

# The Role of Climate Data Records in NOAA Climate Assessments and Climate Services

**John J. Bates**

*Chief, Remote Applications Division  
OAA's National Climatic Data Center*

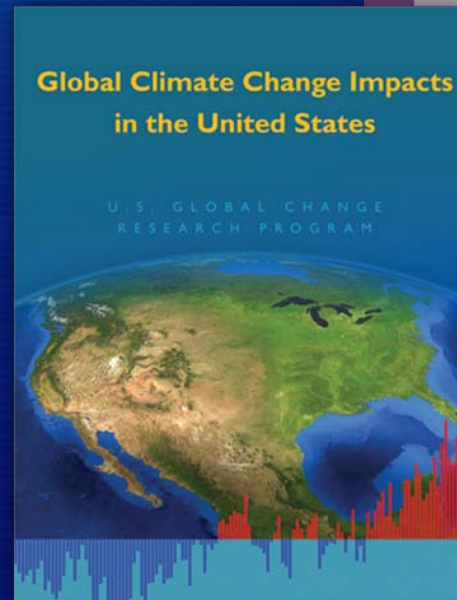


# Some background....

## ASSESSMENTS

NOAA support for assessments over recent years includes:

- 9 GCRP Synthesis and Assessment Products
- GCRP Global Climate Change Impacts Report
- IPCC assessments
- All ozone assessments
- State of the Climate Reports





# And NOAA is creating a new Climate Service Capability and Line Office

**NOAA Headquarters and Staff Offices**

**Under Secretary of Commerce for Oceans and  
Atmosphere and Administrator**

National  
Marine  
Fisheries  
Service

Assistant  
Administrator

National  
Ocean  
Service

Assistant  
Administrator

National  
Weather  
Service

Assistant  
Administrator

National  
Environmental  
Satellite, Data  
and Information  
Service

Assistant  
Administrator

NOAA Climate  
Service

Assistant  
Administrator

Office of  
Oceanic and  
Atmospheric  
Research

Assistant  
Administrator



# Proposed NOAA Climate Service

## NESDIS DATA CENTERS

National Climatic  
Data Center

National Oceanographic  
Data Center

National Geophysical  
Data Center

## OAR PROGRAM & LABORATORIES

Earth System Research Lab  
Office of the Director  
Chemical Sciences Division  
Global Monitoring Division  
Physical Sciences Division

Geophysical Fluid Dynamics  
Laboratory

Climate Program Office

## NWS FUNDING TO MANAGE NETWORKS (NO STAFF CHANGE)

Climate Observing Network  
Tropical Atmosphere Ocean  
(TAO)  
Historical Climate Network  
(HCN)  
Hourly Precipitation Gauge  
Modernization

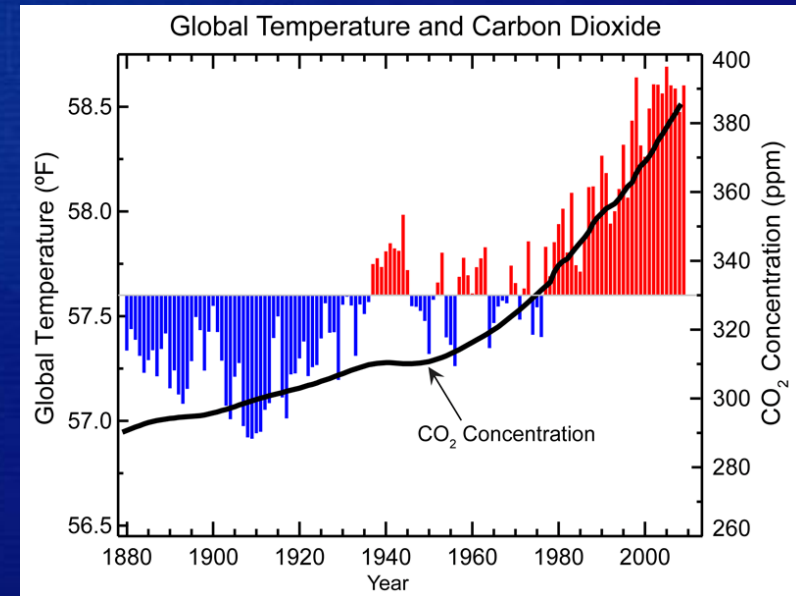
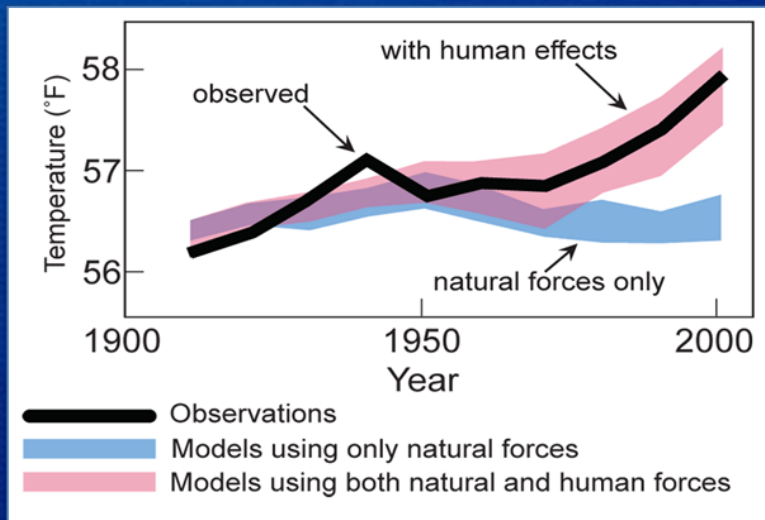
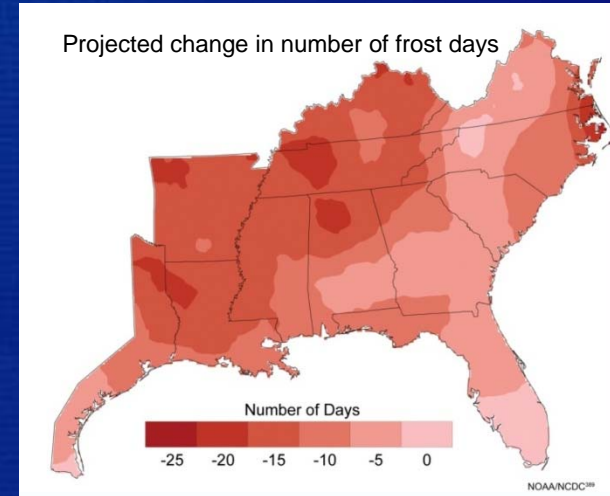
**NOS & NMFS  
UNCHANGED**

