



The global systematic acquisition strategy for ALOS-2

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Systematic acquisition planning



Systematic Observation strategies (Basic Observation Scenarios - BOS) have been developed and implemented by JAXA for 20 years:

- **JERS-1 SAR** (1995-1998: **Pan-tropical, Pan-boreal**)
- **ALOS PALSAR** (2006-2011: **Global**)
- **ALOS-2 PALSAR-2** (Under development. 2014+ **Global**)

Long-term time-series of spatially and temporally consistent satellite data of key importance for both science and operational applications, and for the development of national monitoring systems of forests, wetlands and agriculture.





ALOS-2 Specifications



	Spotlight	Ultra Fine	High sensitive	Fine	ScanSAR nominal		ScanSAR wide
Bandwidth	84MHz	84MHz	42MHz	28MHz	14MHz	28MHz	14MHz
Resolution	Rg × Az: 3 × 1m	3m	6m	10m	100m		60m
Swath	Rg × Az: 25 × 25km	50km	50km	70km	350km (5-scan)		490km (7-scan)
Polarization	SP	SP/DP	SP/DP/FP/CP		SP/DP		
NESZ	-24dB	-24dB	-28dB	-26dB	-26dB	-23dB	-23dB
S/A	Rg	25dB	25dB	23dB	25dB	25dB	20dB
	Az	20dB	25dB	20dB	23dB	20dB	20dB

SP : HH or VV or HV , DP : HH+HV or VV+VH , FP : HH+HV+VH+VV , CP : Compact pol (Experimental mode)

Main applications:

Fine beam (DP): Forest and land cover monitoring

ScanSAR (DP): Rapid deforestation / wetlands / InSAR (ScanSAR-ScanSAR)

Spotlight (SP): Emergency observations

Ultra Fine (SP) : Global map, InSAR base mapping

High sensitive (QP): Global map

ScanSAR wide (SP) : Polar ice

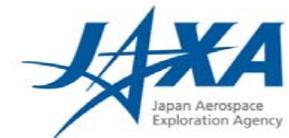


ALOS-2 Basic Observation Scenario



Default beams used in the BOS

ALOS-2 PALSAR-2 - BOS modes									
Mode	Pol.	Resolution (Az)	Band width	Off-nadir angle (sub-beam)	Incidence range	Sub-beams	Swath width (sub-beam)	Pass direction	Coverage
Ultra Fine Single	HH	3 m	84 MHz	29.1°, 32.4°, 35.4°, 38.2°	30.2°–44.4°	4	55 km	Desc	Global
Fine Beam Dual (FBD)	HH+HV	10 m	28 MHz	28.2°, 32.5°, 36.2°	28.5°–42.5°	3	65–70 km	Asc (+ Desc)	Global (+Regional)
High Sensitive Polarimetric	HH+HV+VV+VH	6 m	42 MHz	25.0°, 28.0°, 30.4° 32.7° 34.9°	25.6°–40.2°	5	40–50 km	Asc	Global
ScanSAR Dual 5-scan	HH+HV	100 m (3 looks)	14 MHz	26.2° (near) – 41.8° (far)	25.7°–49.0°	5-scan	350.5 km	Desc (+ Asc)	Regional
ScanSAR Single 7-scan	HH	60 m (1.5 look)	14 MHz	34.9° (near) – 51.5° (far)	36.4°–60.5°	7-scan	489.5 km	Desc	Regional

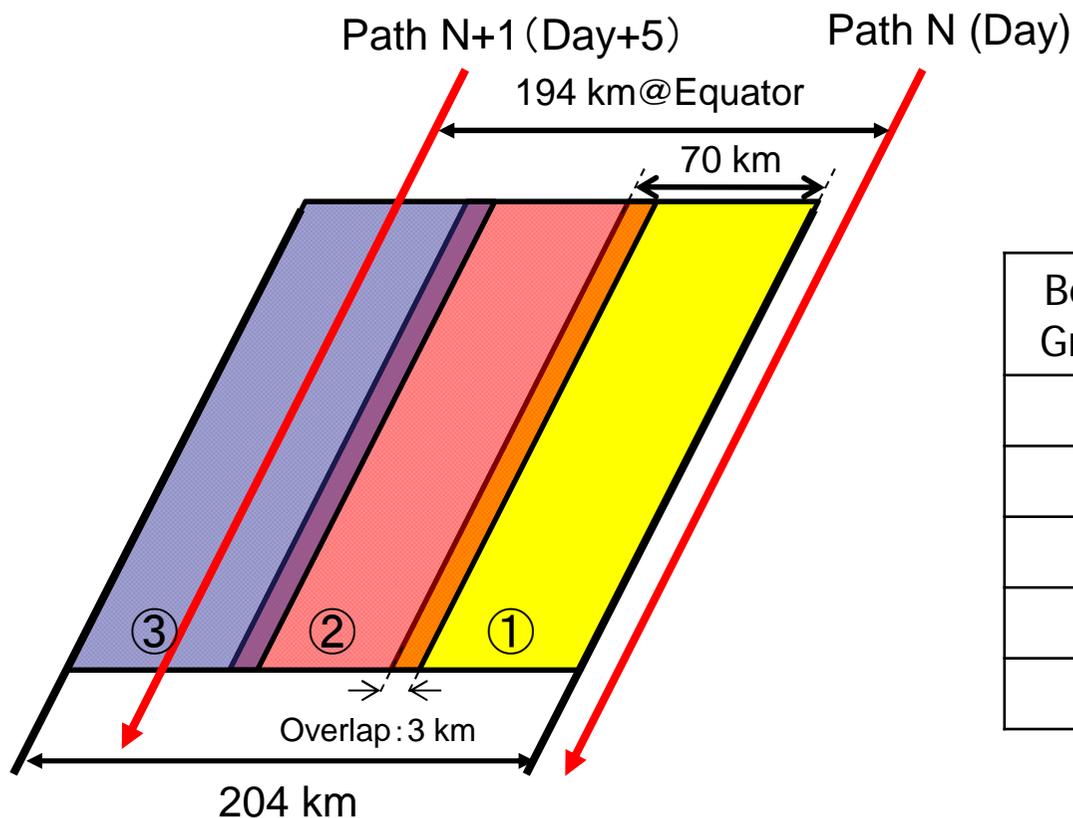




ALOS-2 Basic Observation Scenario



Global coverage by Fine Beam Mode [10m]



Fine Beam Mode [10m]

Beam Group	Incidence Angle	Number of beams to cover
F1	8-30 deg.	4 beams
F2	30-44 deg.	3 beams
F3	44-56 deg.	5 beams
F4	56-64 deg.	5 beams
F5	64-70 deg.	5 beams

F2: Nominal

A minimum of 3 beams is required for gap-free coverage
 ⇒ Minimum: 14 days × 3 cycles = 42 days



ALOS-2 Basic Observation Scenario

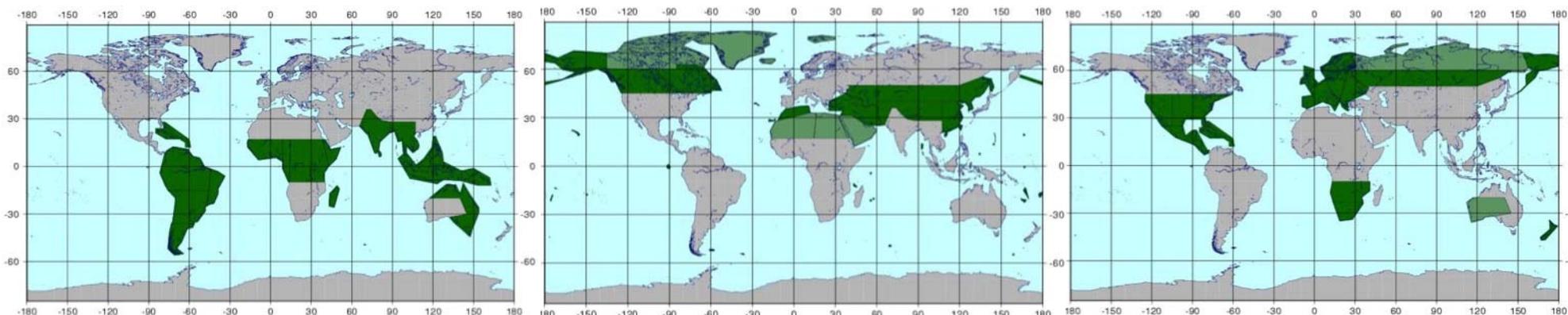


Global land areas – VHR baseline mapping

Temporal repeat: 1 cov/ 3 years

GSD: 3 m (off-nadir 29.1° -38.2°)

Mode: Stripmap Single-pol (HH/84MHz)



1st year

2nd year

3rd year

■ Prio 1
■ Prio 2

* 3 m mode requires 3 years for global coverage



ALOS-2 Basic Observation Scenario

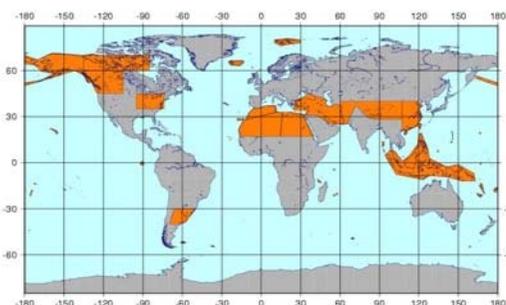


Global land areas – Quad-polarimetric baseline

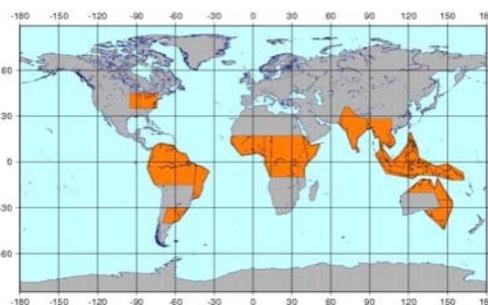
Temporal repeat: 1 cov/ 5 years

GSD: 6 m (off-nadir 25.0° - 34.9°)

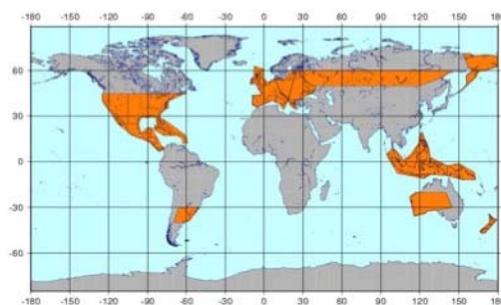
Mode: Stripmap Quad-pol (HH+HV+VV+VH/42MHz)



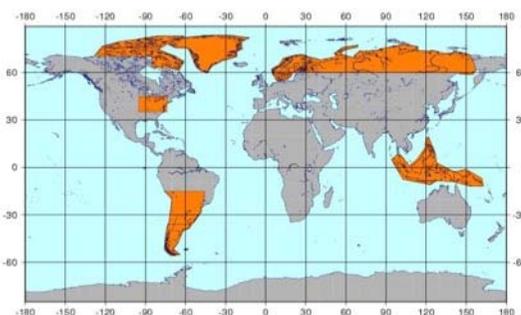
1st year



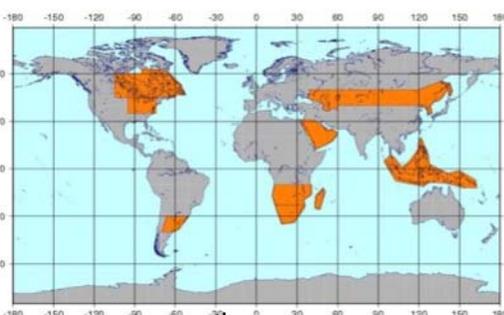
2nd year



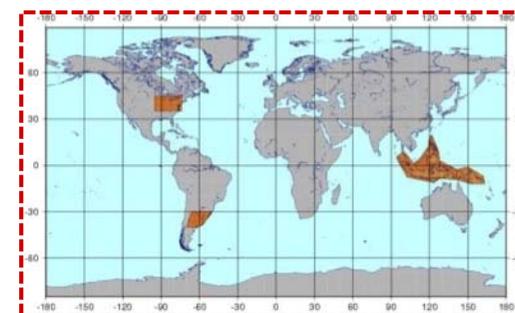
3rd year



4th year



5th year



Areas observed every year

* 6 m QP mode requires 5 years for global coverage



ALOS-2 Basic Observation Scenario

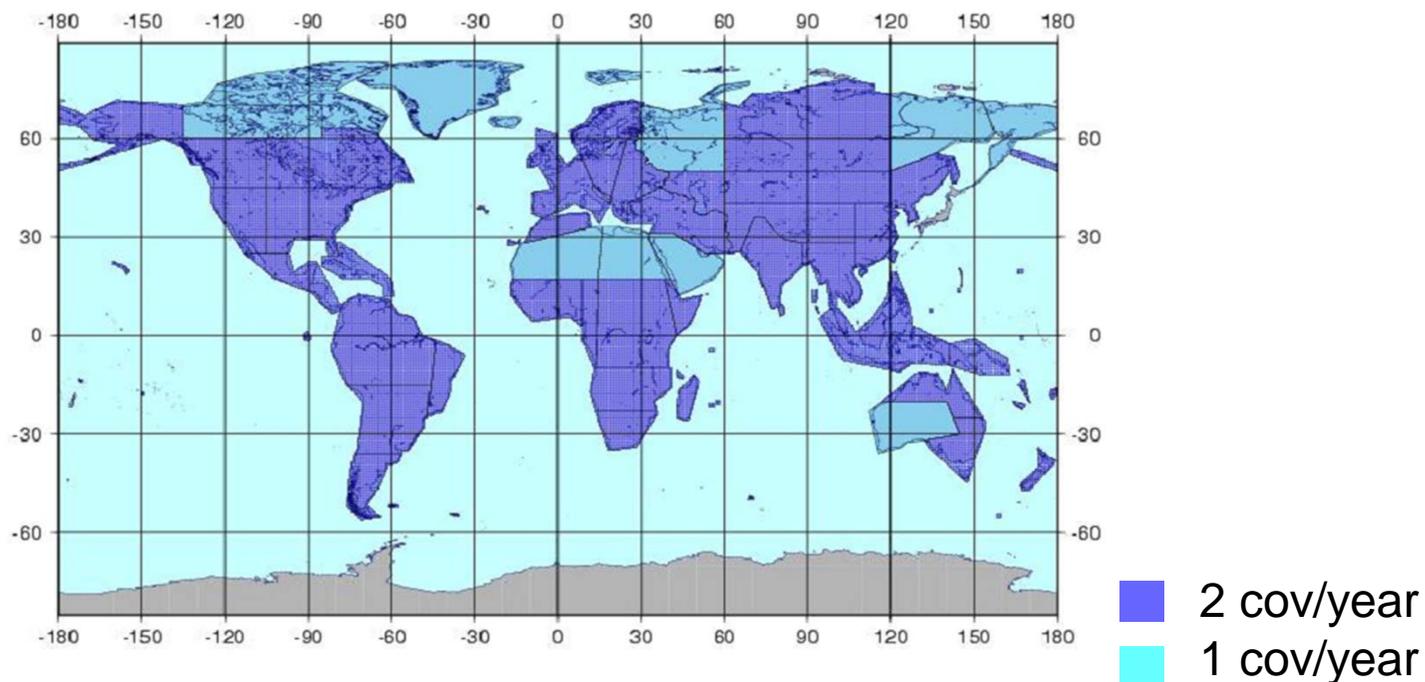


Global land areas – baseline mapping

Temporal repeat: 2 cov/year

GSD: 10 m (off-nadir 28.2° - 36.2°)

Mode: Stripmap Dual-pol (HH+HV/28MHz)





ALOS-2 Basic Observation Scenario

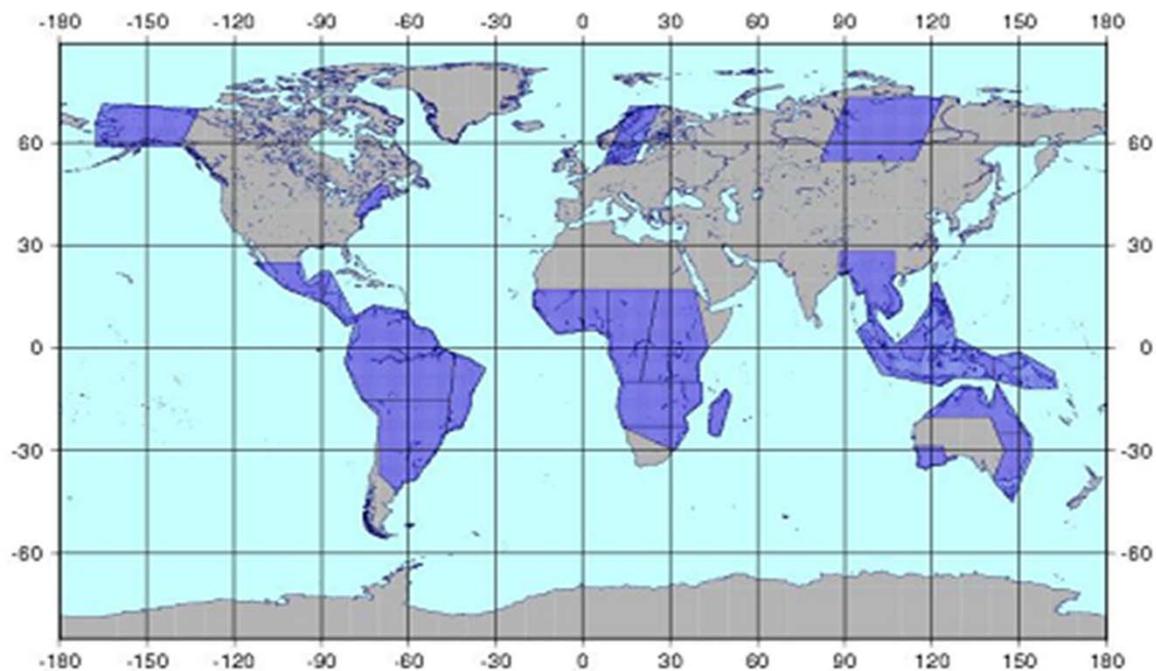


Forest monitoring

Temporal repeat: 2-6 cov/year (tropics 6 cov)

GSD: 10 m (off-nadir 28.2° - 36.2°)

Mode: Stripmap Dual-pol (HH+HV/28MHz)





ALOS-2 Basic Observation Scenario

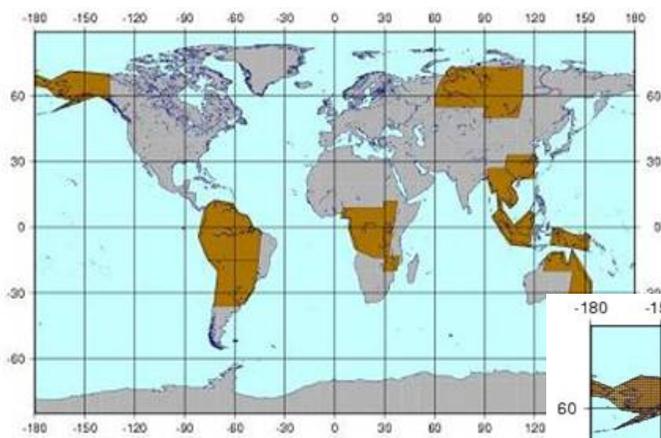


Wetlands & Rapid deforestation monitoring

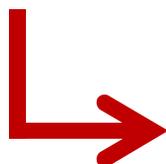
Temporal repeat: 9 cov/year

GSD: 100 m (off-nadir 26.2° -41.8°)

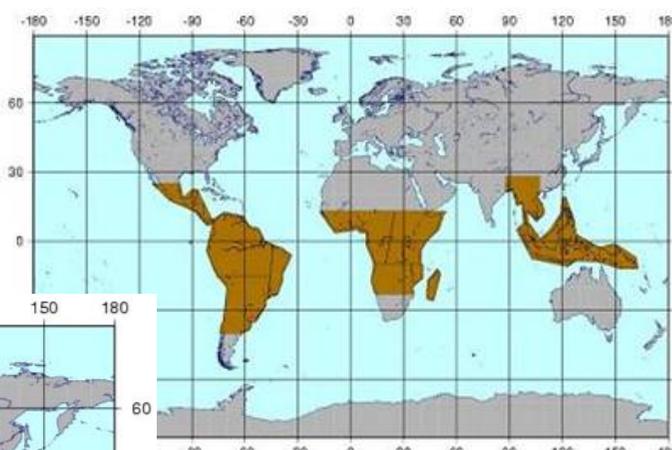
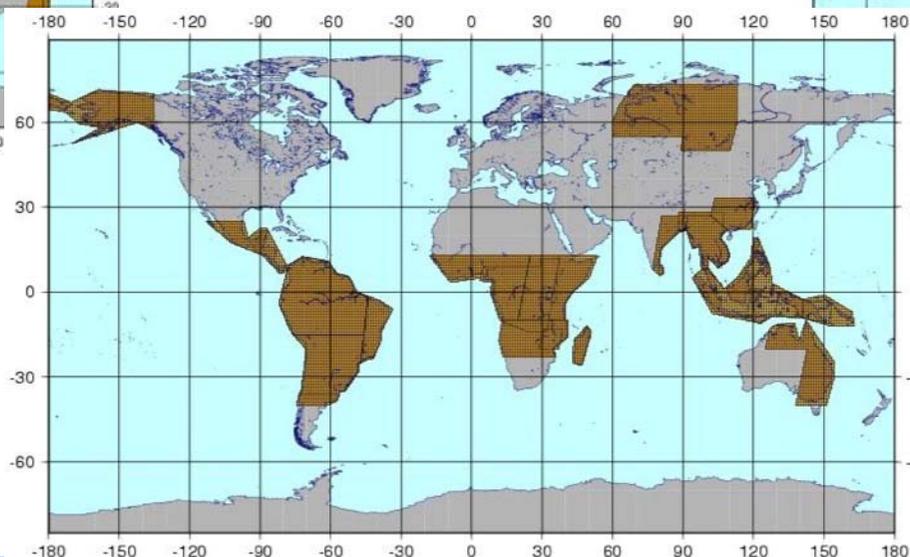
Mode: ScanSAR 350km Dual-pol (HH+HV/14MHz)



