
GLI Processing Subsystem Development Status

GLI Workshop @Kanazawa Japan

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November 7 – 10, 2000

NASDA EOSD

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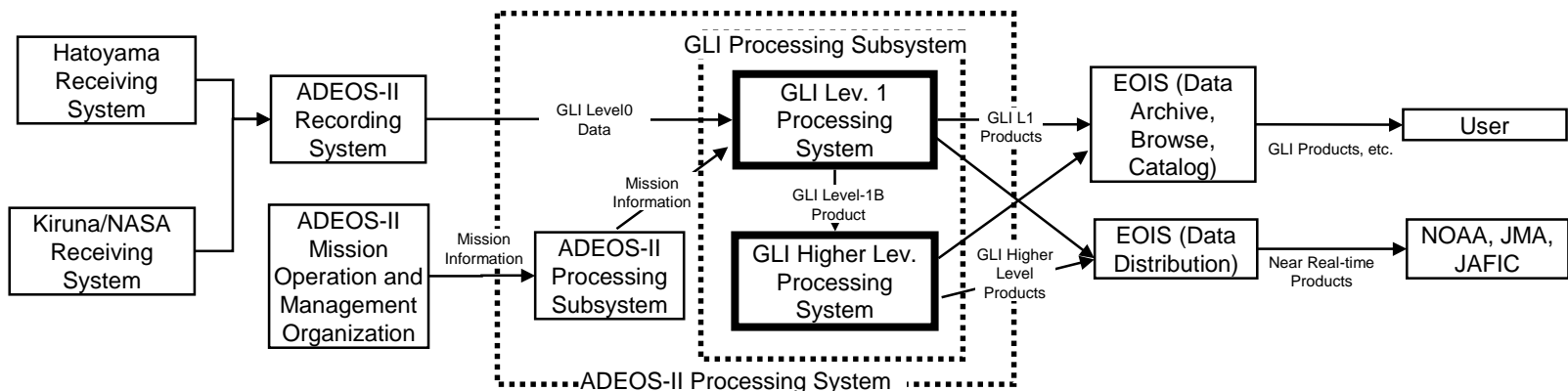
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1. GLI Processing Subsystem Overview

1.1. System Overview

1) General Function

- a. Input GLI 1Km and 250m Level-0 Data processed by ADEOS-II Recording System and Kiruna Station, and output Level-1 and Higher Level Products.
Level-1 Products are Level-1A and Level-1B. Higher Level Products are Level-2A, Level-2, Level-3, Level-3StaMap.
- b. Automatic Level-1 and Higher Level processing scheduling.
- c. Generate Near Real-time Level-1 and Higher Level Products.
- d. Generate Level-1 and Higher Level Map Products (Level-1B Map and Level-2Map) by user order.
- e. Reprocess Level-1 and Higher Level Products.
- f. Inspect processed Level-1 and Higher Level Products.



1. GLI Processing Subsystem Overview

2) System Operation

<GLI Level-1 Processing System>

- Generate Level-1 Products and Near Real-time Products from GLI-1Km data within 35 minutes after receiving Level-0 Data of every downlink.
- Generate 30 scene Level-1 Products from GLI-250m Data within 8 hours.
- Generate Level-1 Product from 3 day Level-0 Data processed from Raw Data received by foreign stations within 72 hours.
- Generate Map Products by user orders and reprocess during idle time.

<GLI Higher Level Processing System>

- Process and reprocess 1 day observed GLI Data within 1 day.
- Generate Near Real-time Products within 2 hours after receiving Level-0 Data.
- Generate Map Products by user orders during idle time.

