GLI Project Status on ADEOS-II

Global Imager (GLI)

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GLI Observation Concept

GLI Over View Field of Views

光学系の視野範囲
Field of Views
NASDA / GLI 36 Spectral Channels will be launched by NASDA H-2 Rocket in Feb. 1999

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

<table>
<thead>
<tr>
<th>Band</th>
<th>VNIR</th>
<th>Band</th>
<th>VNIR</th>
<th>TIR</th>
<th>Band</th>
<th>μm</th>
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<tr>
<td>1</td>
<td>380</td>
<td>9</td>
<td>565</td>
<td></td>
<td>30</td>
<td>3.745</td>
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<tr>
<td>2</td>
<td>400</td>
<td>10</td>
<td>625</td>
<td></td>
<td>34</td>
<td>8.6</td>
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<tr>
<td>3</td>
<td>412</td>
<td>11</td>
<td>666</td>
<td></td>
<td>35</td>
<td>10.8</td>
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<tr>
<td>4</td>
<td>443</td>
<td>12</td>
<td>680</td>
<td></td>
<td>36</td>
<td>12.0</td>
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<tr>
<td>5</td>
<td>460</td>
<td>13</td>
<td>710</td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>490</td>
<td>14</td>
<td>749</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>520</td>
<td>15</td>
<td>865</td>
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<tr>
<td>8</td>
<td>545</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
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
Data flow

EOC $\rightarrow$ EORC online

(L1A (10%) $\rightarrow$ 1 km
L2A $\rightarrow$ 4 km

Program update

$V_0$ : L $\rightarrow$ EOC
$V_1$ : L + 6M $\rightarrow$ EOC
$V_{1.2}$ : $\ldots$ at EORC
$V_2$ : L + 18M $\rightarrow$ EOC
$V_3$ : L + 30M $\rightarrow$ EOC

L2, L3 generation

25% $\rightarrow$ L + 18M
50% $\rightarrow$ 2414
100% $\rightarrow$ 3014 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.

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

Find icons, , , and .

- 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)

Figure

Return Contents

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