Wetlands



observed at the same time



Rapid deforestation monitoring





ALOS-2 Basic Observation Scenario

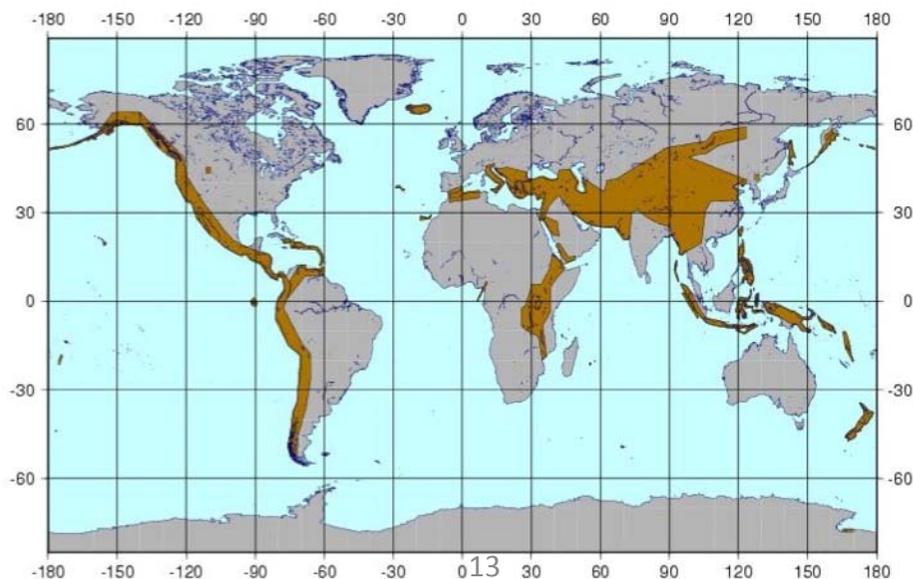
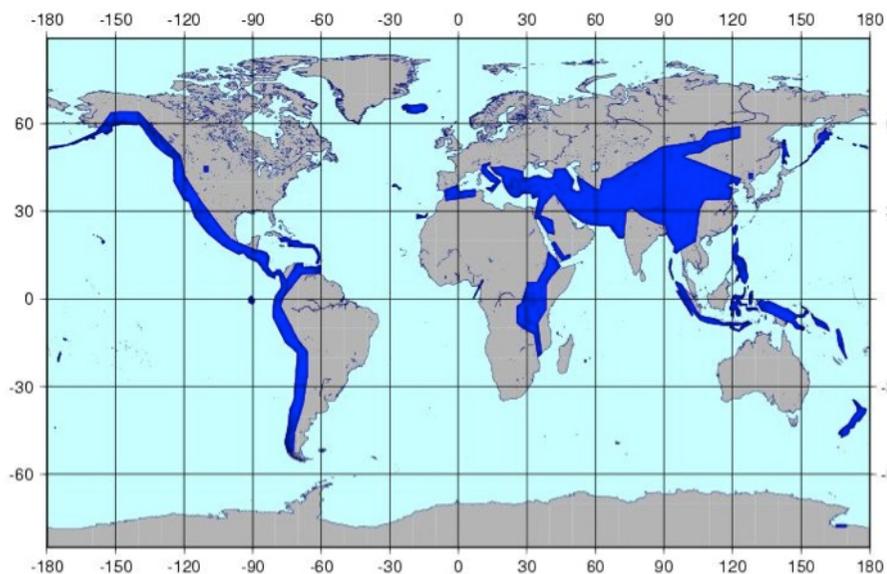


Crustal Deformation

Temporal repeat: 2-6 cov/year & 9 cov/year

GSD: 10 m (off-nadir $28.2^\circ - 36.2^\circ$)
& 100 m (off-nadir $26.2^\circ - 41.8^\circ$)

Mode: Stripmap Dual-pol (HH+HV/28MHz)
& ScanSAR 350km (HH+HV/14MHz)





ALOS-2 Basic Observation Scenario

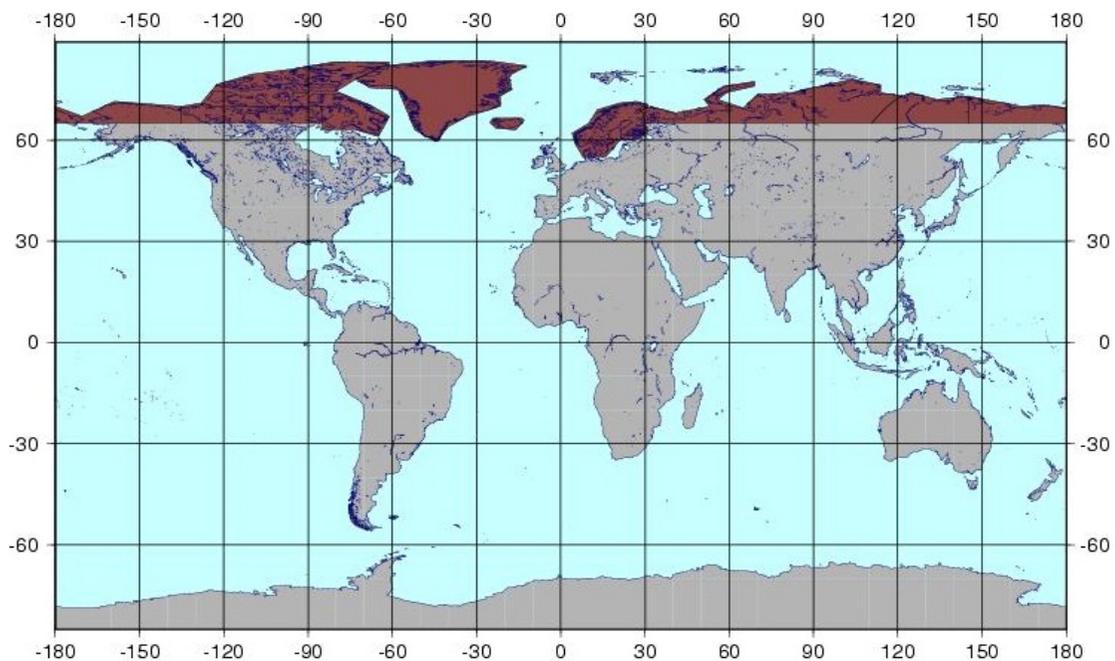


Boreal and sub-Arctic

Temporal repeat: 3 cov/year

GSD: 100 m (offnadir 34.9° - 51.5°)

Mode: ScanSAR 490km (HH+HV/14MHz)





ALOS-2 Basic Observation Scenario

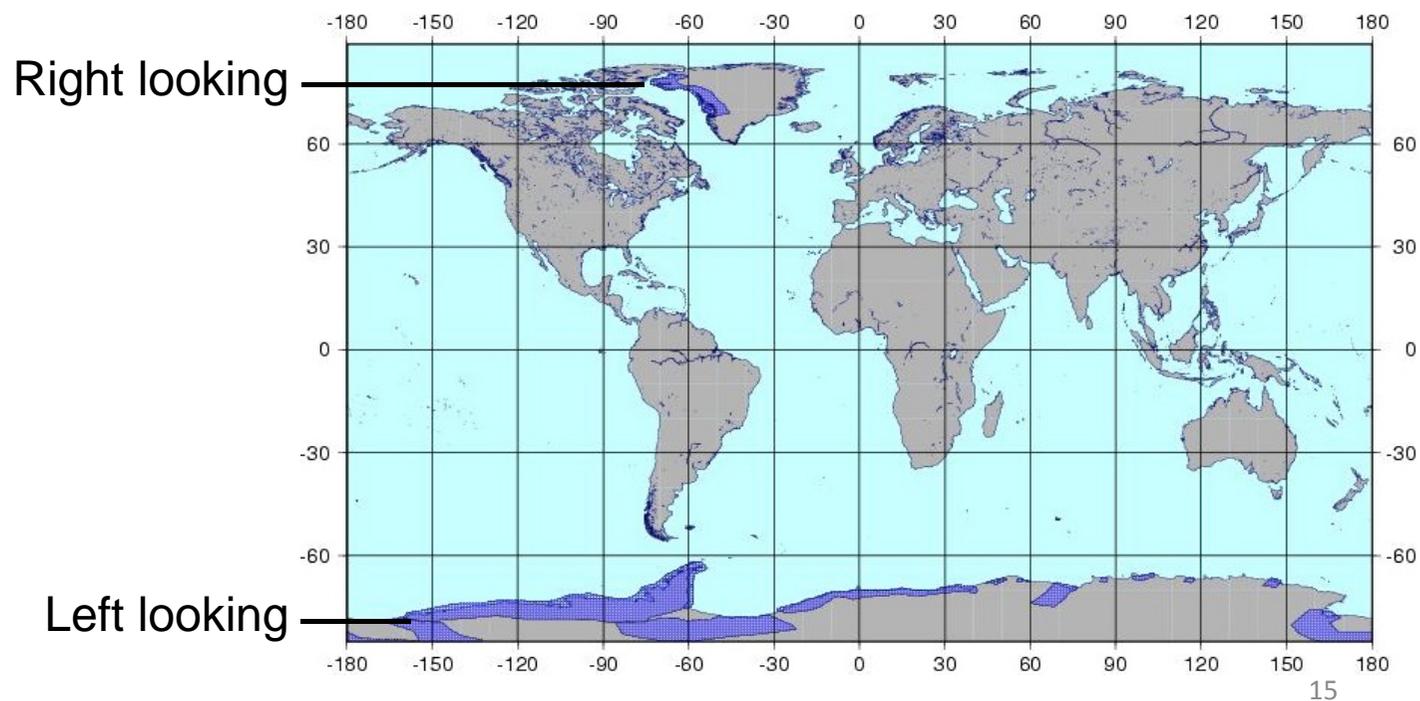


Polar Ice

Temporal repeat: 3 cov/year

GSD: 10 m (off-nadir 32.5°)

Mode: Stripmap Dual-pol (HH/28MHz)





ALOS-2 Basic Observation Scenario

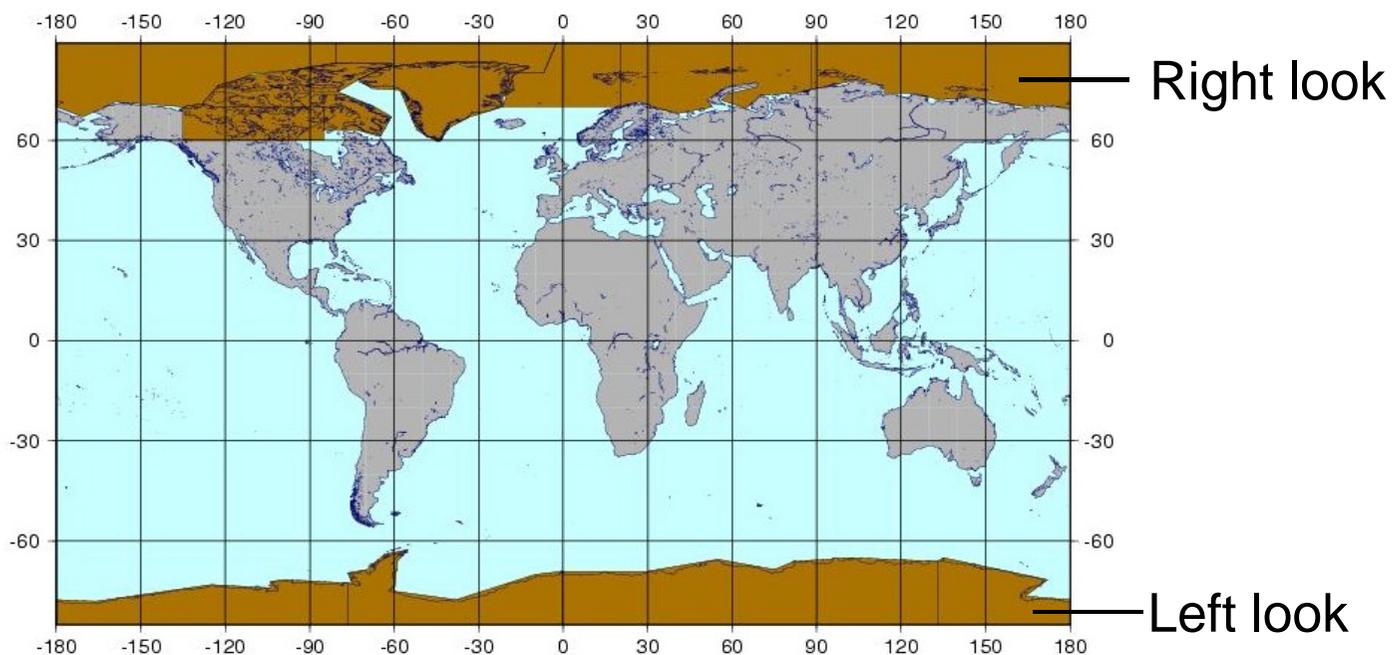


Polar Ice

Temporal repeat: 3 cov/year

GSD: 100 m (off-nadir $26.2^\circ - 41.8^\circ$)

Mode: ScanSAR 350km (HH+HV/14MHz)





ALOS-2 Basic Observation Scenario



Observation pattern for annual acquisitions *

Season	N:Winter/S:Summer				N:Spring/S:Autum				N:Summer/S:Winter				N:Autum/S:Spring														
Week of year	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46	47-48	49-50	51-52	
Desc	D+W+F		Arctic	D+W+F	14-day InSAR	D+W+F	14-day InSAR	D+W+F	14-day InSAR	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global (1/3)	D+W+F	Global (1/3)							
	WB 350km		WB490	WB 350km	DP(5) 10m	DP(5) 10m	WB 350km	DP(6) 10m	DP(6) 10m	WB 350km	DP(7) 10m	DP(7) 10m	WB 350km	WB490	WB 350km	DP(6)L	DP(6)L	WB 350km	DP(6)L	WB490	WB 350km	SP(6) 3m	SP(7) 3m	WB 350km	SP(8) 3m	SP(9) 3m	
Asc	North Pole	World 1			Glacier Greenland		Global (1/5)				World 2			South Pole	N + S Pole	World 1			World 2			N + S Pole					
	WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6)	DP(6)	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350



10m(HH+HV)28MHz Right



ScanSAR350km(HH+HV)14MHz Right



3m(HH)84MHz Right



ScanSAR350km(HH+HV)14MHz Left



6m(HH+HV+VH+VV)42MHz Right



ScanSAR490km(HH+HV)14MHz Right

(*) *Beam No.



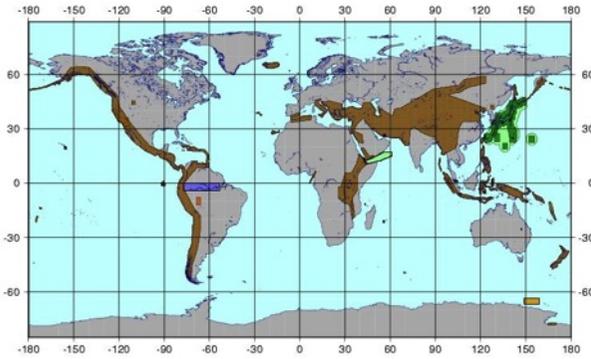
Super sites (TBD)



10m(HH+HV)28MHz Left

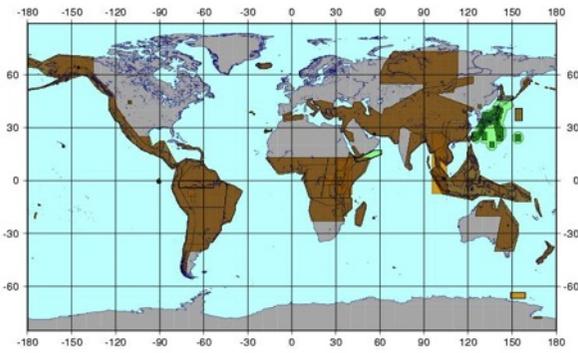
* 3m SP and 6m QP modes require 3 and 5 years for global coverage

【昇交軌道 - Ascending】



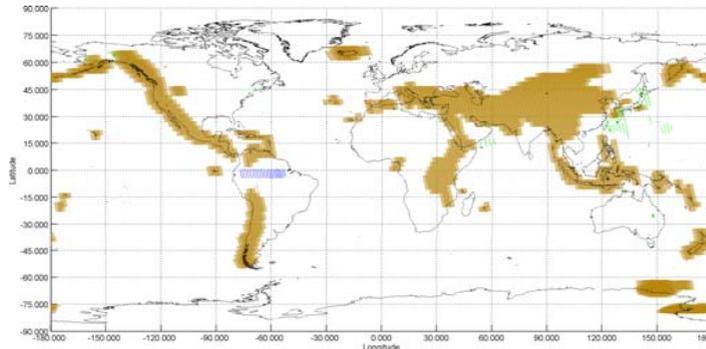
【6回帰】 地殻変動 広域観測350 km
S2・右・HH+HV・14MHz z

【降交軌道 - descending】

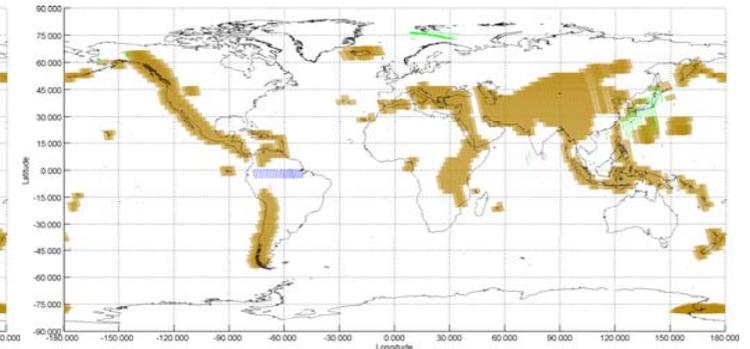


【6回帰】 地殻・湿地・伐採
広域観測【350km】・S2・右・HH+HV・
14MHz

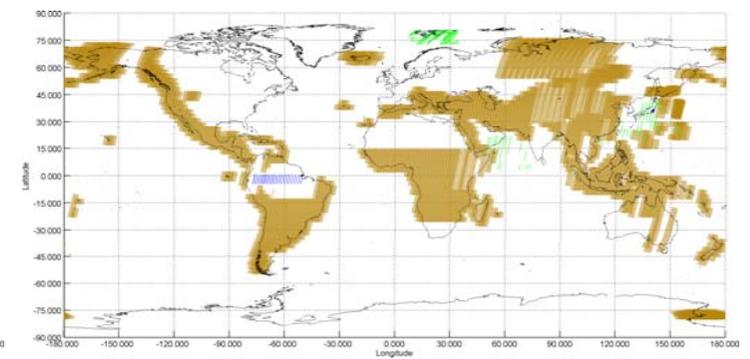
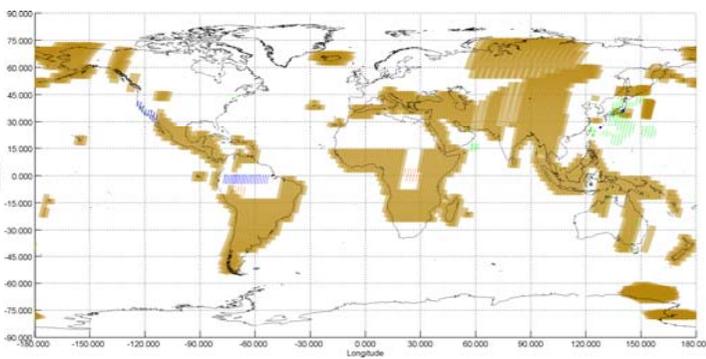
【5-1回目Sim結果】



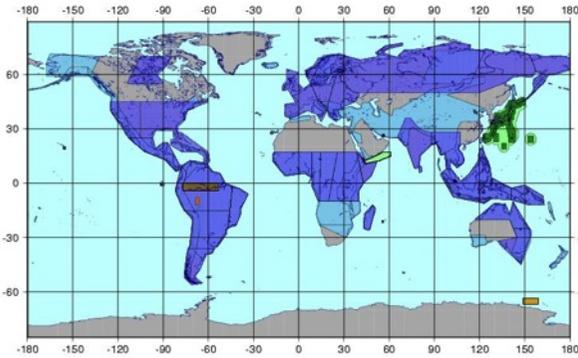
【4-1回目Sim結果】



Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51			
Cycle																													
Asc	Year1 baseline	World 1					Glacier Greenland		Global n/5					World 2					South pole	N+S pole	World 1					World 2			N+S pole
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m			DP(7) 10m	DP(5) 10m	DP(6) 10m			WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3				
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m			

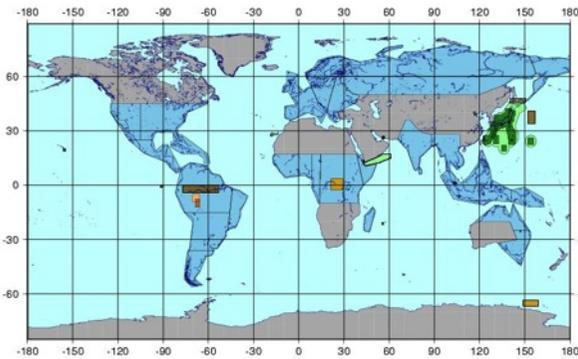


【昇交軌道 - Ascending】



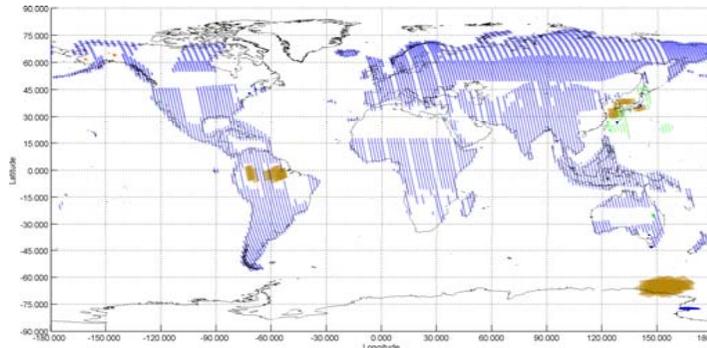
【7回帰】 全球10m：観測パターン①
 高分解能10m・C2・No.5・右・HH+HV・28MH

