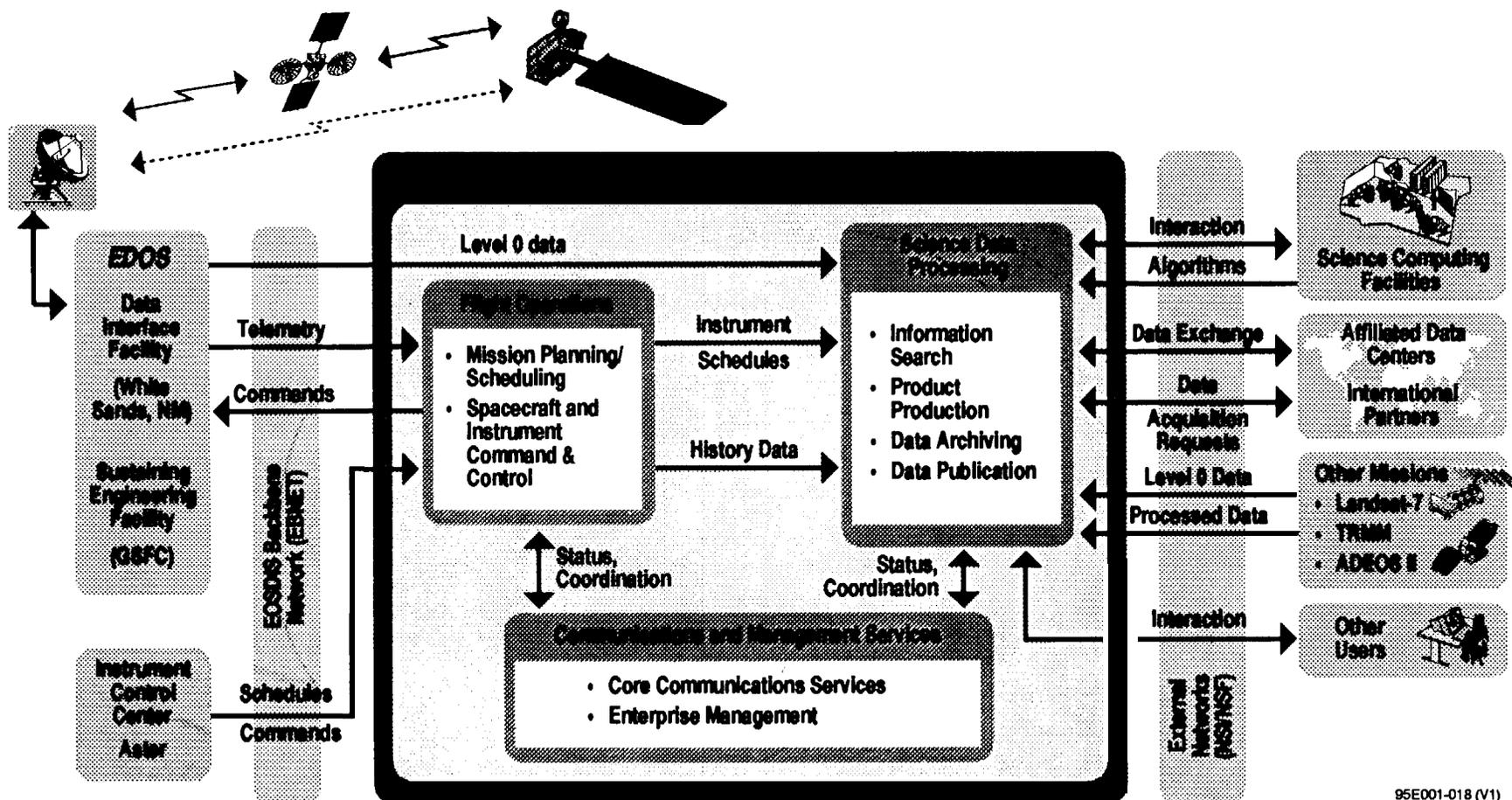# An Overview of EOSDIS Core System

Jeff Masek

Paula Hagan

Andy Endal

