

# ALOS-2 Basic Observation Scenario (4th Edition Ver. A)

March 19, 2026  
SAOC (In charge of ALOS-2)

# Details of revision

Version	Date	Page	Details of revision
A	2026/3/19	P8	▪ Added the Basic Observation Scenario after April 2026 【Japan】 (Cycle 307-339)
		P21	▪ Added the new sites which selected by PI and ALOS-4 CVST
		P38	▪ Finished the observations of Supersites (CEOS) (until Cycle 299)

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# 1. 4th edition

This document is the 4th edition of the ALOS-2 Basic Observation Scenario.

The late phase of ALOS-2 operation has entered a new phase, operating with ALOS-4 in parallel, we revised the Basic Observation Scenario as the 4th edition.

In the 4th edition ver. A, we planed the Basic Observation Scenario for Japan after April 2026. | A

The ALOS-2 Basic Observation Scenario will be reviewed every 6 months based on the requests from users.

Regarding the previous ALOS-2 Basic Observation Scenario, please refer to the 3rd edition ver. N.

## 2. Purpose and Background

The PALSAR-2 instrument onboard ALOS-2 has several observation modes (Spotlight, Stripmap, ScanSAR) and right-and-left looking function to fulfill the mission requirements. This flexibility may however also trigger conflicts among user requests without adequate planning.

As implementation of systematic observations are required to achieve temporally and spatially consistent data, a Basic Observation Scenario (BOS) had been developed for ALOS-2, partially succeeding ALOS systematic observation scenario.

Launched in July 2024 and entering its regular operational period in April 2025, ALOS-4 has been started the observation in Japan with **Stripmap (3 m)** mode and global with **Stripmap (10 m)** mode. About ALOS-2, **Stripmap (10 m)** mode observations are applied to lower priority and the resulting vacant resources are distributed to other observations (e.g. high frequent observation for a specified area with ALOS-4, 2.5-dimensional analysis using ALOS-4 right-looking observation and ALOS-2 left-looking observation etc.) as a policy. We will plan to coordinate the observation plan with the situation of ALOS-4 operation.

# **3. Basic Observation Scenario (Japan)**

## 3.1 Overview for the Basic Observation Scenario for Japan

- ALOS-4 Observation over Japan is undertaken for **Stripmap (3 m)** mode (right-looked) on Ascending/Descending observations. Therefore, ALOS-2 observation is basically undertaken for left-looked observation, and it is aimed for the effective utilization of resources by using 2.5-dimensional analysis etc..
- The observation areas during the winter (January to March) are shown in the following figure excluding snowy areas.



# 3.2 Basic Observation Scenario (Japan) - [ 12<sup>th</sup>-13<sup>th</sup>year ] -

## ■ 12th Year

Cycle	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313								
Year	2025												2026																					
Month/Day	07/21	08/04	08/18	09/01	09/15	09/29	10/13	10/27	11/10	11/24	12/08	12/22	01/05	01/19	02/02	02/16	03/02	03/16	03/30	04/13	04/27	05/11	05/25	06/08	06/22	07/06								
Descending	Differential InSAR						Differential InSAR+ Sea Ice					Sea Ice				Differential InSAR+ Sea Ice				Sea Ice		Differential InSAR												
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R					U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L					U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L								
Ascending	Disaster Base Map						Differential InSAR					Differential InSAR												FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R						
	U3 (10)R	U3 (11)R	U3 (12)R	U3 (13)R	U3 (14)R		W2 (2)L	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R				U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L																

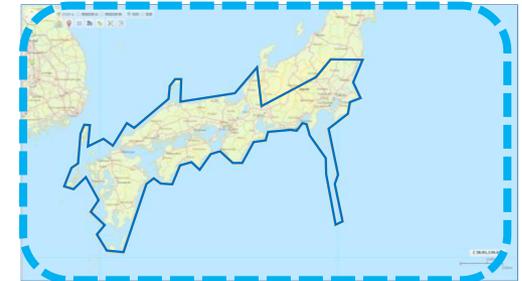
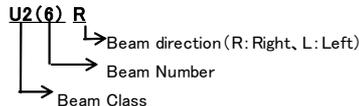
## ■ 13th Year

Cycle	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339								
Year	2026												2027																					
Month/Day	07/20	08/03	08/17	08/31	09/14	09/28	10/12	10/26	11/09	11/23	12/07	12/21	01/04	01/18	02/01	02/15	03/01	03/15	03/29	04/12	04/26	05/10	05/24	06/07	06/21	07/05								
Descending	Differential InSAR						Differential InSAR+ Sea Ice					Sea Ice				Differential InSAR+ Sea Ice				Sea Ice		Differential InSAR												
		U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L		U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L					U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L					U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L								
Ascending	Differential InSAR						Differential InSAR					Differential InSAR												FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R						
		U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L		U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L					U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L																

	Mode	R/L	Polarization	Beam
U2	Stripmap 3m	R	HH	6-9
U2		L	HH	6-9
U3		R	HH	10-14
U3		L	HH	10-14
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7
W2	ScanSAR 350km	R	HH+HV	2
W2		L	HH+HV	2
	(Any Mode)	Open Cycle for the Recovery Observations		

【Number system】

EX: U2(6)R



Observation area in winter

- Regarding the observation pattern in the past, please refer to the appendix.

# **4. Basic Observation Scenario (Global)**

## 4.1 Overview for Basic Observation Scenario (Global)

- The category of ALOS-2 Basic Observation Scenario are shown as below.
  - 1) Global observations in Stripmap (10 m) mode
  - 2) Wetlands & Rapid deforestation monitoring in ScanSAR (350 km) mode
  - 3) Polar regions in ScanSAR (350 km) mode
  - 4) Crustal Deformation in ScanSAR (350 km) modes
  - 5) Supersites

Global observations in Stripmap (10m) mode are made with lower priority due to ALOS-4 global observations, the resulting resources are allocated to important observations except for the BOS.

As for observations of wetlands & rapid deforestation monitoring and polar regions, those priorities are not changed, and the observations are undertaken continuously because ScanSAR observations of ALOS-4 are conducted for the disaster base map with 2 times per year.

Observations of crustal **deformation** are undertaken continuously with current conditions, it **has already been made** with lower priority.

Observations of supersites are undertaken in extent without affecting the BOS (Global).

# 4.2 Basic Observation Scenario (Global) - [ 12<sup>th</sup>-13<sup>th</sup>year ] -

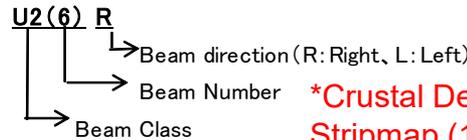
■ 12th Year																											
Cycle	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	
Year	2025													2026													
Month/Day	07/21	08/04	08/18	09/01	09/15	09/29	10/13	10/27	11/10	11/24	12/08	12/22	01/05	01/19	02/02	02/16	03/02	03/16	03/30	04/13	04/27	05/11	05/25	06/08	06/22	07/06	
Descending		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Crustal 1	Wetland Deforest 2 (A+B) Crustal 2	Wetland Deforest 1 (A+B)			Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)	
		W2 (2)R	W2 (2)R	W2 (2)R	W2(2)R W2(2)R	W2 (2)R			W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R
Ascending	World E(10m)			Crustal ScanSAR Replace 1	Polar	World F(10m)				ScanSAR Replace 2				North Polar	South Polar												
	F2 (6)R	F2 (7)R	F2 (5)R	W2(2)R W2(2)R	W2(2)R	F2 (6)R	F2 (7)R	F2 (5)R		W2 (2)R				W2(2)R													