【降交軌道 - descending】

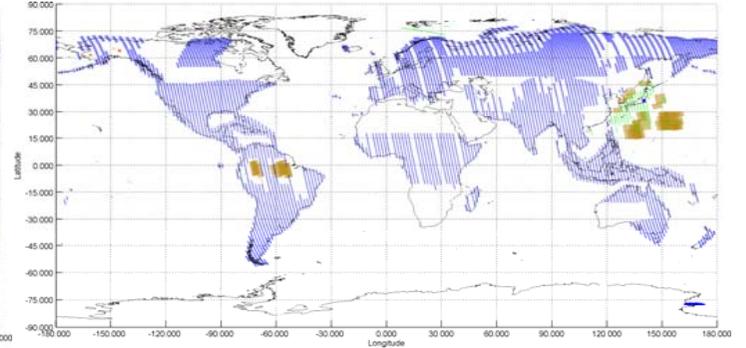


【7回帰】 リカバリー回帰

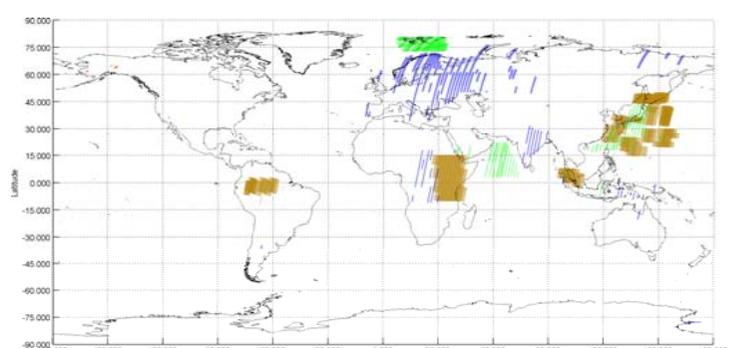
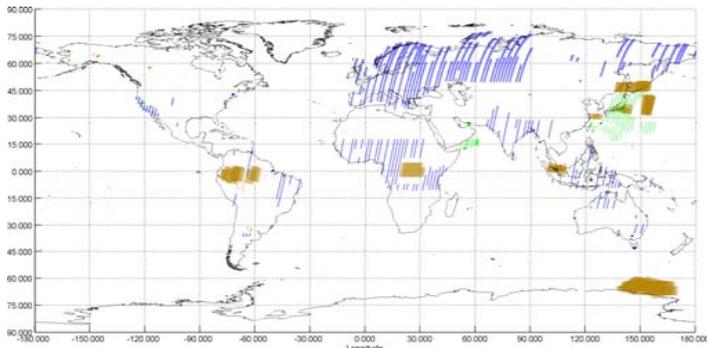
【5-1回目Sim結果】



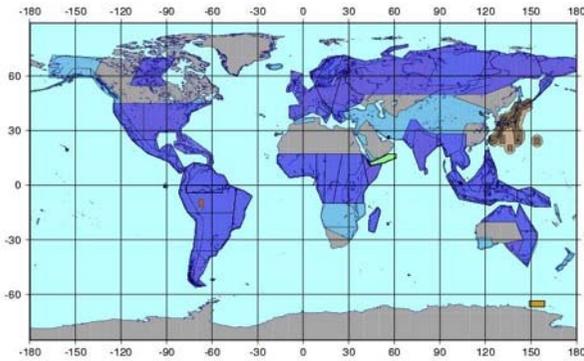
【4-1回目Sim結果】



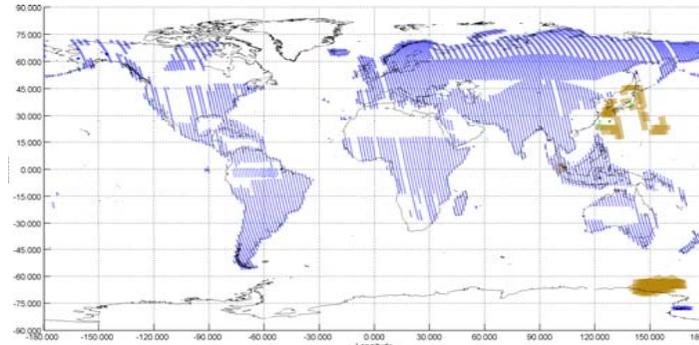
Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole		
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350	WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m	



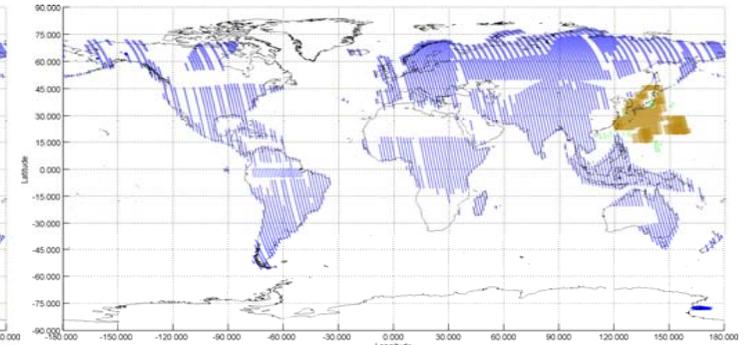
【昇交軌道 - Ascending】



【5- 1 回目 Sim結果】

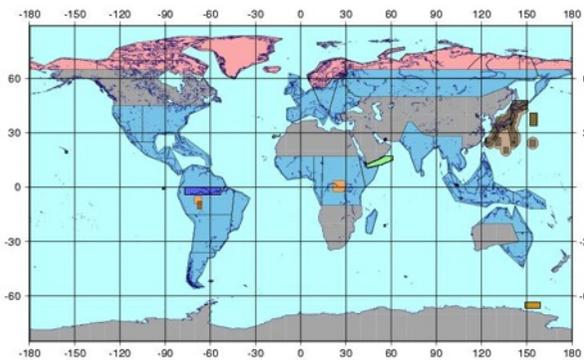


【4- 1 回目 Sim結果】

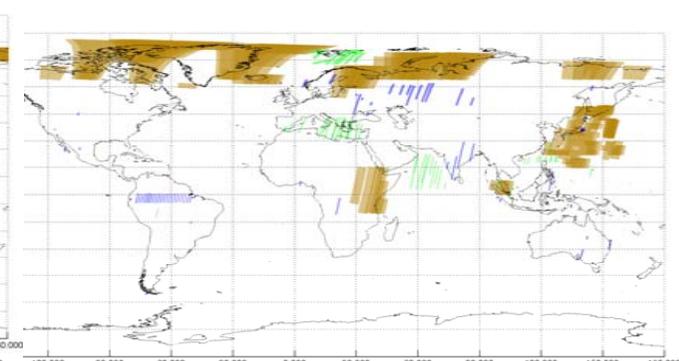
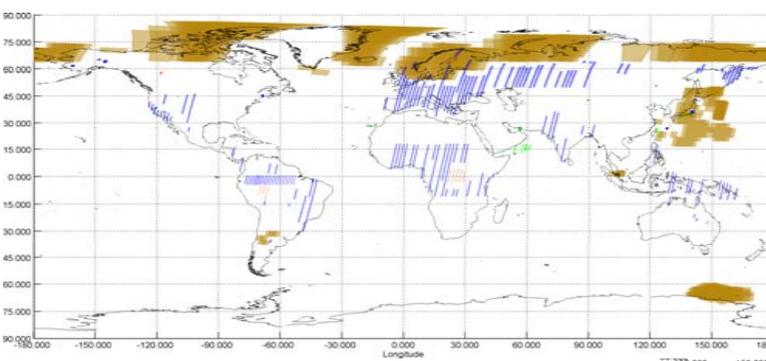


【8回帰】 全球10m：観測パターン①
 高分解能10m・C2・No.6・右・HH+HV・28MHz

【降交軌道 - descending】

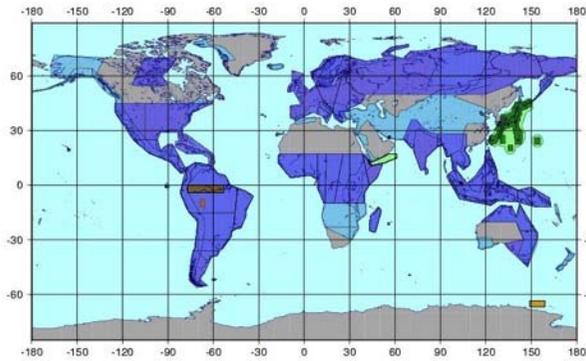


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51																
Cycle	Year1 baseline												Year2 baseline																													
Asc	World 1						Glacier Greenland						Global n/5						World 2						World 1						World 2						N+S pole					
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m	DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350L	WB350L	WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350															
Desc	D+W+F		Arctic		D+W+F		14-day InSAR		D+W+F		14-day InSAR		D+W+F		Arctic		D+W+F		Arctic		D+W+F		Arctic		D+W+F		Global n/3		D+W+F		Global n/3											
	WB 350	WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m																	



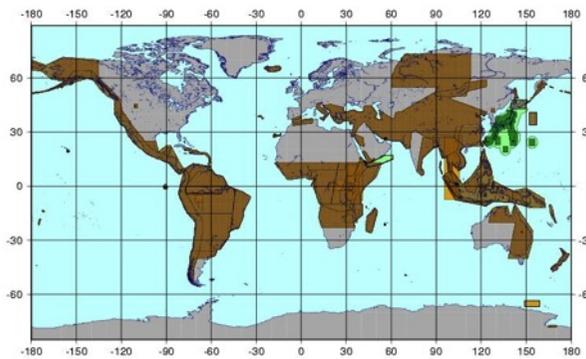
【8回帰】 リカバリー回帰

【昇交軌道 - Ascending】



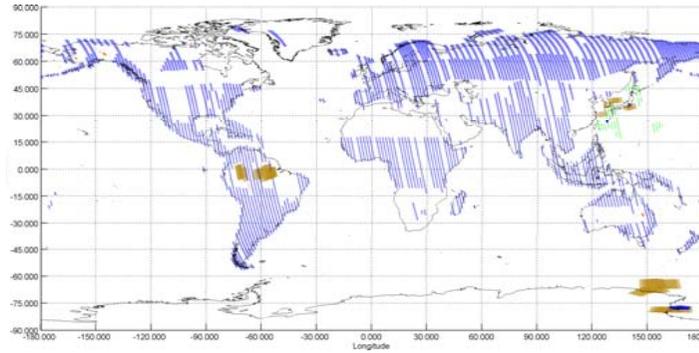
【9回帰】 全球10m：観測パターン①
 高分解能10m・C2・No.7・右・HH+HV・28MHz

【降交軌道 - descending】

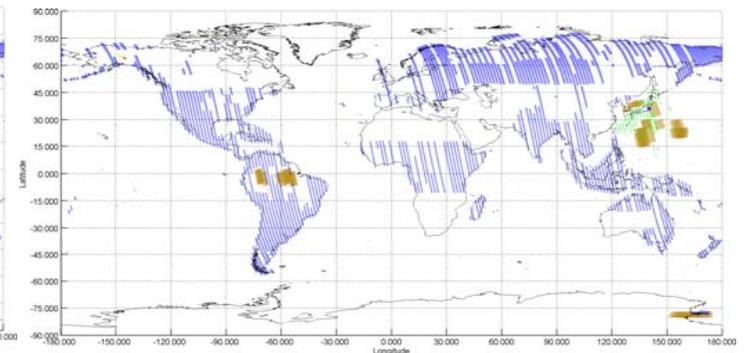


【9回帰】 地殻・湿地・伐採
 広域観測【350km】・S2・右・HH+HV・14MHz

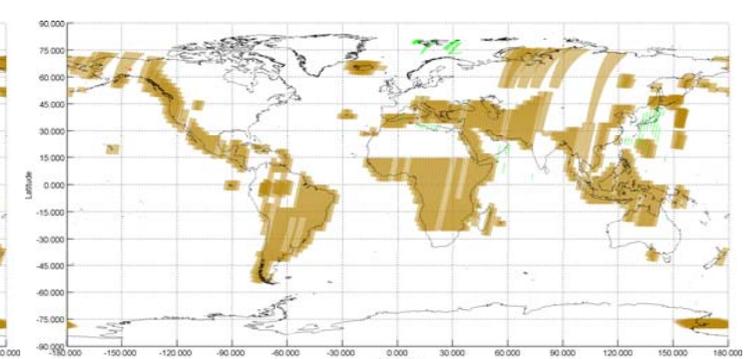
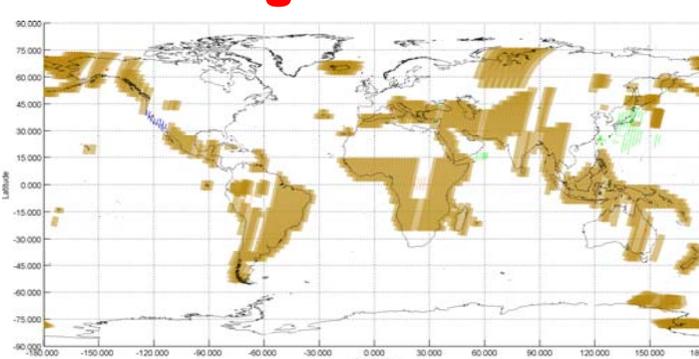
【5-1回目Sim結果】



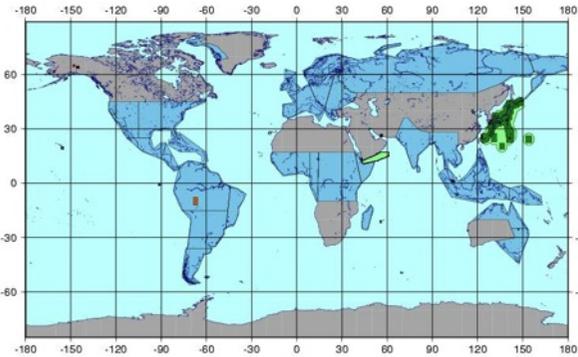
【4-1回目Sim結果】



Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m

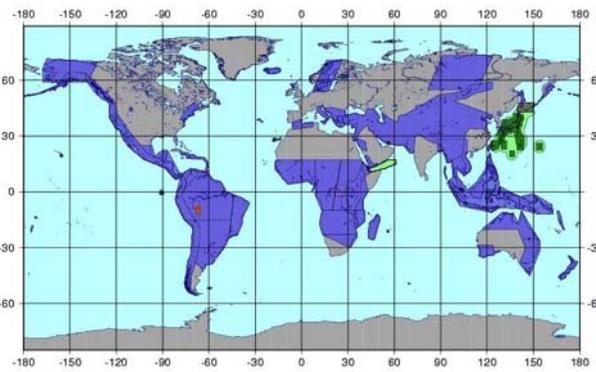


【昇交軌道 - Ascending】



【10回帰】 リカバリー回帰

【降交軌道 - descending】

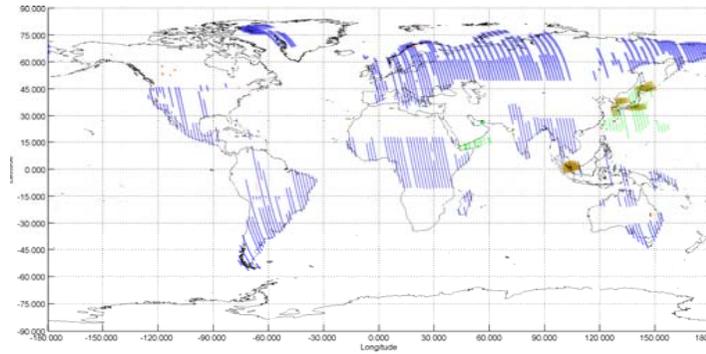


【10回帰】 森林・地殻変動

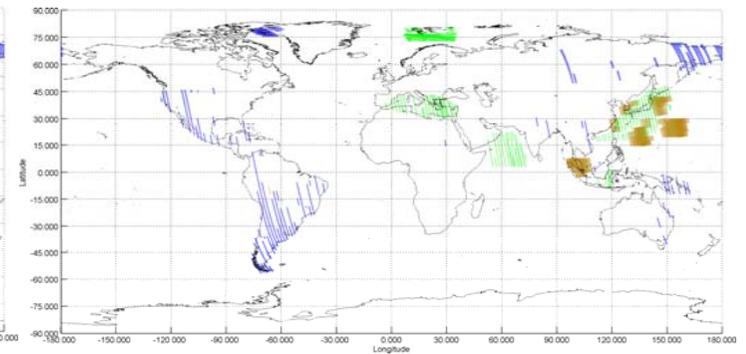
高分解能10m・C2・No.5・右・HH+HV・28MH

Z

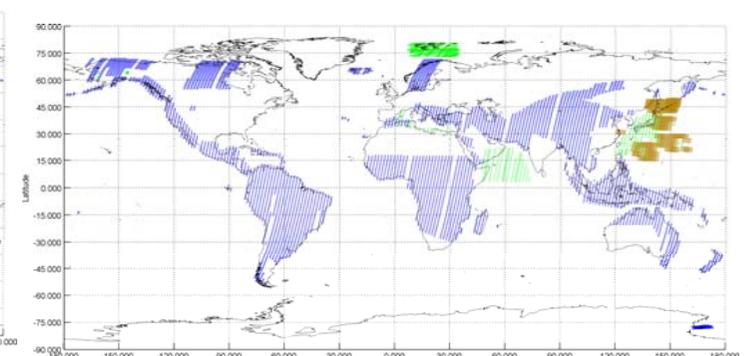
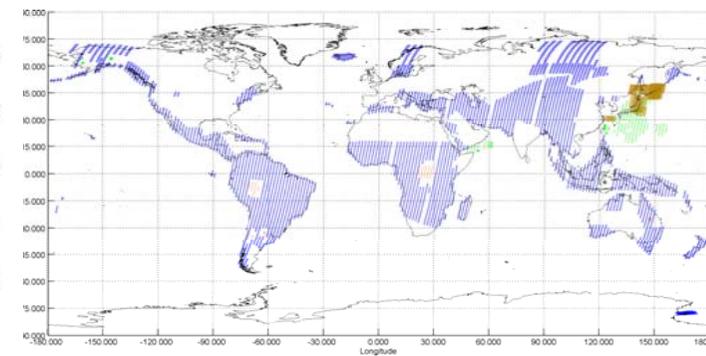
【5- 1 回目Sim結果】



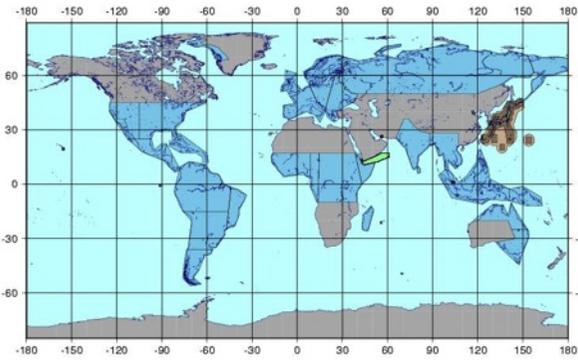
【4- 1 回目Sim結果】



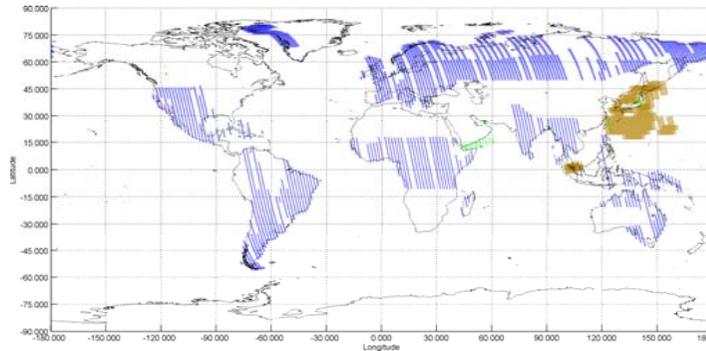
Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	
Cycle																											
Asc	Year1 baseline	World 1					Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole		
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc.	Arctic	D+W+F	Global n/3		D+W+F	Global n/3	
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m



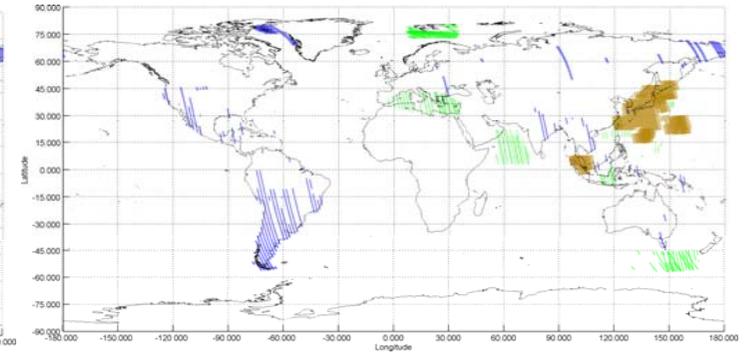
【昇交軌道 - Ascending】



【5- 1 回目Sim結果】

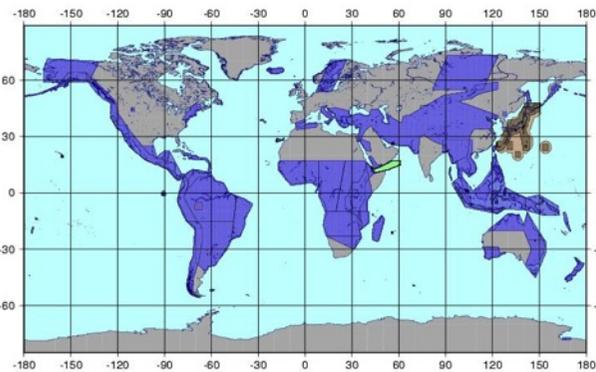


【4- 1 回目Sim結果】

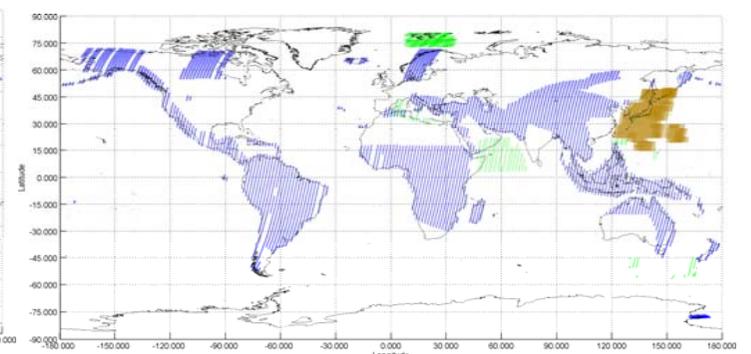
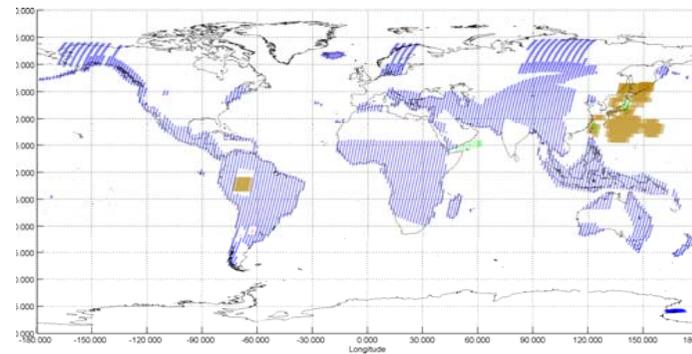