(ECS Science Office)
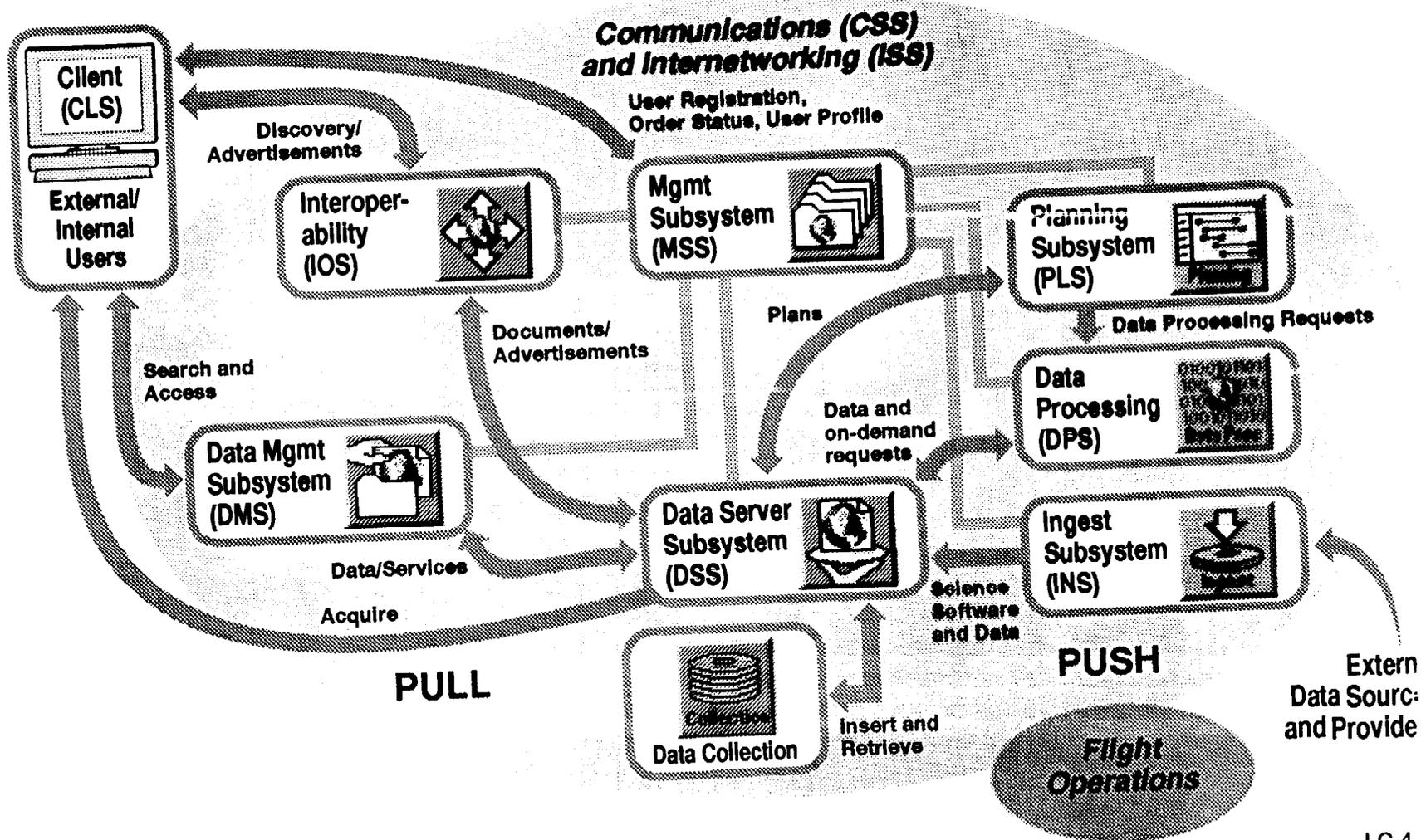
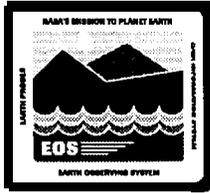# ECS Segment Context