■ 13th Year																											
Cycle	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	
Year	2026													2027													
Month/Day	07/20	08/03	08/17	08/31	09/14	09/28	10/12	10/26	11/09	11/23	12/07	12/21	01/04	01/18	02/01	02/15	03/01	03/15	03/29	04/12	04/26	05/10	05/24	06/07	06/21	07/05	
Descending		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Crustal 1	Wetland Deforest 2 (A+B) Crustal 2	Wetland Deforest 1 (A+B)			Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)	
		W2 (2)R	W2 (2)R	W2 (2)R	W2(2)R W2(2)R	W2 (2)R			W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R
Ascending				Crustal	Polar									North Polar	South Polar												
				W2 (2)R	W2(2)R W2(2)L									W2(2)R													

	Mode	R/L	Polarization	Beam
U2	Stripmap 3m	R	HH	6-9
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7
F2	Stripmap 10m	R	HH+HV	5-7
F2		L	HH+HV	6
W2	ScanSAR 350km	R	HH+HV	2
W2		R	HH	2
W2		L	HH+HV	2
V2	ScanSAR 490km	R	HH+HV	2
	(Any Mode)	Open Cycle for the Recovery Observations		

【Number system】

EX: U2(6)R



\*The scenarios only show observations with a priority of 3051 or higher.

\*Crustal Deformation (Descending orbit, Stripmap (10 m) mode) and Global observations with significantly lower priority have been removed from the scenarios due to a significantly decreased adoption rate. Observations continue at the same time as before, and may be adopted if resources are available.

\*Regarding the observation pattern in the past, please refer to the appendix.

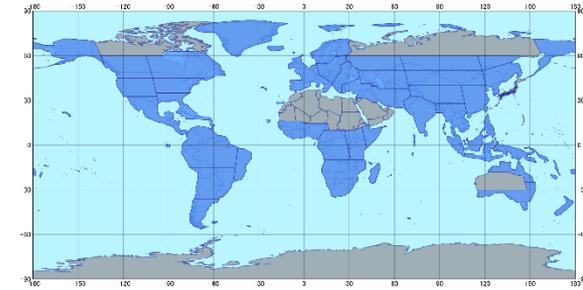
# Basic Observation Scenario (Global)

Global land areas – baseline mapping (Cycle 298-)

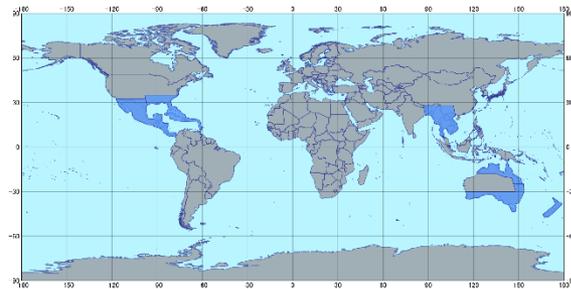
Temporal repeat: Ascending 1 cov/year

GSD: 10 m (off-nadir  $28.2^\circ$  -  $36.2^\circ$  )

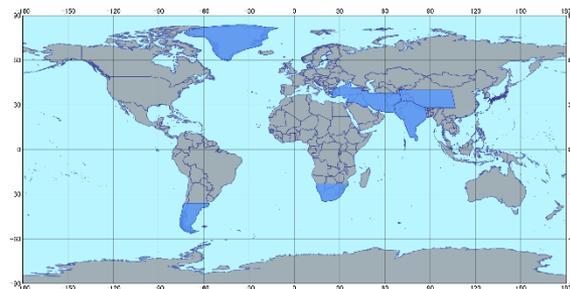
Mode: Stripmap Dual-pol (HH+HV/28MHz)



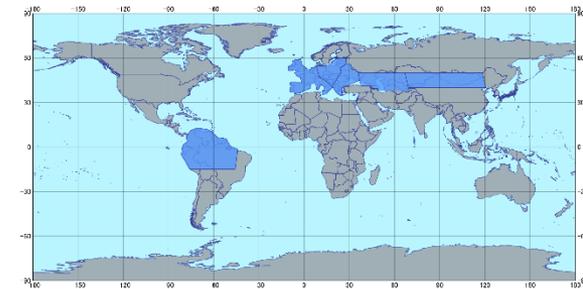
WorldA-F (lower priority)



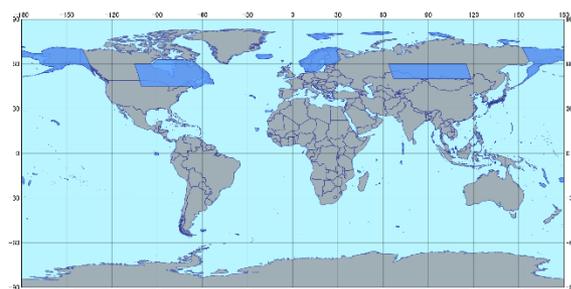
WorldA



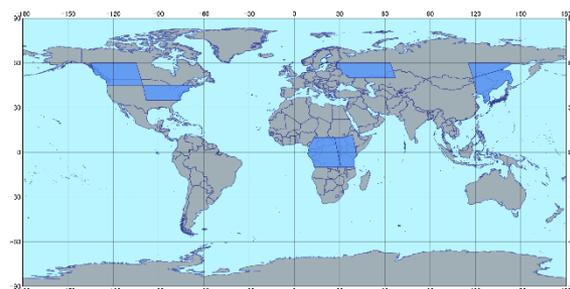
WorldB



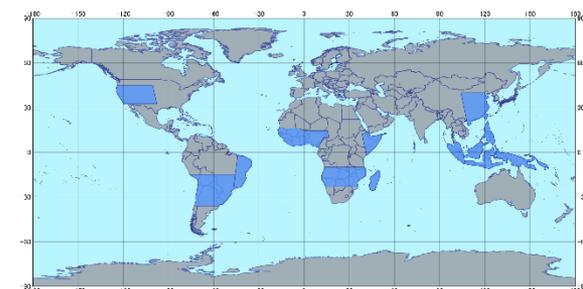
WorldC



WorldD



WorldE



WorldF

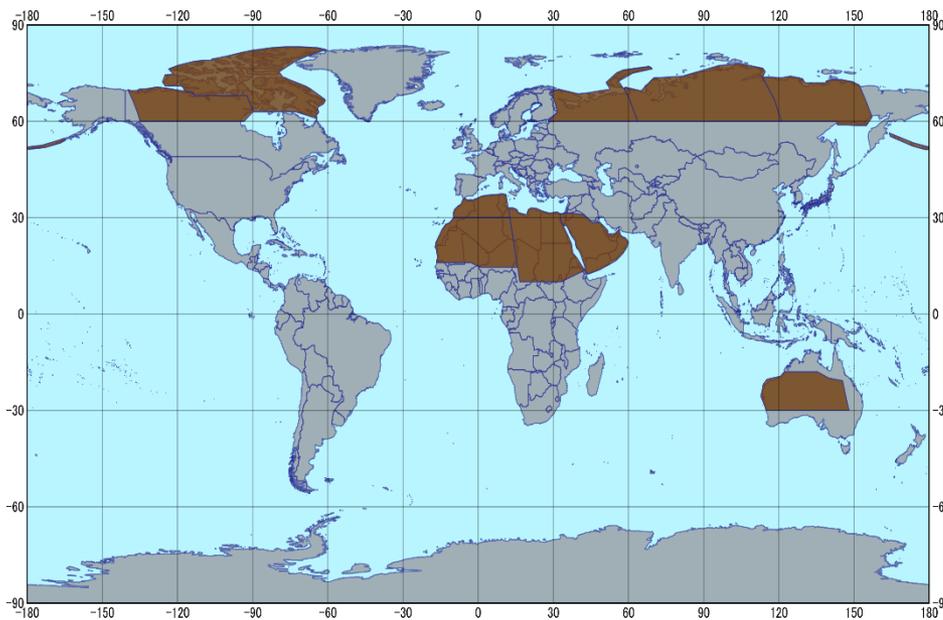
# Basic Observation Scenario (Global)

