NCDC Agency Report

Unidata Policy Committee

Benjamin Watkins
Operations Planning Officer

National Oceanic and Atmospheric Administration
National Environmental Satellite Data and Information Service
National Climatic Data Center
Asheville, NC 28801-5001, USA





Topics

- NOMADS
- NEXRAD
- CLASS
- Scientific Data Stewardship







NOMADS

- NOAA Operational Model Archive and Distribution System (NOMADS)
- · GOALS
 - Improve access to NWP and GCM data
 - Develop linkages between the research and operational communities fostering collaboration
 - Allow users to perform simple analysis without moving raw data via distributed data sharing





NOMADS Status

- NCEP, NCAR, GFDL, NCAR, NCDC, CDC, PMEL, COLA servers on line
- NOMADS program plan completed
- Continue to advance collaborations
 - THREDDS (NCDC is already a partner)
 - OPeNDAP Data Connector (now at NCDC)
 - CONDUIT (University input to NOMADS)
 - DOE Earth System Grid
- Science workshop proposed Fall 2003







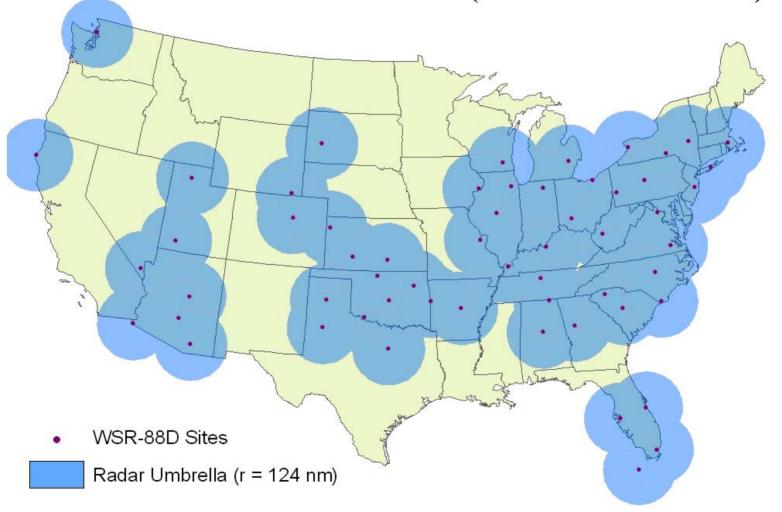
NEXRAD

- NCDC receives WSR-88D level II (base) data from 120 NWS, 12 FAA and 26 DOD sites on 8mm tape or online
- The NCDC Mass Storage System warehouses 900 terabytes of Level II data and grows annually at a rate of 60 terabytes a year
- Prior to August 2000 level II data was archived on 8mm tape
- 59 Sites electronically transmit level II data to NCDC resulting in capture rates at over 95% and data are available in near real time.





Current NEXRAD Sites Delivering Level II Data to NCDC in Near Real Time (59 WSR-88D Sites)



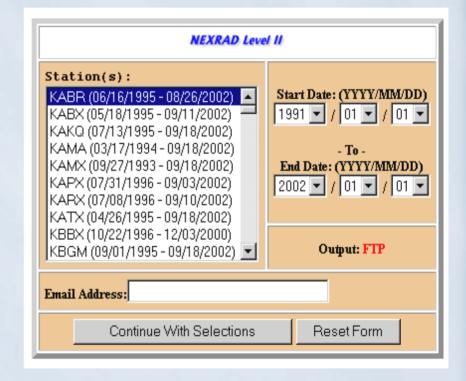






NEXRAD Web Based Services

- NCDC radar resources web page provides direct access to WSR-88D level II digital data, at no cost, via FTP without contacting a NCDC customer service representative.
- To browse NEXRAD data inventories the user goes to http://has.ncdc.noaa.gov, selects the level II option, and follows the instructions for dataset retrieval.









