

GLI Project Status on ADEOS-II

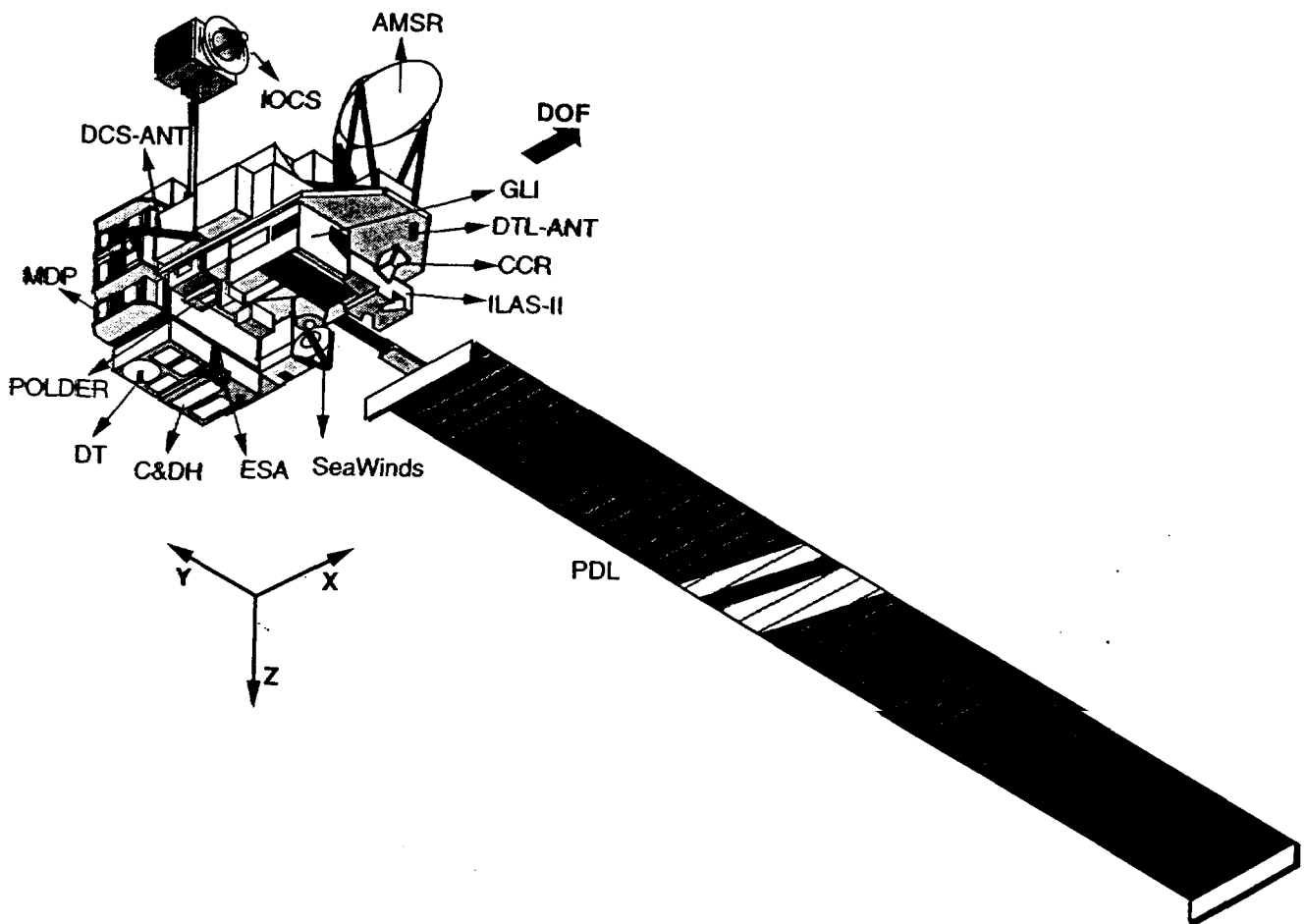
Global Imager (GLI)

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Applied Optics

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Lasers, Photonics, and Environmental Optics