【11回帰】 リカバリ一回帰

【降交軌道 - descending】



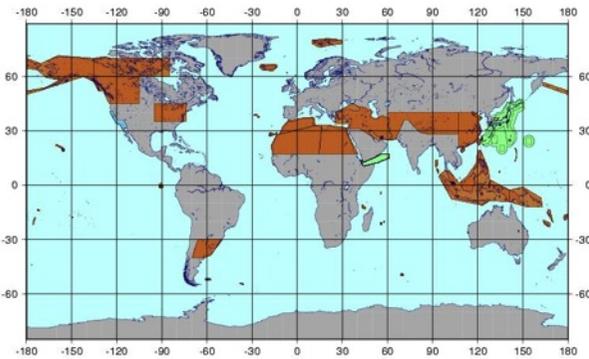
Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m					DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F		Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3			
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350		DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m	



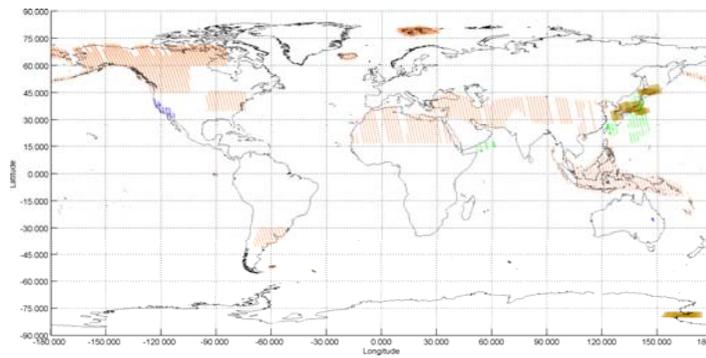
【11回帰】 森林・地殻変動

高分解能10m・C2・No.5・右・HH+HV・28MH

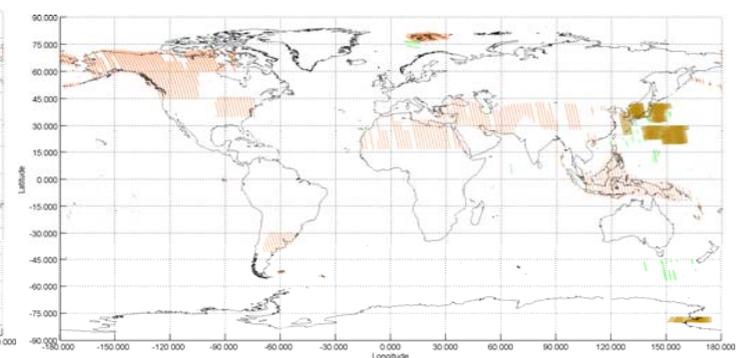
【昇交軌道 - Ascending】



【5- 1 回目Sim結果】

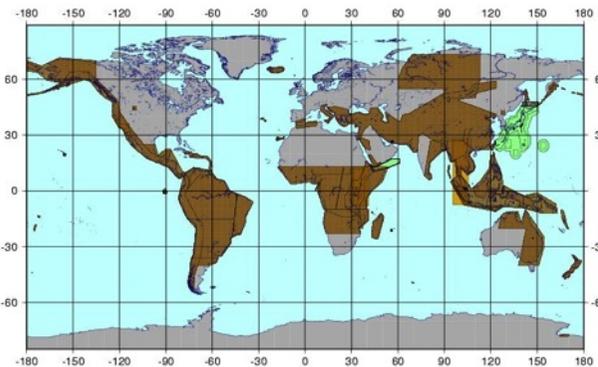


【4- 1 回目Sim結果】

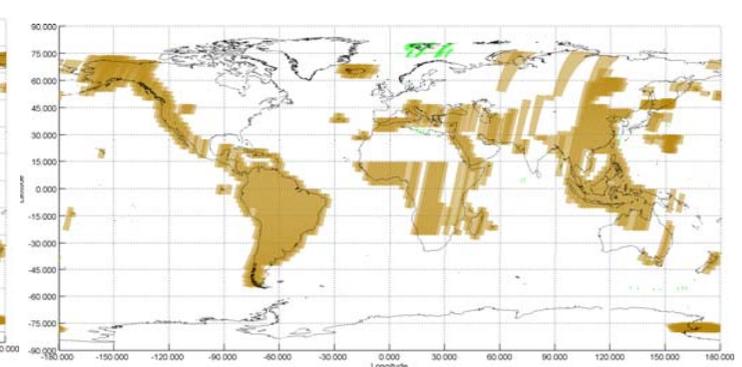
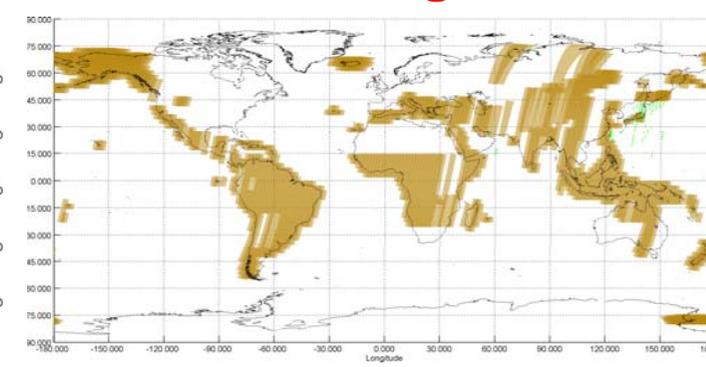


【12回帰】 ポラリメトリ観測 高分解能6m
No.3・右・HH+HV+VH+VV・14MHz z

【降交軌道 - descending】

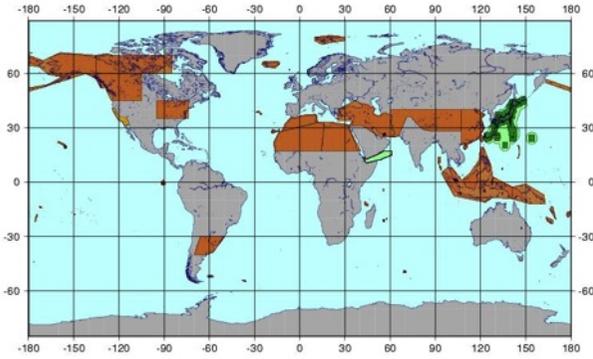


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51							
Cycle	World 1												Glacier Greenland		Global n/5										World 2		South pole	N+S pole	World 1		World 2		N+S pole
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350					
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3							
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m						

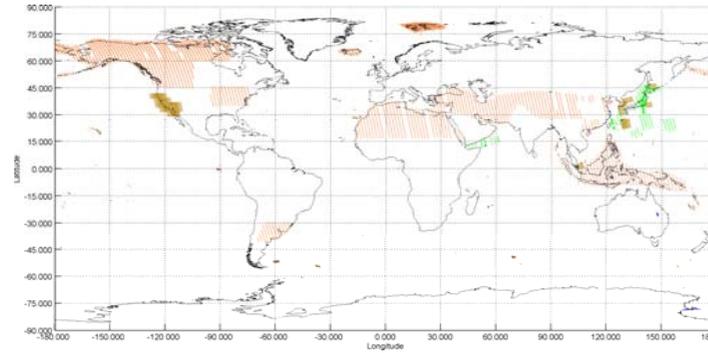


【12回帰】 地殻・湿地・伐採
広域観測【350km】・S2・右・HH+HV・
14MHz

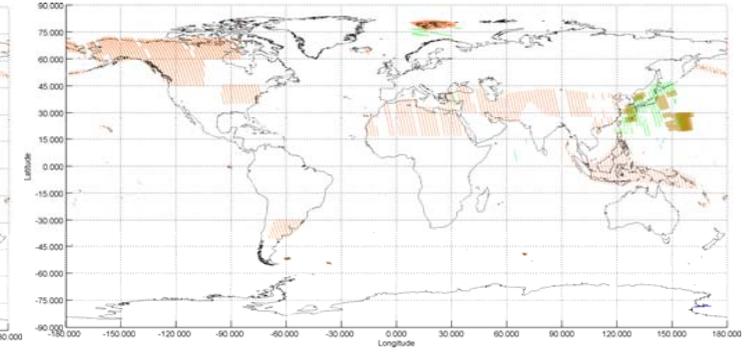
【昇交軌道 - Ascending】



【5- 1 回目Sim結果】

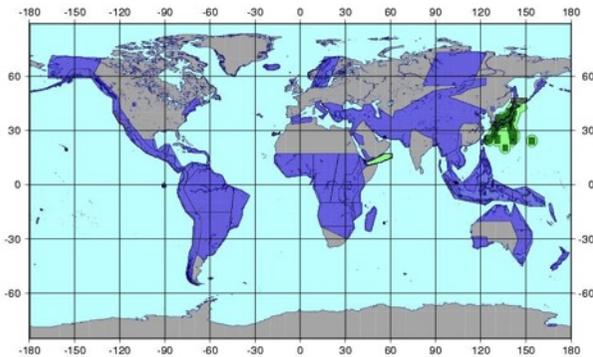


【4- 1 回目Sim結果】

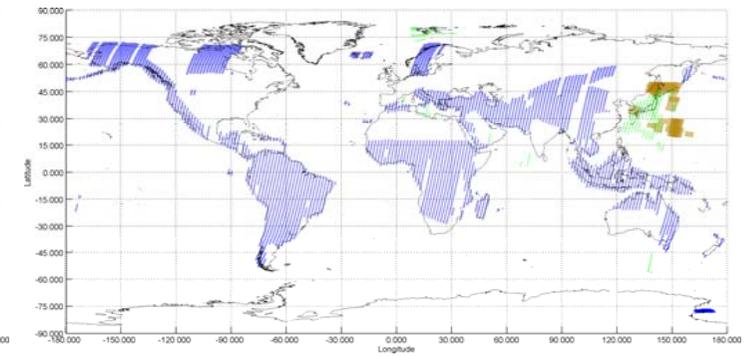
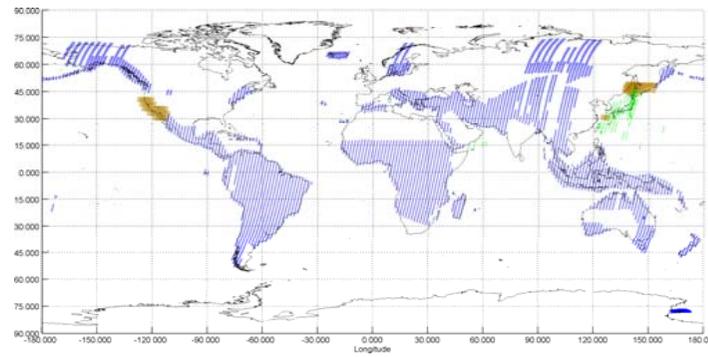


【13回帰】 ポラリメトリ観測 高分解能6m
No.4・右・HH+HV+VH+VV・14MH z

【降交軌道 - descending】

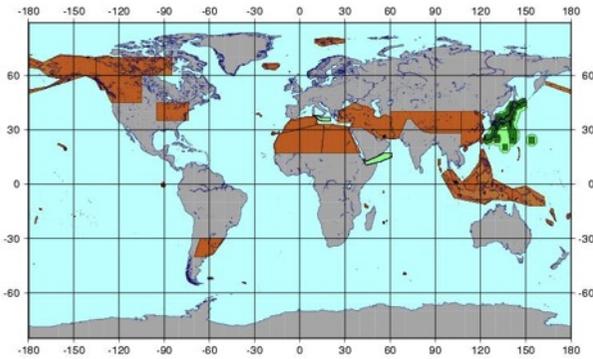


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle																												
Asc	Year1 baseline	World 1				Glacier Greenland		Global n/5					World 2				South pole	N+S pole	World 1				World 2			N+S pole		
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m			DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m					DP(7) 10m	DP(5) 10m	DP(6) 10m
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m

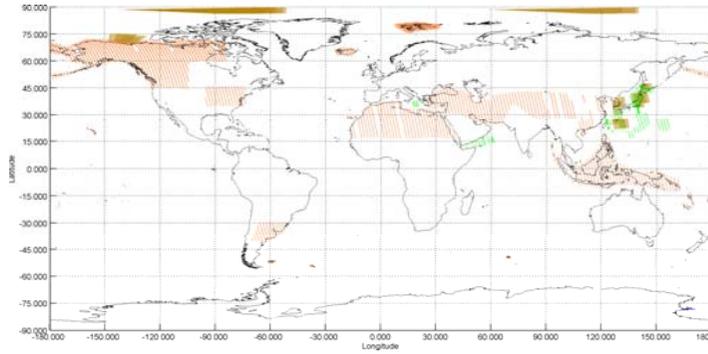


【13回帰】 森林・地殻変動
高分解能10m・C2・No.6・右・HH+HV・28MH z

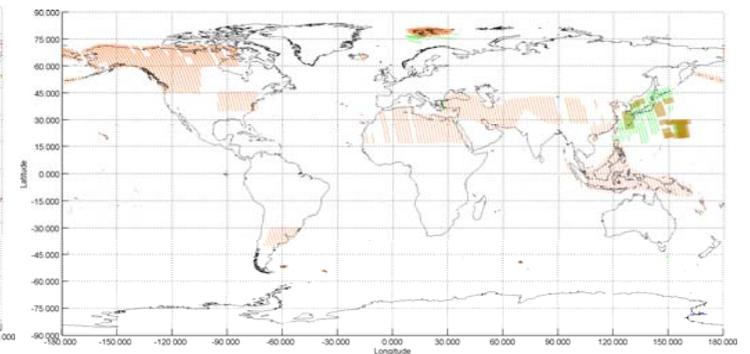
【昇交軌道 - Ascending】



【5-1回目Sim結果】

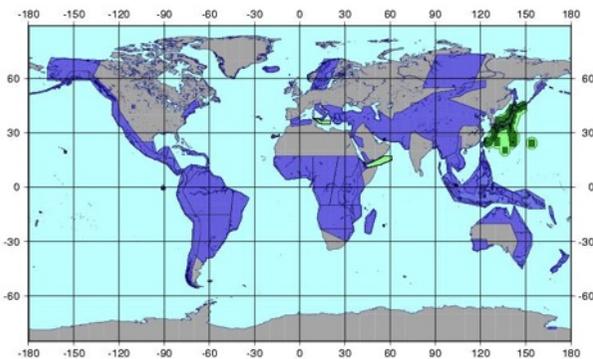


【4-1回目Sim結果】

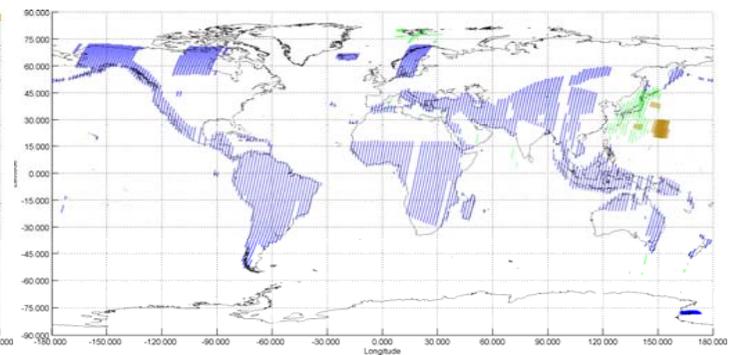
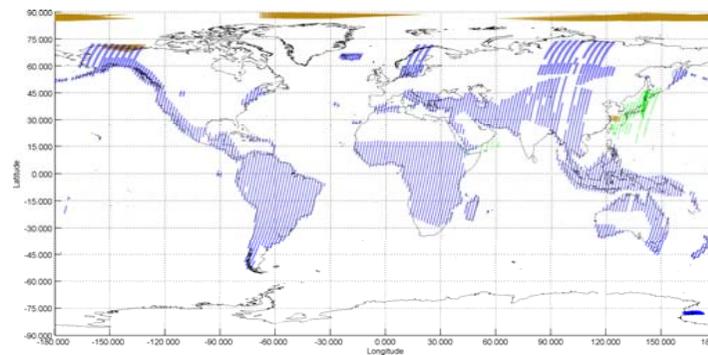


【14回帰】 ポラリメトリ観測 高分解能6m
No.5・右・HH+HV+VH+VV・14MH z

【降交軌道 - descending】

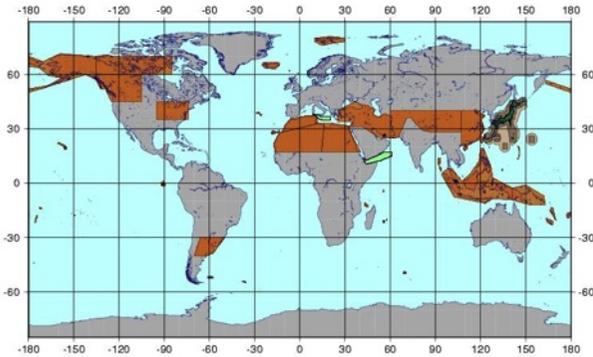


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m

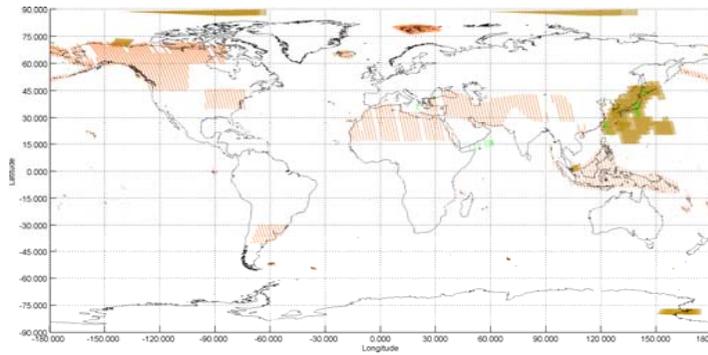


【14回帰】 森林・地殻変動
高分解能10m・C2・No.6・右・HH+HV・28MH z

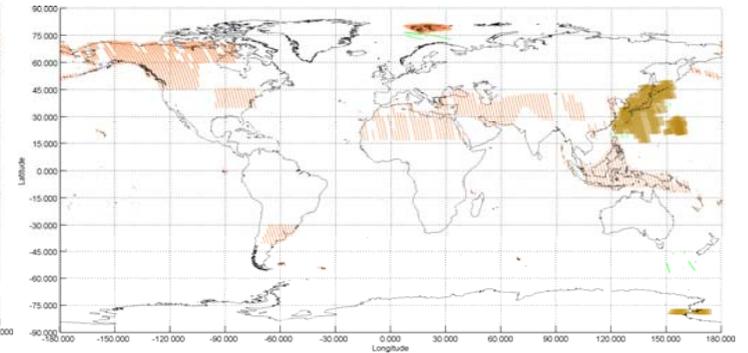
【昇交軌道 - Ascending】



【5-1回目Sim結果】

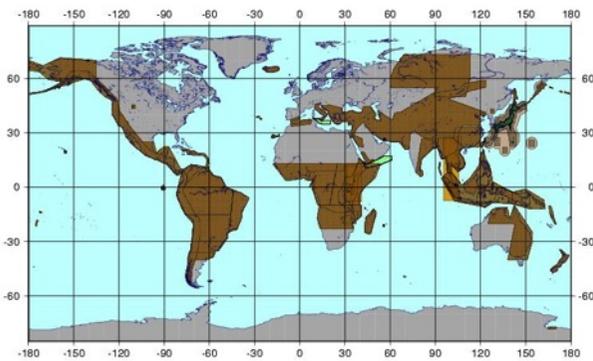


【4-1回目Sim結果】

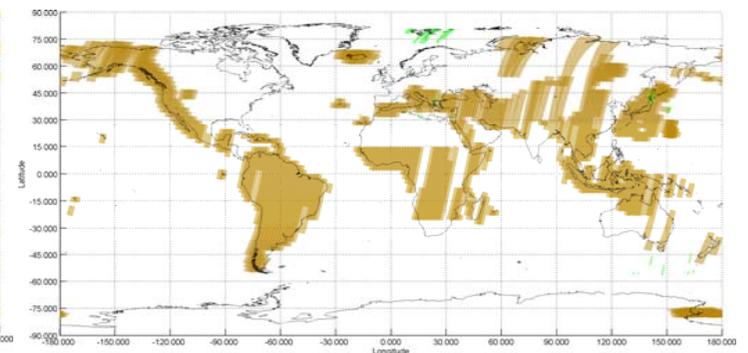
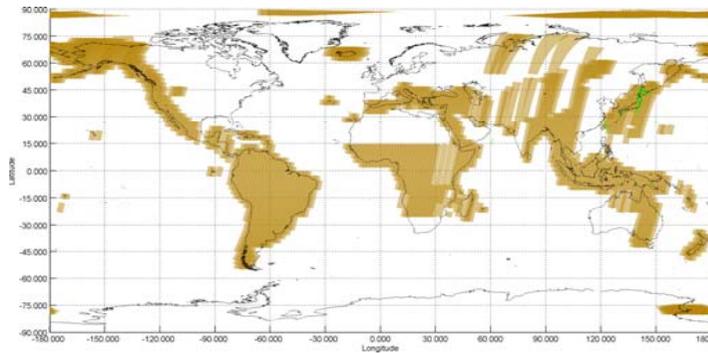


【15回帰】 ポラリメトリ観測 高分解能6m
No.6・右・HH+HV+VH+VV・14MHz z

【降交軌道 - descending】

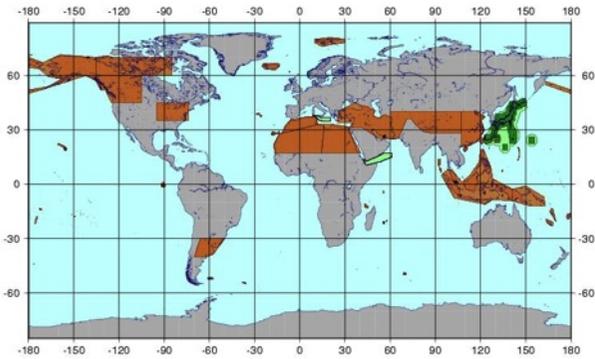


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51			
Cycle																													
Asc	Year1 baseline	World 1					Glacier Greenland		Global n/5					World 2					South pole	N+S pole	World 1					World 2		N+S pole	
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350	WB350L
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m		



