

ALOS acquisition simulation results



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About ALOS simulation



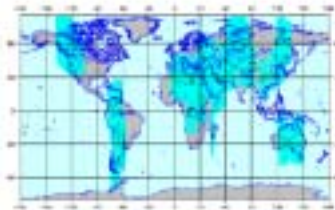
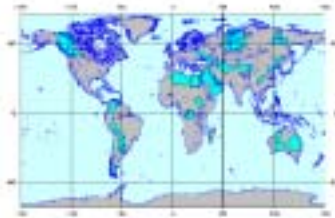
◆ Version

- A real simulation version was available in this september.
- Get results for the first time by the simulation.
- Optimum will be done in a few months.

◆ Conditions & Restriction

- Start date: August 5th in 2002, Term: 3 years.
- There is one data relay satellite(DRTS-W).
- About 9 hrs/day of DRTS-W resources were assigned to ALOS mission.
- Calibration data is sent for 270 sec in every pulsar observation segment. This corresponds to 1800km and this makes it difficult to change a pulsar mode frequently.

270 sec problem



Overview of the Results

Request		Acq. Rate (%)
Node	ADEN	52.5
	ASF	8.4
	AUDN	34.7
	USDN	22.8
Japanese agency, etc.	ERSDAC	59.1
	GSI	45.9
	JCG	25.4
	MAFF	65.5
	MOE	95.3
	NASDA	51.2
Else	PI	10.3

Request	Sensor, etc	Acq. Rate (%)
Calibration	Pulsar	66.0
Calibration	PRISM, AVNIR2	35.3
Validation		47.4
Scenario	PALSAR(Asc.)	50.9
	PALSAR(Desc.)	42.2
	PRISM	47.5
	AVNIR-2	77.2
Internal		28.6

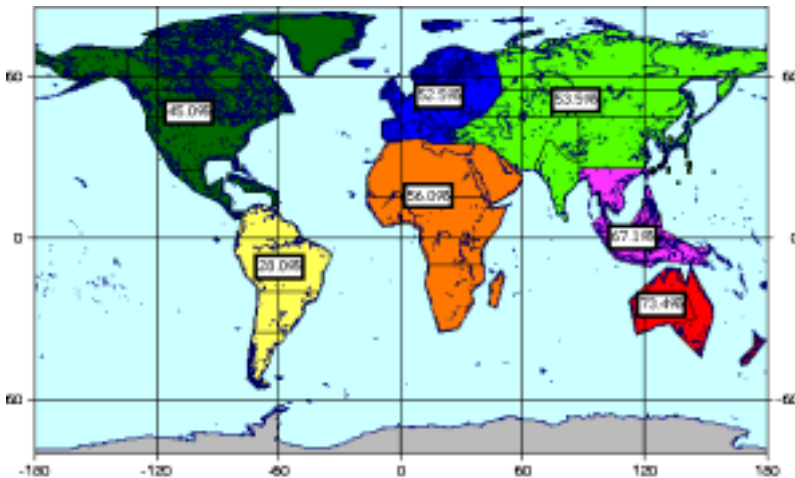
Pulsar Scenario (Ascending)

Acquisition Rate (%)

PALSAR A v1(2002/9/28)	Number of scenes/reqs	2002							2003							2004							2005							Acq. Rate	Acq. Rate						
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4			5	6	7			
A1	1325			48.6																																66.3	67.1
A2	2821			72.4			80.4	71.0	58.8																											67.4	
B1	1449						71.4																													68.2	
B2	1846						79.5	65.5																												73.4	
B3	247						54.7	39.7																												59.3	
C1	5992								38.0																											56.2	
C2	4596						48.8		71.4																											58.0	
C3	2070																																			48.9	
C4	285								61.1	51.6																										61.4	
D1	4197								20.1	50.1																										33.6	
D2	1398								18.6																											11.5	28.0
D3	992																																			26.8	
E1	1957																																			53.8	
E2	4172																																			57.4	
E3	3283																																			45.0	
E4	4083																																			34.4	
E5	395																																			25.2	
E6	823																																			49.6	
F1	3670																																			50.8	
F2	2081																																			53.6	
F3	142																																			77.0	
G1	7042																																			53.8	
G2	2790																																			49.8	
G3	3536																																			46.1	
G4	1335																																			77.0	
G5	3113																																			58.5	
G6	386																																			42.1	
G7	337																																			42.5	
wetlandK	93																																			31.0	31.0

■ FBS(7) ■ FBD(43) ■ WB1(80)

Acquisition Rate on map (%)



Future Plans

A horizontal yellow brushstroke with a textured, painterly appearance, extending across the width of the slide below the title.

◆ Tune the simulation.

- The program may have some minor bugs and haven't been yet optimized. We will install the new program and check it as soon as possible. The program may be fixed within a few months.

◆ Modify the scenario.

- There are some conflicts with other requests. As mentioned before, it is difficult to change the pulsar mode frequently. Then, we will negotiate with other agency, etc to reduce the mode change and to share the data.
- An updated (or new?) scenario will be submitted by next January or February.

270 sec problem