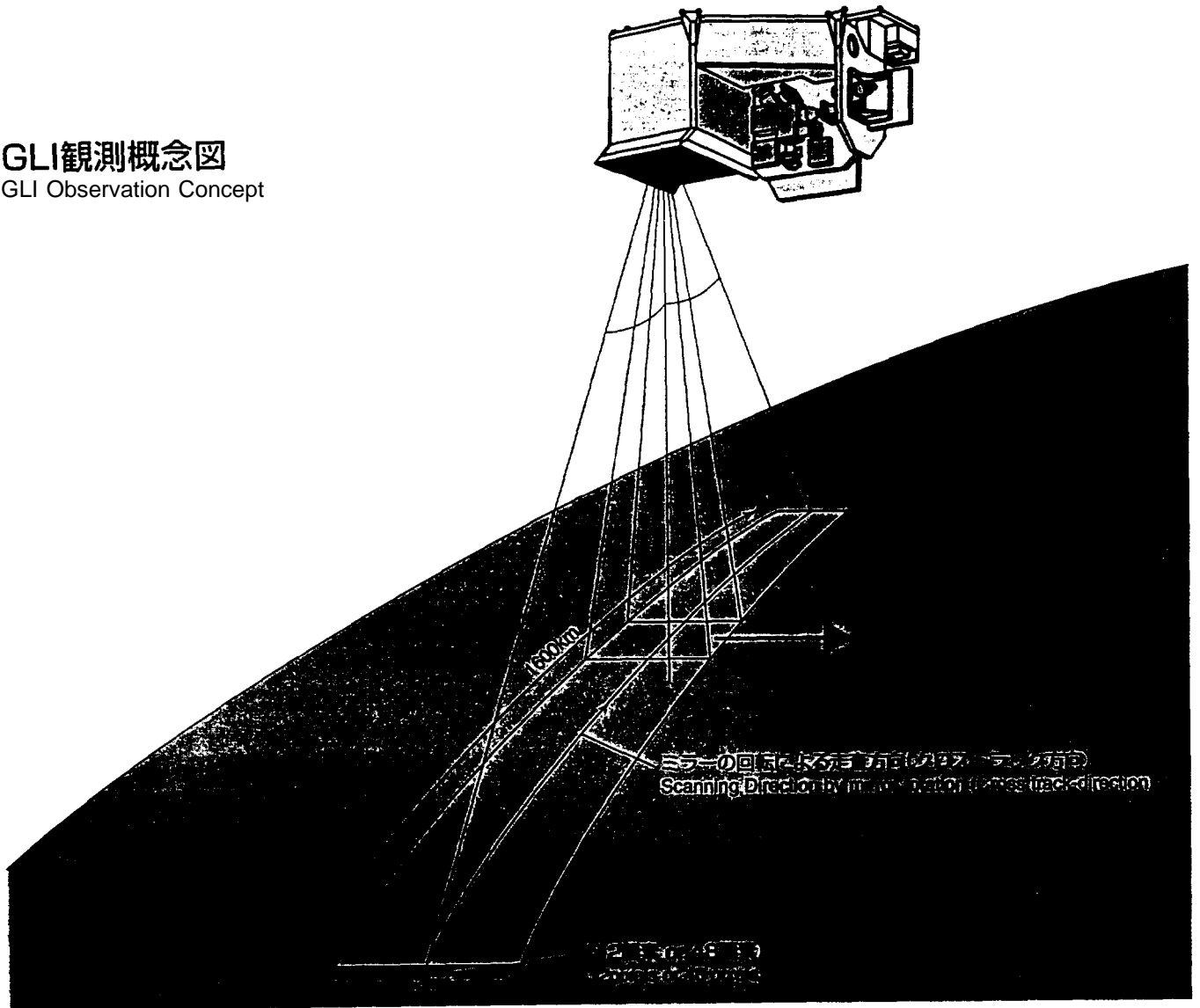
OSA

Optical Society of America

20 May 1998

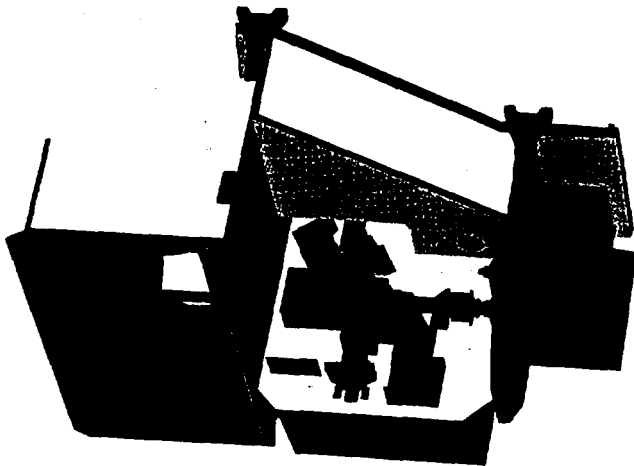
GLI観測概念図