Global land areas – baseline mapping (Cycle 239-)

Temporal repeat: Ascending 1 cov/year

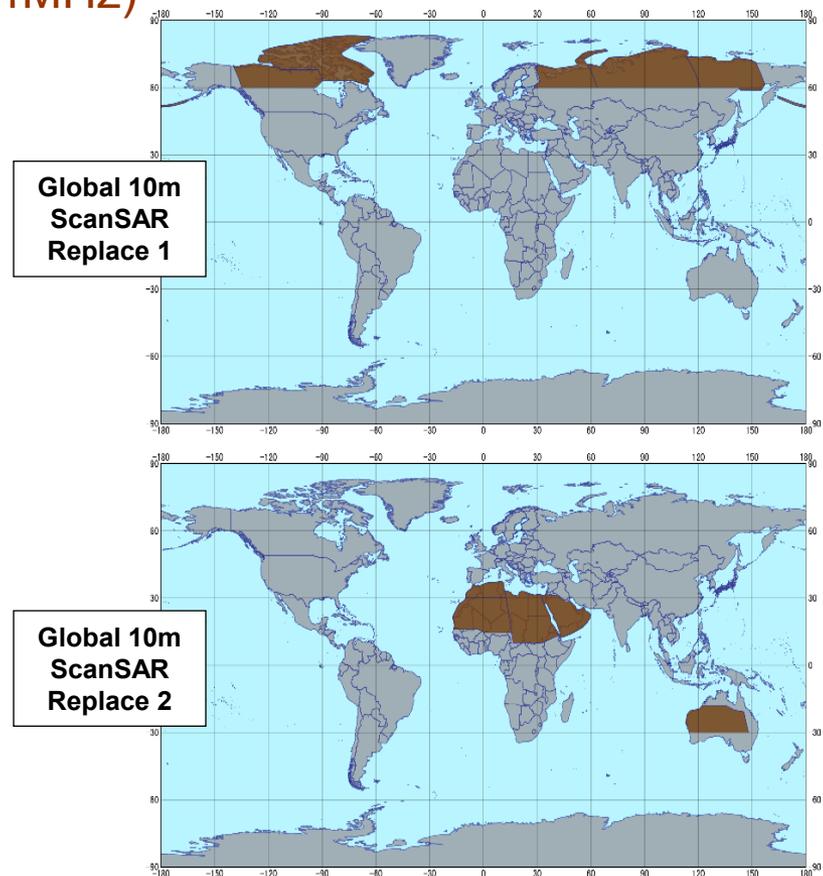
GSD: 100 m (off-nadir 26.2° -41.8° )

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



## Global 10m ScanSAR replaced observation Area

As the global 10m replaced observation, selected areas of snow/desert regions is divided into “Global 10m ScanSAR Replace 1” and “ Global 10m ScanSAR Replace 2”. On and after the cycle 298, lower priority will be applied to this observation.



# Basic Observation Scenario (Global)

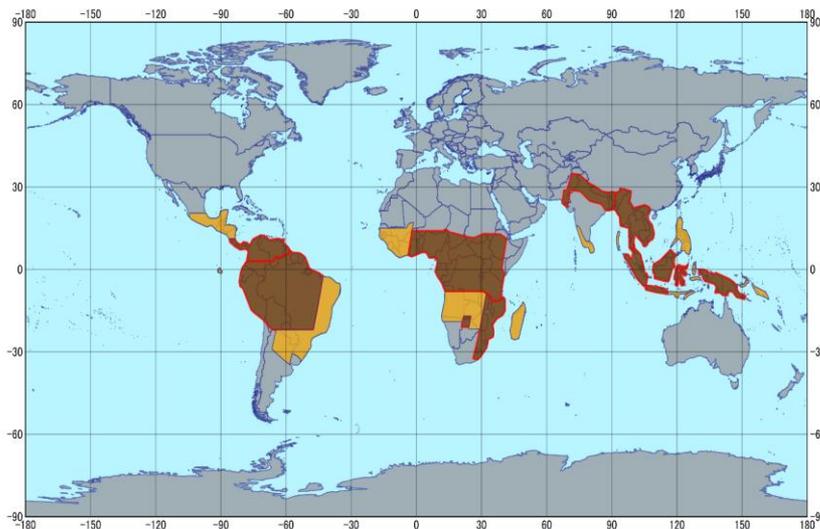
## Wetlands & Rapid deforestation monitoring (Cycle 255-)

Temporal repeat: Descending 9 cov/year (A), 5 cov/year (B),

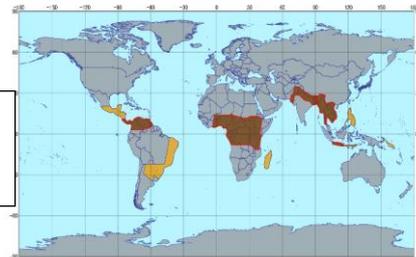
GSD: 100 m (off-nadir 26.2° -41.8° )

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

9 cov/year (A)  
5 cov/year (B)



Wetland Deforest 1

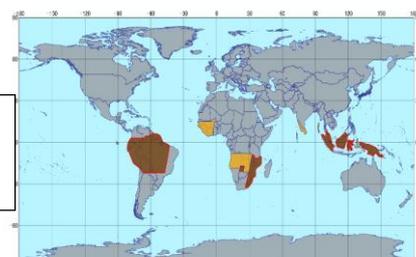


Wetland Deforest1 (A+B)

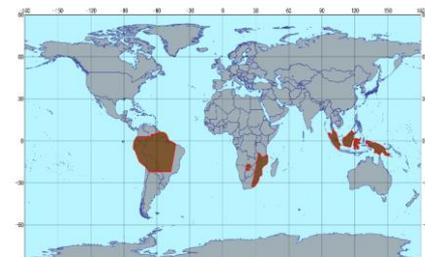


Wetland Deforest1 (A)

Wetland Deforest 2



Wetland Deforest2 (A+B)



Wetland Deforest2 (A)

### Wetlands & Rapid deforestation monitoring Area

The observation area is divided into "Wetland Deforest 1" and "Wetland Deforest 2".

\*The overlap areas between "Wetland Deforest" and "Crustal Deformation" are observed in ScanSAR (HH+HV) mode at the Cycle of Wetland Deforest.