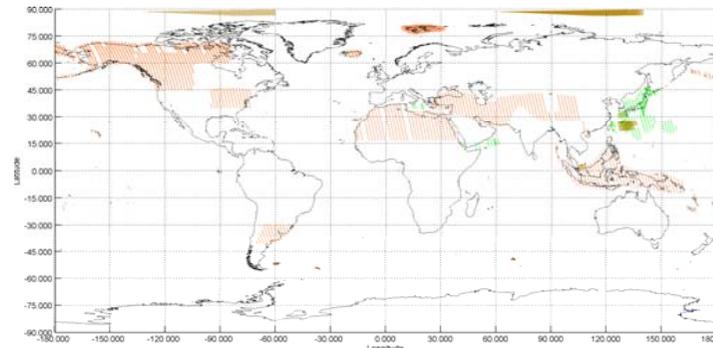
【15回帰】 地殻・湿地・伐採
広域観測【350km】・S2・右・HH+HV・
14MHz

【昇交軌道 - Ascending】

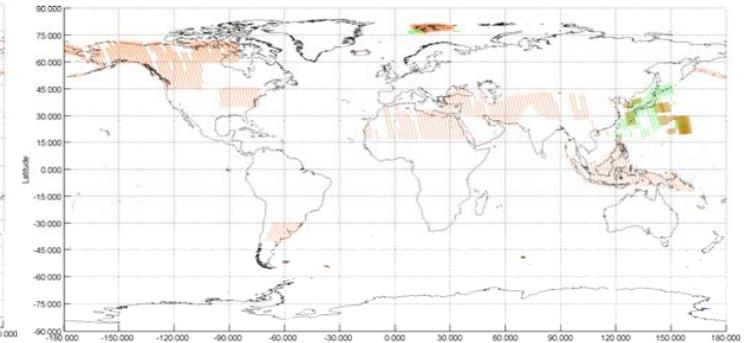


【16回帰】 ポラリメトリ観測 高分解能6m
No.7・右・HH+HV+VH+VV・14MH z

【5-1回目Sim結果】

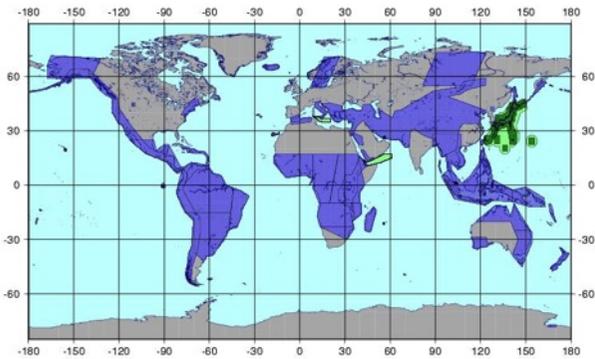


【4-1回目Sim結果】

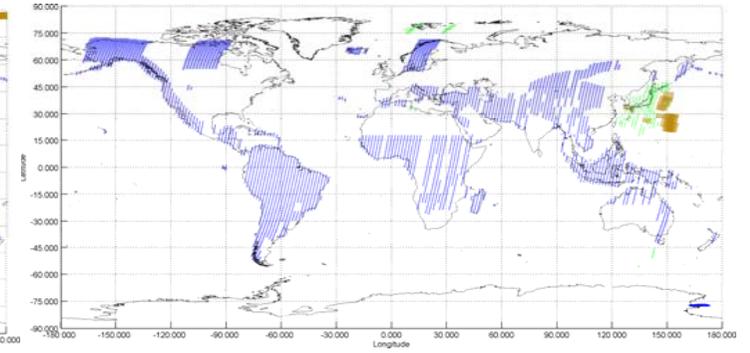
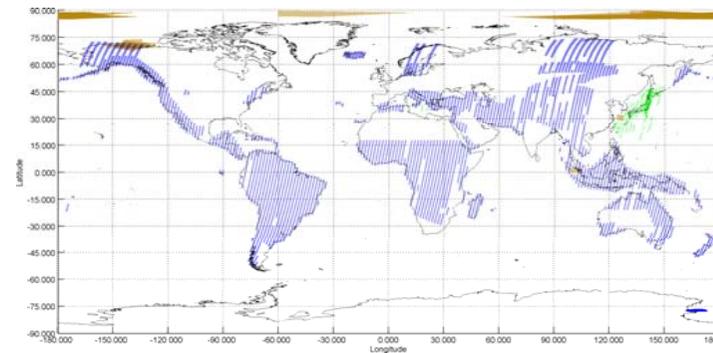


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51
Cycle																										
Asc	Year1 baseline	World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole		
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 6m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m	DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350L
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3	
	WB 350	WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m	

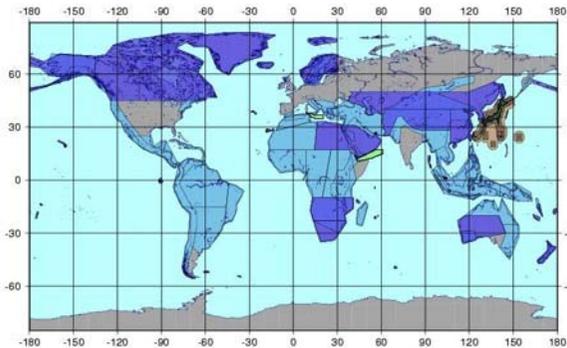
【降交軌道 - descending】



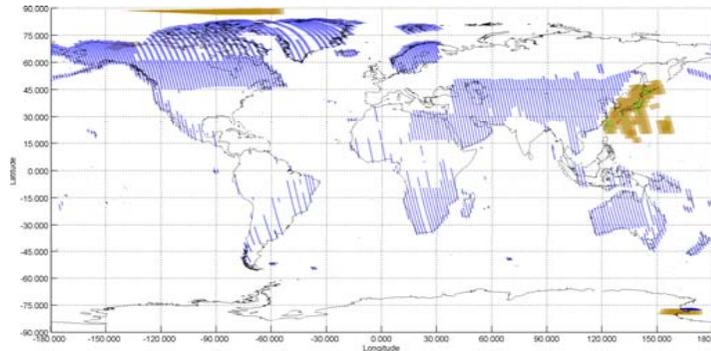
【16回帰】 森林・地殻変動
高分解能10m・C2・No.7・右・HH+HV・28MH z



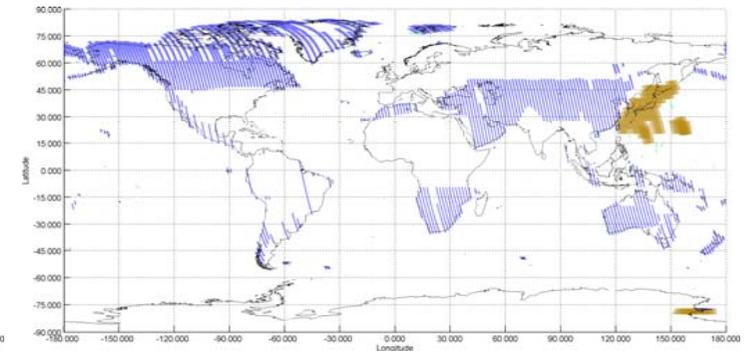
【昇交軌道 - Ascending】



【5-1回目Sim結果】

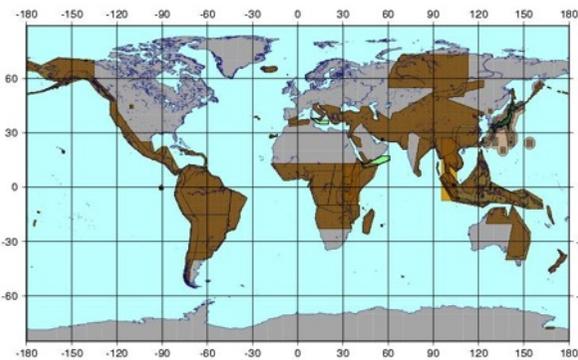


【4-1回目Sim結果】

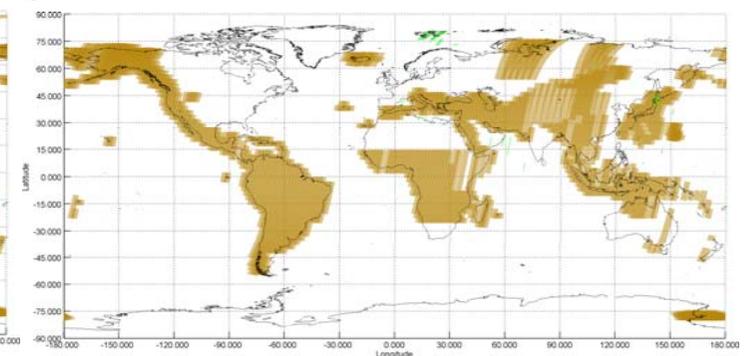
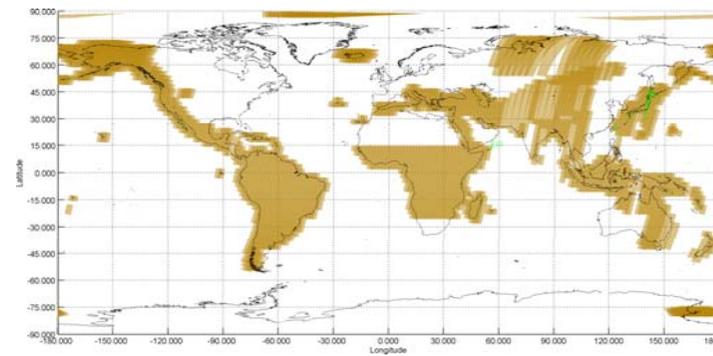


【18回帰】 全球10m：観測パターン②
 高分解能10m・C2・No.5・右・HH+HV・28MHz
 Z

【降交軌道 - descending】

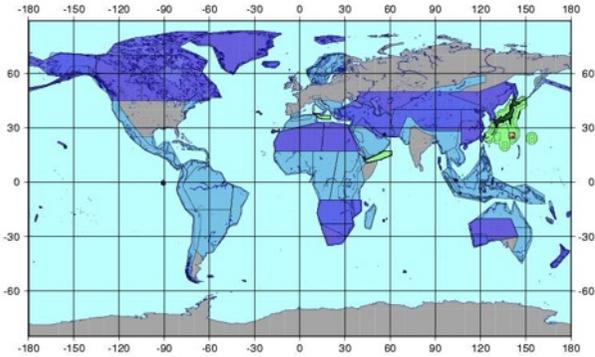


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51					
Cycle																															
Asc	Year1 baseline	World 1					Glacier Greenland		Global n/5					World 2					South pole	N+S pole	World 1					World 2					N+S pole
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m			DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350		
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		D+W+F	Global n/3					
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m						



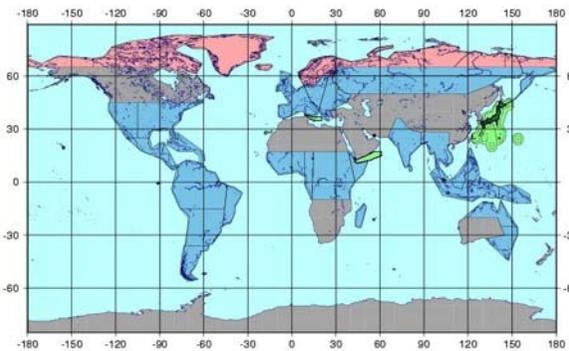
【18回帰】 地殻・湿地・伐採
 広域観測【350km】・S2・右・HH+HV・
 14MHz

【昇交軌道 - Ascending】



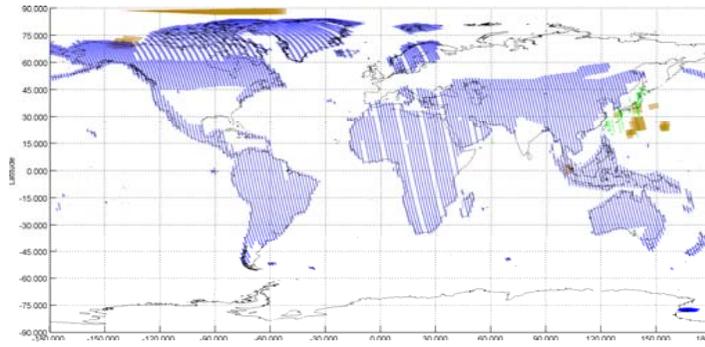
【19回帰】 全球10m：観測パターン②
高分解能10m・C2・No.6・右・HH+HV・28MHz

【降交軌道 - descending】

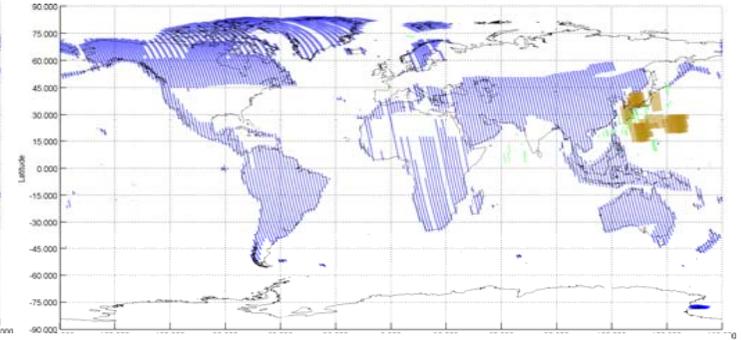


【19回帰】 リカバリー回帰

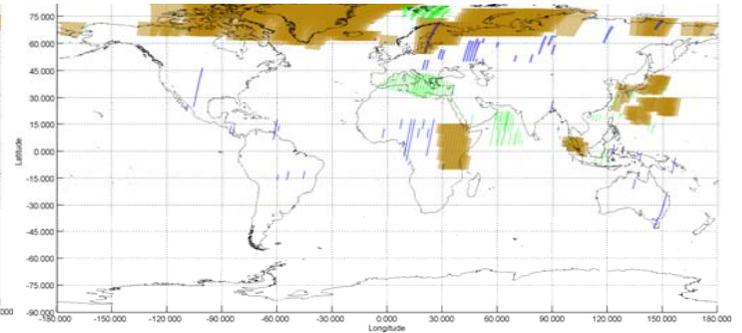
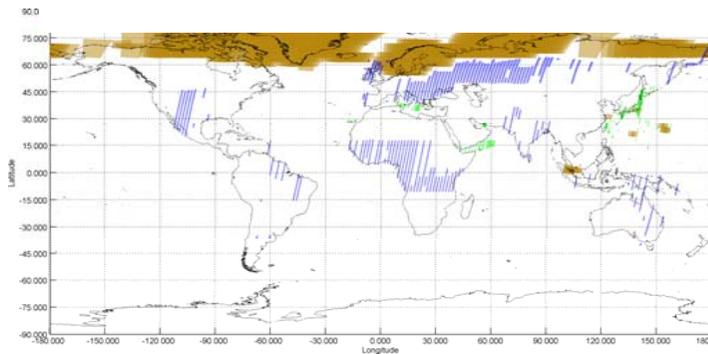
【5-1回目Sim結果】



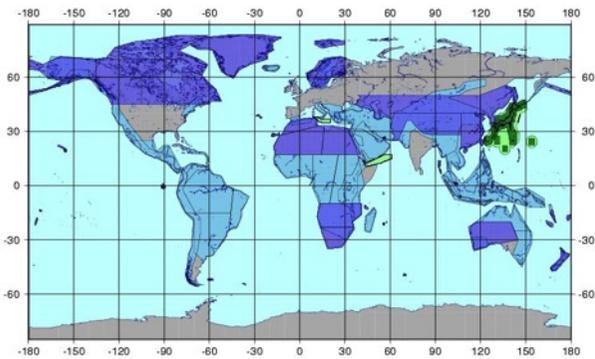
【4-1回目Sim結果】



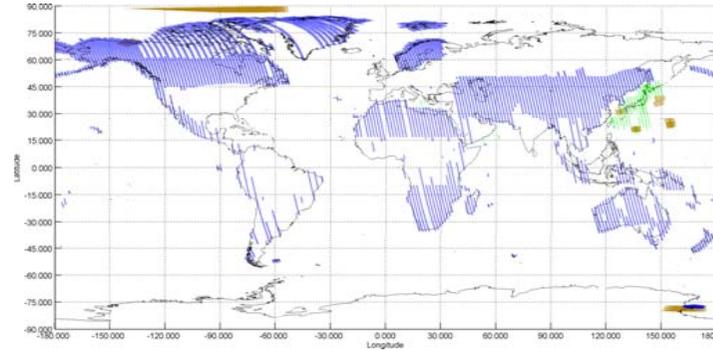
Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1				World 2		N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3			
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m		



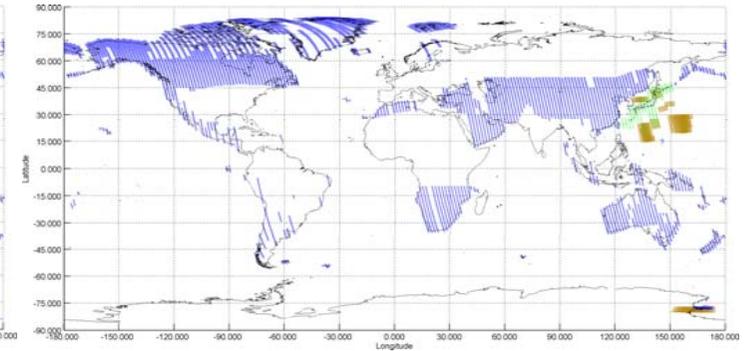
【昇交軌道 - Ascending】



【5-1回目Sim結果】

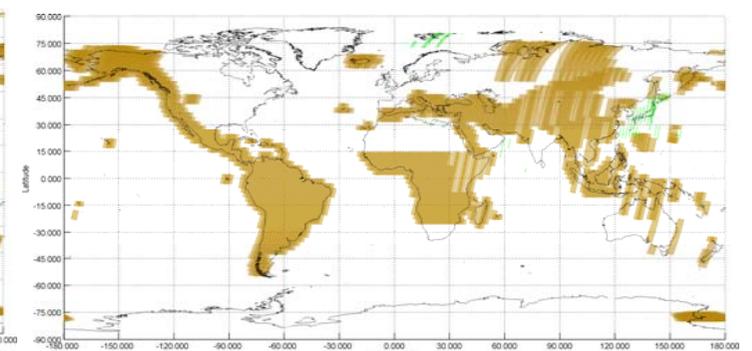
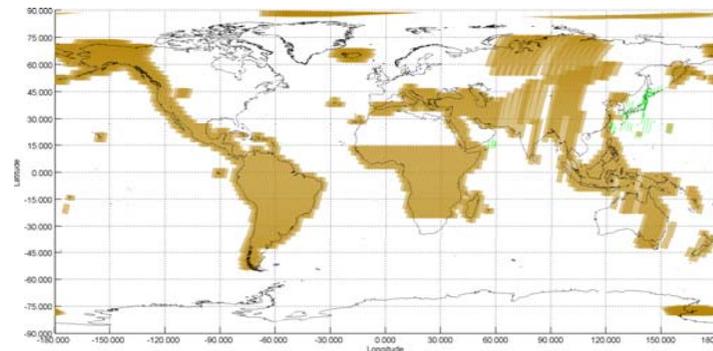
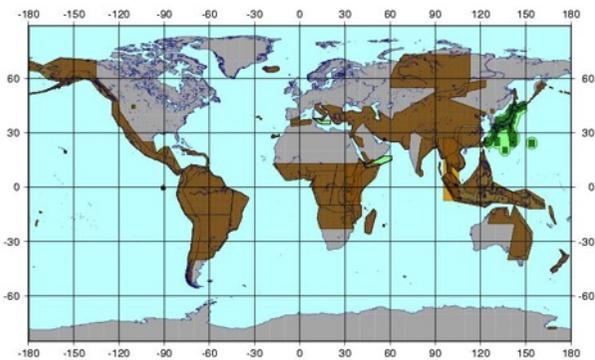


【4-1回目Sim結果】



【20回帰】 全球10m：観測パターン②
 高分解能10m・C2・No7・右・HH+HV・28MHz

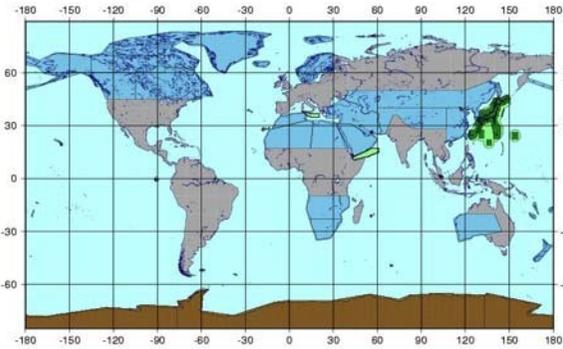
【降交軌道 - descending】



Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	
Cycle																											
Asc	Year1 baseline	World 1				Glacier Greenland		Global n/5					World 2				South pole	N+S pole	World 1				World 2			N+S pole	
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m			DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc.	Arctic	D+W+F	Global n/3		D+W+F	Global n/3	
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350		DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m

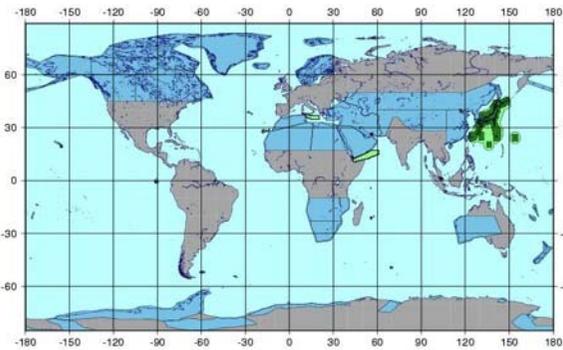
【20回帰】 地殻・湿地・伐採
 広域観測【350km】・S2・右・HH+HV・14MHz