GLI Observation Concept



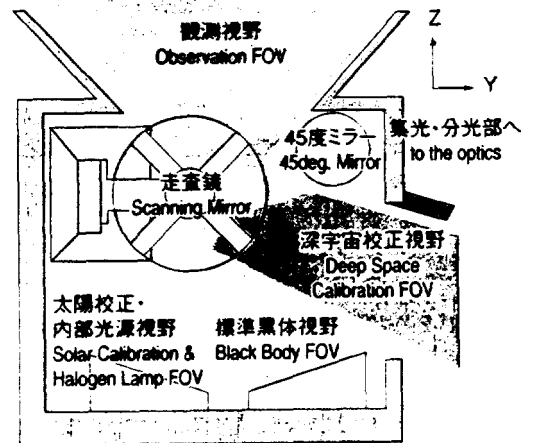
GLI外観図

GLI Over View



光学系の視野範囲

Field of Views



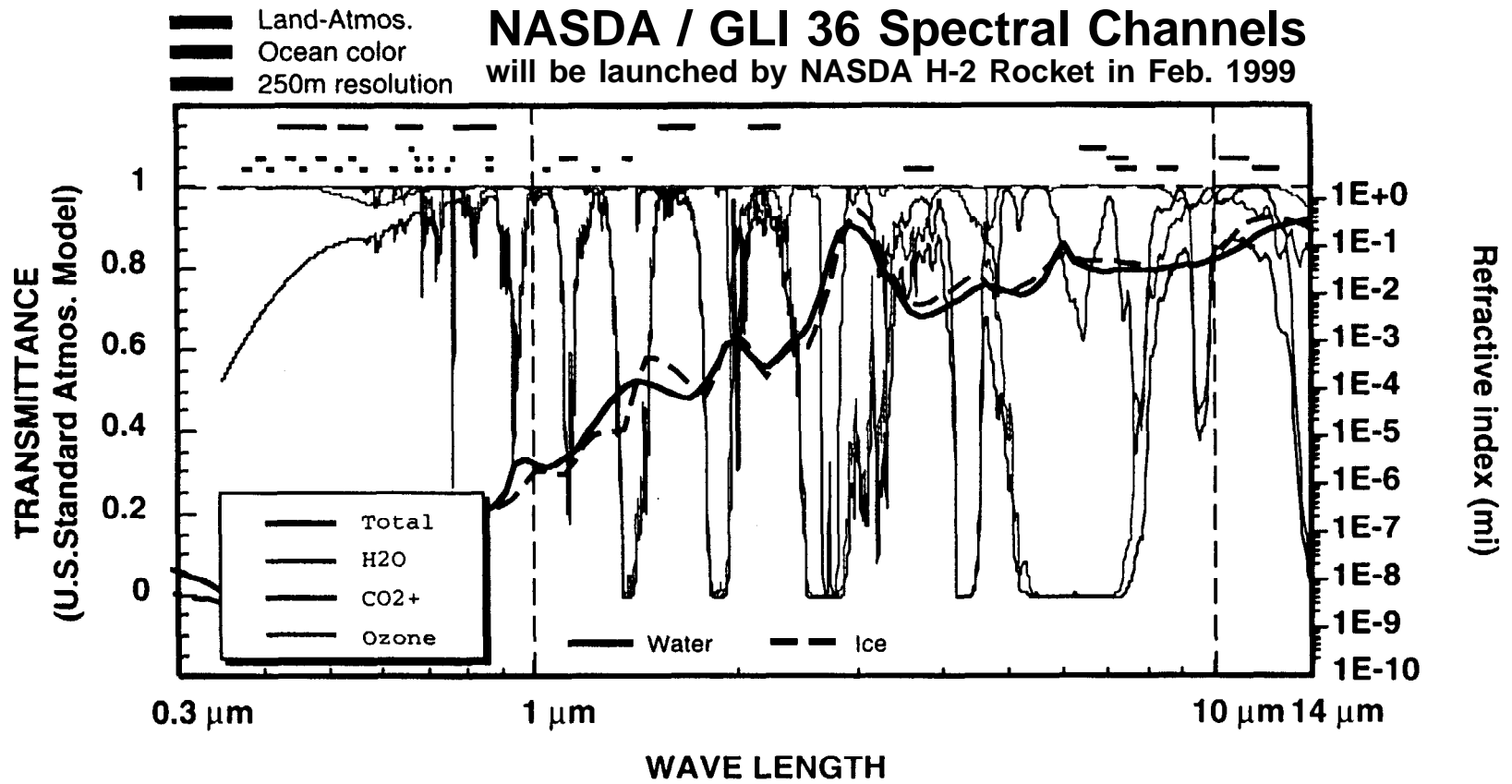
