

NOAA OSTM / Jason-2 Ground System

November 2003

**Mike Mignogno
Bob Cheney**

NOAA/NESDIS

Office of Satellite Operations



Fairbanks Command and Data Acquisition Station

Suitland Satellite Operations Control Center



Wallops Command and Data Acquisition Station

Satellite Operations Control Center



**POES
Operations**

**GOES
Operations**

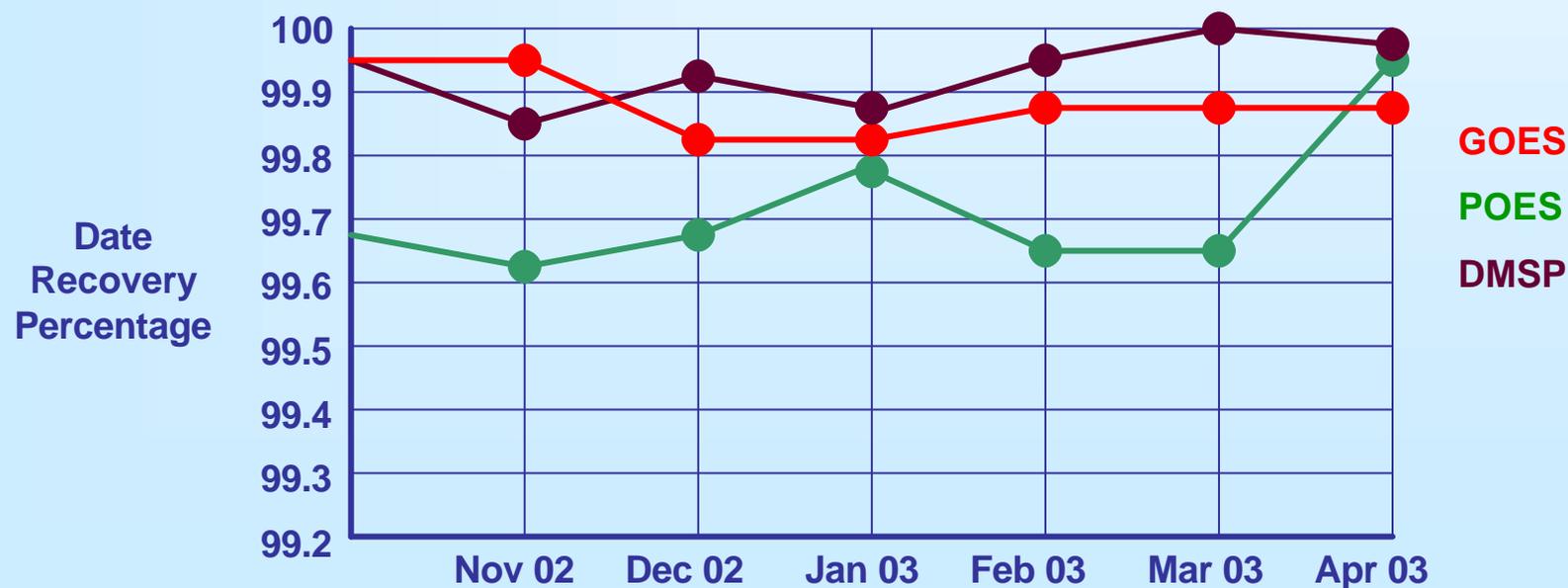


**DMSP
Operations**

