JASON ALTIMETER DATA AT PO.DAAC

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY

MANAGING DATA TO UNDERSTAND AND MANAGE THE OCEAN

J. ROBERT BENADA
PO.DAAC DEPUTY MANAGER

NASA

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY

The JASON MISSION

- French-U.S. Mission to:
  - Monitor global ocean circulation
  - Discover ocean/atmosphere link
  - Monitor El Nino/La Nina
  - Monitor ocean eddies
- Measure sea level from space at a accuracy of 3 cm or better.

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY

JASON DATA at PO.DAAC

Jason Data Products

- Operational Sensor Data Record-OSDR
  - Near-real-time product: < 3hrs latency
  - Uses
    - o Operational products
    - o Research in short term phenomena
  - Daily volume = 14 MB
- Geophysical Data Record – GDR
  - High accuracy product: 30 day latency
  - Primary research product
  - Daily Volume = 32 MB

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY

JASON DATA at PO.DAAC

OSDR Distribution

- Public FTP distribution to most users
- High reliability system for Operational users
  - Double redundant systems in two locations provide continuity of service
  - Fail-over is automatic

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY

JASON DATA at PO.DAAC

GDR Distribution

- Public FTP
- DVD distribution for mass distribution
  - Trade off:
    - o Efficient storage on 4-6 DVDs/year
    - o Timely delivery – 3 month delay
  - Compatibility issues with some unix workstations

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY

JASON DATA at PO.DAAC

What PO.DAAC Supplies

- User Handbook
- Data reader software: FORTRAN, C, IDL
- Quality Assurance checks
  - Reduces risk of distribution of bad data or media
- User Services Office support
- Packaging of data for distribution
- Long-term archiving of data
- Web: News, Data, Links

Physical Oceanography DAAC
Distributed Active Archive Center
JET PROPULSION LABORATORY