【昇交軌道 - Ascending】



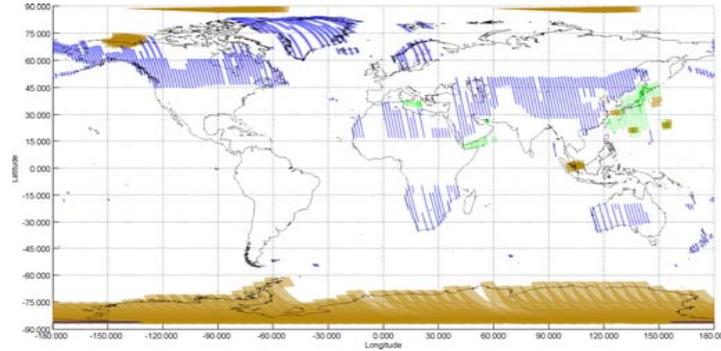
【21回帰】 極域 広域観測490km
S2・南極左・HH・14MH z

【降交軌道 - descending】

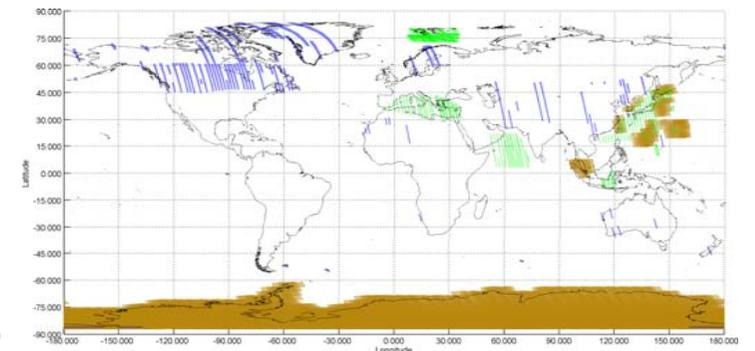


【21回帰】 リカバリー回帰

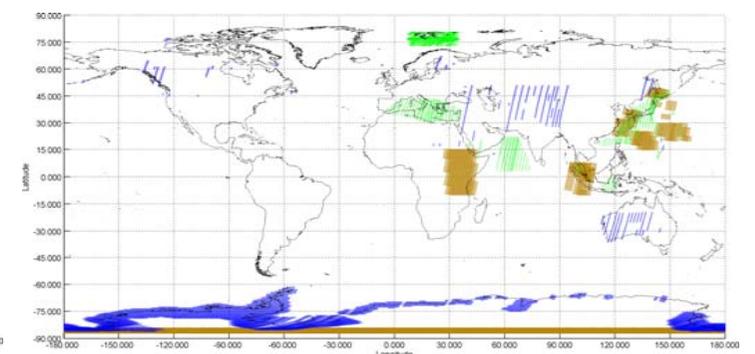
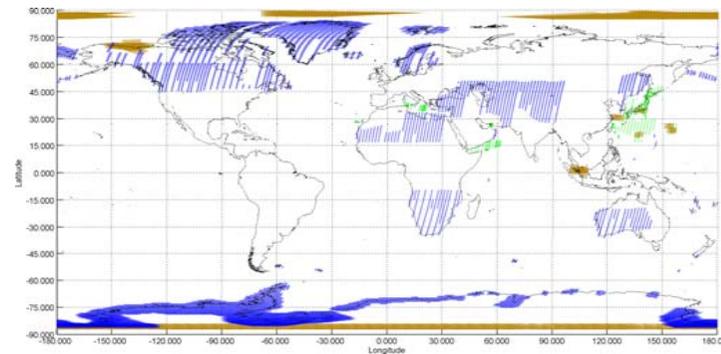
【5- 1 回目Sim結果】



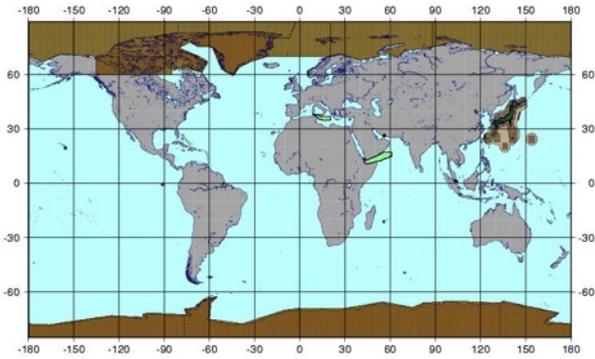
【4- 1 回目Sim結果】



Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle																												
Asc	Year1 baseline	World 1					Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole			
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m			DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m					DP(7) 10m	DP(5) 10m	DP(6) 10m
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3				
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m		



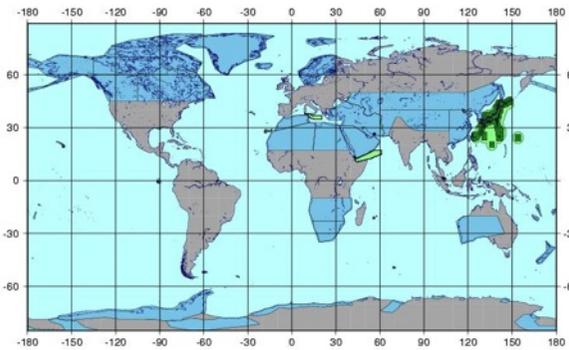
【昇交軌道 - Ascending】



【22回帰】 極域 広域観測490km
S2・北極右/南極左・HH・14MH

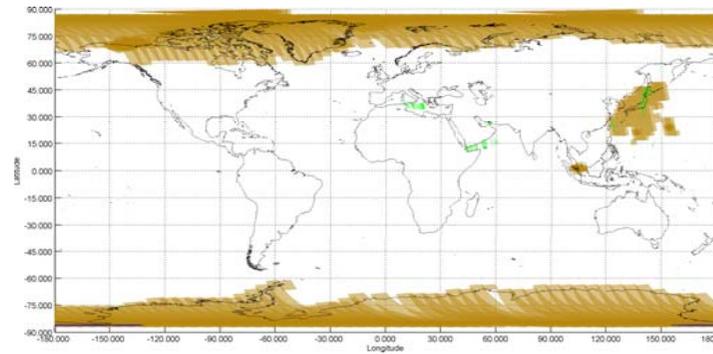
Z

【降交軌道 - descending】

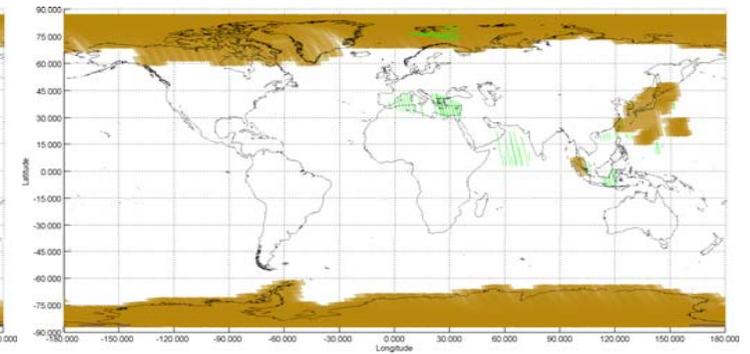


【22回帰】 リカバリー回帰

【5-1回目Sim結果】

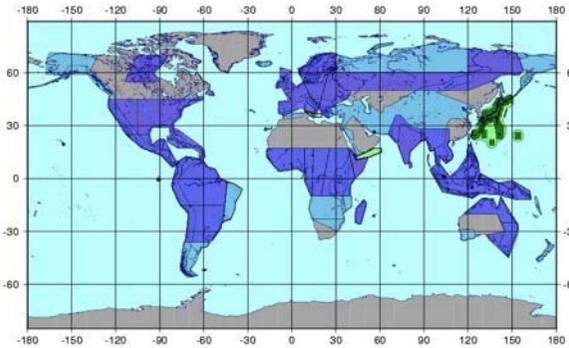


【4-1回目Sim結果】

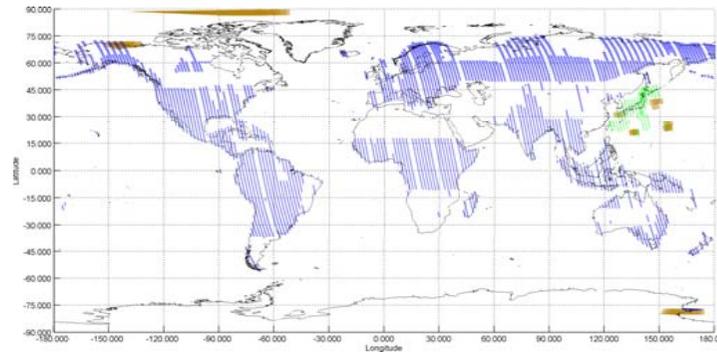


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1				World 2		N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m	DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m						DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3			
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m		

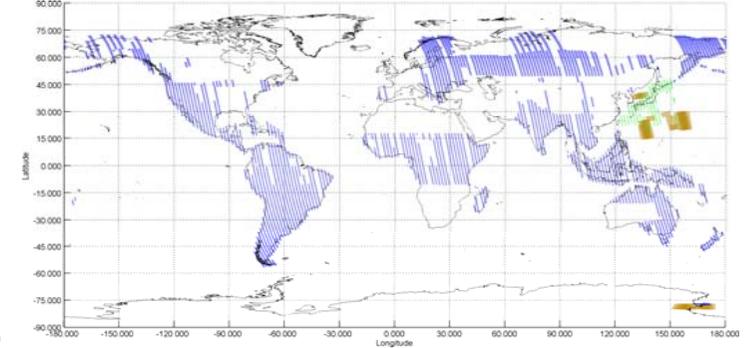
【昇交軌道 - Ascending】



【5-1回目Sim結果】

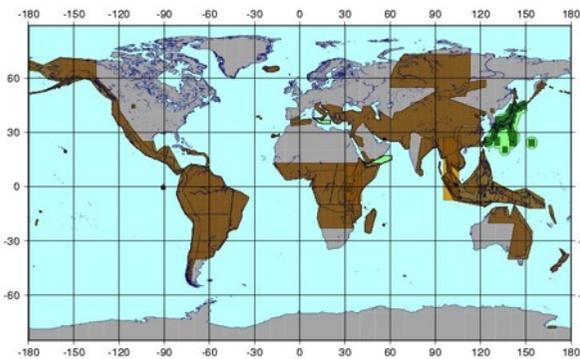


【4-1回目Sim結果】

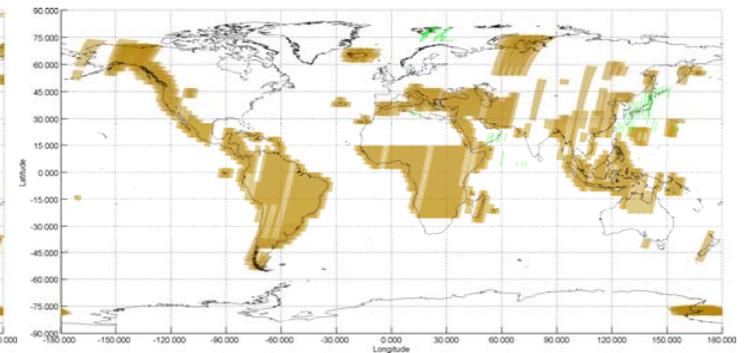
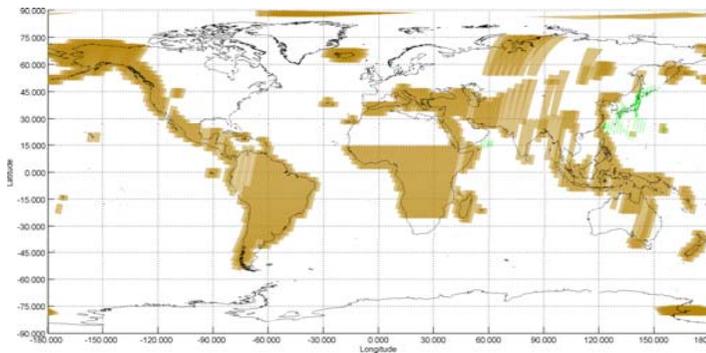


【23回帰】 全球10m：観測パターン①
 高分解能10m・C2・No.5・右・HH+HV・28MH

【降交軌道 - descending】

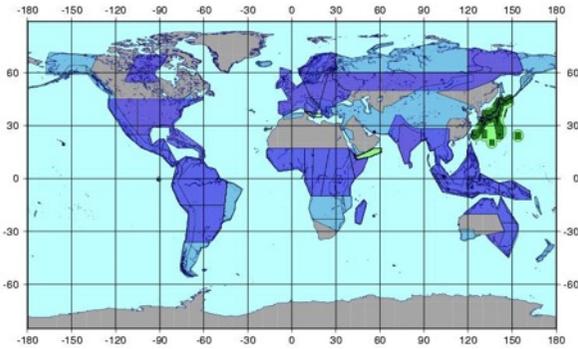


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5				World 2				South pole	N+S pole	World 1				World 2		N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m					DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3				
	WB 350	WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m			

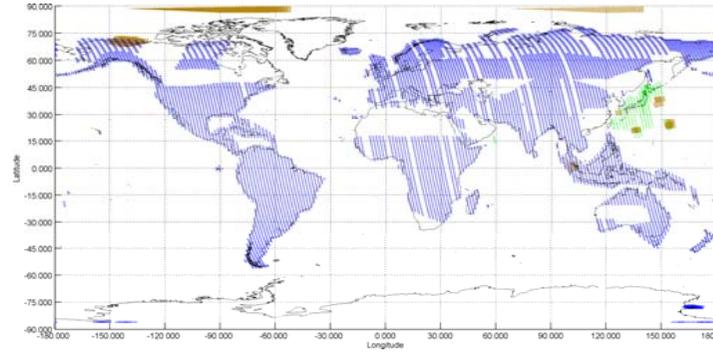


【23回帰】 地殻・湿地・伐採
 広域観測【350km】・S2・右・HH+HV・14MHz

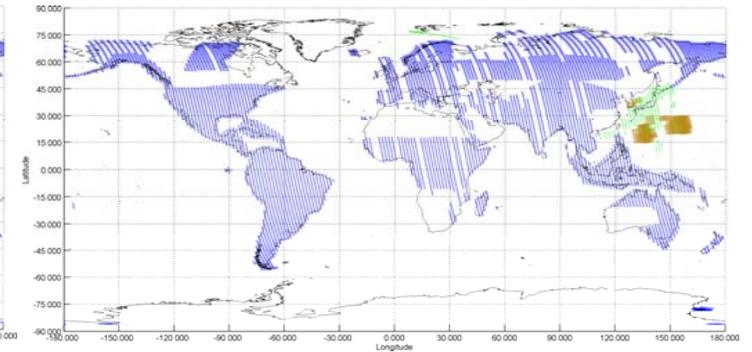
【昇交軌道 - Ascending】



【5- 1 回目Sim結果】



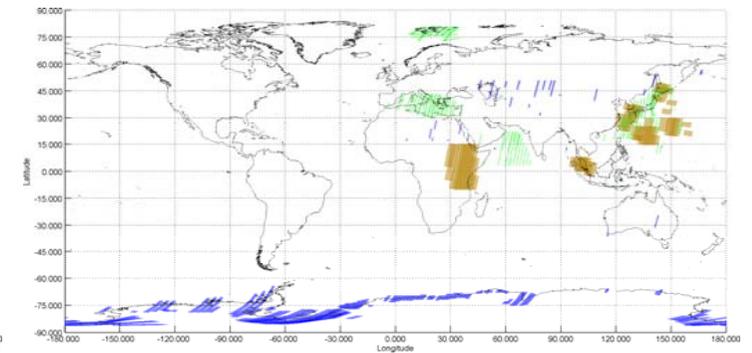
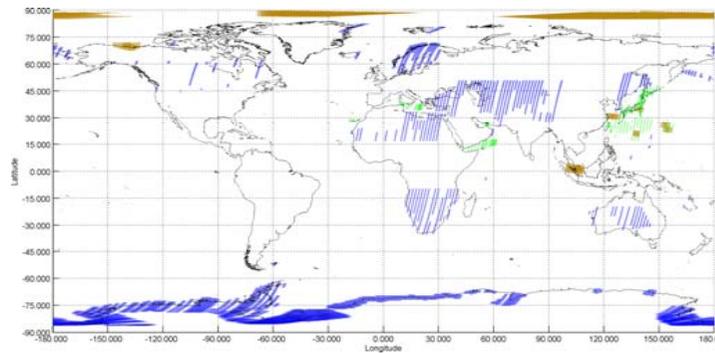
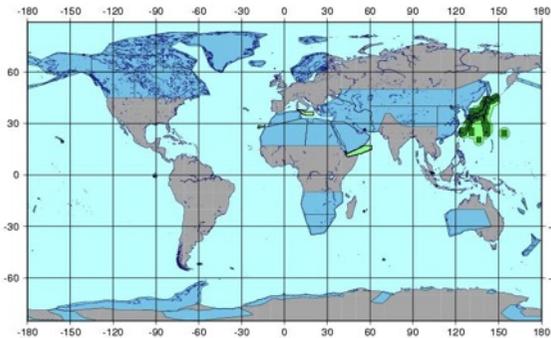
【4- 1 回目Sim結果】



【24回帰】 全球10m : 観測パターン①
 高分解能10m・C2・No.6・右・HH+HV・28MH
 Z

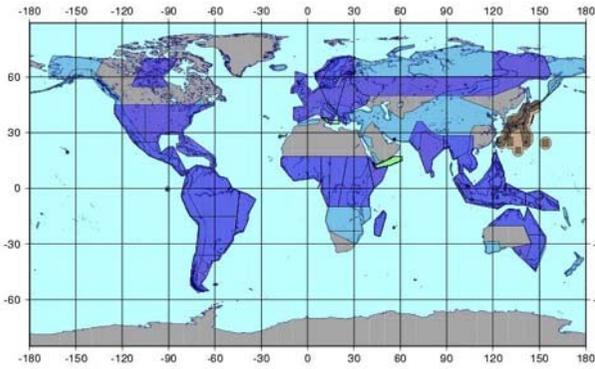
【降交軌道 - descending】

Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2		South pole	N+S pole	World 1				World 2		N+S pole				
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 6m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	DP(6)L	DP(6)L	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3	D+W+F	Global n/3	D+W+F	Global n/3
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m

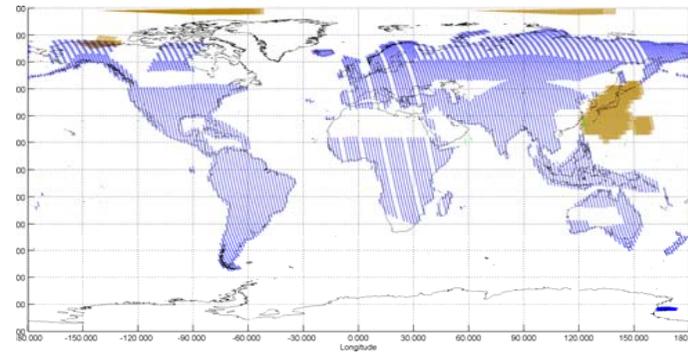


【24回帰】 リカバリー回帰

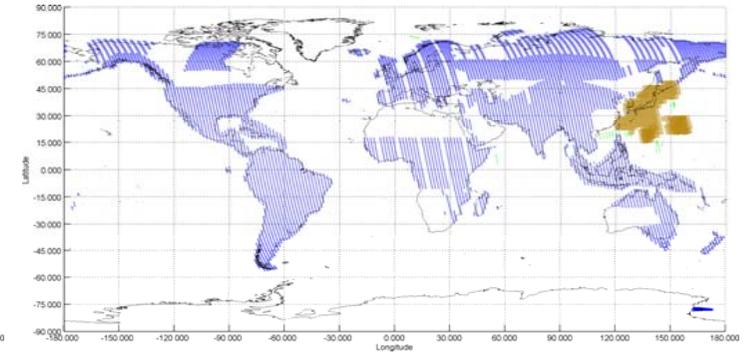
【昇交軌道 - Ascending】



【5-1回目Sim結果】



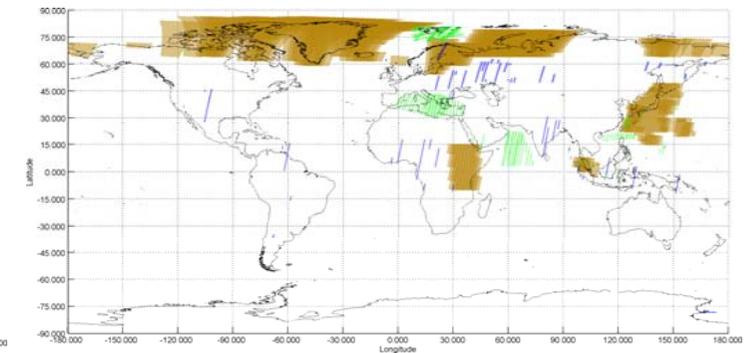
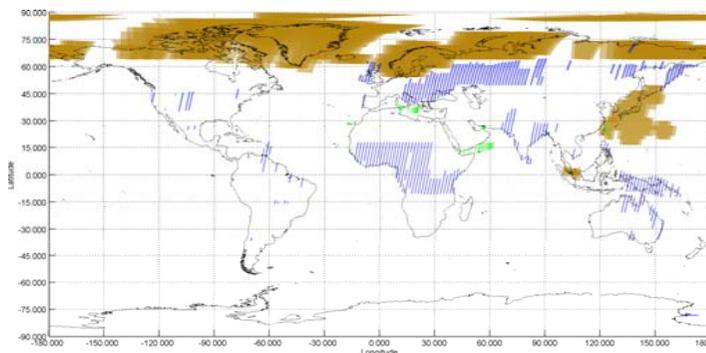
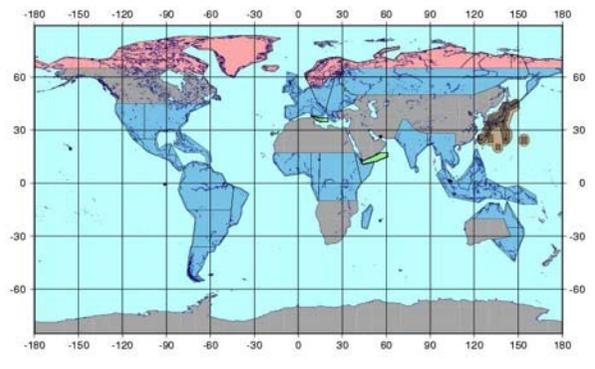
【4-1回目Sim結果】