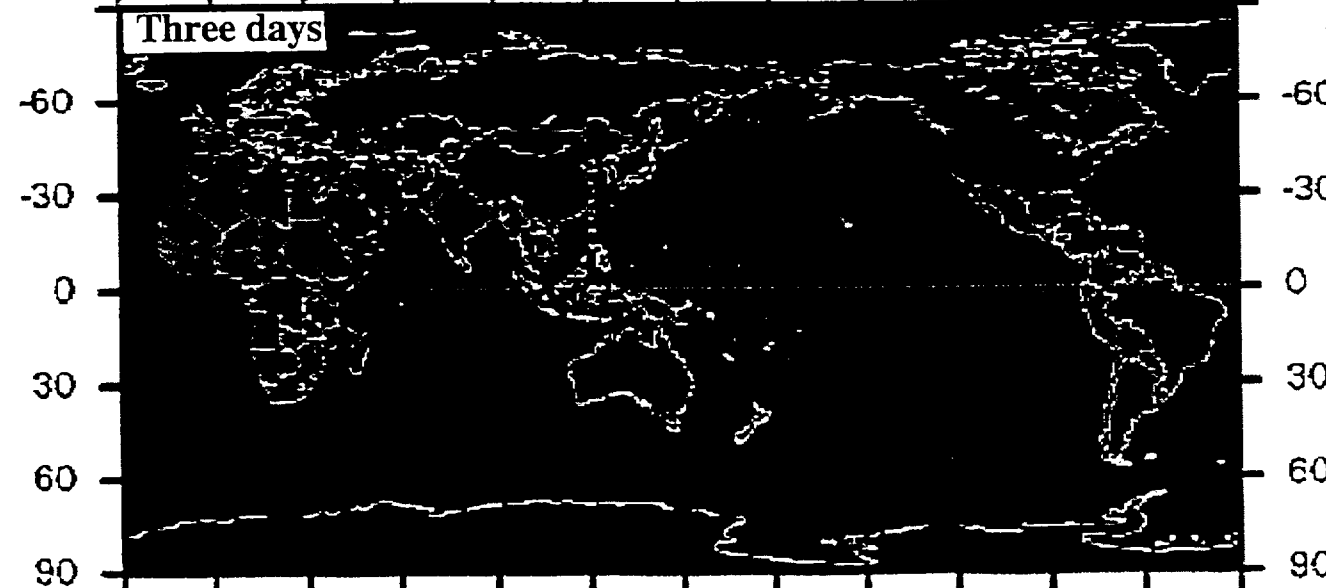
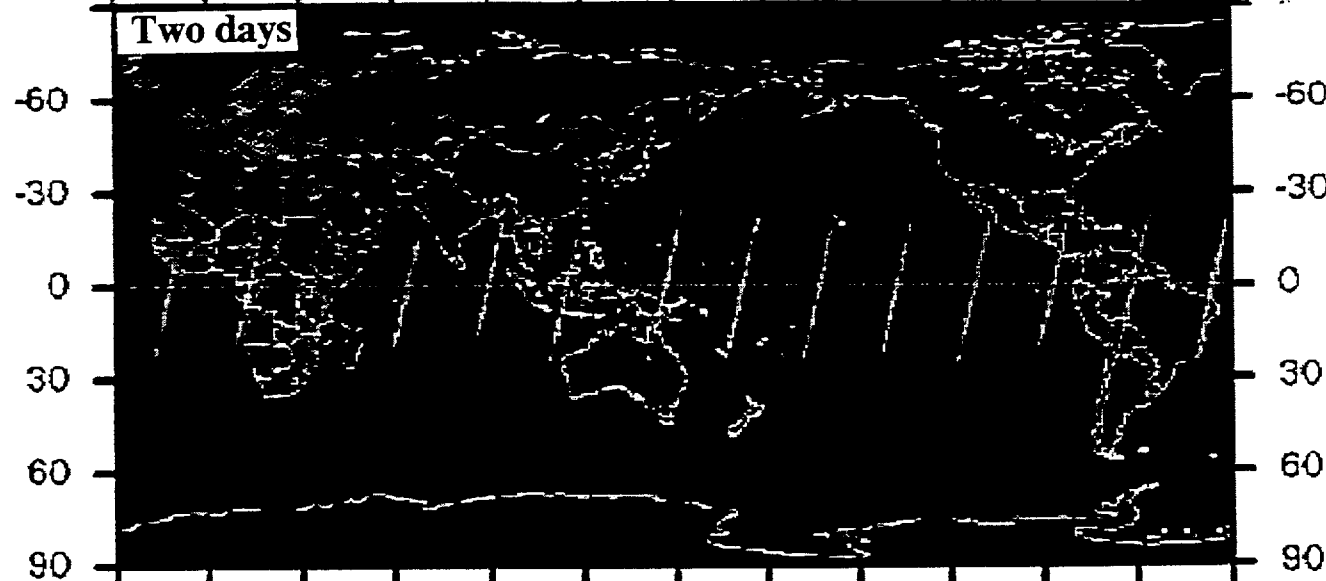
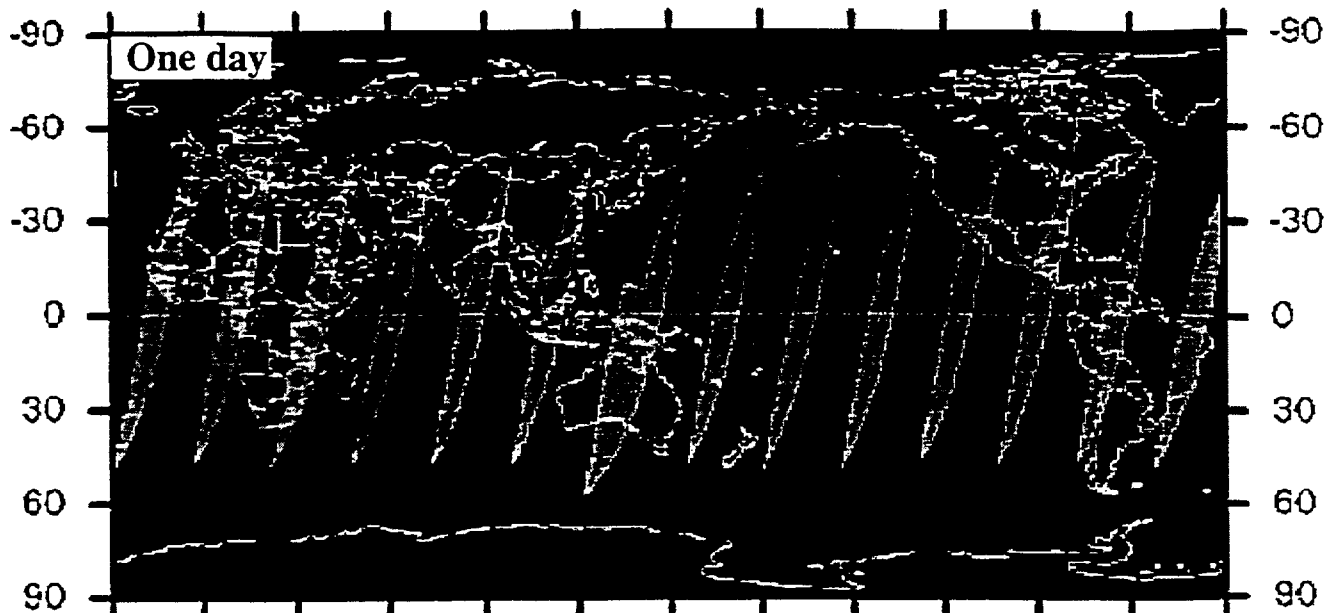