Comprehensive Large Array-data Stewardship System (CLASS)

Goals

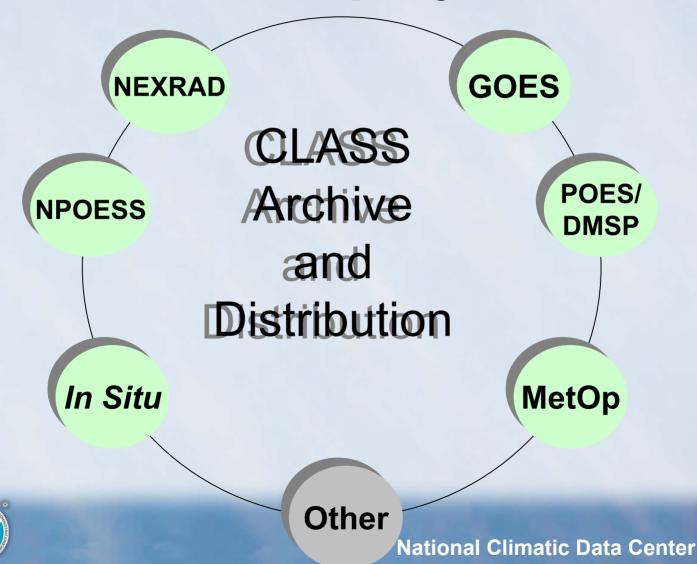
- On-line archive of large datasets
- Improve access to large datasets
- Provide one-stop entry for customer access



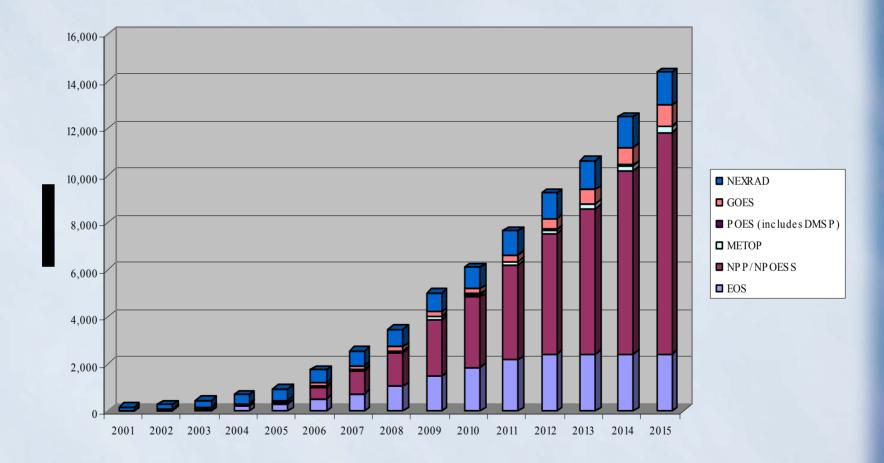




Comprehensive Large Array-data Stewardship System



Cumulative Major Systems Archive Growth



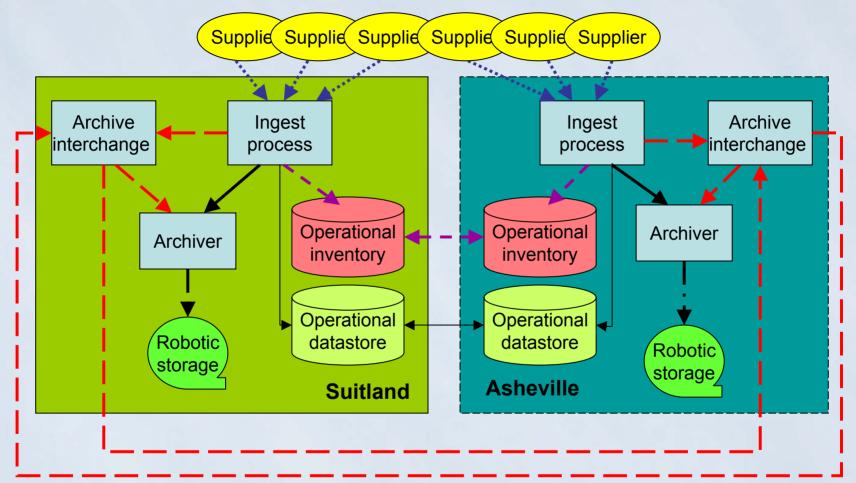






Distributed redundant archive

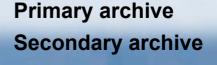








Raw data
Access metadata
Browse imagery





Scientific Data Stewardship

- Integrated suite of functions to preserve and exploit the full scientific value of NOAA's environmental data
- Real-time data monitoring
- Authoritative long-term records reprocessing
- Authoritative records to assess the current state of the environment
- Comprehensive metadata
- Data archaeology





SCIENTIFIC DATA STEWARDSHIP OBSERVATIONS FOR CLIMATE

