

Communicating **Actionable** Earth Science

at the **Earth Information Center**

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NASA Scientific Visualization Studio
Data Viz DC: Earth Day, April 22, 2024



NASA has partnered with **seven other Federal agencies** to bring **actionable data** to the via the Earth Information Center

Earth
Information
Center



FEMA



USAID
FROM THE AMERICAN PEOPLE

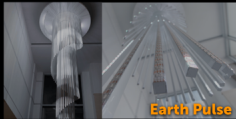


The EIC at NASA HQ has **four components**



Space for Earth

**Immersive
Projection
Room**



**Data-driven
LED chandelier**

Earth Pulse



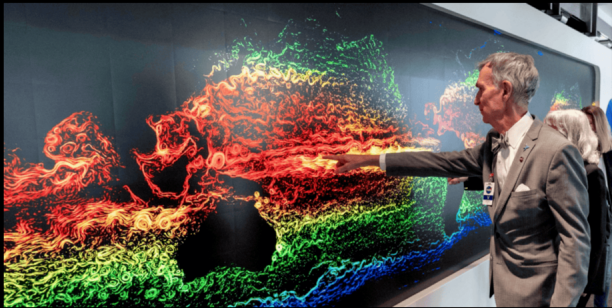
Eyes on Earth

**Interactive
Drafting
Table
Kiosks**



The Hyperwall

"Earth Mission Control"





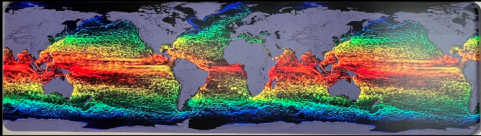
Beauty Pieces

Narrated Stories

Dashboards

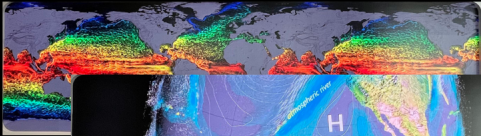
Hyperwall content is split into **three groups**:
beauty pieces, narrated stories, and dashboards

ocean flows



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beauty pieces, narrated stories, and dashboards

ocean flows

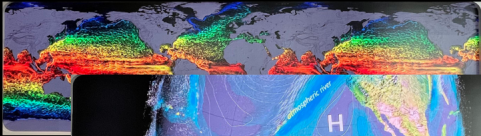


atmospheric
river



Hyperwall content is split into **three groups**:
beauty pieces, narrated stories, and dashboards

ocean flows



atmospheric river



dixie fire



Hyperwall content is split into **three groups**:
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air quality



Hyperwall content is split into **three groups**:
beauty pieces, **narrated stories**, and dashboards

air quality



hurricanes

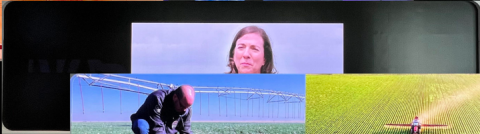


Hyperwall content is split into **three groups**: beauty pieces, **narrated stories**, and dashboards

air quality



hurricanes

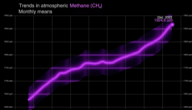


agriculture

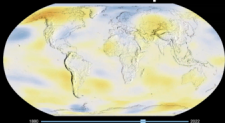


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beauty pieces, narrated stories, and **dashboards**

animated charts/graphs



animated maps



big statistics

Global Temperature
↑ 1.4°C
since pre-industrial

Sea Level
↑ 4"
since January 1992

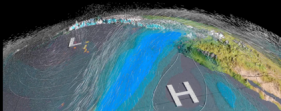
Minimum Extent of Arctic Sea Ice
↓ 12.2%
per decade since 1979

Carbon Dioxide
↑ 427
current parts per million

Methane
↑ 1932
current parts per billion

Ice Sheets
↓ 408
billion metric tons per year

3D models



Dashboard content is categorized thematically

WEDNESDAY
03/26/2025 4:00:01 12:02 AM

Earth Now

Earth science provides data on Earth's land, ecosystems, water, air, temperature, and climate - and has done so for more than 60 years. Earth information from space supports decision makers, partners, and people in developing the tools they need to mitigate, adapt, and respond to our changing planet.

