer Suite (VIIRS). This instrument collects global observations of the land, atmosphere, cryosphere, biosphere, and ocean as visible and infrared images. (Image credit: NOAA, CSU/CIRA)



February 2025

Aiwu Li

Physical Scientist, Cryosphere Product Area Lead NOAA/NESDIS/Office of Satellite and Product Operations (OSPO)

Snow and sea ice are two important indicators of climate change. The global distribution and seasonal changes in snow cover and sea ice cover are of considerable interest to scientists involved in various aspects of environmental science, weather forecasting, and climate and hydrological modeling. At NESDIS/OSPO, we offer several operational satellite-based cryosphere products. Most of the snow and ice products are archived at NCEI/CLASS (Comprehensive Large Array-data Stewardship System), which provides long-term datasets that are applicable to climate variability and change impact studies.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	• 5	6	7	8
9	10	11 DSCOVR launches in 2015	0 12	13	14	15
16	17 Presidents' Day	18	19	• 20	21	22
NOAA, JMA sign geostationary satellite back-up arrangement in 2005	24	25	26	27	• 28	



Five-Year Span of Geostationary Lightning Mapper Observations Reveals Long-Term Lightning Patterns

The Geostationary Lightning Mappers (GLMs), located on the GOES-R series satellites, continuously observe lightning distributions over the Americas and adjacent oceanic regions. Texture within the flash densities illustrate the close relationship between lightning occurrence and the underlying topography. (Image credit: Katrina Virts, from The University of Alabama in Huntsville)



March 2025

Scott D. Rudlosky

Physical Scientist Office of Geostationary Earth Orbit Observations

The Geostationary Lightning Mappers (GLMs) have captured over a trillion images to geolocate and characterize billions of lightning flashes. The occurrence, distribution, seasonal, and interannual variability of lightning and thunderstorms are closely linked to the Earth's climate. The close linkage between lightning and convective cloud properties and precipitation makes it a useful indicator for observing changes in climate and extreme storms.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						GOES-17 launches in 2018 and GOES-18 launches in 2022
2	3	4	5	• 6	7	8
9	10	11	12	13	0 14	15
16	17	18	19	20 Vernal Equinox	21	• 22
23	24 31	25	26	27	28	• 29



Cloud Normal Water Floodwater Depth (m) 0 1 2 3 4 5 6 7 8 9 ≥10

Flood Water Emerges From Kuskokwim River in Bethel, Alaska

On May 9, 2024, the Kuskokwim River overflowed near Bethel, Alaska, impacting many in the village. A developmental VIIRS downscaled flood depth product was able to provide estimates of the extent and severity of flooding in connection with the Alaska River Watch program. (Image credit: NOAA)



April 2025

Sean Helfrich

Physical Scientist Water Surface Conditions Team Lead

The NOAA STAR Flood team has worked diligently to improve flood inundation mapping throughout the Nation and many impacted areas of the world. The improved resolution products provide a much better assessment of flood location and severity for users like NOAA's National Water Center, NWS River Forecasters, and other federal and state officials.

From left to right: Jeffrey Key (Formerly of NESDIS/ STAR), Andrew Einhorn (University of Alaska), Laurence Conner (NESDIS/STAR), and Sean Helfrich.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 TIROS-1 launches in 1960	2	3	4	5
6	7	8	9	10	11	12
0 13	14	15	16	17	18	19
0 20	21	22	23	24	25	26
• 27	28	29	30			



Auroras as Seen From Space and From Earth

In the larger image, NOAA's Joint Polar Satellite System (JPSS) captured the stunning display of the aurora borealis that was visible during the May 2024 Jenn Gannon Solar Storm, the strongest geomagnetic storm in decades. The smaller image shows how viewers here on Earth experienced auroras from this G5-level storm at latitudes where sightings of auroras are uncommon. (Image credit: NOAA, CSU/CIRA. Photo by Daniel Jablonski, a NOAA/NESDIS Meteorologist in Marquette, MI)





May 2025

Elsayed R. Talaat

Director NOAA Office of Space Weather Observations (SWO), NOAA/ NESDIS

Auroras are a visual reminder of the largely invisible impacts of space weather on our Earth, and the importance of understanding and predicting these storms in order to minimize their harmful impacts on our daily lives, while still enjoying their beauty from a distance. I've been fascinated by auroras ever since I was a kid. I spent years researching the science behind space weather, and I came to NOAA to apply that science to make the observations that help save lives and protect property.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
• 4	5	6	7	8	9	10
11	0 12	13	14	15	16	17
18	5 19	• 20	21	22	23	24
25	Memorial Day	• 27	28	29	30 NOAA-20 becomes operational in 2018	31