# Basic Observation Scenario (Global)

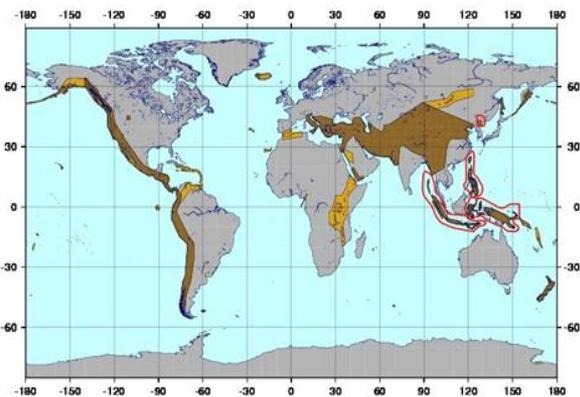
## Crustal Deformation (Cycle 216-)

Temporal repeat: Ascending 1 cov/year, Descending 1 cov/year

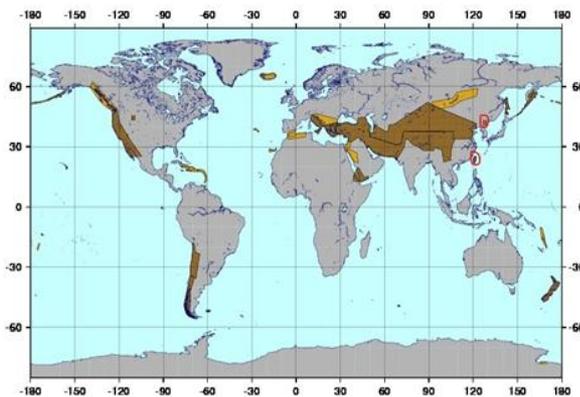
GSD: 100 m (off-nadir  $26.2^\circ - 41.8^\circ$  )

Mode: ScanSAR 350km (HH/14MHz)

- : High priority
- : Middle priority
- : Low priority

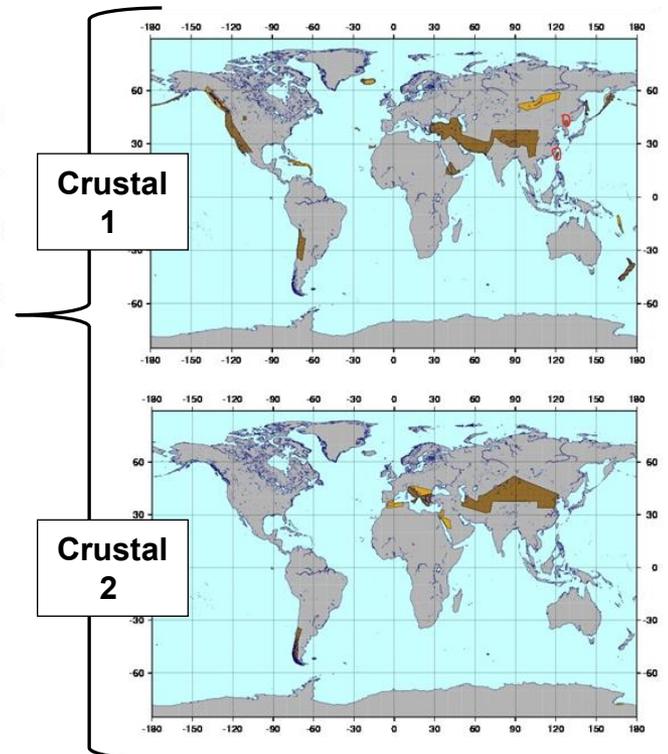


Ascending: 1cov/year



Descending: 4cov/year

The observation area is divided into "Crustal 1" and "Crustal 2".



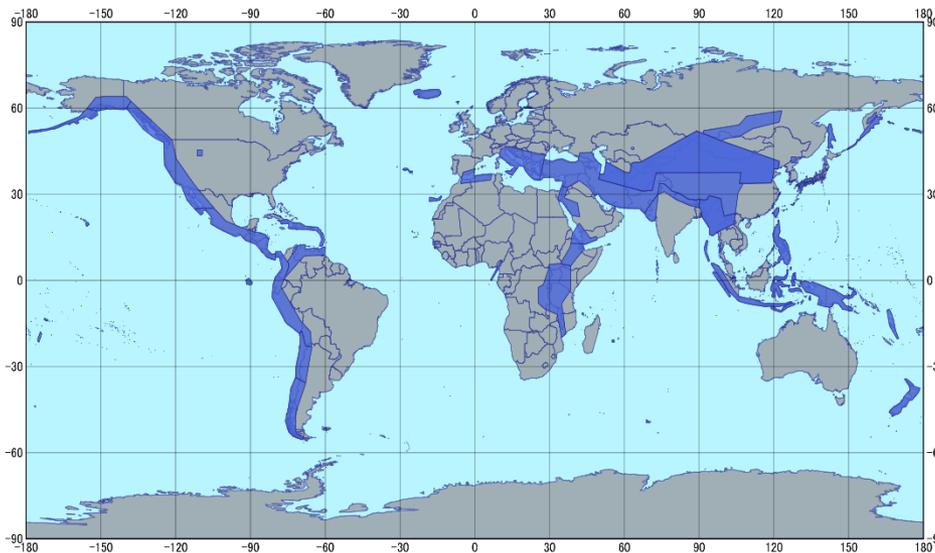
# Basic Observation Scenario (Global)

## Crustal Deformation (Cycle 216-)

Temporal repeat: Descending 1 cov/year

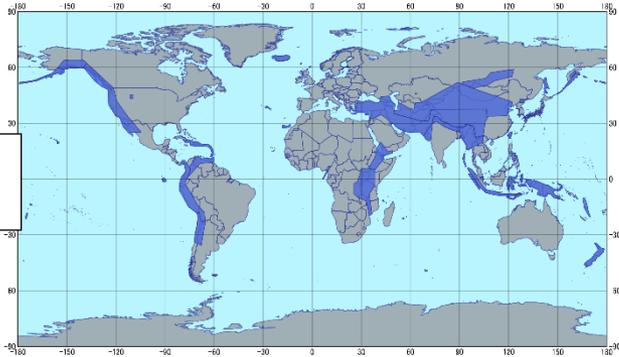
GSD: 10 m (off-nadir  $28.2^\circ - 36.2^\circ$  )

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

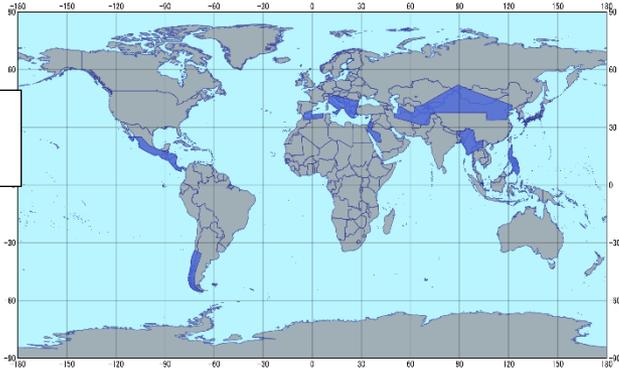


**Crustal 10m**

**Crustal 1**



**Crustal 2**



The observation area is divided into "Crustal 1" and "Crustal 2", and conduct observations with **lower priority**.