*The physical location of these facilities will not change*



# 1) Specific Motivation

- Success of CMIP availability for AR4
- Transparency of data services
  - Must avoid even the appearance that Assessment data are not readily available or well documented





## 2) Some Challenges

- Large diversity of data and institutions
  - e.g academia, govt, corporate
- Agreement on formats and metadata
- Technical challenges and agreements on granularity.



# 3) Potential Users and Important Linkages

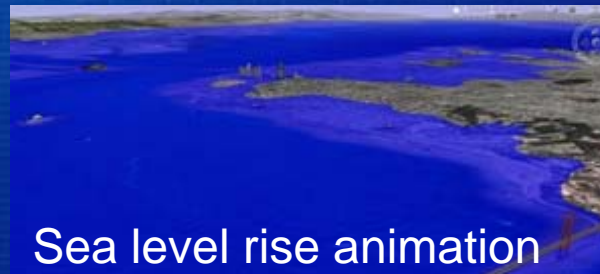
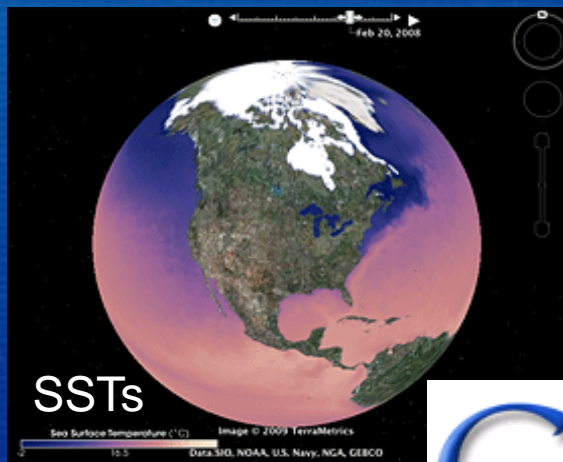
- Stakeholders, decision-makers and...
- Key agencies and organizations: USGCRP, IPCC/WMO
- Must provide and coordinate linkages to existing orgs
  - GEO, WCRP, IGBP, etc etc.





# 4) Role of Private Sector?

- What is the role of the private sector and NGOs?
  - e.g., Google, Unidata, ESRI etc
- Public Access to Assessment Datasets
  - how do we ensure proper use, up-to-date data, line of sight issues etc



Google™

Google earth





# 5) Climate.gov ---- a rallying point? NOAA Climate Services Portal

[www.climate.gov](http://www.climate.gov)

The image displays three overlapping screenshots of the NOAA Climate Services Portal. The top screenshot shows the 'Articles' section with a featured article titled 'Living with an Uncertain Monsoon' and a 'Videos' section with three video thumbnails. The middle screenshot shows the 'Global Climate' dashboard with navigation tabs for 'Past & Present Climate', 'Predictions', 'NOAA Partners', 'Climate & You', and 'Data Library'. The bottom screenshot shows the 'Global Climate Dashboard' with a 'Past Weather' section and a 'News' section.

- One-stop access for NOAA's climate information
- Multiple audiences so multiple avenues to access information
  - ClimateWatch Magazine
  - Data and Services CDRs
  - Understanding Climate
  - Education
  - Climate Dashboard



## 6) Organization and sustained effort

- Proposed new NOAA Climate Service – central coordination role, including Assessment Services function
- Distributed climate services and assessment services in regions – including many partners
- To what degree should we be centralized versus distributed?
- How does your CDR work make an Impact?
  - How do your journal articles move the science forward?
  - Is your work used in national/international assessments or the annual state of the climate report?
  - How can your work be used to assess climate models (CMIP5)?
  - Does your work have sectoral or regional impacts?





**Thank you.**

**Questions**