June 2025

Monica Todirita

Flight Project Deputy Manager GOES-R/GeoXO

With GOES-U, NOAA put into operation a complex observing system that builds on remote-sensing advancements and provides vital capabilities for Earth and Space Weather forecast processes. We are constantly learning new ways to use this satellite data to better understand atmospheric and cosmic phenomena.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	• 3	4	5	6	7
		10	<u> </u>	12	12	14
8	9	10	0	12	13	14
15	16	17	• 18	19 Juneteenth National Independence Day	20 Summer Solstice / JASON-2 launches in 2008	21
22	23	24	GOES-U launches in 2024	26	27	28
29	30					



July 2025

Morgan Zabow

Community Heat and Health Program Manager NOAA/OAR/Climate Program Office (CPO)

Extreme heat kills more Americans each year than any other weather-related event—and heat is not distributed equally across neighborhoods. To address this issue, NOAA is working with interested partners, local communities, and community volunteers to collect heat data. This project spreads awareness about heat, and it engages the very people who are exposed. We have worked with more than 80 communities across the country and internationally to map their heat distribution and implement equitable cooling solutions such as tree planting, adding shading, creating heat action plans, and more.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 COSPAS-SARSAT international agreement signed in 1988	0 2	3	4 Independence Day	5
6	7	8	9	0 10	11	12
13	14 NOAA-CIMSS University of Wisconsin partnership begins in 1980	15	16	17	18	19
20	21	22	23	• 24	25	26
27	28	29	30	31		

Coral Restoration Tree at a Coral Nursery in Florida

The Advanced Baseline Imager (ABI) aboard the GOES-R satellite series and NOAA-20's Visible Infrared Imaging Radiometer Suite (VIIRS) provide data on ocean surface temperatures by looking at the infrared radiation that is emitted from the ocean. NOAA's Coral Reef Watch monitors this data and identifies areas at risk for coral bleaching. This allows coral reef managers to move corals to land-based nurseries when restoration and nursery sites are at risk of bleaching. (Photo credit: NOAA Coral Reef Watch)

August 2025

Erick Geiger

NOAA Coral Reef Watch Scientist NESDIS/STAR/SOCD

Coral reef managers rely on Coral Reef Watch (CRW) data for timely alerts related to coral bleaching risk due to heat stress. Over the past year, we developed single-pixel virtual stations that summarize the key bleaching risk metrics for individual reefs in U.S. jurisdictions. In 2023, Florida experienced an unprecedented marine heatwave and the restoration community used these stations to cross-compare relative heat stress by site and determine when and where to do interventions, including rescuing corals and bringing them to land-based nurseries.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					• 1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21 GOES-16 sees 2017 total solar eclipse	22	• 23
24 0 31	25	26	27 NOAA and EUMETSAT sign long-term cooperation agreement in 2013	28	29	30

Hurricane Helene Makes Historic Landfall

Hurricane Helene made landfall on Sept. 26, 2024, as a Category 4 storm with 140-mph winds. Within 48 hours of landfall, Helene tore through the Southeast U.S. and up through the southern Appalachians, causing tornadoes, deadly landslides, and historic flooding that destroyed homes, businesses, roads, and key infrastructure. This is a Geocolor image, a NOAA GOES satellite imagery product that combines how the daytime and nighttime parts of Earth look like from space. (Image credit: NOAA)

September 2025

Rebecca Keller

Aerospace Engineer

NOAA Aircraft Operations Center (NOAA's "Hurricane Hunters")

I work as the Airborne Vertical Atmospheric Profiling System (AVAPS) operator on the Hurricane Hunters' WP-3D Orion, gathering crucial atmospheric data by releasing dropsondes and other scientific expendables. The NOAA Hurricane Hunters fly into storms to gather high-resolution profiles of the atmosphere and ocean conditions that influence hurricane track and intensity. This data and satellite data are used to develop forecasts and issue advisories to guide emergency management decisions and protect people on the ground.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Labor Day / Carrington Event of 1859, largest geomagnetic storm in history	2	3	4	5	6
○ 7 7	8	9	10	11	12	13
14	15	16	17	18 NOAA-CIRA partnership begins in 1980	19	20
• 21	22 Autumnal Equinox	23	24	25	26	27
28	0 29	30				

The Park Fire Rages in Northern California

NOAA's GOES West satellite captured this image of the July 24, 2024, hot spot and smoke from Park Fire in Butte and Tehama Counties in northern California. The Park Fire was the largest single wildfire of California's 2024 season and the fourth-largest in the state's history. It destroyed more than 700 structures, burned nearly 430,000 acres, and spewed smoke and hazardous particulates more than five miles into the atmosphere. (Image credit: NOAA, CSU/CIRA)