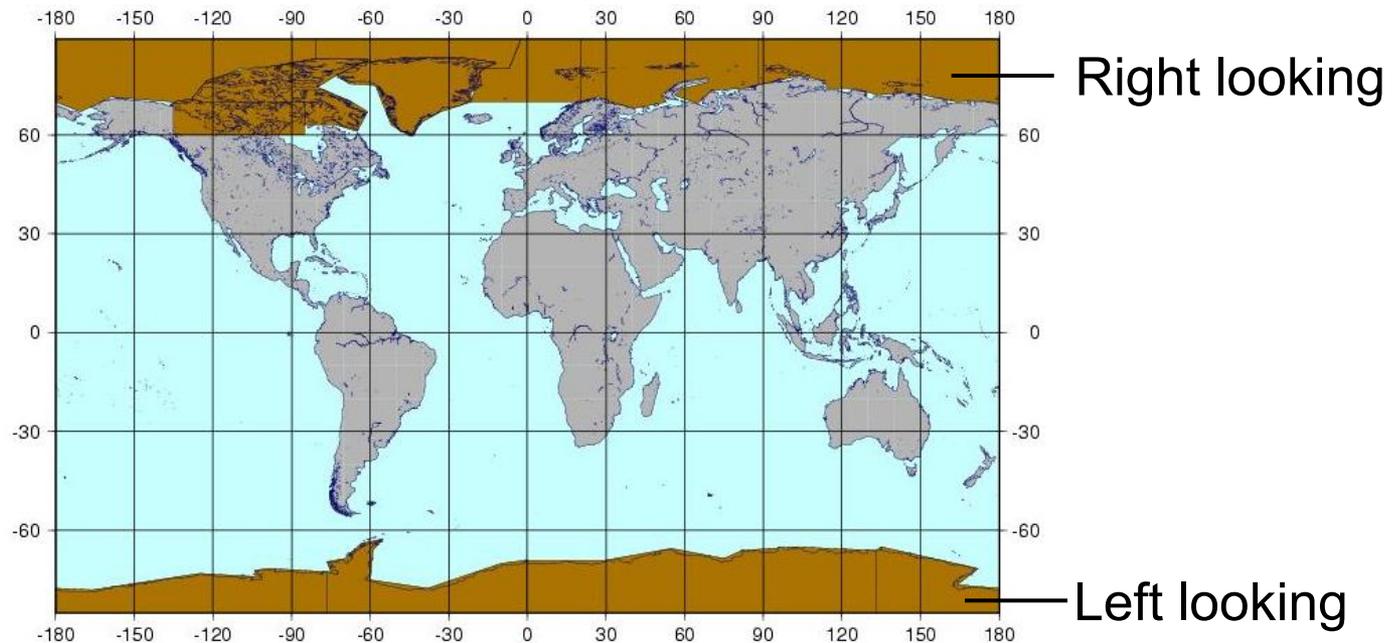
# Basic Observation Scenario (Global)

## Polar Ice (Cycle 138-)

Temporal repeat: *Ascending 2 cov/year*

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

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



# Supersites 10m (JAXA)

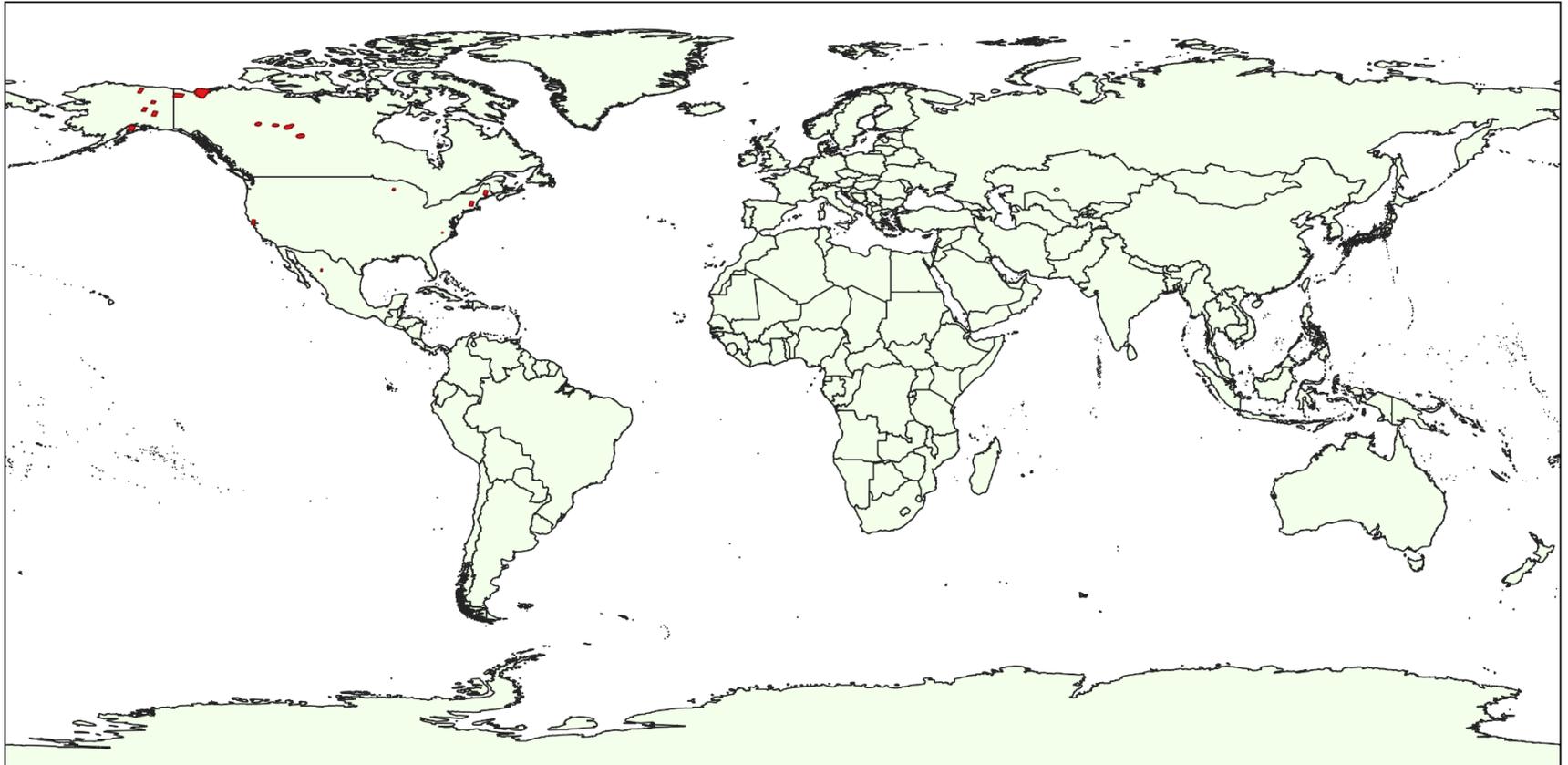
## 10m Super Sites (Cycle 216-)

Temporal repeat: Descending 1 cov/year

GSD: 10 m (off-nadir  $28.2^\circ - 36.2^\circ$  )