EDOS

Data Interface Facility

(White Sands, NM)

Sustaining Engineering Facility (GSFC)

Instrument Control Center

Aster

EOSDIS Backbone Network (EBNET)

Telemetry

Commands

Schedules

Commands

Level 0 data

Flight Operations

- **Mission Planning/ Scheduling**
- **Spacecraft and Instrument Command & Control**

Instrument Schedules

History Data

Science Data Processing

- **Information Search**
- **Product Production**
- **Data Archiving**
- **Data Publication**

Status, Coordination

Status, Coordination

Communications and Management Services

- **Core Communications Services**
- **Enterprise Management**

External Network (NSI/NSF)

Interaction

Algorithms

Science Computing Facilities

Data Exchange

Affiliated Data Centers

Data Acquisition Requests

International Partners

Level 0 Data

Processed Data

Other Missions

- Landsat-7
- TRMM
- ADEOS II

Interaction

Other Users

95E001-018 (V1)

95E001_r

ECS Context

Communications (CSS) and Internetworking (ISS)

- Client (CLS)
- External/Internal Users
- Discovery/Advertisements
- Interoper-ability (IOS)
- User Registration, Order Status, User Profile
- Mgmt Subsystem (MSS)
- Planning Subsystem (PLS)
- Plans
- Data Processing Requests
- Documents/Advertisements
- Search and Access
- Data Mgmt Subsystem (DMS)
- Data and on-demand requests
- Data Processing (DPS)
- Data Server Subsystem (DSS)
- Ingest Subsystem (INS)
- Data/Services
- Acquire
- Science Software and Data
- Data Collection
- Insert and Retrieve
- Flight Operations
- PULL
- PUSH
- External Data Source and Provide

LC-4

Release B ECS Client Tools

ESST/JEST - granule level search and order
Advertising - finding data collections and services within and outside ECS
EOSView - viewing HDF-EOS files and browse images.
Subsetting - subsetting and subsampling granules prior to ordering

Data Dictionary Tool - retrieve definitions of key terms
Document Search Tool - find guide (and other) documents

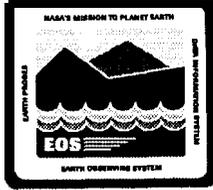**DART** - request data aquisition, examine planned aquisitions (ASTER).
DPRT - request on-demand production (ASTER).
Subscription - specify subscription to data product.

User Preferences Tool - change look&feel preferences for client GUI.
User Registration Tool - registration, security.
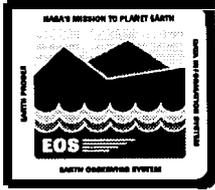**Desktop** - provides tool integration, login services, drag/drop services.

EOSView: What is it?

- <u>HDF and HDF-EOS Viewer</u>. Opens HDF files, reads metadata, and displays data, text, and image(s).
Will be bundled as part of ECS Client (X-based interface).

<u>Designed for</u>:
- viewing browse images
- viewing entire granules locally
- viewing animations
- inspecting data/metadata in tabular form

<u>Not designed as a scientific analysis tool</u> (e.g. no image processing, mathematical/statistical tools, etc).

Release B EOSView Functionality:

- Display of HDF file contents

- HDF-EOS (swath, grid, point)

- 24-bit Raster image display

- Raster image animation

- Tabular display of data objects

- Color palette selection

- Color palette manipulation

- View multiple images at once

- Display of text/annotations

- Hypertext help

- Pan/zoom on display

- Country /state overlays *

- Save HDF to ASCII or binary files*

> * Not in 10/96 version