October 2025

Drew Daily

Deputy Fire Management Chief—Operations/Preparedness Oklahoma Forestry Services

It takes an interdisciplinary and interagency approach to effectively fight wildfires. Our integrated warning team functionality—which leverages the skills of fire analysts and operational meteorologists coupled with innovative research has facilitated resource readiness, effective public messaging, and timely warning of the citizens we serve when a fast-moving wildfire is on the landscape. Marrying satellite detection and monitoring with a gridded fire environment (fuels and weather over geography) and fire spread modeling saves lives when minutes matter.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	Columbus Day	14	15	16 GOES-1 launches in 1975	17	18
19	20	• 21	22	23	24	25
26	27	28 Suomi NPP launches in 2011	• 29	30	31	

NOAA Satellites Save Lives

The U.S. Coast Guard assists a boater in distress at sea. In addition to monitoring Earth's weather and environment 24/7, NOAA satellites also detect and relay distress signals from emergency beacons to the appropriate search and rescue authorities. Since its inception in 1982, NOAA's Search and Rescue Satellite Aided Tracking (SARSAT) has saved more than 10,000 lives. (Photo credit: U.S. Coast Guard)

November 2025

Michael "Mickey" Fitzmaurice

NOAA/NESDIS Satellite Systems Engineer U.S. SARSAT program

The geolocation tools we rely on every day are supported by international satellite-assisted partnerships like the Cospas-Sarsat program to which NOAA's SARSAT program contributes 24/7. For aviators, mariners, and land-based beacon users, NOAA's satellites are essential to survival. The program provides real-time distress alerts and accurate location information to search and rescue authorities in more than 200 countries and territories.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	O 5	6	7	8
9	10	11	12	13	14	15
	JPSS-2 launches in 2022	Veterans Day				
16	17	18	19	• 20	21	22
		NOAA-20 launches in 2017	GOES-16 launches in 2016			
23	24	25	26	27	• 28	29
End of Hurricane Season 30				Thanksgiving Day		

Full Disk Image of the Pacific Ocean

NOAA satellites constantly monitor the Earth's atmosphere and ocean. This image from GOES West over the Pacific Ocean shows cloud cover and ocean temperature. This image from May 2024 shows the early transition toward La Niña conditions as evidenced by the cooler water temperatures seen near the Equatorial Pacific Ocean. (Image credit: NOAA, RAMMB/CIRA)

December 2025

Felix Castro

Warning Coordination Meteorologist NOAA/NWS San Joaquin Valley/Hanford, CA

Satellite images are a powerful tool we use to gather information not only for the weather forecasts that you see on TV or read on your mobile phone, but they also help us understand other weather phenomena, such as fire behavior, tropical cyclones and frontal boundaries. Engaging with our community to inform them about the weather, help them make timely decisions, and keep them safe is the most rewarding part of my job.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	O 4	5	6
7	8	9	10	NOAA-1 launches in 1970	12	13 NOAA-20 sends first image in 2017
14	15	16	17	GOES-16 becomes operational as GOES East in 2017	19	• 20
21 Winter Solstice	22	23	24	25 Christmas Day	26	0 27
28	29	30	31			

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Nor'easters are storms that form along the East Coast of North America and can bring dangerous wind, snow, rain and flooding. NOAA's GOES East satellite monitors this region continuously and takes detailed images and measurements of these powerful storms. This provides minute-by-minute updates of a nor'easter's progress to people in the storm's path. This image from Feb. 14, 2024, depicts the cloud properties of the storm. (Image credit: NOAA)

January 2026

Janae Elkins

Emergency Response Meteorologist/Specialist NWS National Operations Center

As an Emergency Response Meteorologist in the National Weather Service (NWS) Operations Center, I act as a critical liaison between Regional Operation Centers, National Centers, various stakeholders, and NWS senior leadership. I coordinate and collaborate with these centers during daily and significant weather events, and prepare and provide briefings to keep NWS senior leaders informed about highimpact severe weather. A significant portion of my role involves oral and written communication, as well as fostering effective relationships with internal and external partners.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	○ 3
				New Year's Day		
4 GOES-18 becomes operational in 2023	5	6	7	8	9	• 10
11	12	13	14	15 GOES-16 sends first image in 2017	16	17 JASON-3 launches in 2016
• 18	19 Martin Luther King, Jr.'s Birthday	20	21	22	23	24
25	• 26	27	28	29	30	31 NASA launches Explorer 1 in 1958

At the National Environmental Satellite, Data, and Information Service (NESDIS) we provide secure and timely access to global environmental data and information from satellites and other sources to promote and protect the Nation's security, environment, economy, and quality of life.

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