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

● : 10m Super Site



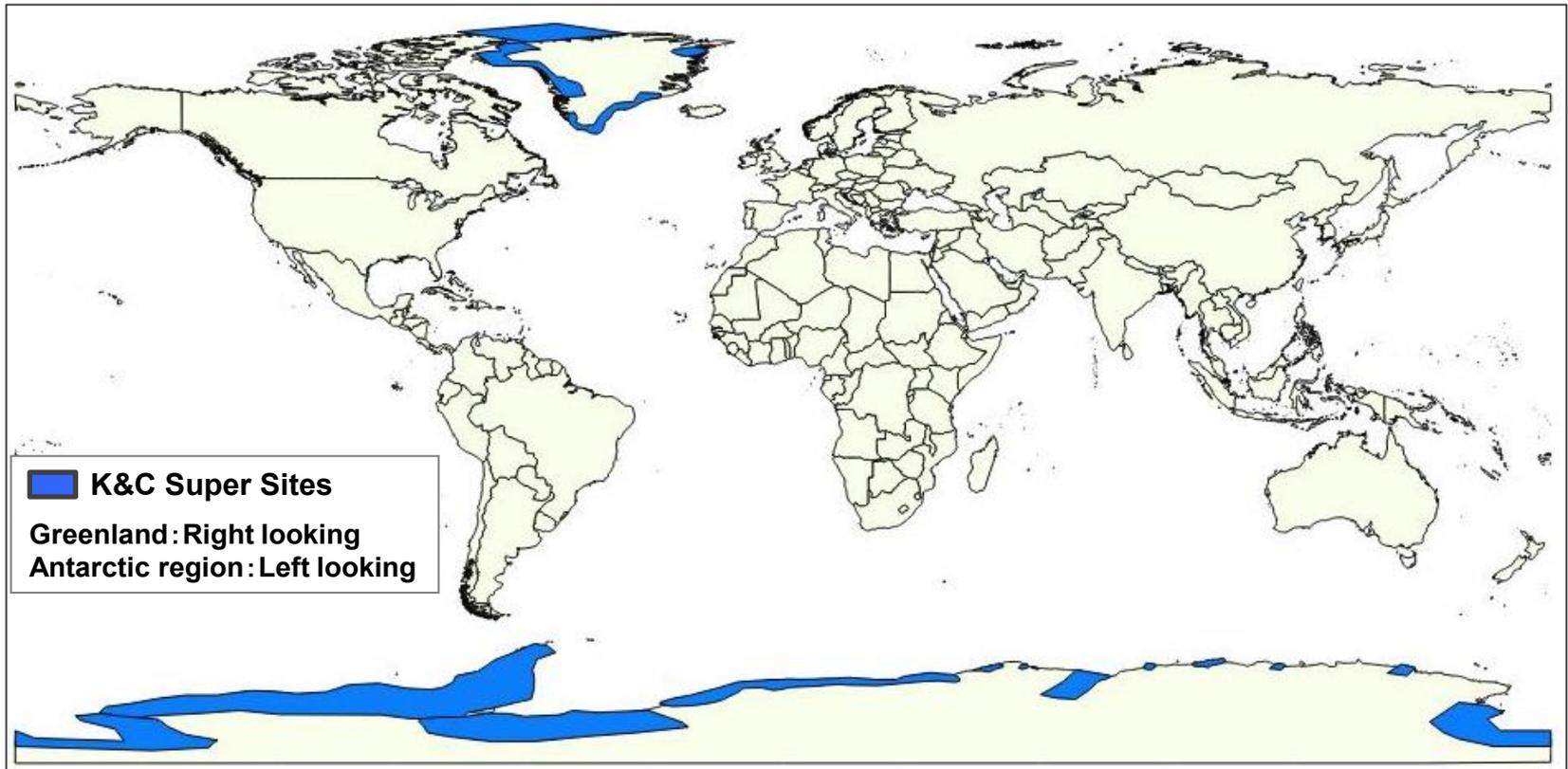
# Supersites (K&C)

## Glacier movement

Temporal repeat : Descending Antarctic region 4 cov/year, Ascending Greenland 3 cov/year

GSD: 10 m (off-nadir  $32.5^\circ$  )