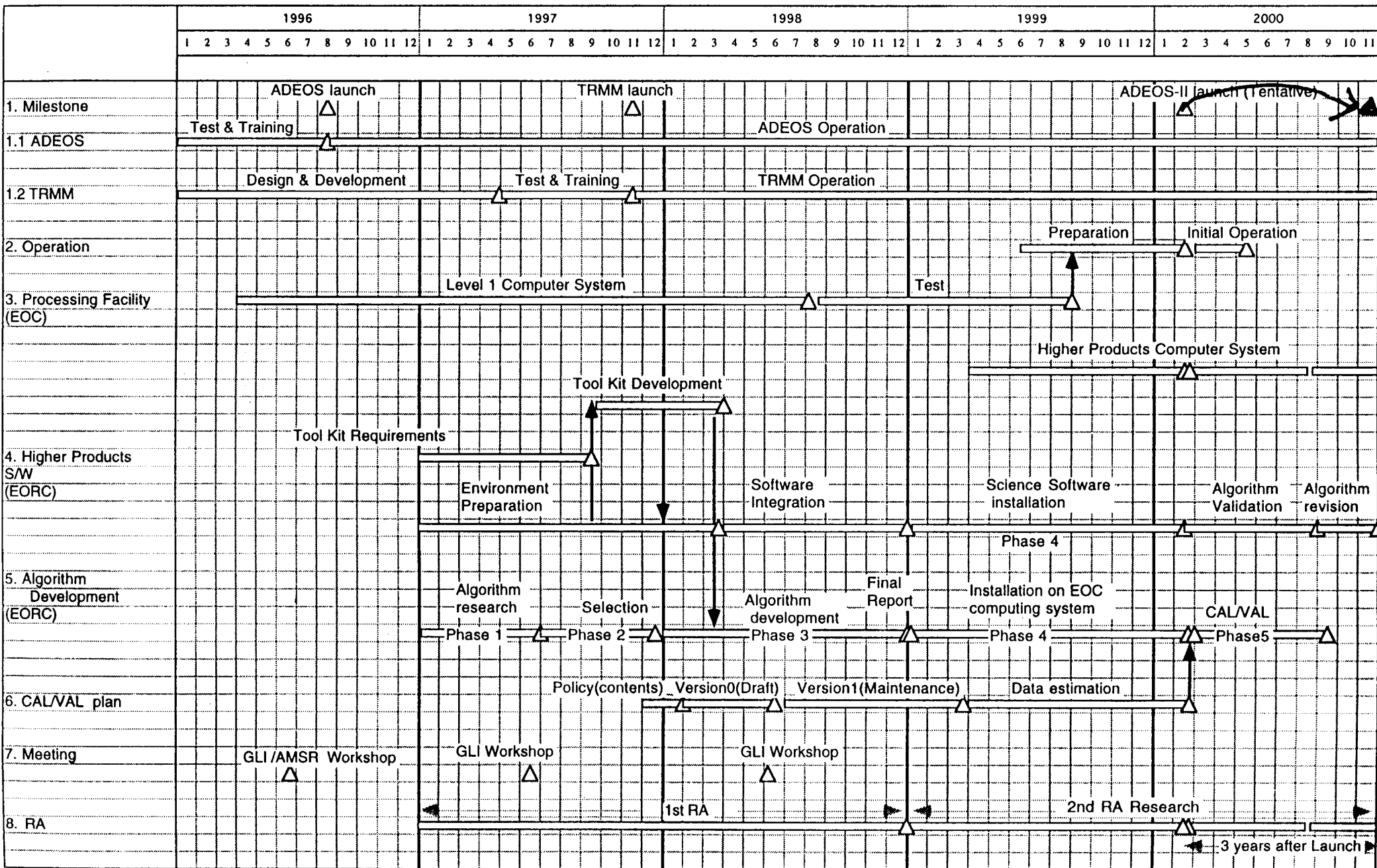
Fig. 21 GLI channels and the atmospheric transmittance (1976 US standard atmosphere model) . .