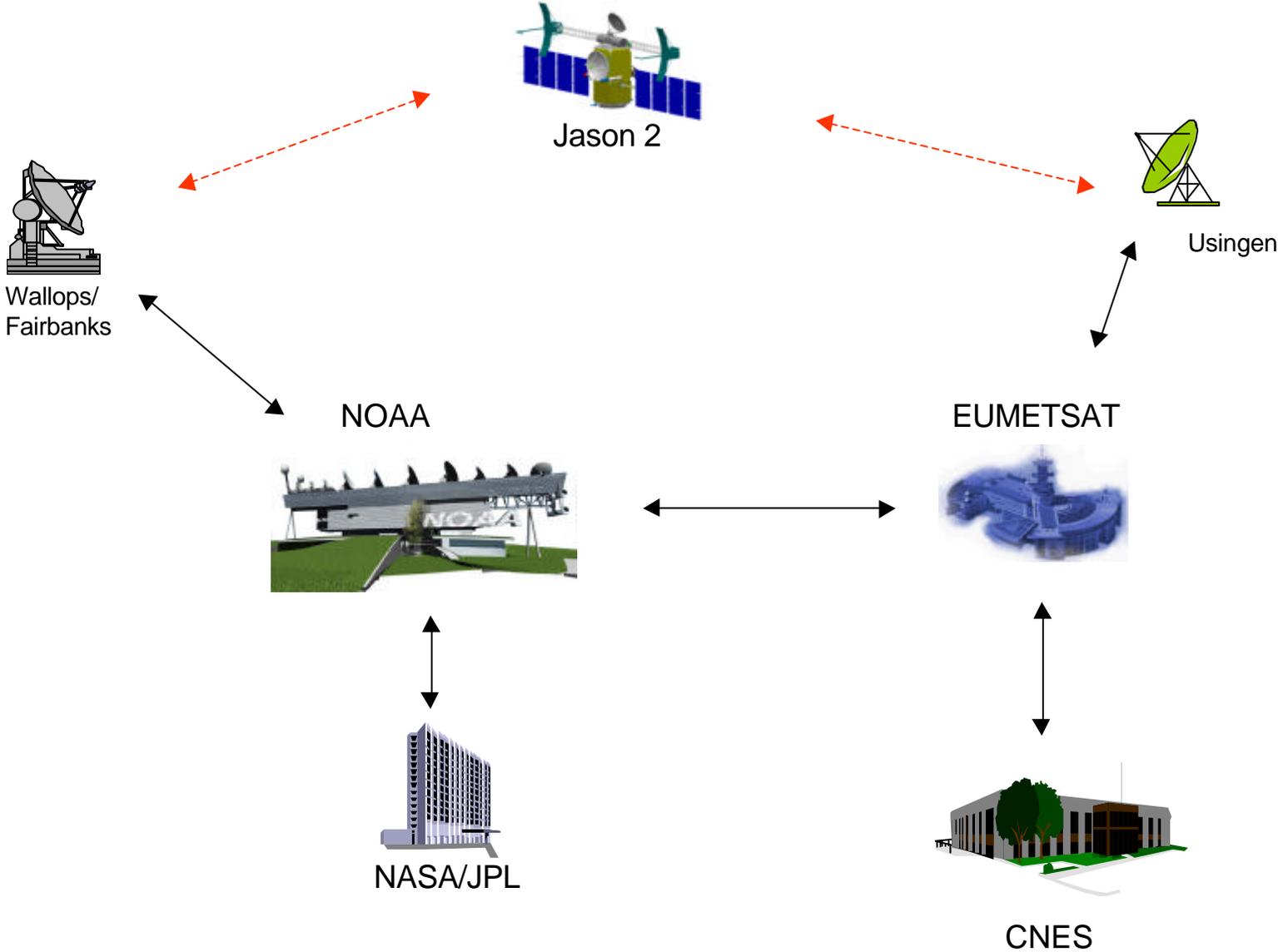


Real-Time Operations

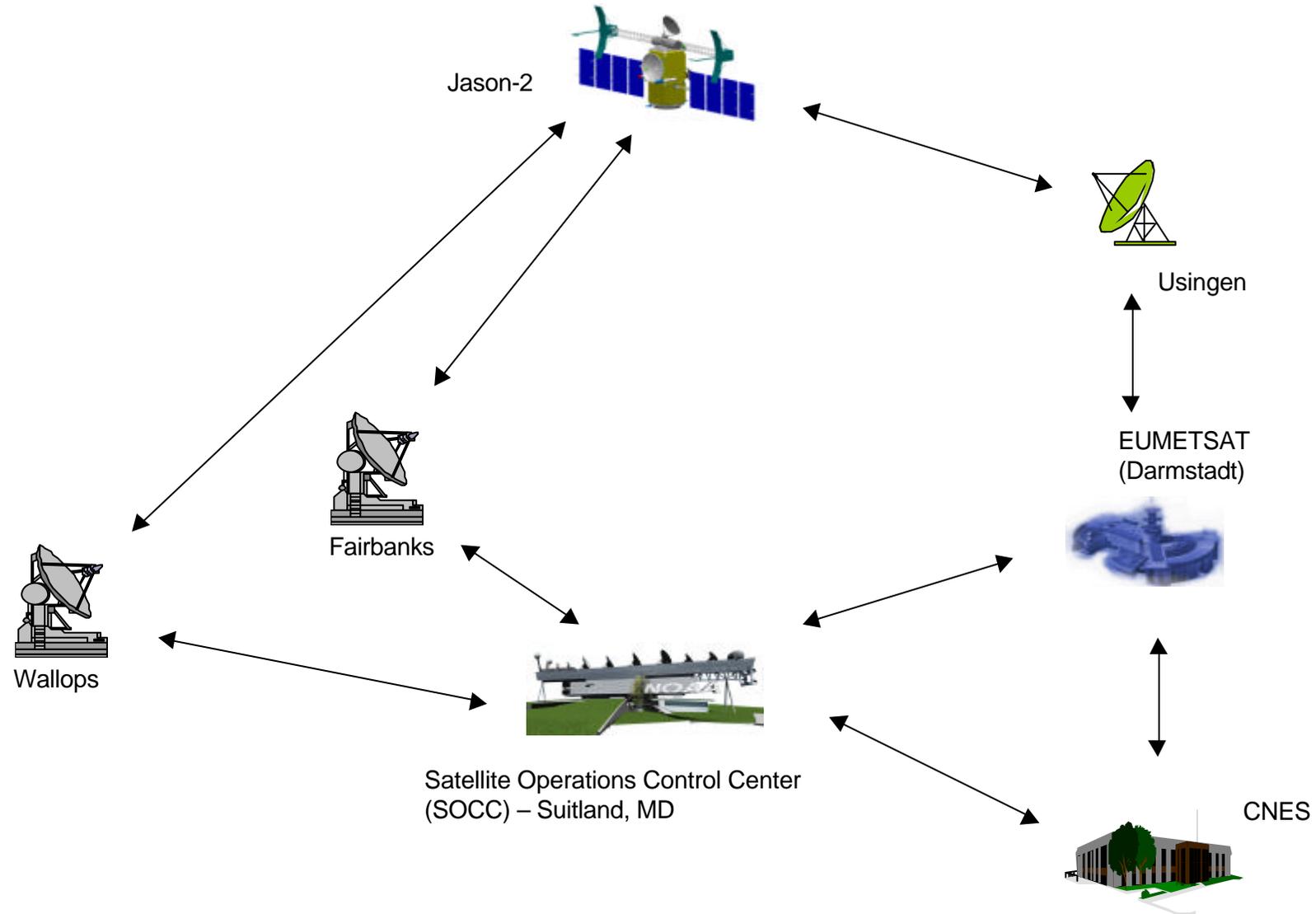
- Total Redundancy in all Ground Components
- High Reliability: 99.8% Data Recovery for all Three Systems