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

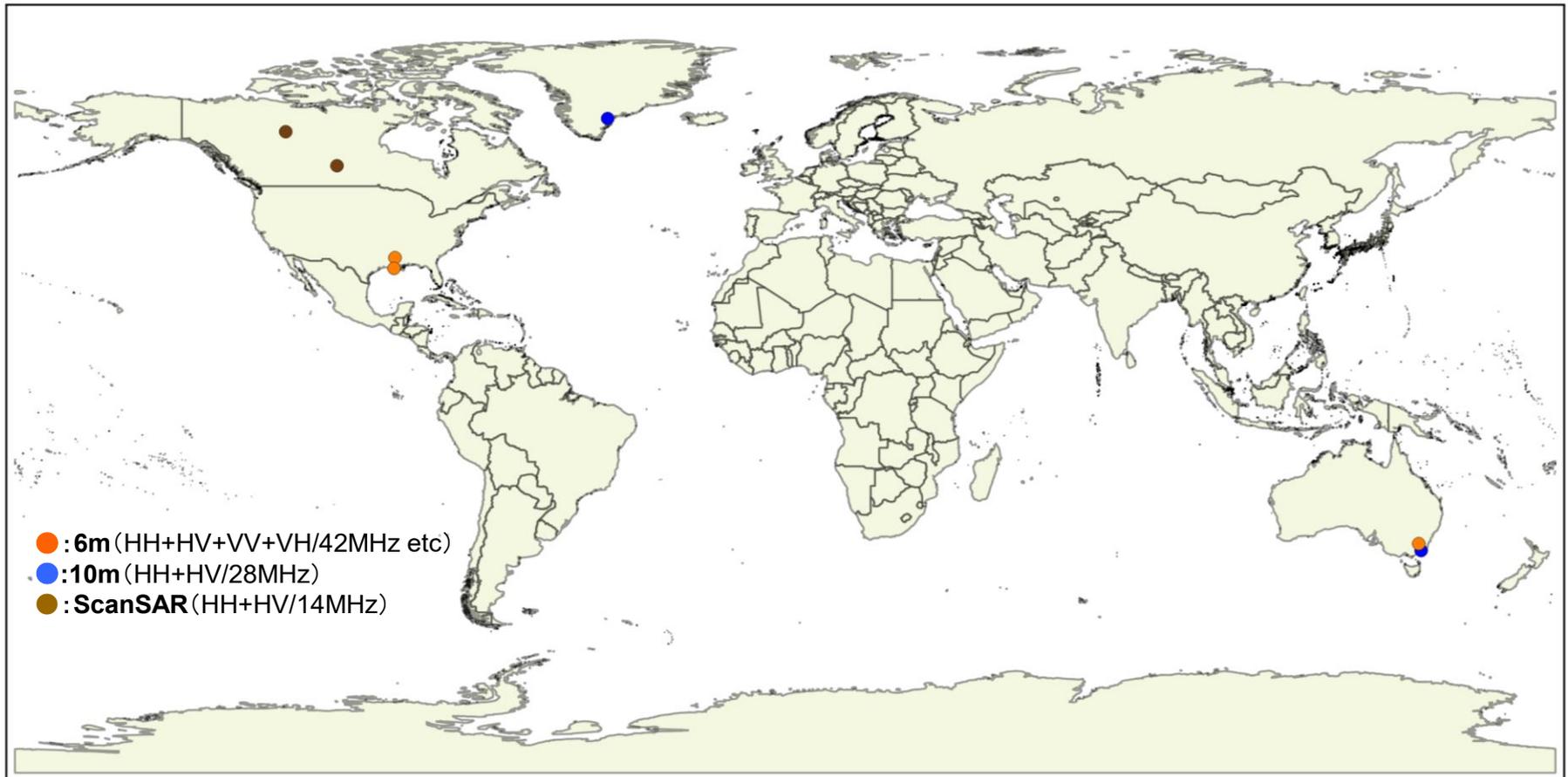


# Supersites (K&C)

## K&C Supersites (Cycle 248-)

Temporal Repeat: When observation requests do not conflict with the BOS

GSD/Mode: based on the PI requests



# Supersites (PI)

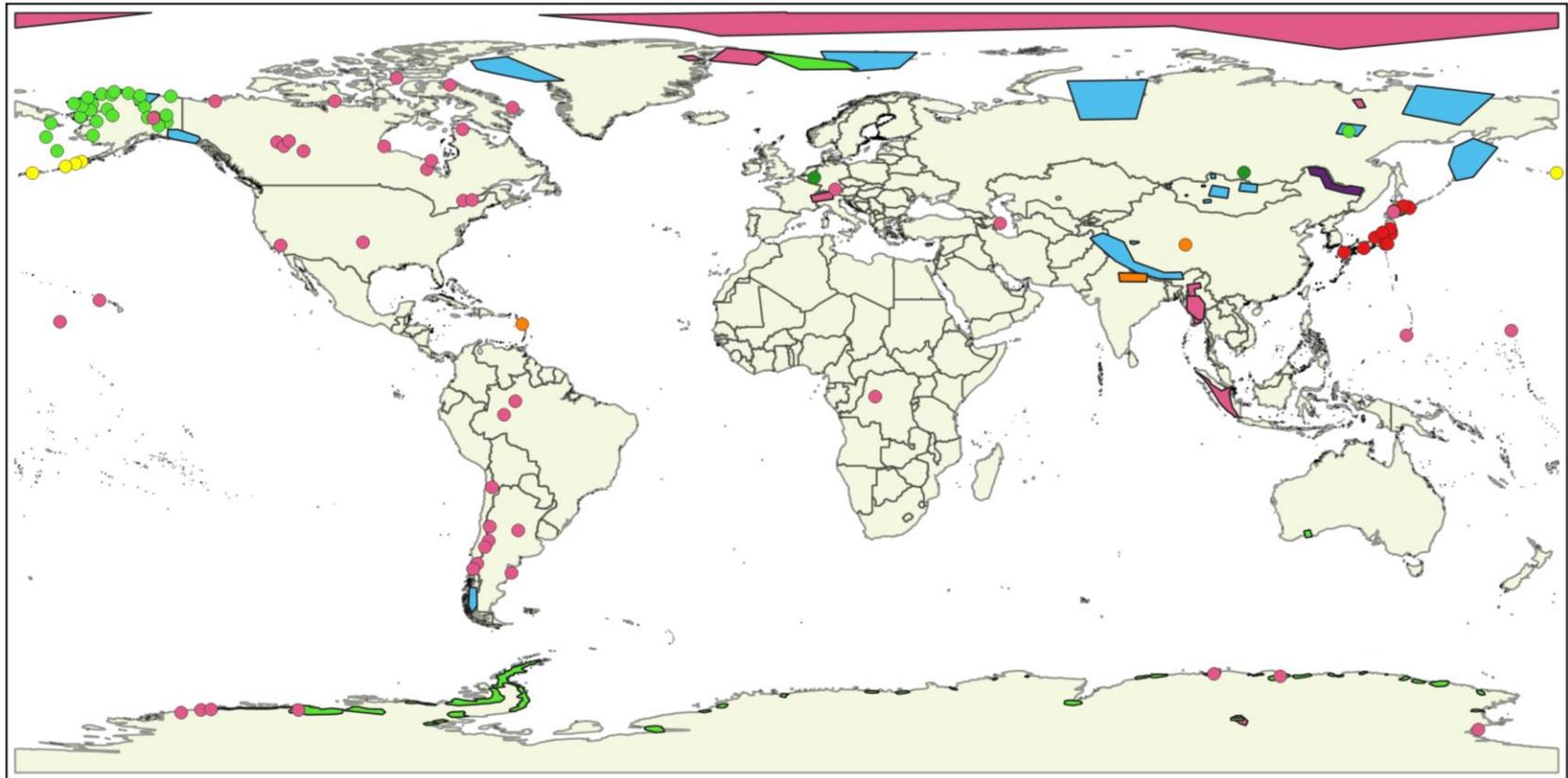
A

## PI Supersites (Cycle 307-)

Temporal repeat: When observation requests do not conflict with the BOS

GSD/Mode: based on the PI requests

- Light Green : Polar research and Snow
- Orange : Disaster
- Dark Green : Hydrology and Agriculture
- Purple : Land use and Forestry
- Blue : Cryosphere
- Yellow : Volcano
- Red : ALOS-2/4 FP
- Pink : ALOS-4 CVST



# **Appendix:**

## **Basic Observation Scenario in the past.**

# Basic Observation Scenario (Japan) - [1<sup>st</sup> -3<sup>th</sup>year] -

■ 1st Year

Cycle	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
Year	2014												2015													
Month/Day	08/04	08/18	09/01	09/15	09/29	10/13	10/27	11/10	11/24	12/08	12/22	01/05	01/19	02/02	02/16	03/02	03/16	03/30	04/13	04/27	05/11	05/25	06/08	06/22	07/06	07/20
Descending	Disaster Base Map						Disaster Base Map						Disaster Base Map						Disaster Base Map							
	U2 (6)R	U2 (7)R		U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)L	U2 (7)L	W2 (2)L	W2(2)L	W2(2)L	W2 (2)L	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R		U3 (10)L	U3 (11)L	U3 (12)L	U3 (13)L	U3 (14)L
Ascending	Disaster Base Map						Disaster Base Map						Differential InSAR						Differential InSAR							
	U2 (6)R	U2 (7)R		U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)L	U2 (7)L	W2 (2)L	U2 (8)L	U2 (9)L	W2 (2)L		U2 (6)R	U2 (7)R	W2 (2)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	

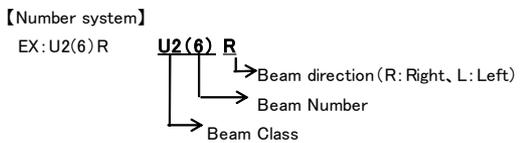
■ 2st Year

Cycle	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	53
Year	2015年												2016													
Month/Day	08/03	08/17	08/31	09/14	09/28	10/12	10/26	11/09	11/23	12/07	12/21	01/04	01/18	02/01	02/15	02/29	03/14	03/28	04/11	04/25	05/09	05/23	06/06	06/20	07/04	07/18
Descending	Differential InSAR						Differential InSAR						Differential InSAR						Differential InSAR							
		W2 (2)R	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R		U2 (6)R	U2 (7)R	W2 (2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	
Ascending	Differential InSAR						Differential InSAR						Differential InSAR						Differential InSAR							
	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R		U2 (6)R	U2 (7)R	W2 (2)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	W2 (2)R	U2 (8)R	U2 (9)R	W2 (2)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R

■ 3st Year

Cycle	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79		
Year	2016												2017															
Month/Day	08/01	08/15	08/29	09/12	09/26	10/10	10/24	11/07	11/21	12/05	12/19	01/02	01/16	01/30	02/13	02/27	03/13	03/27	04/10	04/24	05/08	05/22	06/05	06/19	07/03	07/17		
Descending	Differential InSAR						Differential InSAR + Sea Ice						Sea Ice			Differential InSAR + Sea Ice						Sea Ice		Differential InSAR				
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R			
Ascending	Differential InSAR						Differential InSAR						Differential InSAR						Differential InSAR									
	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R		

	Mode	R/L	Polarization	Beam
U2	Stripmap 3m	R	HH	6-9
U2		L	HH	6-9
U3		R	HH	10-14
U3		L	HH	10-14
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7
W2	ScanSAR 350km	R	HH+HV	2
W2		L	HH+HV	2
	(Any Mode)	Open Cycle for the Recovery Observations		



   Non-base map observations

# Basic Observation Scenario (Japan) - [ 4<sup>th</sup> -6<sup>th</sup>year ] -

## ■ 4th Year

Cycle	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	
Year	2017												2018														
Month/Day	07/31	08/14	08/28	09/11	09/25	10/09	10/23	11/06	11/20	12/04	12/18	01/01	01/15	01/29	02/12	02/26	03/12	03/26	04/09	04/23	05/07	05/21	06/04	06/18	07/02	07/16	
Descending	Differential InSAR					Differential InSAR					Sea Ice			Differential InSAR+Sea Ice					Sea Ice		Differential InSAR						
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	
Ascending	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R	U3 (10)L	U3 (11)L	U3 (12)L	U3 (13)L	U3 (14)L		U2 (6)R	U2 (7)R	U2 (8)R	U2(9)R	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R			U3 (10)R	U3 (11)R	U3 (12)R	U3 (13)R	U3 (14)R	W2 (2)R
	Disaster Base Map					Disaster Base Map					Differential InSAR			Differential InSAR					Disaster Base Map								

## ■ 5th Year

Cycle	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131
Year	2018												2019													
Month/Day	07/30	08/13	08/27	09/10	09/24	10/08	10/22	11/05	11/19	12/03	12/17	12/31	01/14	01/28	02/11	02/25	03/11	03/25	04/08	04/22	05/06	05/20	06/03	06/17	07/01	07/15
Descending	Differential InSAR					Differential InSAR+Sea Ice					Sea Ice			Differential InSAR+Sea Ice					Sea Ice		Disaster Base Map					
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L
Ascending	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R	U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L	W2 (2)L					U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R
	Disaster Base Map					Disaster Base Map					Differential InSAR			Differential InSAR					Differential InSAR							