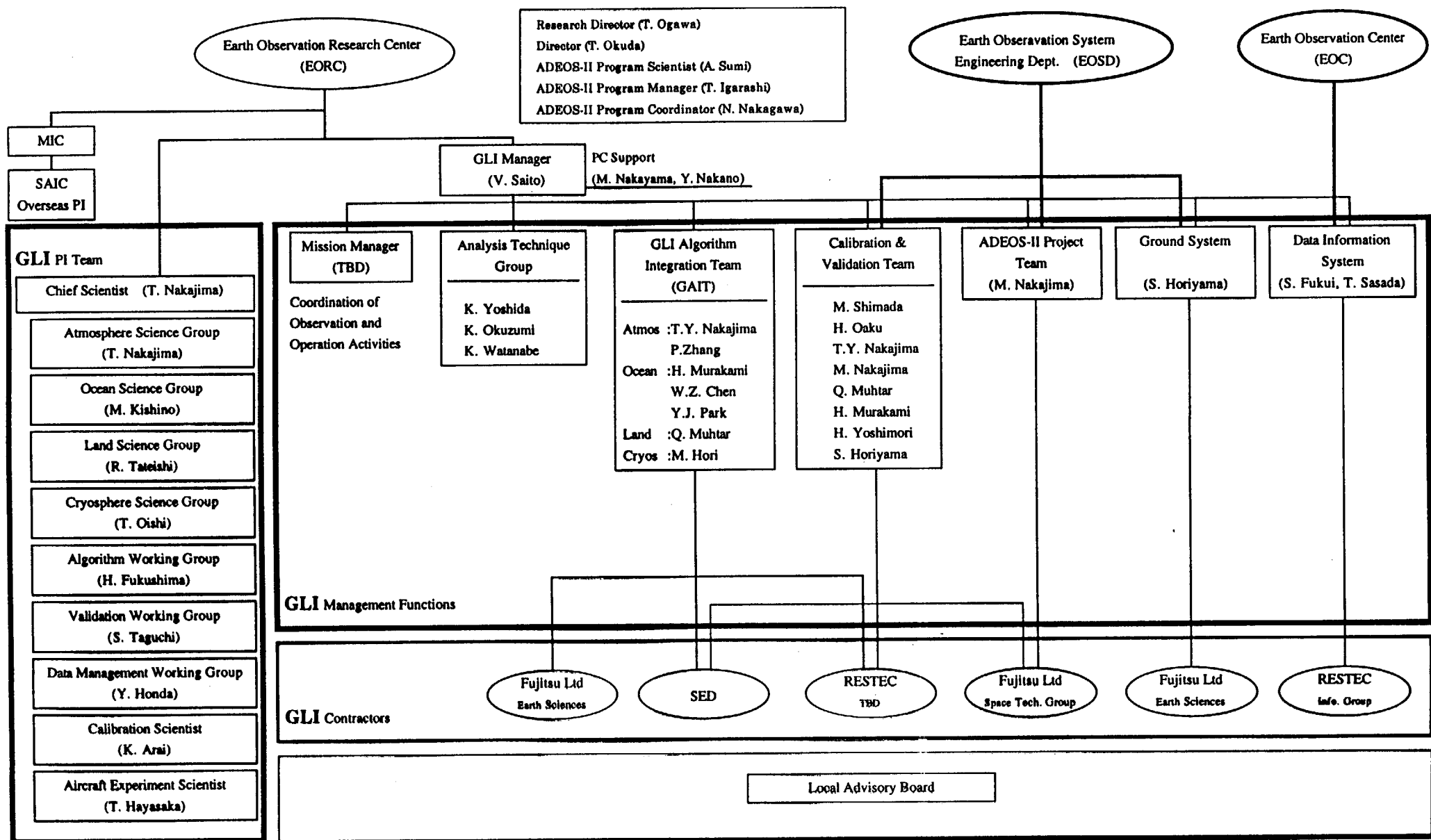
30W 0 30E 60E 90E 120E 150E 180 150W 120W 90W 60W 30W