Jason-2 System Overview



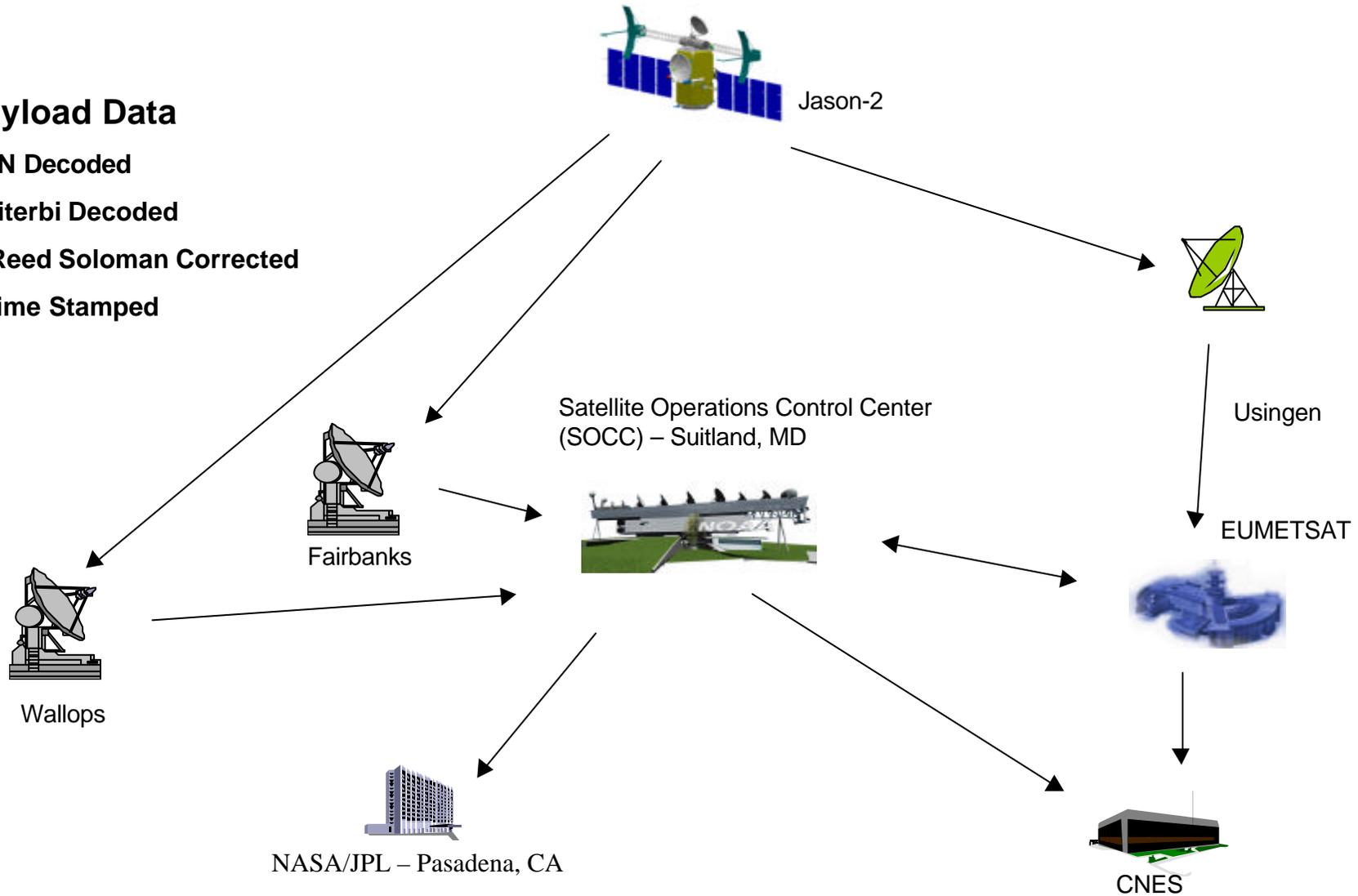
Telemetry, Command & Control Data Flow



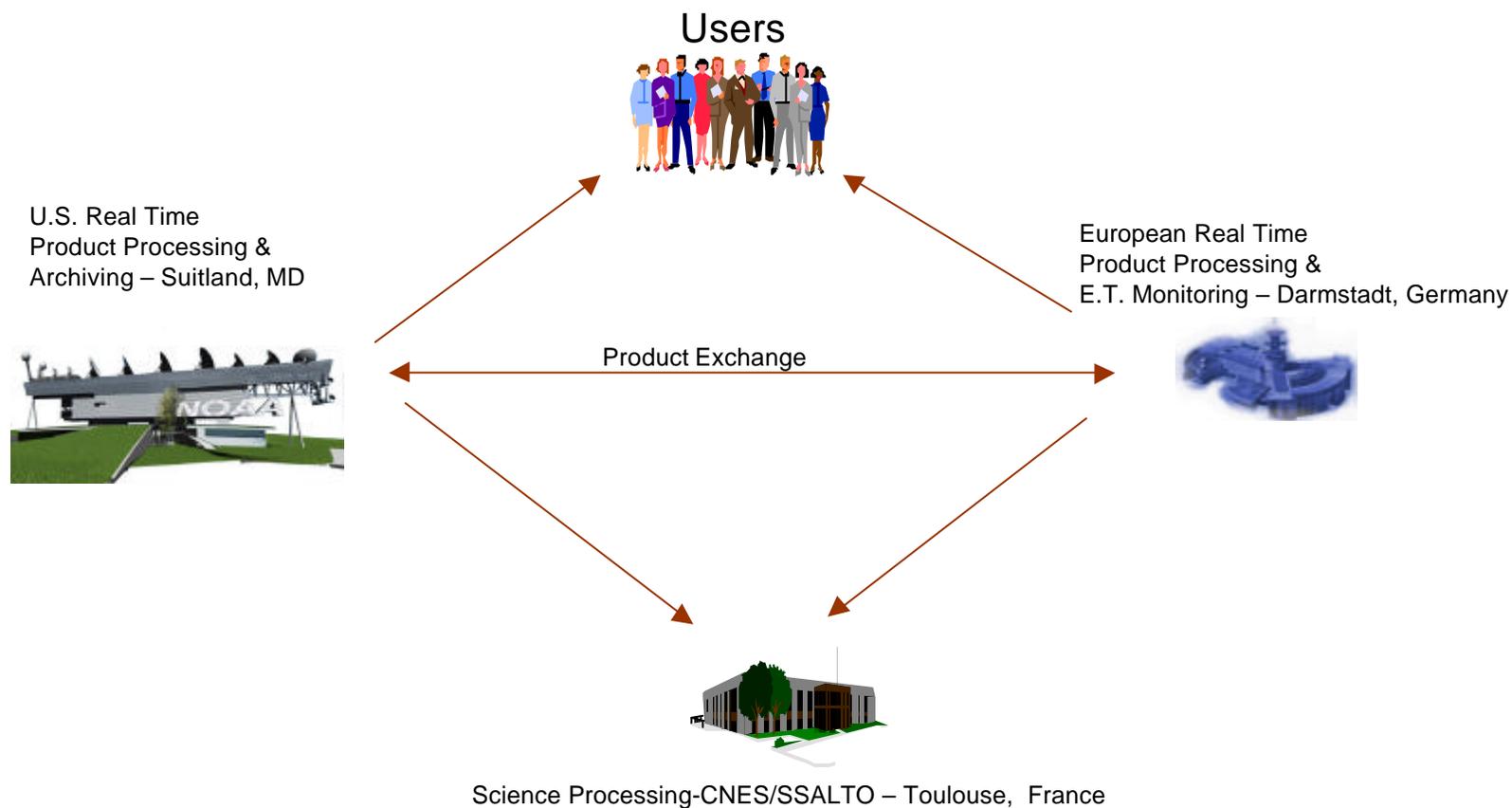
Payload Data Flow

Payload Data

- ✓ PN Decoded
- ✓ Viterbi Decoded
- ✓ Reed Soloman Corrected
- ✓ Time Stamped

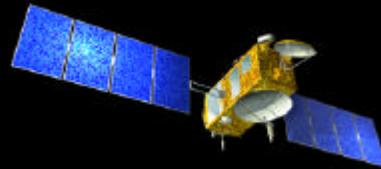


Jason-2 Operational Geophysical Data Records (OGDRs) Data Flow





Envisat



Jason



GFO



Altimeter telemetry

NASA / CNES / ESA / NAVY / NOAA / EUMETSAT

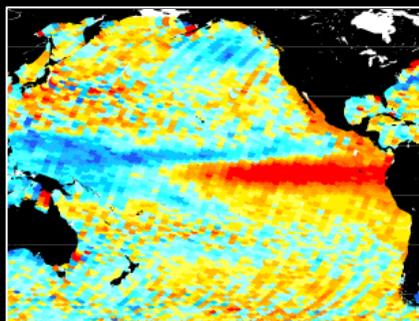


Quick-look GDRs

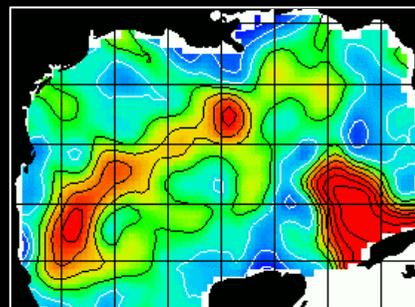