2. GLI Processing Subsystem Development Status

2.1. Level-1 Processing System Software

- 1) CDR#1 and #2 --- completed by 1999/9E
- 2) GLI Level-1 Processing System Internal Test --- completed by 2000/3B
- 3) ADEOS-II Ground System Internal Test (ADEOS-II Integration Test Part I) --- completed in 2000/7E
- 4) NASDA Ground System (ADEOS-II Ground System, EOIS and TACC) Internal Test (ADEOS-II Integration Test Part II)--- will complete by 2000/11B
- 5) NASDA, NASA, NOAA and CNES Test (ADEOS-II Mission Simulation Test No.1 and No.2) --- will complete in 2001/7E

2.2. Higher Level Processing System Software (EOC)

- 1) CDR#3 --- completed in 2000/7B
- 2) First version of Higher Level Algorithm Software from EORC --- will be provided to EOSD by 2000/11M
- 3) ADEOS-II Integration Test Part I --- will complete by 2001/3E
- 4) ADEOS-II Integration Test Part II and ADEOS-II Mission Simulation Test --- will complete by 2001/7E

2. GLI Processing Subsystem Development Status

2.3. Level-1 Processing Algorithm

- 1) First version of Algorithm --- developed by 2000/3B
- 2) Updating software based on Algorithm basis document Ver. 4 --- will complete by 2001/3E

Table 2-1 Algorithm version up plan

Version	Definition	Release Date
Ver.0.0	- Based on Algorithm basis document version 2	2000/3B (Completed)
Ver.0.1	- Based on Algorithm basis document version 3 and incorporate some modification of version 4	2001/3E
Ver.0.2	- ADEOS-II Launch version - Based on Algorithm basis document version 5(TBD)	ADEOS-II launch
Ver.1.0	- Based on Algorithm basis document version TBD - Incorporate the update by Initial checkout and GLI Level-1 Algorithm initial calibration - Software version for GLI Level-1 routine processing at EOC	After Algorithm initial calibration
After Ver.1.0	- Incorporate the update by algorithm validation	After algorithm validation