30W 0 30E 60E 90E 120E 150E 180 150W 120W 90W 60W 30W

ADEOS-II Development Schedule



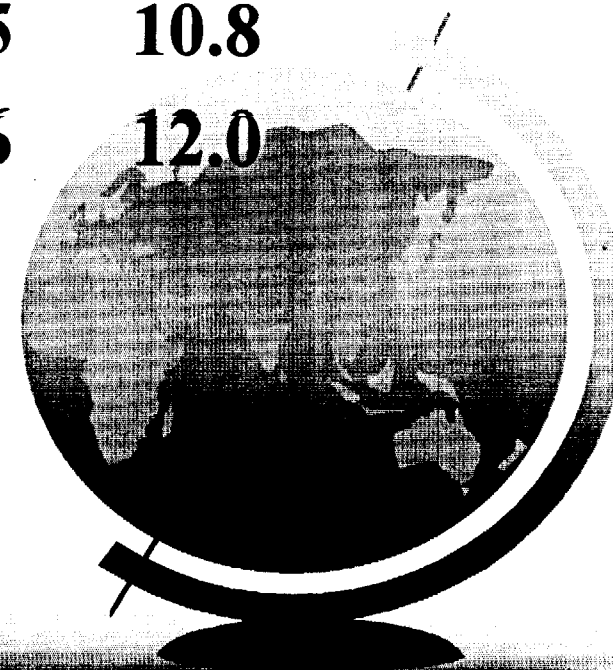


GLI Ocean Channel

VNIR

TIR

Band	nm	Band	nm	Band	μm
1	380	9	565	30	3.745
2	400	10	625	34	8.6
3	412	11	666	35	10.8
4	443	12	680	36	12.0
5	460	13	710		
6	490	14	749		
7	520	15	865		
8	545				



