Ground Subsystem
H.1 Overview

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Ground System Overview Outline

- H.1 Overview (Gell)
- H.2 Mission Operations Computer System (Gell)
- H.3 Mission Operations Software (Gell)
- H.4 Instrument Level I&T, Calibration and Qualification (Grassl)
- H.5 TIDI-Spacecraft I&T (Gell)
- H.6 Mission Operations (Gell)

Ground System Overview

- **Ground system consists of the elements required to**
  - **Operate the instrument during**
    - **calibration and qualification**
    - **spacecraft I&T**
    - **flight operations**
  - **Reduce the measurements to scientifically useful quantities**
  - **Archive, catalog and serve the data products**

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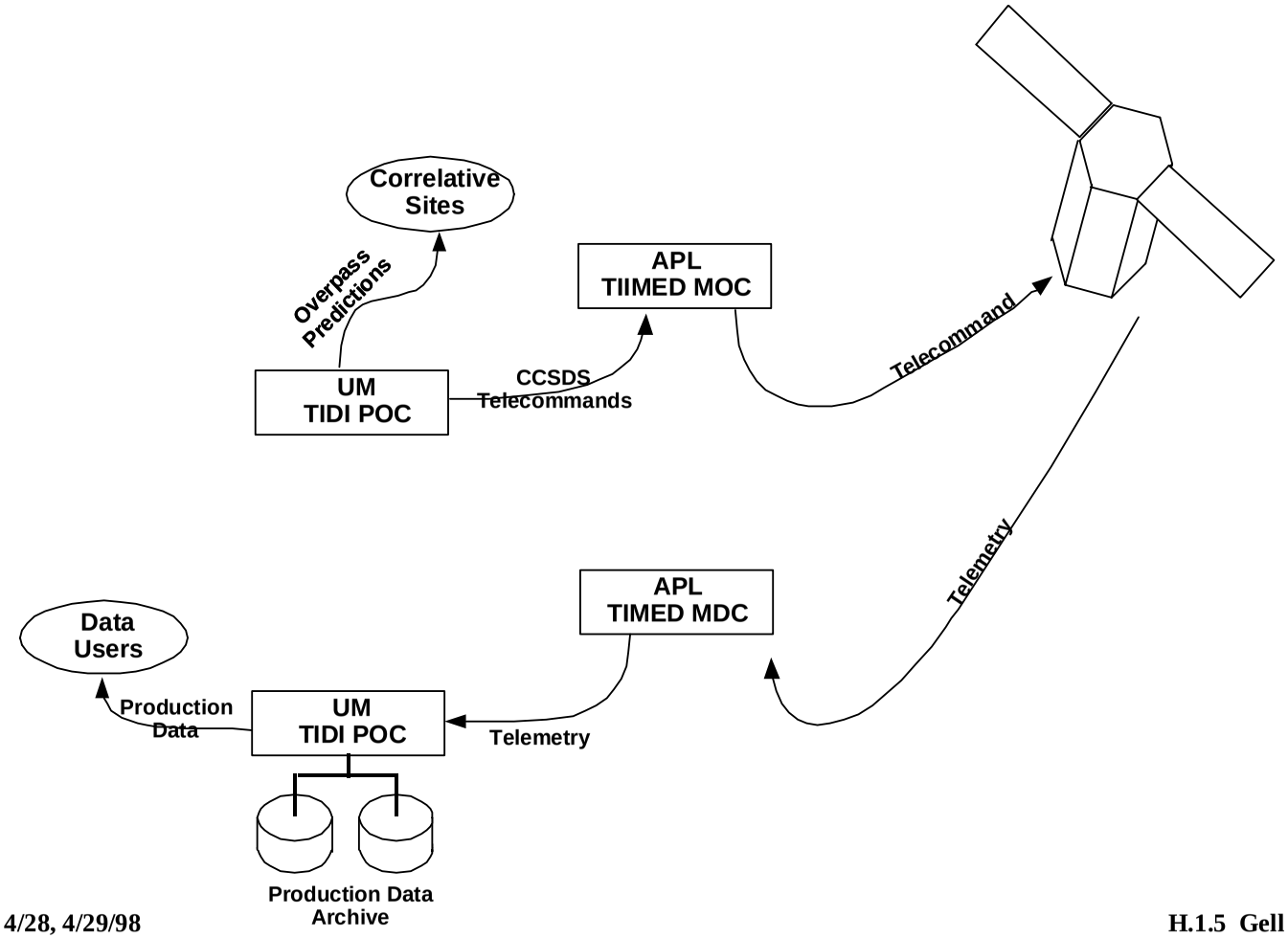
Mission Operations Concept

- **Mission Operations Consists of all the functions that the ground system is called upon to perform**
  - **Uplink Operations**
    - **Command Planning**
    - **Command Generation**
    - **Command Transmission**
  - **Downlink Operations**
    - **Instrument Health and Safety Monitoring**
    - **Operations Monitoring**
    - **Data Logging**
  - **Anomaly Resolution**
  - **Data Processing and Distribution**
    - **Data Generation**
    - **Archive Maintenance**

Mission Operations Data Flow



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Ground System Components

- **Software**
  - Command Planning and Generation
  - Instrument Evaluation
  - Data Production
  - Data Display
- **Hardware**
  - Computers
  - Data Storage
  - Communications
- **Procedures**
  - Planning
  - Instrument Operations
  - Anomaly identification and resolution