2. GLI Processing Subsystem Development Status

2.4. Development Schedule

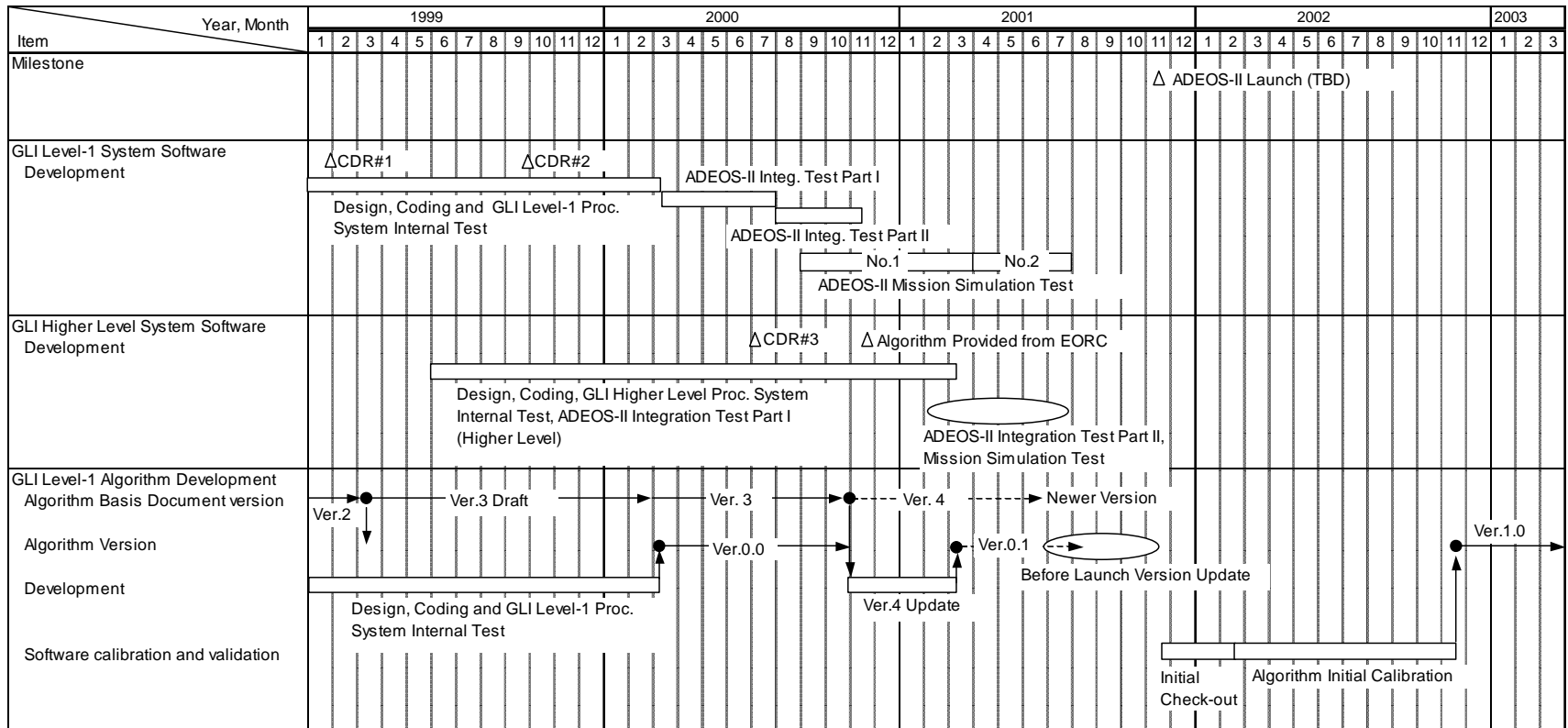


Figure 2-1 GLI Processing Subsystem Development Schedule

3. Level-1 Processing System Overview

3.1. System Overview

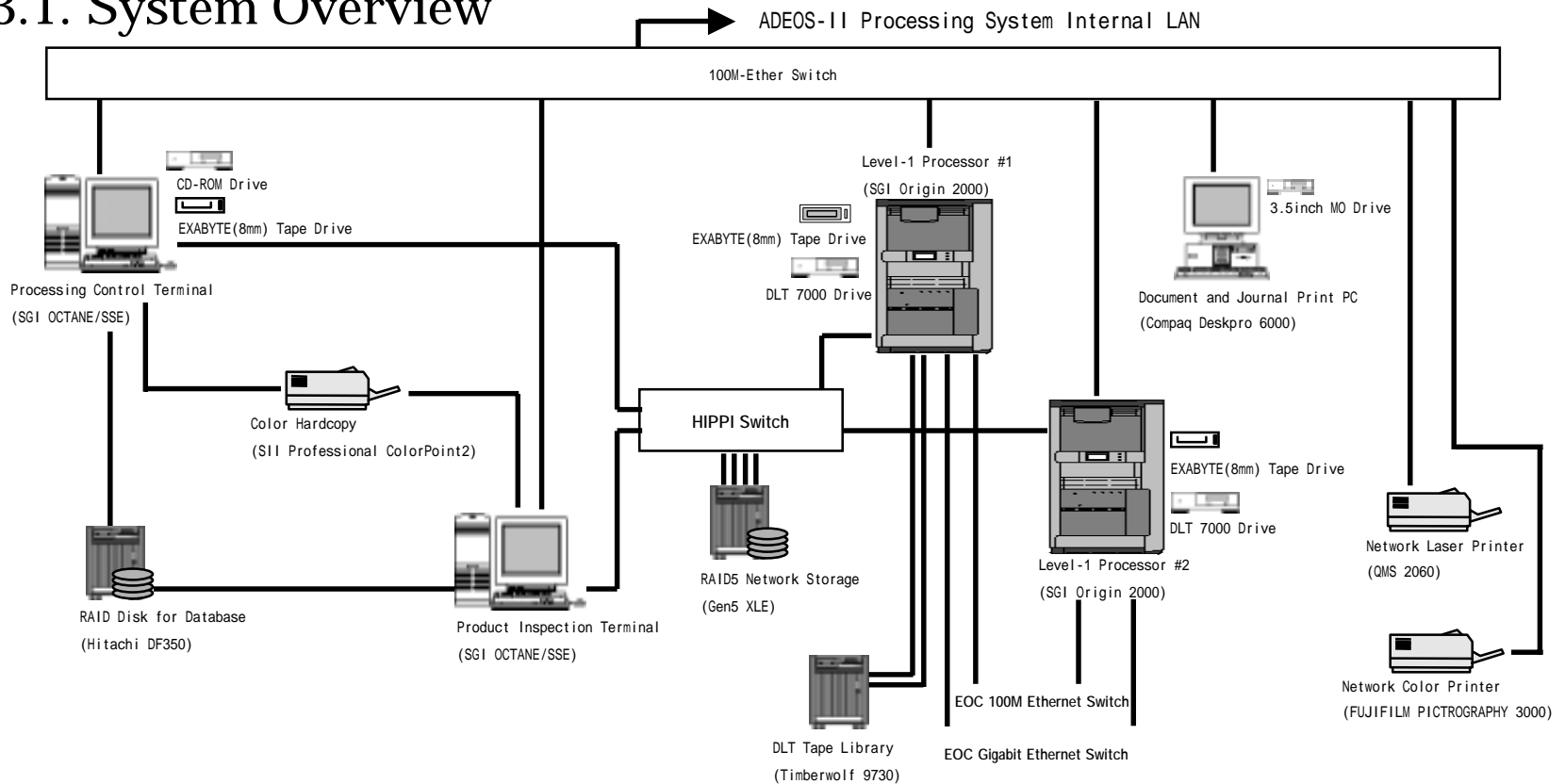


Figure 3-1 GLI Level-1 Processing System Overview

3. Level-1 Processing System Overview

3.2. Hardware Configuration

- 1) Processing Control Terminal
 - SGI OCTANE/SSE
 - R10000@250MHz x 2, 512MB Memory, 18GB Disk
- 2) Product Inspection Terminal
 - SGI OCTANE/SSE
 - R10000@250MHz x 2, 512MB Memory, 18GB Disk
- 3) Level-1 Processor #1 and #2
 - SGI Origin2000
 - R10000@250MHz x 8, 2GB Memory, 27GB Disk
- 4) RAID5 Network Storage
 - Gen5 XLE, 600GB
 - HIPPI Interface
- 5) DLT Tape Library
 - StorageTek TimberWolf 9730, 840MB
 - 24 Cell, 2 DLT 7000 Drive
- 6) Document and Journal Print PC
 - Compaq Deskpro 6000
 - Pentium2@300MHz, 64MB Memory, 4.3GB Disk, WindowsNT4
- 7) Color Hardcopy
 - SII Professional ColorPoint2
- 8) Color Network Printer
 - FUJIFILM PICTROGRAPHY3000
- 9) Network Laser Printer
 - QMS 2060

