WELCOME

Tom Karl
Director
**International COADS**
- critical for climate and global change research

**Successful CLIWOC (1750-1854) project**

**Many European (e.g. UK) logs still untapped**
- proposed “post-CLIWOC” cooperation
- add to & improve ICOADS (e.g., US Maury)

**Climate Database Modernization Program**
- opportunities & constraints

**Balancing priorities & logistics?**
- instrumental (WW II), pre-instrum., etc.

**Meeting outcomes?**
NOAA’s Climate Database Modernization Program

NOAA Projects and Task
Joe Elms
CDMP Program Manager
Climate Database Modernization Program

- **GOAL**: To make major climate and environmental databases available via the internet

- Fifth year of the program
• August 23 - WSSRD. Net
• Climate Data On-line (CDO) at NCDC
• Other NOAA Web Sites (e.g. NOAA Central Library)
WSSRD Major Cabinet Counts

Number of Records in WSSRD in Millions (Total = 43 Million)
Cooperative Observation Network

USA Daily Temperature & Precipitation

NWS Cooperative Climate Network
Available Digital Data at NCDC 1852 - 2003
Station History Forms

Station Record

US Department of Commerce
Weather Bureau

Station: [Station Name]
Location: [Location]

Observer: [Observer Name]

Station Data:
- Type of Station: [Type]
- Date Established: [Date]
- Date of Record: [Date]
- Name of Officer: [Name]
- Number of Observations: [Number]
- Number of Stations: [Number]
- Number of Observations per Day: [Number]
- Number of Stations per Day: [Number]

Instrumental Equipment:
- Temperature: [Temperature]
- Humidity: [Humidity]
- Wind Speed: [Wind Speed]
- Wind Direction: [Wind Direction]
- Pressure: [Pressure]
- Rainfall: [Rainfall]
- Sunshine: [Sunshine]

Observations:
- [Observations]

Station Notes:
- [Notes]

Location:
- [Location]

[Additional Information]

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Observations:
- [Observations]

Station Notes:
- [Notes]

Location:
- [Location]

[Additional Information]
Major Keying Projects- Surface Weather Observations (SWO) & Forts Data

- SWO data keyed is from the pre-1948 period, 148 out of 209 stations have been completed.

- Northeast Regional Climate Center performing the Quality Control of the data and also formatting the keyed data to the NCDC Integrated Surface Hourly (ISH) Format.

- The Number of forms prepared surpassed 3.5 million and 27 million observations have been keyed.

- Roughly 20 stations keyed in the forts project, 87 million keystrokes. Project total is 150 stations with data from the early 1820’s through the 1890’s.
Marine Imaging and Keying Projects

- 1955-1972 International List of Selected and Supplementary Ships (WMO Pub # 47)
- Imaged 850 German Maury Logbooks on loan from Germany, Possible keying project with China
- Canadian VOS data
- Early European Ship Logs
- NARA imaging
Iraqi Upper Air Data (1958-1986)

Iraq Upper Air data

Daily Records- 1 pg/day, 2-4 times/day

Total of 22,485 records
CDMP FY 04 Tasks by NOAA Organization
National Environmental Satellite Data and Information Service

- NGDC Projects
- DMSP Images, Ionospheric Data, Solar Observations, Glacier Photographs and Arctic Sea Ice Charts

http://nsidc.org/data/glacier_photo/photo_query.html
Projects Range from Scanning Historical Nautical charts, Coast Pilots, Digitizing Water Level data and SST temperatures

Vectorizing of Shoreline Charts to Digital/GIS Information Systems
National Environmental Satellite Data and Information Service

- NODC Projects
- Various Oceanographic MBT charts and NOAA Library Archive Projects including the Daily Weather Maps and Monthly Weather Review Publications, Rare Book Collection, Circular N and M Instructions to Observers.
Daily Weather Map -1955

Map includes surface analysis, high and low temps, precipitation and 500 MB Upper Air analysis.
National Marine Fisheries Service

- Lightship Records Recovery
- SeaCat/Bongo
- Cetaceans- Tagging and Tracking

Cetacean Images scanned at 4000 dpi to bring out scarring details on the cetaceans
National Weather Service

- Scanning and Keying Upper Air Data from Six African Countries
- HPD analog records from Nicaragua
- Surface observations from Uruguay and Dominican Republic
- 1956-1976 Hurricane Reconnaissance data
Oceanic and Atmospheric Research

- Great Lakes Ice Thickness scanning and Keying text information

- WMO Publication # 47. Metadata for Volunteer Ships- Image the publication and then key instrument information
Goal: To create a catalogue of U.S. historical climate data that will serve as a directory to historical climate data not contained in the National Archives collections.

- The catalogue is being generated from information solicited from historical societies, libraries, and people with knowledge of historical climate data sources, such as State Climatologists.

- It will provide a searchable meta database of historical climate data allowing users to search for records by fields such as date, location, and author, as well as submit new entries.

- The catalogue will enable users to locate records in archives across the U.S. It will complement CDMP and HCDN efforts and include links to other sources of information on historical climate data.
The Historical Climate Data Catalogue will be maintained by the NOAA Paleoclimatology Branch, National Climatic Data Center and the WDC for Paleoclimatology, Boulder, CO

Project PI’s: Cary Mock (University of South Carolina) and Connie Woodhouse (NOAA Paleoclimatology Branch)

Database Manager: Michael Hartman (NOAA Paleoclimatology Branch)

Project Funding from NOAA’s Environmental Services Data and Information Management (ESDIM) Program

For more information, and to contribute historical climate data, contact: Michael Hartman (Michael.Hartman@noaa.gov)
Proposal Process

- Call for papers – August
- CDMP Data Access Workshop – November 8-9, 2004
- 25% of CDMP funding - other NOAA Organization
- $25K available to State Climatologists
The proposals judged against the following criteria:

1. Supports NOAA’s Strategic Goals
2. Contribution to improved data access & rescue
3. Value to climate community
4. General merit to overall program
5. Cost effectiveness
6. Ease of digitization by the contractors
CDMP FY 04 Contracts

March 1, 2004 – February 28, 2005
Information Manufacturing Corporation
Rocket Center, WV
&
Source Corp, London, KY

April 1, 2004 – March 31, 2005
Lason Inc., Beltsville, MD