GLIOCEAN Products

- **Standard Products**

 - Water-Leaving Radiance (nLw, Aerosols)**

 - Chlorophyll *a*, CDOM, SS, K490**

 - Bulk SST**

- **Research Products**

 - Accessory pigment (Carotenoid, Phycobilin)**

 - Phytoplankton species (Trichodesmium, Coccolithus)**

 - Natural fluorescence**

 - PAR**

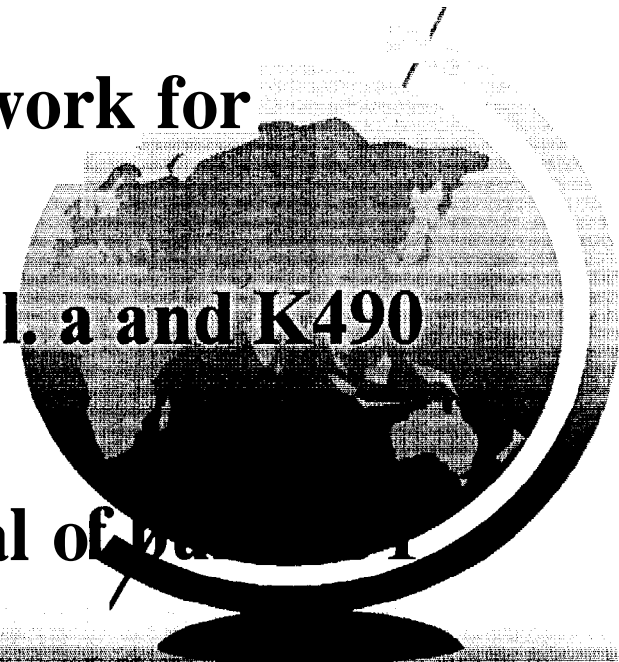
 - Primary production**

 - Absorption of suspended particles**

 - skin SST**

Outline of Algorithms for Standard Products

- **Atmospheric Correction Algorithm**
 - *Improved OCTS A. C. with 749 nm and 865 nm
 - *A. C. in use of Neural Network
- **Bio-optical Algorithm**
 - *Inverse Method in use of Neural Network for retrieval of Chl. a, SS, and CDOM
 - *Empirical Method for retrieval of Chl. a and K490
- **Sea Surface Temperature**
 - *Improvement of MCSST for retrieval of SST



Data flow

EOC → EORC online

(L1A (10%) 1 km
L2A 4 km

Program update

V0 : L → EOC

V1 : L + 6M → EOC

V1.2 : ... at EORC

V2 : L + 18M → EOC

V3 : L + 30M → EOC

L2, L3 generation

25% -- L + 18M 25%

50% ... 24M

100% 30M

EOC

EORC



GLI (Global Imager)

GLI is an optical sensor observing the reflected solar radiation from the earth's surface including land, ocean and cloud and/or the infrared radiation with multi channel for measuring the biological content, such as chlorophyll, organic substance, vegetation index, and temperature, snow and ice, cloud distribution. These data will be used for grasping the global circulation of carbon and climate change. GLI will be equipped by ADEOS-II which will be launched by H-II rocket in **2000**.

Contents

--- Last Update: 19 May 1998 ---

Find icons, ~~UPDATED~~, and ~~PI's~~.

- Figure
 - Organization
 - Schedule
 - Sensor Specification
 - Expected Data Products
 - Meetings (updated; September 11, 1997)
 - Subgroup Activities
 - PI List
 - Presentation toolkit
 - GLI Signal Simulator (Moved to PI's Door page)
 - The Airborne Multi-Spectral Scanner (AMSS)
 - GLI Flow Chart
 - PI's Door (GLI Signal Simulator. Documents. Status Check) ~~UPDATED~~
-

Figure

Return Contents

*http://www.eorc.nasda.go.jp/ADEOS-II
/GLI/gli.html*