4. Higher Level Processing System Overview

4.1. System Overview

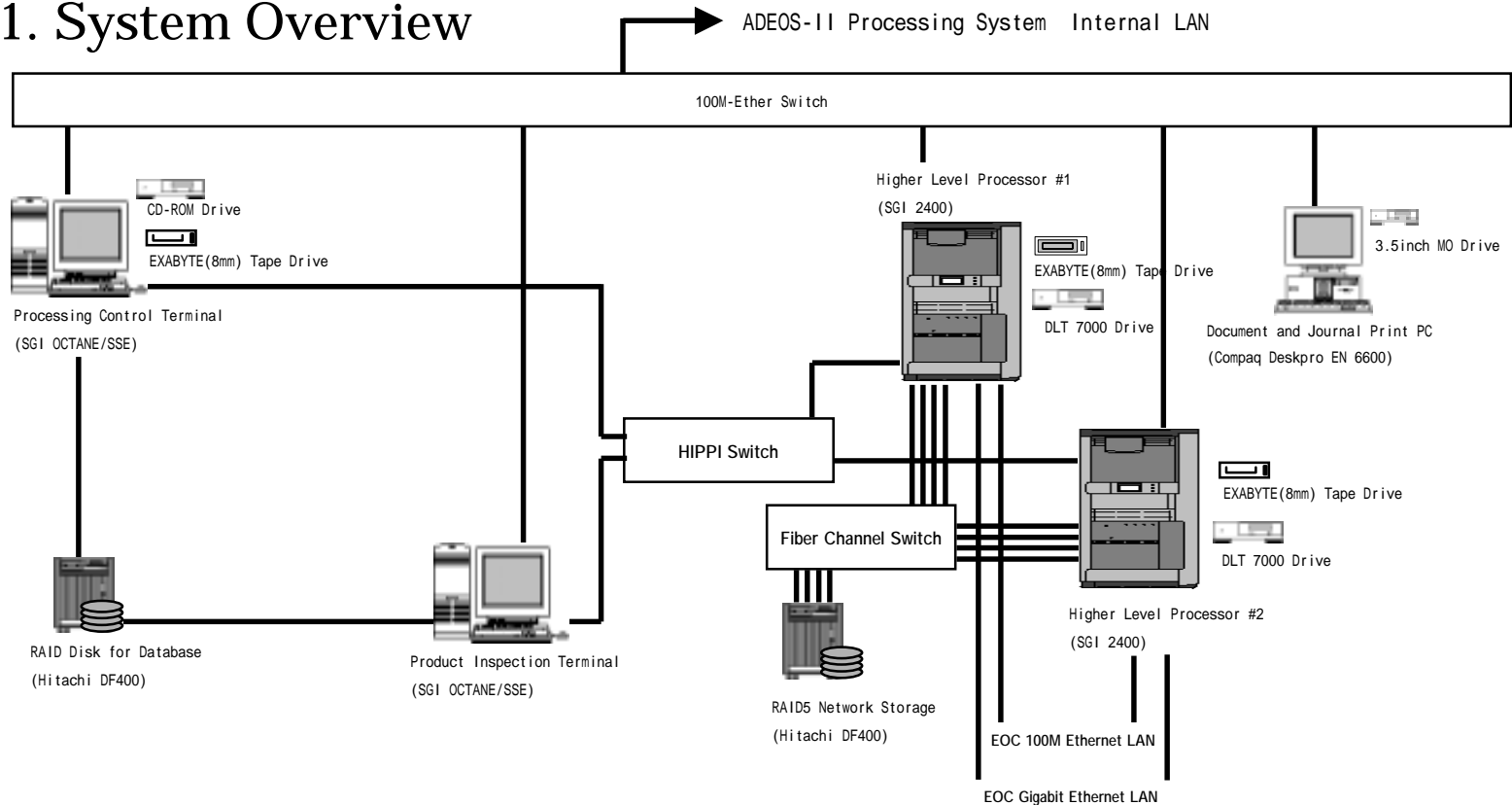


Figure 4-1 GLI Higher Level Processing System Overview

4. Higher Level Processing System Overview

4.2. Hardware Configuration

- 1) Processing Control Terminal
 - SGI OCTANE/SSE
 - R12000@300MHz x 2, 512MB Memory, 36GB Disk
- 2) Product Inspection Terminal
 - SGI OCTANE/SSE
 - R12000@300MHz x 2, 512MB Memory, 36GB Disk
- 3) Higher Level Processor #1 and #2
 - SGI 2400
 - R12000@400MHz x 8, 4GB Memory, 90GB Disk
- 4) RAID5 Network Storage
 - Hitachi DF400, 1.5TB
 - Fiber Channel Interface
- 5) Document and Journal Print PC
 - Compaq Deskpro EN 6600
 - Pentium3@600MHz, 128MB Memory, 10GB Disk, WindowsNT4

5. Picture of GLI Processing Subsystem



Figure 5-1 Picture of GLI Processing Subsystem