Earth Observing Fleet



Current Satellite Observations

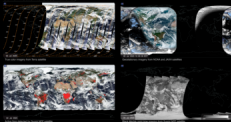


Image of the Day



On This Day in 2025: Maharashtra Begins

A state of India, one of the seven states that were formed through state reorganization in 2025.

Vital Signs

Temperature	Sea Level	Minimum Amount of Rainfall	
+1.1°C	+4"	-12.8%	
Carbon Dioxide	Methane	Air Quality	Ocean Warming
+421	+1824	-424	+348

NRT, broad

Dashboard content is categorized thematically

WEDNESDAY
OCTOBER 4, 2023 12:02 AM

Earth Now

NASA's website provides data on Earth's land, ecosystems, water, air temperature, and climate, and has done so for more than 50 years. Earth information from space supports decision makers, partners, and people in developing the tools they need to mitigate, adapt, and respond to our changing planet.

Current Satellite Observations



Image of the Day



NRT, broad

WEDNESDAY
OCTOBER 4, 2023 12:02 AM

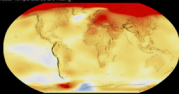
Climate Vital Signs

NASA monitors the health of our planet to benefit humanity. Our missions track key climate indicators and we share these with the world.

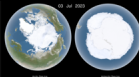
Greenhouse Gas Levels are Increasing



Global Temperatures are Rising



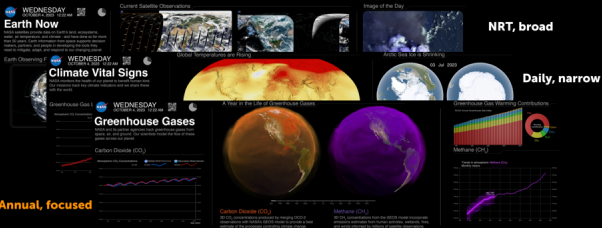
Arctic Sea Ice is Shrinking



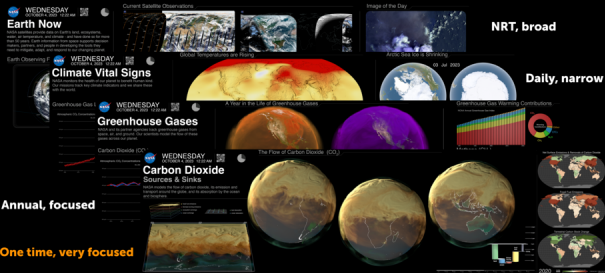
The quantity of sea ice at each pole varies seasonally. In the Arctic, it reaches maximum in March and minimum in September; in the Antarctic the seasons are reversed. The extent of Arctic sea ice is steadily decreasing, while Antarctic sea ice has remained stable in recent decades.

Daily, narrow

Dashboard content is categorized thematically



Dashboard content is categorized thematically



Annual, focused

One time, very focused

The EIC is the culmination of an **amazing team's** effort



NASA's Scientific Visualization Studio (PC: Wade Sisler)

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The Hypocenter — Earth Info: <https://earth.gov/stories/hypocenter>

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EARTH NOW | CLIMATE VITAL SIGNS | 1 | **2** | 3 | 4 | ⏪ | ⏸ | ⏩ | 🌐 | 🗨️

Earth Now

Earth Observing Fleet

Current Satellite Observations

- Current Satellite Observations
- Sea Surface Temperature
- Sea Surface Salinity
- Sea Surface Chlorophyll
- Sea Surface Temperature

Image of the Day

Damage in the United Arab Emirates

Vital Signs

Global Temperature	Sea Level	Sea Level Change
↑ 1.4°C	↑ 4"	↓ 12.2%
Carbon Dioxide	Methane	Sea Ice
↑ 425	↑ 1992	↓ 424
Ocean Warming		
↑ 380		