



# NOAA Climate Services Portal Prototype

**A collaborative, NOAA-wide prototyping initiative featuring CPC, CPO, CSC, and NCDC**

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# NOAA's Climate Services Portal Prototype

<http://www.climate.gov>

The screenshot shows the NOAA Climate Services Portal Prototype. At the top, there is a navigation bar with links: NOAA HOME, WEATHER, OCEANS, FISHERIES, CHARTING, SATELLITES, CLIMATE, RESEARCH, COASTS, CAREERS. Below this is the NOAA logo and the text "NOAA CLIMATE SERVICES" with "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION" underneath. To the right, it says "Development Prototype". Below the header is a search bar and a navigation menu with tabs: "Explore: ClimateWatch Magazine", "Data & Services", "Understanding Climate", and "Education".

The main content area is divided into five sections:

- Past & Present Climate**: "Climate at a Glance" - Read and explore summaries and digests of recent climate-related phenomena from NOAA's distributed climate service community.
- Predictions**: "Looking Ahead" - Explore how climate phenomena are likely to unfold in the coming days, weeks, and months.
- NOAA Partners**: "Locate Climate Expertise" - Use an interactive map to find national and regional climate services.
- Climate & You**: "Utilizing Climate Data" - Climate information is essential for business and community planning. These resources focus on needs of specific sectors of society.
- Data Library**: "Visualizing & Explore" - NOAA is a leading provider of access to data from research projects, stations, and satellites to the nation and the world.

Below the main content area is the "Global Climate Dashboard" with two tabs: "Climate Change" and "Climate Variability". It features a slider to "Adjust the sliders to view different time periods." from 1950 to 2008. A "Temperature (C)" bar chart shows data from 1959 to 1999. To the right is a "Past Weather" section with a map of the United States and a form to input "City, State or Zip" and "01-14-2010" with a "Lookup" button. Below that is a "News" section with a headline: "Tom Karl, Director of NOAA's National Climatic Data Center Answers Questions About Climate Science" dated "Mon, 14 Dec 2009". A sub-headline reads: "On Friday, Dec. 11, Tom Karl was the guest for a live webchat with Washington Post".

The NCS Portal Prototype provides a well-integrated, online presentation of NOAA's climate data & services.

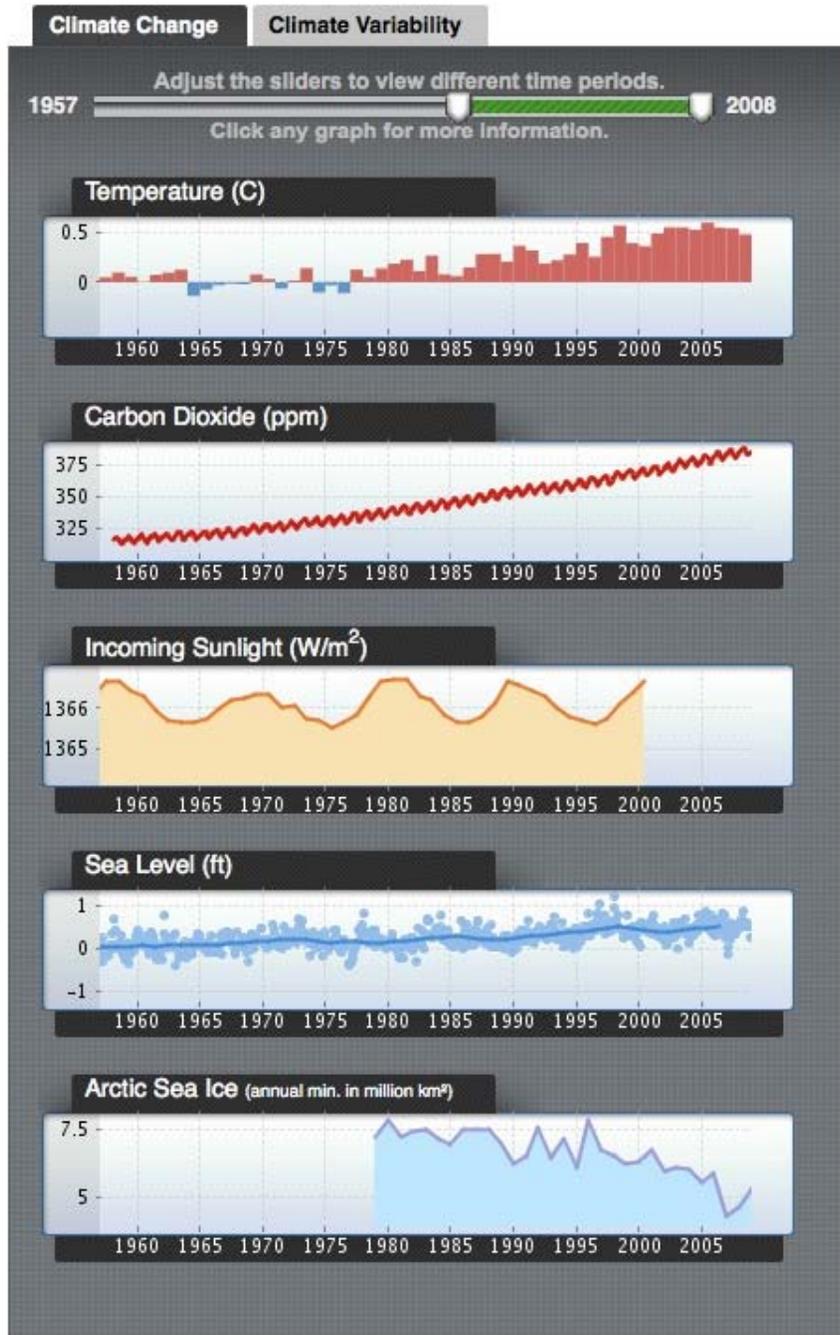
The prototype features four audience-focused sections:

- **ClimateWatch** for the public
- **Data & Services** for scientists and data users
- **Understanding Climate** for policy leaders
- **Education** for educators & students

The **Dashboard** is a data-driven synoptic overview of the state of the global climate system.

**Past Weather** allows users to easily retrieve weather data for any given location & date.

## Global Climate Dashboard



# NCS Portal Dashboard

<http://www.climate.gov>

Just as a dashboard gives instant information on the status of a vehicle's various systems, NOAA's Global Climate Dashboard presents an overview of the current state of Earth's climate system in historical context.

The Dashboard is designed for people seeking a synoptic view about what we know about climate variability and change, particularly **policy leaders**.

**Adjustable sliders** up top allow users to focus on the time period of interest.

**Hover cursor over graphs** to produce brief "tool-tip" snippets stating what each parameter is showing.

**Click on graphs** to jump to more detailed landing pages with more details produced in a popular style.

Future plans include:

- Adding future climate scenarios out to 2100.
- Making graphs more interactive, using MultiGraph
- Rewriting Dashboard as an appliance that can be syndicated / hosted by others.

# Design concept for an enhanced data browse

The screenshot displays the NOAA Climate Services website. At the top, there is a navigation bar with links: NOAA HOME, WEATHER, OCEANS, FISHERIES, CHARTING, SATELLITES, CLIMATE, RESEARCH, COASTS, CAREERS. Below this is the NOAA logo and the text "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION". The main heading is "CLIMATE SERVICES".

On the left side, there are sections for "SECTIONS" (Climate Data & Services, Climate News & Features, Climate Education, Climate Science Progress) and "DATASETS" (Satellite Data Products, Model & Assimilated Data, Aircraft Data Sets, Land Surface Station Data, Ship-based Data, Buoy Data, Drifters & AUV Data). Below these are "RESOURCES" (GIS Resources, Analysis Tools, Services Catalog, Documents & Reports, Glossary, Tell Us What You Think).

The main content area features a "BASIC SEARCH" section with a search bar and three input fields: "Enter data of interest", "Enter location of interest", and "Enter date or range of interest". Below these is a link: "Click to select Composite Period, and then the desired span of time." A world map is visible in the background.

A "COMPOSITE PERIODS" dropdown menu is open, showing options: "Daily Maps", "Weekly Maps", "Monthly Maps", and "Yearly Maps". A "COMPOSITE PERIODS" calendar is also open, showing a grid of months from 2000 to 2008. The calendar has columns for months (J, F, M, A, M, J, J, A, S, O, N, D) and rows for years (2008, 2007, 2006, 2005, 2004, 2003, 2002, 2001, 2000). The year 2008 is highlighted, and the month of July is selected.

At the bottom of the page, there is a footer with links: Privacy Policy, FOIA, Information Quality, Disclaimer, USA.gov, Ready.gov, Site Map, Contact Webmaster.

# Design concept for an enhanced data browse

The screenshot displays the NOAA Climate Services website interface. At the top, a navigation bar includes links for NOAA HOME, WEATHER, OCEANS, FISHERIES, CHARTING, SATELLITES, CLIMATE, RESEARCH, COASTS, and CAREERS. The main header features the NOAA logo, the text "NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION", and "CLIMATE SERVICES". Below the header is a search bar with a "+" button and a "SEARCH" button.

**SECTIONS**

- Climate Data & Services
- Climate News & Features
- Climate Education
- Climate Science Progress

**DATASETS**

- Satellite Data Products
- Model & Assimilated Data
- Aircraft Data Sets
- Land Surface Station Data
- Ship-based Data
- Buoy Data
- Drifters & AUV Data

**RESOURCES**

- GIS Resources
- Analysis Tools
- Services Catalog
- Documents & Reports
- Glossary
- Tell Us What You Think

**BASIC SEARCH**

NOAA is a leading provider of climate data and services to the nation and the world. Click above to key in Search terms or, to browse, select from among the Datasets listed below left. Click the "+" button above to display Advanced Search features.

Three small thumbnail maps are shown above a "Transparency" slider ranging from 1 to 3.

The main content area features a large world map titled "SEA SURFACE TEMPERATURE" for the period "August 1 - August 31, 2008". The map uses a color scale from -2 to 45 degrees Celsius. Below the map is a toolbar with navigation and interaction icons.

