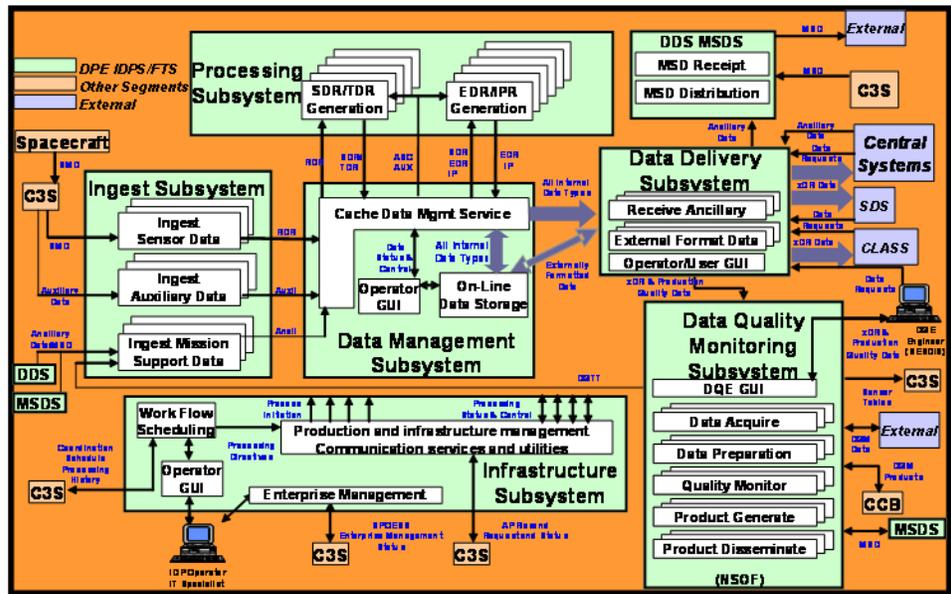
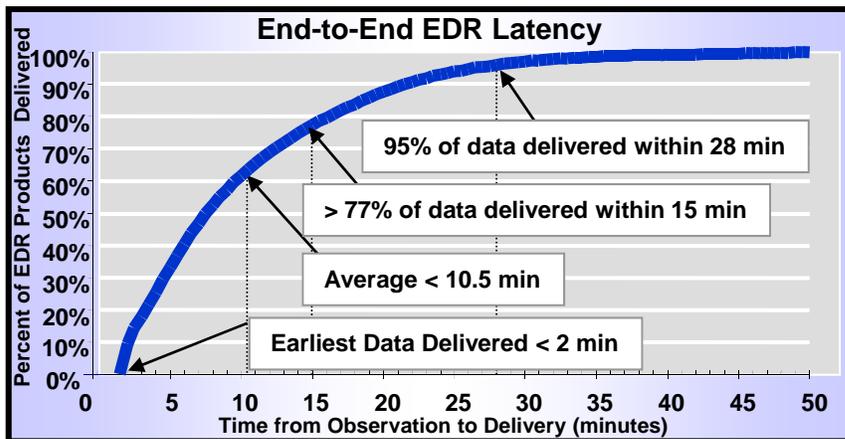


Interface Data Processing Segment (IDPS)

The Interface Data Processing Segment (IDPS) consists of the data processing elements (DPEs) located at each of the four Centrals. Each DPE consists of high performance computers to transform the satellite sensor data streams into the required products which are made available to the Centrals, the Comprehensive Large Array Data Stewardship System (CLASS) and the NPP Science Data Segment (SDS). The IDPS provides NPOESS and NPP products and associated metadata to the Centrals for additional application specific processing and dissemination. The IDPS may also use ancillary data and auxiliary data in processing EDRs. Field terminal data processing will perform a subset of the functions of the Centrals IDPS as necessary to meet global user requirements.



IDPS Functional Diagram



Key Features

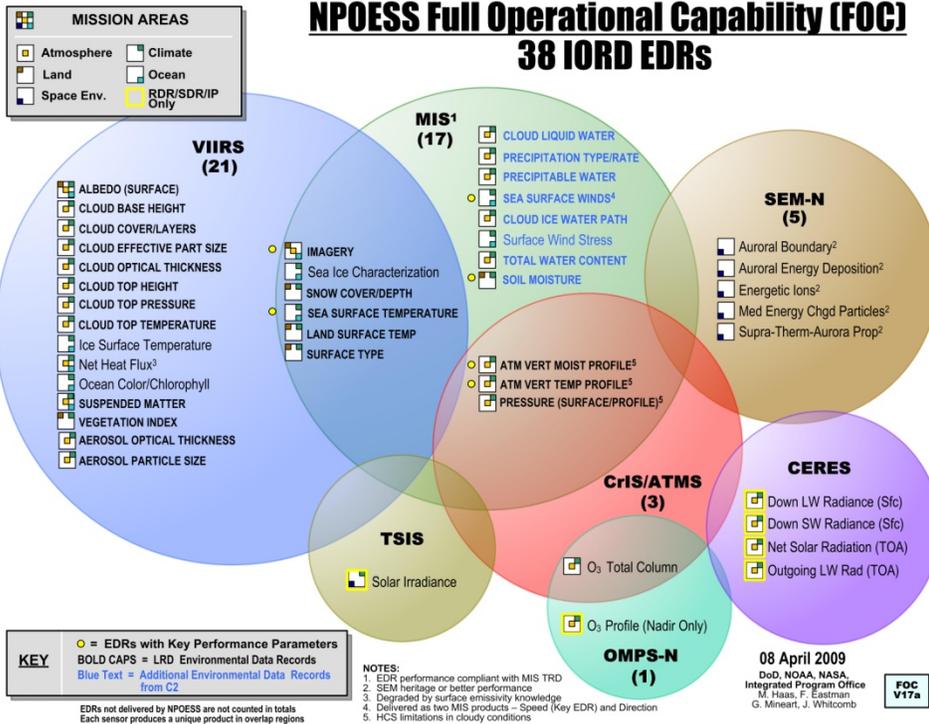
- Fully functional systems at all Centrals
- Enterprise management (EM) and data monitor and recovery (DMR).
- User tailored data delivery subscription

Benefits

- High performance data granule design
- Fault tolerant
- Highly Flexible
- Expandable
- Low operations cost

Functionality

NPOESS Full Operational Capability (FOC) 38 IORD EDRs



The function of the IDPS is to convert the raw satellite data into Raw Data Records (RDR), Sensor Data Records (SDR), Temperature Data Records (TDR), and Environmental Data Records (EDR) and then to make these products available to the customers.

•RDR Processing - The first step is to convert the satellite mission data into RDRs. This involves removing the communications protocol, time ordering the information, logging the information and segmenting the information for further processing.

•SDR/TDR Processing - The second step is to generate SDRs and TDRs from the RDRs. This involves applying sensor corrections to RDR values, removing the sensor identity, and converting the information into physical units for subsequent processing.

•EDR Processing - The third step is to create EDRs. This involves running SDRs and TDRs into algorithms specifically designed to produce a given set of time and geospatially referenced environmental parameters. Depending upon the EDR, this could involve the integration or referencing of other SDR, TDR, and EDR parameter settings, and/or ancillary information.