【25回帰】 全球10m：観測パターン①
 高分解能10m・C2・No.7・右・HH+HV・28MH
 z

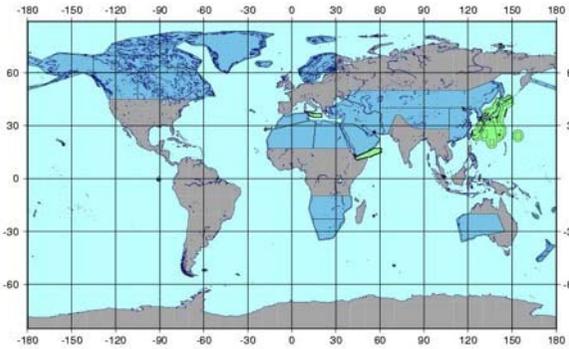
【降交軌道 - descending】

Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51									
Cycle	Year1 baseline		World 1					Glacier Greenland					Global n/5					World 2					South pole	N+S pole	World 1					World 2					N+S pole
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350							
Desc	D+W+F		Arctic	D+W+F		14-day InSAR		D+W+F		14-day InSAR		D+W+F		14-day InSAR		D+W+F	Arctic	D+W+F		Glacier Antarctica	D+W+F		Glac. Antarc.	Arctic	D+W+F		Global n/3	D+W+F		Global n/3					
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350		DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m								

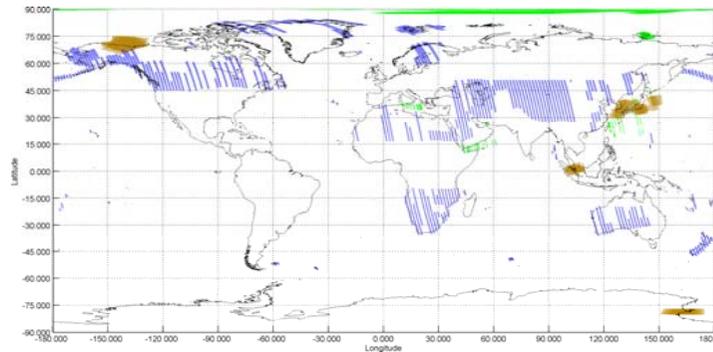


【25回帰】 リカバリー回帰

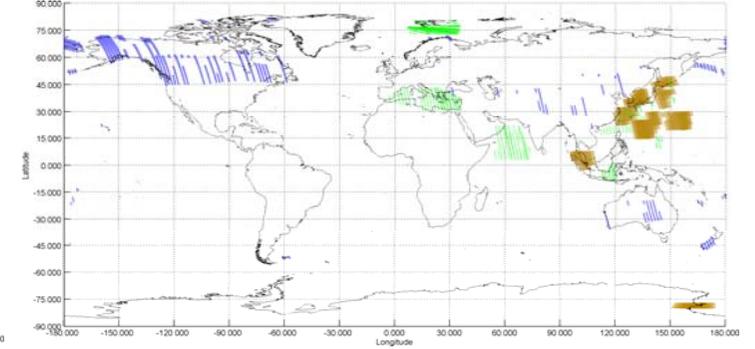
【昇交軌道 - Ascending】



【5-1回目Sim結果】

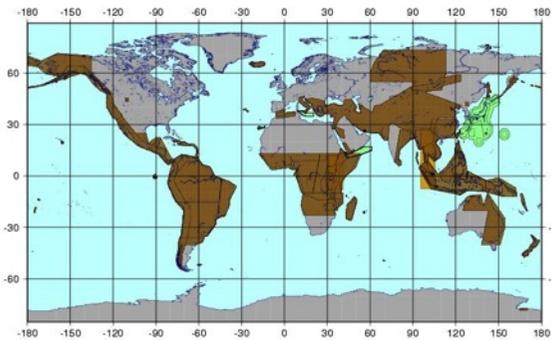


【4-1回目Sim結果】

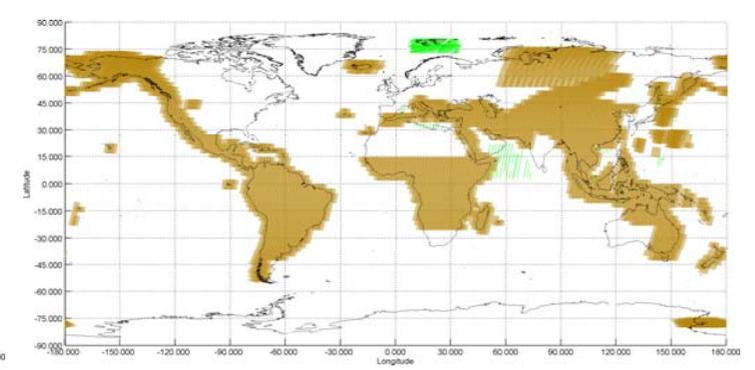
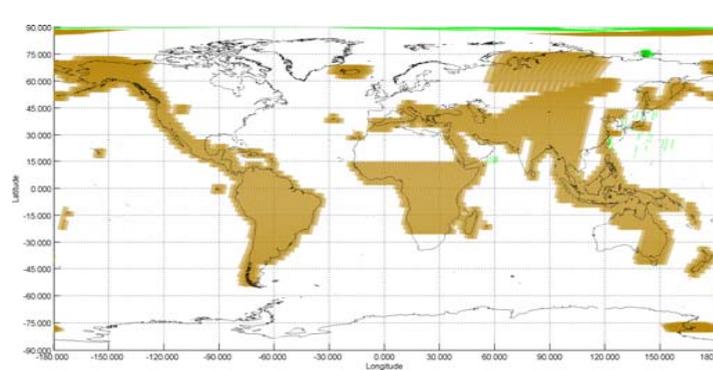


【26回帰】 リカバリー回帰

【降交軌道 - descending】

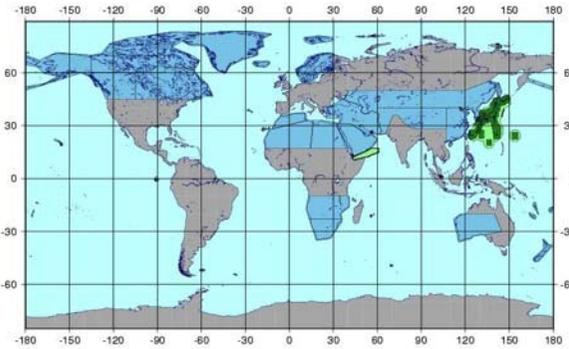


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51			
Cycle																													
Asc	Year1 baseline	World 1					Glacier Greenland		Global n/5					World 2					South pole	N+S pole	World 1					World 2		N+S pole	
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m			DP(7) 10m	DP(5) 10m	DP(6) 10m			WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m					DP(7) 10m	DP(5) 10m	DP(6) 10m
Desc	D+W+F		Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3			
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m		

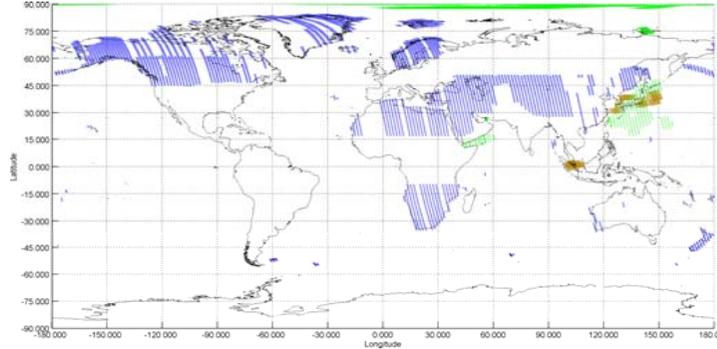


【26回帰】 地殻・湿地・伐採
 広域観測【350km】・S2・右・HH+HV・
 14MHz

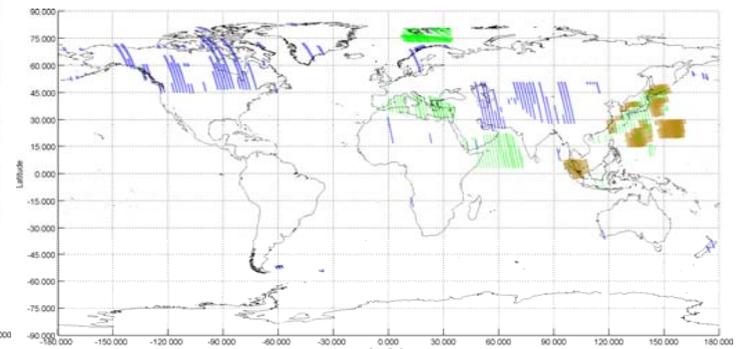
【昇交軌道 - Ascending】



【5-1回目Sim結果】

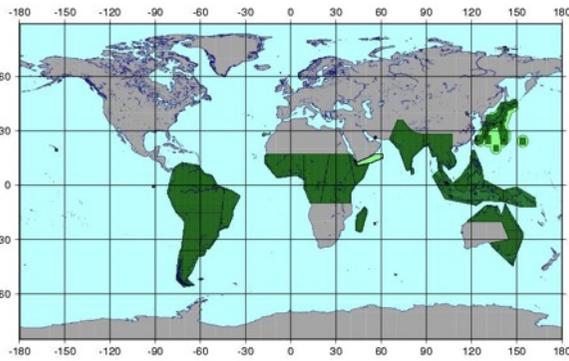


【4-1回目Sim結果】

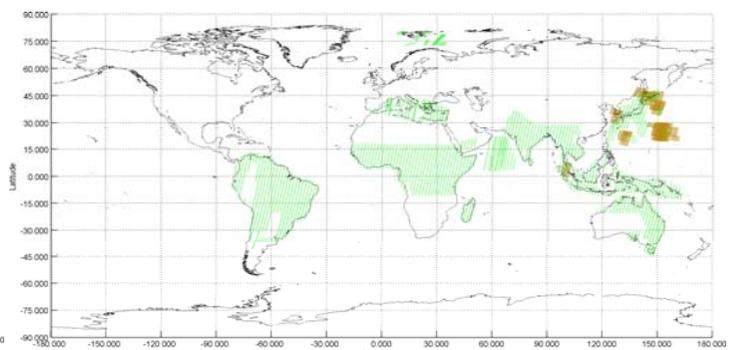
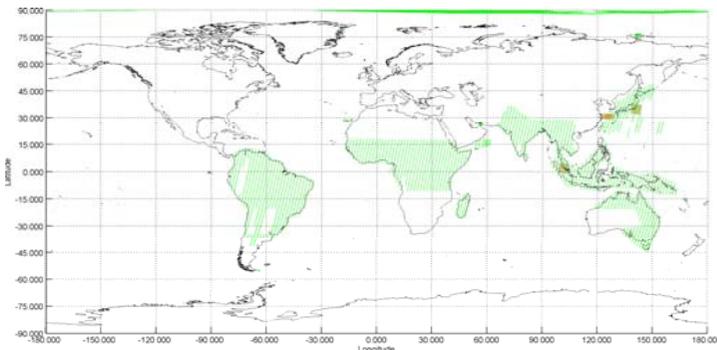


【27回帰】 リカバリ一回帰

【降交軌道 - descending】

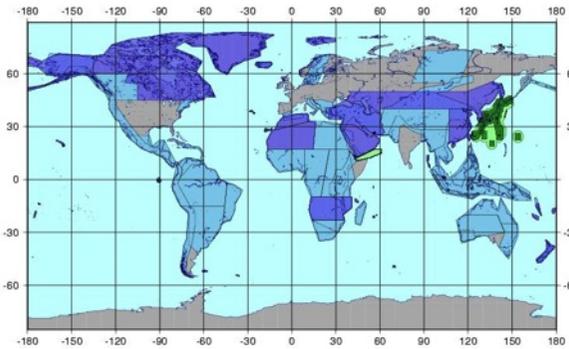


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51						
Cycle																																
Asc	Year1 baseline	World 1						Glacier Greenland		Global n/5						World 2						South pole	N+S pole	World 1						World 2		N+S pole
	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350			
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3						
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m				

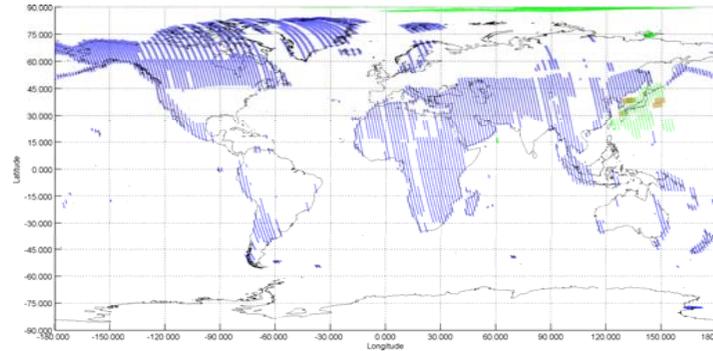


【27回帰】 全球3m：観測パターン①
 高分解能3m・F2・No.6・右・HV・84MH z

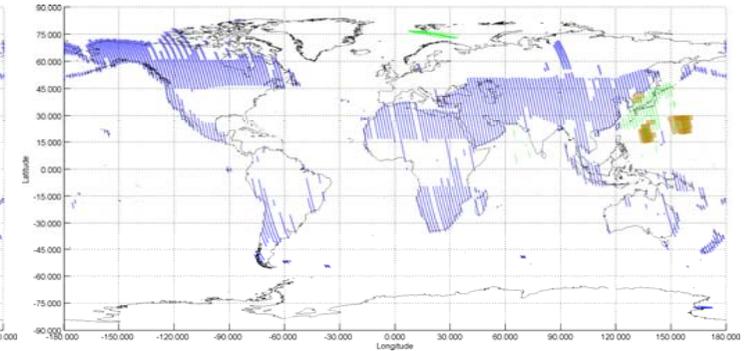
【昇交軌道 - Ascending】



【5-1回目Sim結果】

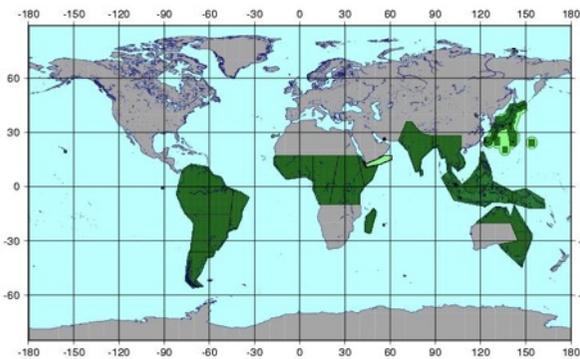


【4-1回目Sim結果】

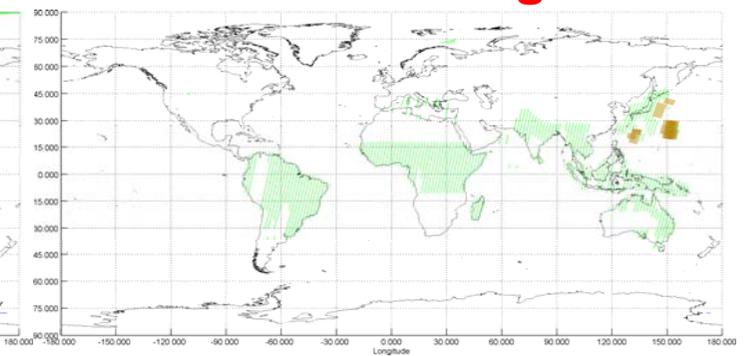
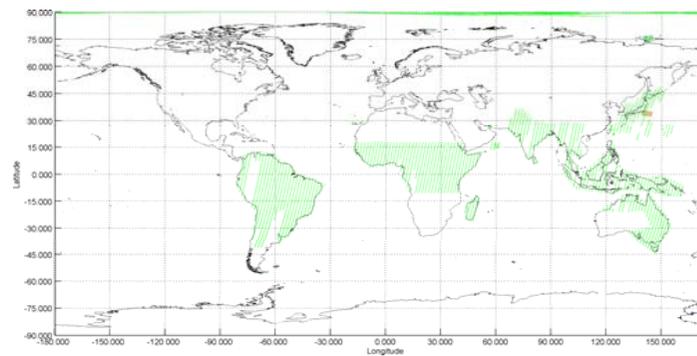


【28回帰】 全球10m：観測パターン②
 高分解能10m・C2・No.5・右・HH+HV・28MH
 z

【降交軌道 - descending】

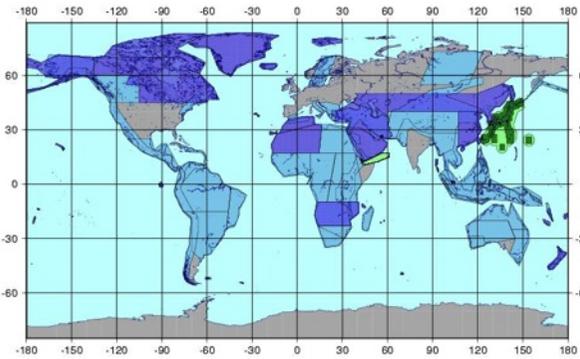


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1			World 2			N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m



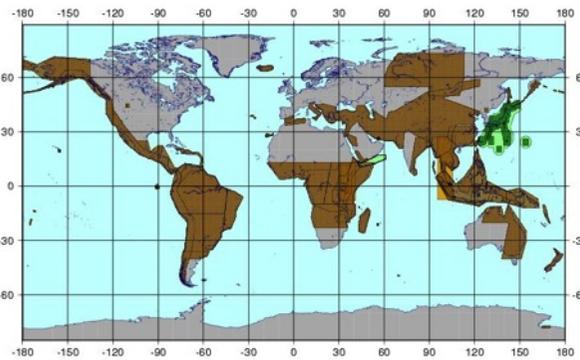
【28回帰】 全球3m：観測パターン①
 高分解能3m・F2・No.7・右・HV・84MH
 z

【昇交軌道 - Ascending】



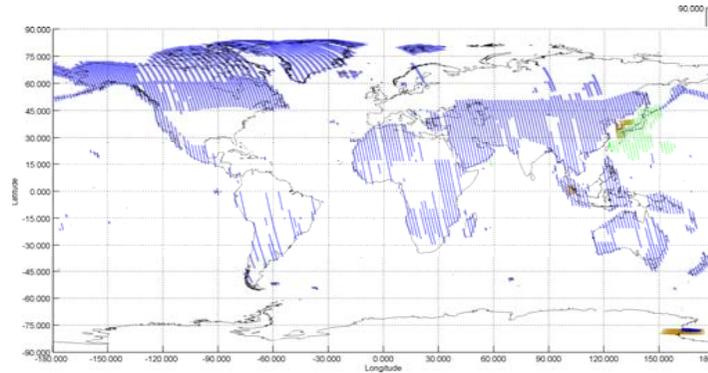
【29回帰】 全球10m：観測パターン②
 高分解能10m・C2・No.6・右・HH+HV・28MHz

【降交軌道 - descending】

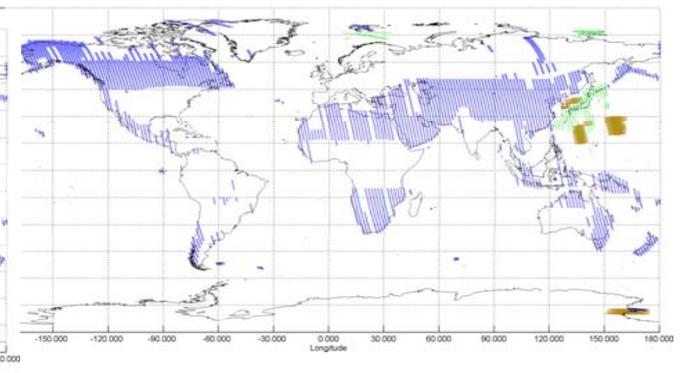


【29回帰】 地殻・湿地・伐採
 広域観測【350km】・S2・右・HH+HV・14MHz

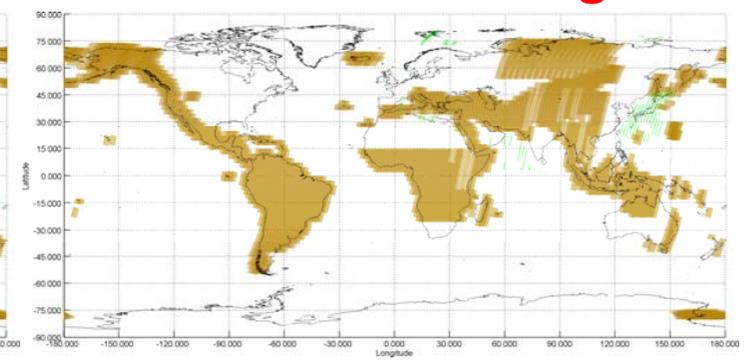
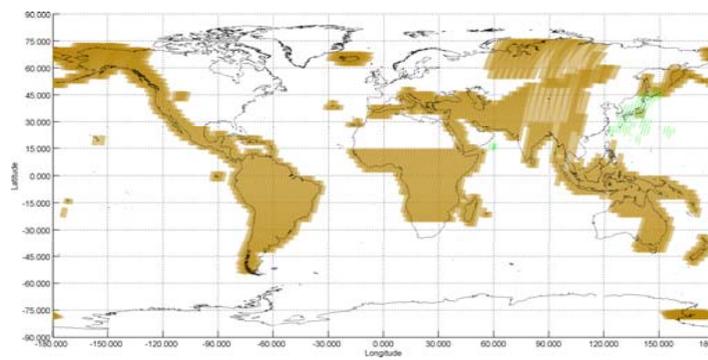
【5-1回目Sim結果】



