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GLI-250m Data Acquisition Analysis

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1. GLI-250m operation priority



*Initial checkout phase [- Launch+4Month]

Requests are not accepted in principle.

*Calibration and Validation phase [L+4 – 12M]

- 1st priority : <u>requests</u> for the observations for calibration and <u>validation</u>, such as the synchronous observation
- 2nd priority : requests for other observation
- 3rd priority : requests of the global acquisition planning

*Operational phase [L+12M -]

- 1st priority : requests of the PIs
- 2nd priority : requests of the foreign stations
- 3rd priority : requests of the global acquisition planning

The mission manager finally decide the priority in consulting with each sphere's leaders!

2.GLI-250m Observation Requirements Summary



1st Synchronous ground observation for validation

- -Cryosphere-
 - *Around Alaska
 - *South Pole

-Land-*Mongolia *Japan

2nd Land monitoring observations

-Land-

* The whole Asia, every 4 recurrent periods (about 16 days)

-Cryosphere-

* The region within a maximum radius of 3500km centering around the **South Pole** (south of 55deg.S) and all region where ADEOS-II passes over during daylight and where the antenna on the ground can receives data directly.

2.GLI-250m Observation Requirements Summary



3rd **Global observations**

4th Individual PI's requirement

*findings in 2000-2001 requirement survey

Name	Siripong	Duong	Kawamura	Trotter
Group	Ocean	Land	Ocean	Land
Category	Earth Science	Research Algorithm	Standard Algorithm	Research Algorithm
Period	1/MAY/2002 – 31/MAY/2002	1/MAY/2002 – 31/MAY/2003	?	?
Area	Gulf of Thailand	(22degN,102degE)- (9degN,102degE)	Red tide region in Asia	New Zealand
Purpose	Ocean productivity	Validation of the algorithm for automated land cover classification	Monitoring?	?

→See More

http://sharaku.eorc.nasda.go.jp/pisdoor/gli/survey2/index.html

Mode 1 :

3.1 Condition

- DRTS-W are available
- Four DT ground stations are available
- Using ODR if needed, in case of Synchronous ground observation

ODR can use the only one scene for each path.

3. Simulation of GLI-250m Data Acquisition





3.2 Simulation Area





3.2 Synchronous ground observation for validation

3.2.1 Case1: Around Alaska (Cryosphere PI)

- Period: April May 2002 over 1scene/day
- Area: * Fairbanks: 65deg.N, 145deg.W,
 and the region within a radius of 300km.
 * Barrow: 73deg.N, 160deg.W,
 and the region within a radius of 300km.

Required scene numbers	scenes
Acquired scene numbers	scenes



3.2 Synchronous ground observation for validation

3.2.2 Case2: Mongolia and Japan (Land PI)

Period: AUG 2002

Area: * Mandalgovi

* Yatsugatake

Required scene numbers

* Mandalgovi <u>scenes</u>

* Yatsugatake <u>scenes</u>

Acquired scene numbers

* Mandalgovi <u>scenes</u>

* Yatsugatake <u>scenes</u>



3.2 Synchronous ground observation for validation

(Land PI)

3.2.3 Case3: Land monitoring

Period: L+4 -

Area: Whole Asia

(First 4 recurrent period (about 16 days) takes the continuous observations, and second 4 recurrent period takes no observations)

Required scene numbersscenesAcquired scene numbersscenes