**SEA SURFACE TEMPERATURE**

August 1 - August 31, 2008

This global map shows the temperature of the top millimeter of the ocean's surface. Scientists monitor sea surface temperature because the ocean's warmth influences Earth's climate system in many different ways. Even seemingly small changes in ocean surface temperatures can have huge impacts on weather, oceanic and atmospheric current patterns, and life in the ocean and on land.

[Read more about this product...](#)  
[Take me to these data](#)  
[Credits & contacts](#)

**OPTIONS**

- Download displayed image(s)
- Analyze displayed image(s)
- Animate displayed images
- Export image(s) to GoogleEarth
- Export image(s) to GIS Tool
- Export data to MS Excel

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The left sidebar contains a "SECTIONS" menu with links for "Climate Data & Services", "Climate News & Features", "Climate Education", and "Climate Science Progress". Below this is a "DATASETS" menu with links for "Satellite Data Products", "Model & Assimilated Data", "Aircraft Data Sets", "Land Surface Station Data", "Ship-based Data", "Buoy Data", and "Drifters & AUV Data". A "RESOURCES" menu includes "GIS Resources", "Analysis Tools", "Services Catalog", "Documents & Reports", and "Glossary". At the bottom of the sidebar is a "Tell Us What You Think" link.

The main content area is titled "BASIC SEARCH" and includes a paragraph: "NOAA is a leading provider of climate data and services to the nation and the world. Click above to key in Search terms or, to browse, select from among the Datasets listed below left. Click the '+' button above to display Advanced Search features." Below this text are three input fields: "Enter data of interest", "Enter location of interest", and "Enter date or range of interest".

A red instruction reads: "Click to select Measurements. Click and drag the red dot along the transect to highlight a given location." Below this is a world map showing a transect of measurement locations. A red dot is positioned over the location 67.53.16N - 88.34.56W. A "MEASUREMENTS" dropdown menu is open, showing options for "Acidity", "Salinity", "Sea Surface Temperature", and "Dissolved Organic Matter".

The "DATA DISPLAY" window shows a line graph for the location 67.53.16N - 88.34.56W. The x-axis represents time from 20070605 to 20070631. The y-axis represents measurement values. Three data series are plotted: Sea Surface Temperature (blue line), Salinity (green line), and Acidity (red line). The graph shows seasonal variations in all three parameters. Below the graph are links for "Go get these data", "About these data", and "Credits".

At the bottom of the page, a footer contains links for "Privacy Policy", "FOIA", "Information Quality", "Disclaimer", "USA.gov", "Ready.gov", "Site Map", and "Contact Webmaster".

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The main content area is divided into "SECTIONS" (Climate Data & Services, Climate News & Features) and "BASIC SEARCH". The search section includes a search box and a "SEARCH" button. Below the search box, there are three input fields: "Enter date or range of interest", "Enter date or range of interest", and "Enter date or range of interest".

The primary data visualization is a grid of 12 precipitation charts for the year 2006, labeled "PRECIPITATION (MM)". The charts are arranged in a 4x3 grid, with each chart representing a month from January to December. Each chart shows a blue line representing the precipitation data and a grey shaded area representing the range of data. The y-axis for each chart is labeled "NN" and has a "0" mark. Below the grid are three links: "Go got these data", "About these data", and "Credits".

To the right of the charts is a map of the Eastern United States, showing a network of red lines representing precipitation measurement stations. A "MEASUREMENTS" legend is overlaid on the map, listing various data types: Aerosol Optical Depth, Air Temperature, Barometric Pressure, Carbon Dioxide, Humidity, Ozone, Precipitation (highlighted with a red dot), Wind Direction, and Wind Speed. A "YEAR" selector is also present, with a dropdown menu showing "2009" and "2006" (selected), and a vertical timeline showing "1940" and "1937".

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Back up slides

# NOAA Climate Portal Prototype Charter

## VISION:

Provide an **authoritative** and **credible** source of climate data and services for the public, and be an **honest broker** in assessing the state of the climate system, regional impacts, and future projections.

Establish the Portal as a **unifying focal point** through which NOAA's offices, labs, centers, and partners work collaboratively to serve priority publics and meet specific objectives in communication, education, engagement, and capacity-building.

- Already existing Web interfaces across NOAA will continue to exist & evolve in concert with the NCS Portal, with increasing seamlessness.
- We do **not** plan one massive, centralized Website to host and serve all datasets and products as this is not practical or efficient.
- We are striving for **centralized access** for users, **decentralized process** among NOAA personnel for developing & serving products & services.

# NOAA Climate Portal Prototype Charter

## GOAL:

Develop a one-stop Web portal to enhance the discovery, accessibility, and usability of NOAA's and its partners' climate data, information, and services

## OBJECTIVES:

- Implement appropriate **metadata standards** and requirements for climate data, products & services
- Provide a consistent delivery of Web-based climate services across NOAA with **enhanced interoperability** & leveraging of products
- Establish feedback loops from each target audience to ensure a **user-driven evolution** and to **document best practices** for our partners