U.S. Shared Processing Program



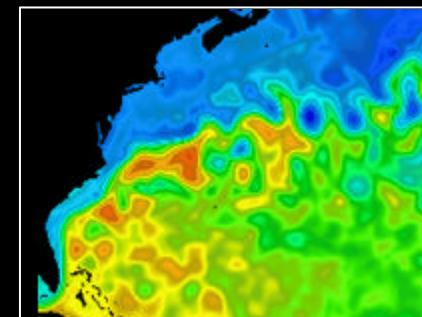
Sea level anomaly



NOAA



Commercial



Navy

NOAA

OSTM/Jason-2 Status

- U.S. Department of Commerce approved OSTM Ground System upgrade budget request for FY05
 - Next step, budget approval from U.S. Office of Management Budget
- NESDIS Administrator, Mr. Withee, sent letter of commitment (pending budget approval) to both EUMETSAT and CNES in September 03
- System Engineering task are well underway

NOAA OSTM/Jason-2 Ground System Project Schedule

Milestone	Start	End	Joint System Need (Joint Schedule Line #)
Four Partners System PDR	May 04	May 04	May 04 ⁽⁶⁾
Wallops CDA Upgrade (Incl. SOCC Backup)	Aug 05	Feb 06	Dec 06 ⁽¹⁵¹⁾
SOCC Upgrade	Sep 05	Mar 06	Dec 06 ⁽¹⁶¹⁾
Four Partners System CDR	Mar 06	Mar 06	Mar 06 ⁽⁸⁾
Data Processing Integration	Sep 05	Aug 06	Dec 06 ⁽¹⁶⁰⁾
Fairbanks CDA Upgrade	Jan 06	Jun 06	Dec 06 ⁽¹⁵¹⁾
Archive & Access Integration	Oct 05	Sep 06	Dec 06 ⁽¹⁵⁹⁾
Complete Ground Segment Validation	May 06	Jun 06	Jun 06 ⁽¹⁶⁶⁾
NOAA DCN Operational	Jun 06	Dec 06	Mar07 ⁽¹⁸⁰⁾
System (incl. Sat.) Technical Qualification	Mar 07	Mar 07	Mar 07 ⁽¹⁷⁶⁾
Jason-2 Launch	Oct 07 ⁽¹⁹⁷⁾		

Mar 07 ⁽¹⁸⁰⁾