【4-1回目Sim結果】



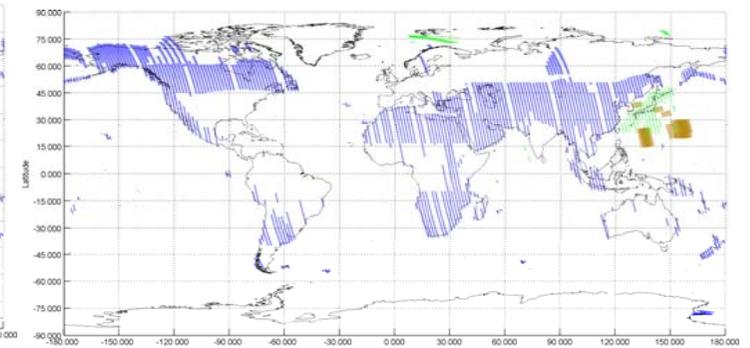
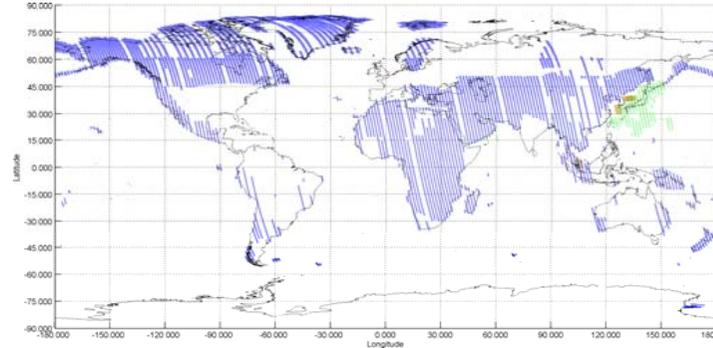
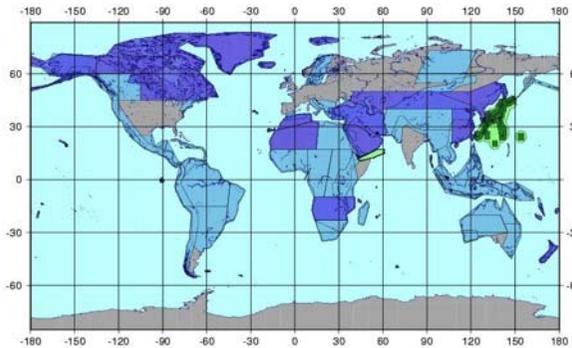
Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51				
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2			South pole	N+S pole	World 1				World 2		N+S pole					
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m					DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350	
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3	D+W+F	Global n/3	D+W+F	Global n/3	WB 350	WB 350	WB 350	WB 350
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	WB 350	SP(8) 3m	SP(9) 3m	WB 350	



【昇交軌道 - Ascending】

【5-1回目Sim結果】

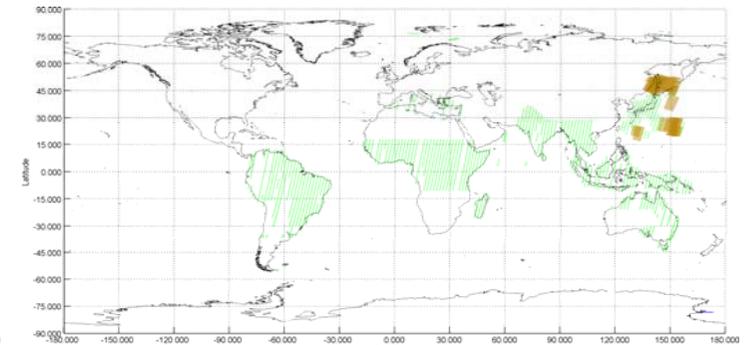
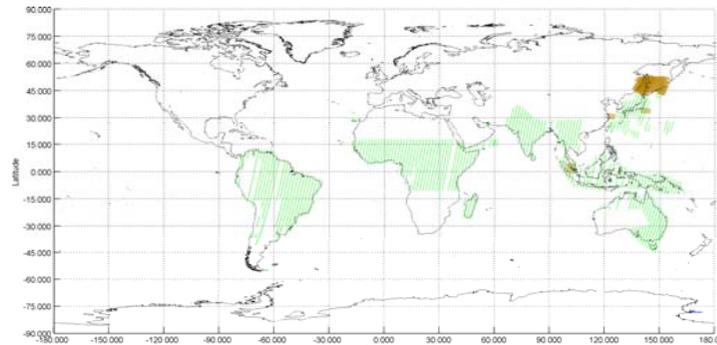
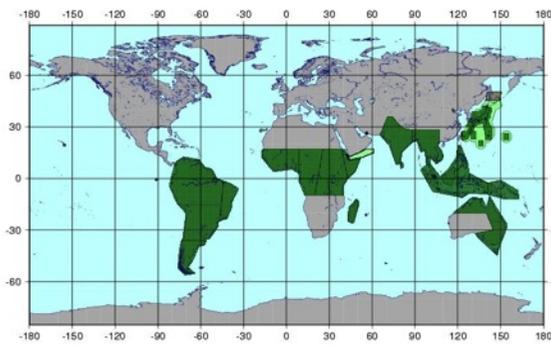
【4-1回目Sim結果】



【30回帰】 全球10m : 観測パターン②
 高分解能10m・C2・No.7・右・HH+HV・28MH

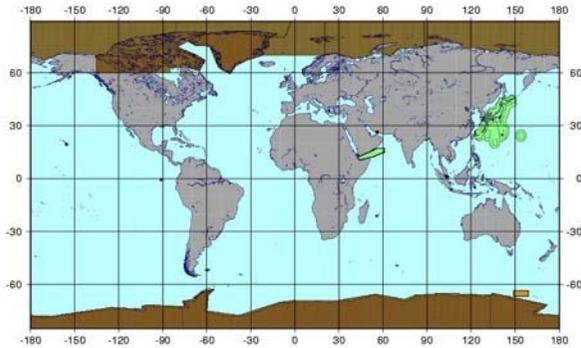
【降交軌道 - descending】

Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51		
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5				World 2				South pole	N+S pole	World 1				World 2				N+S pole	
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350L
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	DP(6)L	DP(6)L	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3	
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m

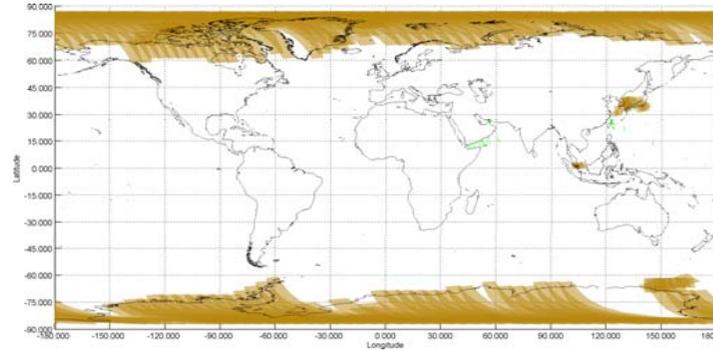


【30回帰】 全球3m : 観測パターン①
 高分解能3m・F2・No.8・右・HV・84MH z

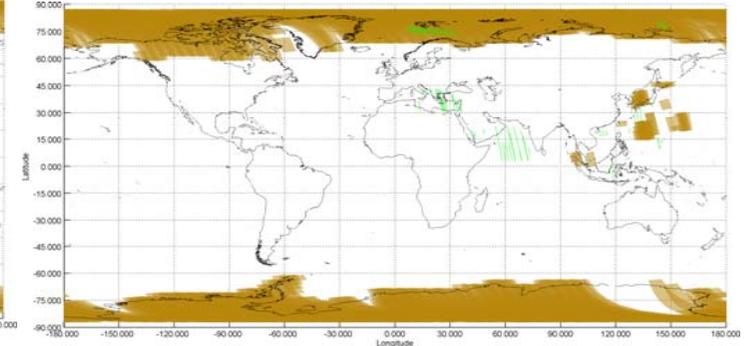
【昇交軌道 - Ascending】



【5-1回目Sim結果】

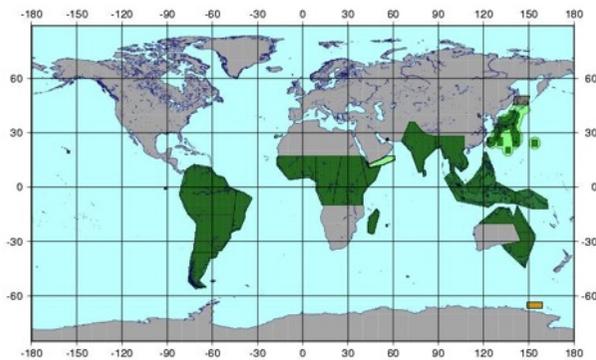


【4-1回目Sim結果】

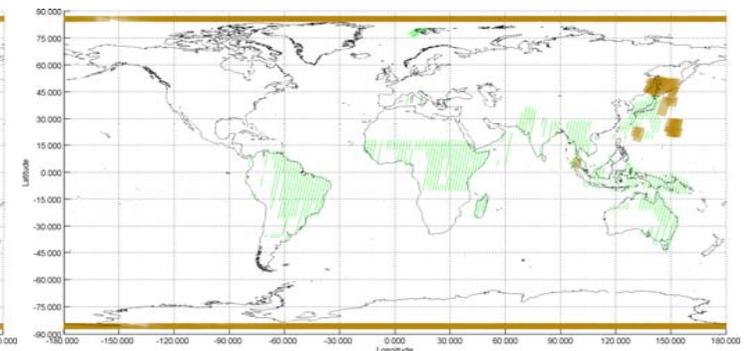
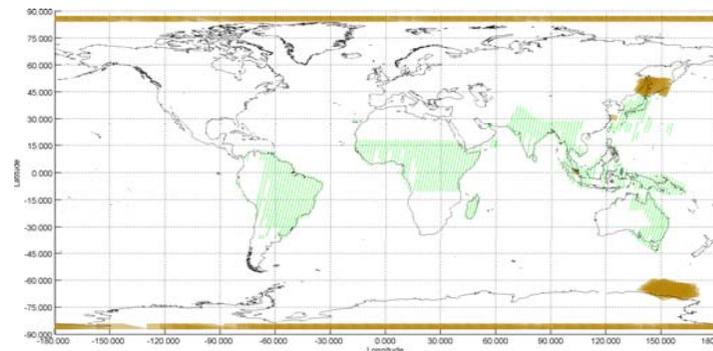


【31回帰】 極域 広域観測490km
S2・北極右/南極左・HH・
14MH z

【降交軌道 - descending】

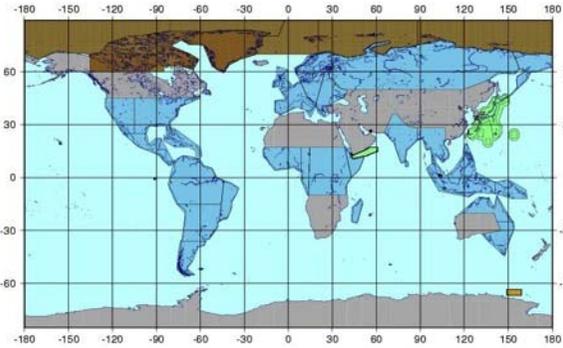


Week	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	
Cycle	Year1 baseline		World 1				Glacier Greenland		Global n/5					World 2		South pole	N+S pole	World 1				World 2		N+S pole			
Asc	WB 350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m		WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350		WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(8) 3m	SP(9) 3m	



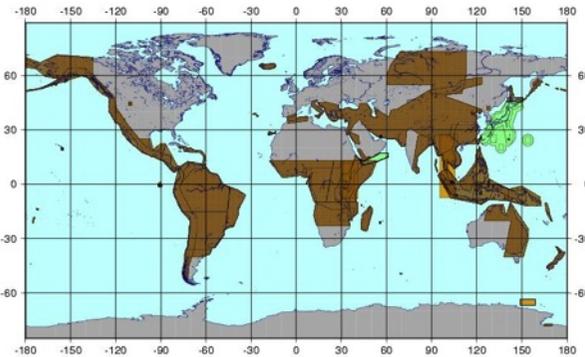
【31回帰】 全球3m：観測パターン①
高分解能3m・F2・No.9・右・HV・84MH z

【昇交軌道 - Ascending】



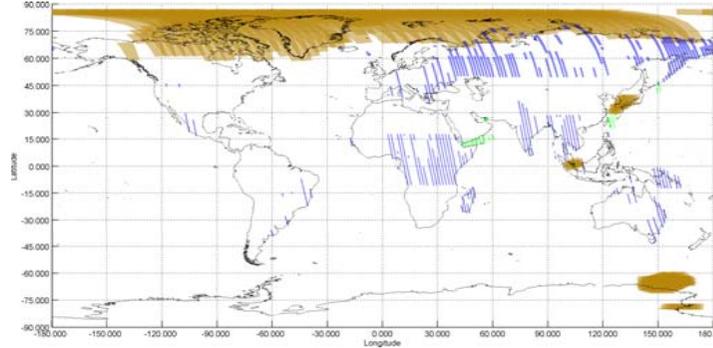
【32回帰】 極域 広域観測350 km
S2・北極右・HH+HV・14MHz z

【降交軌道 - descending】

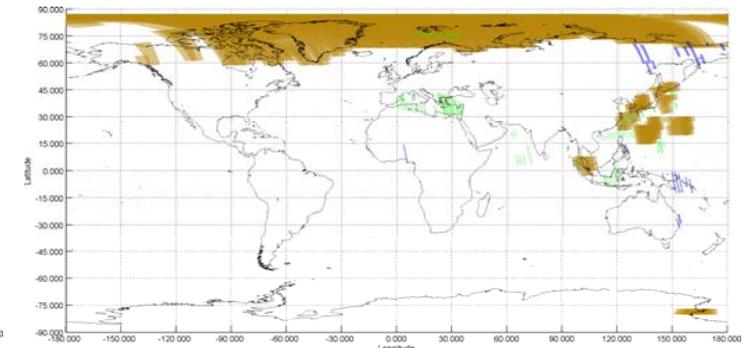


【32回帰】 地殻・湿地・伐採
広域観測【350km】・S2・右・HH+HV・
14MHz

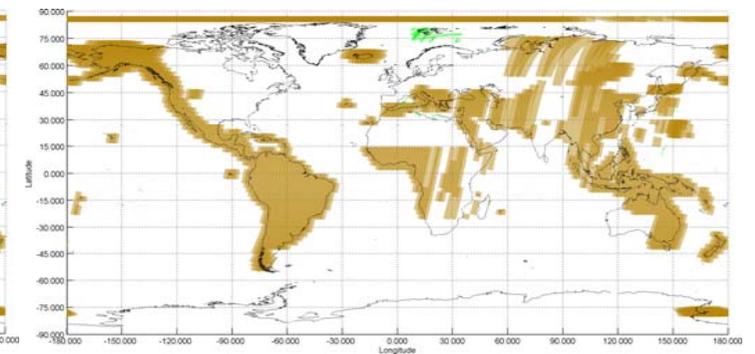
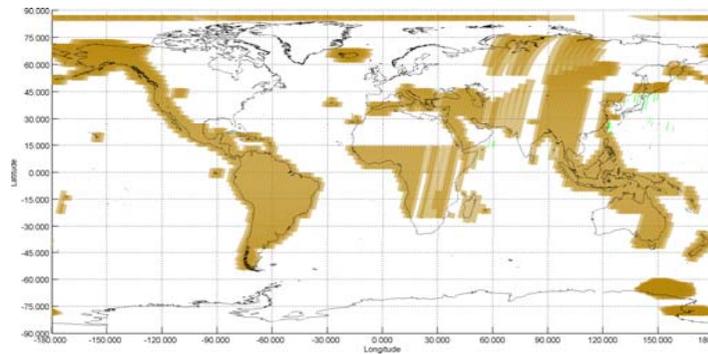
【5-1回目Sim結果】



【4-1回目Sim結果】



Week Cycle	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51
Asc	N pole	World 1				Glacier Greenland		Global n/5					World 2			S pole	N+S pole	World 1			World 2			N+S pole		
	WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m	DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350L	WB350L	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350
Desc	D+W+F	Arctic	D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	14-day InSAR		D+W+F	Arctic	D+W+F	Glacier Antarctica		D+W+F	Glac. Antarc.	Arctic	D+W+F	Global n/3		D+W+F	Global n/3		
	WB 350	WB 490	WB 350	DP(5) 10m	DP(5) 10m	WB 350	DP(6) 10m	DP(6) 10m	WB 350	DP(7) 10m	DP(7) 10m	WB 350	WB 490	WB 350	DP(6)L	DP(6)L	WB 350	DP(6)L	WB 490	WB 350	SP(6) 3m	SP(7) 3m	WB 350	SP(6) 3m	SP(6) 3m	





ALOS-2 Basic Observation Scenario



Observation pattern for annual acquisitions *

Season	N:Winter/S:Summer				N:Spring/S:Autum				N:Summer/S:Winter				N:Autum/S:Spring													
Week of year	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46	47-48	49-50	51-52
Desc	D+W+F		Arctic	D+W+F	14-day InSAR	D+W+F	14-day InSAR	D+W+F	14-day InSAR	D+W+F	Arctic	D+W+F	Glacier Antarctica	D+W+F	Glac. Antarc	Arctic	D+W+F	Global (1/3)	D+W+F	Global (1/3)						
	WB 350km		WB490	WB 350km	DP(5) 10m	DP(5) 10m	WB 350km	DP(6) 10m	DP(6) 10m	WB 350km	DP(7) 10m	DP(7) 10m	WB 350km	WB490	WB 350km	DP(6)L	DP(6)L	WB 350km	DP(6)L	WB490	WB 350km	SP(6) 3m	SP(7) 3m	WB 350km	SP(8) 3m	SP(9) 3m
Asc	North Pole	World 1			Glacier Greenland	Global (1/5)				World 2			South Pole	N + S Pole	World 1		World 2			N + S Pole						
	WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m	DP(6) 10m	DP(6) 10m	QP(6) 6m	QP(5) 6m	QP(4) 6m	QP(3) 6m	QP(7) 6m		DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350	DP(7) 10m	DP(5) 10m	DP(6) 10m				DP(7) 10m	DP(5) 10m	DP(6) 10m	WB350

DP 10m 10m(HH+HV)28MHz Right

WB 350km ScanSAR350km(HH+HV)14MHz Right

SP 3m 3m(HH)84MHz Right

WB 350km ScanSAR350km(HH+HV)14MHz Left

QP 6m 6m(HH+HV+VH+VV)42MHz Right

WB 490km ScanSAR490km(HH+HV)14MHz Right

(*) *Beam No.

DP 10m 10m(HH+HV)28MHz Left

Super sites (TBD)

* 3m SP and 6m QP modes require 3 and 5 years for global coverage



ALOS-2 Basic Observation Scenario



- The BOS started on Aug. 2, in the background of the CAL/VAL
- ALOS-2 in operational phase since last week
- We are now in cycle 10.

	Cycle	start	end	Desc	Asc
		24-May-14	6-Jun-14	Commissioning	
		7-Jun-14	20-Jun-14		
		21-Jun-14	4-Jul-14		
		5-Jul-14	18-Jul-14		
		19-Jul-14	1-Aug-14		
Cal/Val Phase	1	2-Aug-14	3-Aug-14	-	-
	2	4-Aug-14	17-Aug-14	WB 100m	WB 100m
	3	18-Aug-14	31-Aug-14	Glacier DP(6)	N&S Poles WB
	4	1-Sep-14	14-Sep-14	WB 100m	DP(7) 10m 36.2°
	5	15-Sep-14	28-Sep-14	Glacier DP(6)	DP(5) 10m 28.2°
	6	29-Sep-14	12-Oct-14	VWB Sub-Arctic	DP(6) 10m 32.5°
	7	13-Oct-14	26-Oct-14	WB 100m	Recovery
	8	27-Oct-14	9-Nov-14	SP(6) 3m 29.1°	Recovery
	9	10-Nov-14	23-Nov-14	SP(7) 3m 32.4°	DP(7) 10m 36.2°
	10	24-Nov-14	7-Dec-14	WB 100m	DP(5) 10m 28.2°
	11	8-Dec-14	21-Dec-14	SP(8) 3m 35.4°	DP(6) 10m 32.5°
	12	22-Dec-14	4-Jan-15	SP(9) 3m 38.2°	WB N&S Poles



ALOS-2 Basic Observation Scenario



2015

Cycle	start	end	Desc	Asc
13	5-Jan-15	18-Jan-15	WB 100m	WB N Pole
14	19-Jan-15	1-Feb-15	Recovery	DP(7) 10m 36.2°
15	2-Feb-15	15-Feb-15	VWB Sub-Arctic	DP(5) 10m 28.2°
16	16-Feb-15	1-Mar-15	WB 100m	DP(6) 10m 32.5°
17	2-Mar-15	15-Mar-15	DP(5) 10m 28.2°	Glacier DP(6)
18	16-Mar-15	29-Mar-15	DP(5) 10m 28.2°	Glacier DP(6)
19	30-Mar-15	12-Apr-15	WB 100m	QP(6) 6m 32.7°
20	13-Apr-15	26-Apr-15	DP(6) 10m 32.5°	QP(5) 6m 30.4°
21	27-Apr-15	10-May-15	DP(6) 10m 32.5°	QP(4) 6m 28.0°
22	11-May-15	24-May-15	WB 100m	QP(3) 6m 25.0°
23	25-May-15	7-Jun-15	DP(7) 10m 36.2°	QP(7) 6m 34.9°
24	8-Jun-15	21-Jun-15	DP(7) 10m 36.2°	Recovery
25	22-Jun-15	5-Jul-15	WB 100m	DP(7) 10m 36.2°
26	6-Jul-15	19-Jul-15	VWB Sub-Arctic	DP(5) 10m 28.2°
27	20-Jul-15	2-Aug-15	WB 100m	DP(6) 10m 32.5°
28	3-Aug-15	16-Aug-15	Glacier DP(6)	WB S Pole
29	17-Aug-15	30-Aug-15	Glacier DP(6)	WB N&S Poles
30	31-Aug-15	13-Sep-15	WB 100m	DP(7) 10m 36.2°
31	14-Sep-15	27-Sep-15	Glacier DP(6)	DP(5) 10m 28.2°
32	28-Sep-15	11-Oct-15	VWB Sub-Arctic	DP(6) 10m 32.5°
33	12-Oct-15	25-Oct-15	WB 100m	Recovery
34	26-Oct-15	8-Nov-15	SP(6) 3m 29.1°	Recovery
35	9-Nov-15	22-Nov-15	SP(7) 3m 32.4°	DP(7) 10m 36.2°
36	23-Nov-15	6-Dec-15	WB 100m	DP(5) 10m 28.2°
37	7-Dec-15	20-Dec-15	SP(8) 3m 35.4°	DP(6) 10m 32.5°
38	21-Dec-15	3-Jan-16	SP(9) 3m 38.2°	WB N&S Poles



Systematic acquisition planning



The latest version of the BOS is available at

http://www.eorc.jaxa.jp/ALOS-2/en/obs/scenario/ALOS-2_Basic_Observation_Scenario_First-Ed_E_v00A.pdf