## ■ 6th Year

Cycle	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	
Year	2019												2020														
Month/Day	07/29	08/12	08/26	09/09	09/23	10/07	10/21	11/04	11/18	12/02	12/16	12/30	01/13	01/27	02/10	02/24	03/09	03/23	04/06	04/20	05/04	05/18	06/01	06/15	06/29	07/13	
Descending	Differential InSAR					Differential InSAR+Sea Ice					Sea Ice			Differential InSAR+Sea Ice					Sea Ice		Differential InSAR						
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	
Ascending	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R	FP (7)R
	Disaster Base Map					Differential InSAR					Differential InSAR			Differential InSAR					Differential InSAR								

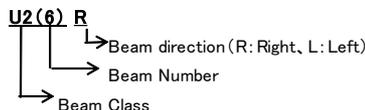
	Mode	R/L	Polarization	Beam
U2	Stripmap 3m	R	HH	6-9
U2		L	HH	6-9
U3		R	HH	10-14
U3		L	HH	10-14
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7
W2	ScanSAR 350km	R	HH+HV	2
W2		L	HH+HV	2
	(Any Mode)	Open Cycle for the Recovery Observations		

\* Regarding the ascending cycle84(FP6-7), cycle94(U2-9), cycle110(FP6-7) and cycle157(FP6-7), the observations are carried out only paths where gaps occur between the paths observed with other beams.

\* Several descending ScanSAR observations are planned for monitoring the sea ice at cycle91-99, cycle117-125 and cycle143-151.

【Number system】

EX: U2(6)R



Non-base map observations

# Basic Observation Scenario (Japan) - [ 7<sup>th</sup> -9<sup>th</sup>year ] -

## 7<sup>th</sup> Year

Cycle	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	
Year	2020													2021													
Month/Day	07/27	08/10	08/24	09/07	09/21	10/05	10/19	11/02	11/16	11/30	12/14	12/28	01/11	01/25	02/08	02/22	03/08	03/22	04/05	04/19	05/03	05/17	05/31	06/14	06/28	07/12	
Descending	Differential InSAR						Differential InSAR+Sea Ice					Sea Ice			Differential InSAR+Sea Ice					Sea Ice		Disaster Base Map					
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R				U3 (10)L	U3 (11)L	U3 (12)L	U3 (13)L	U3 (14)L
Ascending	Disaster Base Map					Differential InSAR					Differential InSAR					Differential InSAR											
	FP (3)R	FP (4)R	FP (5)R	FP (6)R	U3 (10)L	U3 (11)L	U3 (12)L	U3 (13)L	U3 (14)L				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R					U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R	

## 8<sup>th</sup> Year

Cycle	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209
Year	2021													2022												
Month/Day	07/26	08/09	08/23	09/06	09/20	10/04	10/18	11/01	11/15	11/29	12/13	12/27	01/10	01/24	02/07	02/21	03/07	03/21	04/04	04/18	05/02	05/16	05/30	06/13	06/27	07/11
Descending	Differential InSAR					Disaster Base Map+Sea Ice					Sea Ice			Differential InSAR+Sea Ice				Sea Ice		Differential InSAR						
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R		W2 (2)L	U3 (10)R	U3 (11)R	U3 (12)R	U3 (13)R	U3 (14)R				U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R					U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R
Ascending	Disaster Base Map					Differential InSAR					Differential InSAR					Disaster Base Map										
	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R		U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R							U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L

## 9<sup>th</sup> Year

Cycle	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235		
Year	2022													2023														
Month/Day	07/25	08/08	08/22	09/05	09/19	10/03	10/17	10/31	11/14	11/28	12/12	12/26	01/09	01/23	02/06	02/20	03/06	03/20	04/03	04/17	05/01	05/15	05/29	06/12	06/26	07/10		
Descending	Differential InSAR						Disaster Base Map+Sea Ice					Sea Ice			Differential InSAR+Sea Ice				Sea Ice		Differential InSAR							
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R			U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L					U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R					U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R		
Ascending	Disaster Base Map					Differential InSAR					Differential InSAR					Disaster Base Map												
	FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R		W2 (2)L	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R			U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R							U3 (10)R	U3 (11)R	U3 (12)R	U3 (13)R	U3 (14)R

Mode	R/L	Polarization	Beam
U2	R	HH	6-9
U2	L	HH	6-9
U3	R	HH	10-14
U3	L	HH	10-14
FP	R	HH+HV+VH+VV	3-7
W2	R	HH+HV	2
W2	L	HH+HV	2
(Any Mode)	Open Cycle for the Recovery Observations		

(Number system)

EX: U2(6)R

U2(6)R

→ Beam direction (R: Right, L: Left)

→ Beam Number

→ Beam Class



\* Several descending ScanSAR observations are planned for monitoring the sea ice from December to April.

Non-base map observations

# Basic Observation Scenario (Japan) - [ 10<sup>th</sup>-11<sup>th</sup>year ] -

■ 10th Year																																	
Cycle	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261							
Year	2023													2024																			
Month/Day	07/24	08/07	08/21	09/04	09/18	10/02	10/16	10/30	11/13	11/27	12/11	12/25	01/08	01/22	02/05	02/19	03/04	03/18	04/01	04/15	04/29	05/13	05/27	06/10	06/24	07/08							
Descending	Differential InSAR					Differential InSAR + Sea Ice					Sea Ice					Differential InSAR + Sea Ice					Sea Ice					Disaster Base Map							
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)R	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R							U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R										U3 (10)L	U3 (11)L	U3 (12)L	U3 (13)L	U3 (14)L
Ascending	FP (3)R (4)R (5)R (6)R (7)R					Differential InSAR					Disaster Base Map					Differential InSAR					FP (3)R (4)R (5)R (6)R (7)R												
						U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R							U3 (10)L	U3 (11)L	U3 (12)L	U3 (13)L	U3 (14)L													

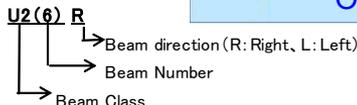
  

■ 11th Year																																	
Cycle	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287							
Year	2024													2025																			
Month/Day	07/22	08/05	08/19	09/02	09/16	09/30	10/14	10/28	11/11	11/25	12/09	12/23	01/06	01/20	02/03	02/17	03/03	03/17	03/31	04/14	04/28	05/12	05/26	06/09	06/23	07/07							
Descending	Differential InSAR					Differential InSAR + Sea Ice					Sea Ice					Differential InSAR + Sea Ice					Sea Ice					Disaster Base Map							
	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	W2 (2)L	U3 (10)R	U3 (11)R	U3 (12)R	U3 (13)R	U3 (14)R						U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R										U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R	
Ascending	Disaster Base Map					Differential InSAR					Differential InSAR					FP (3)R (4)R (5)R (6)R (7)R																	
		U2 (6)L	U2 (7)L	U2 (8)L	U2 (9)L	U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R							U2 (6)R	U2 (7)R	U2 (8)R	U2 (9)R										FP (3)R	FP (4)R	FP (5)R	FP (6)R	FP (7)R

	Mode	R/L	Polarization	Beam
U2	Stripmap 3m	R	HH	6-9
U2		L	HH	6-9
U3		R	HH	10-14
U3		L	HH	10-14
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7
W2	ScanSAR 350km	R	HH+HV	2
W2		L	HH+HV	2
	(Any Mode)	Open Cycle for the Recovery Observations		

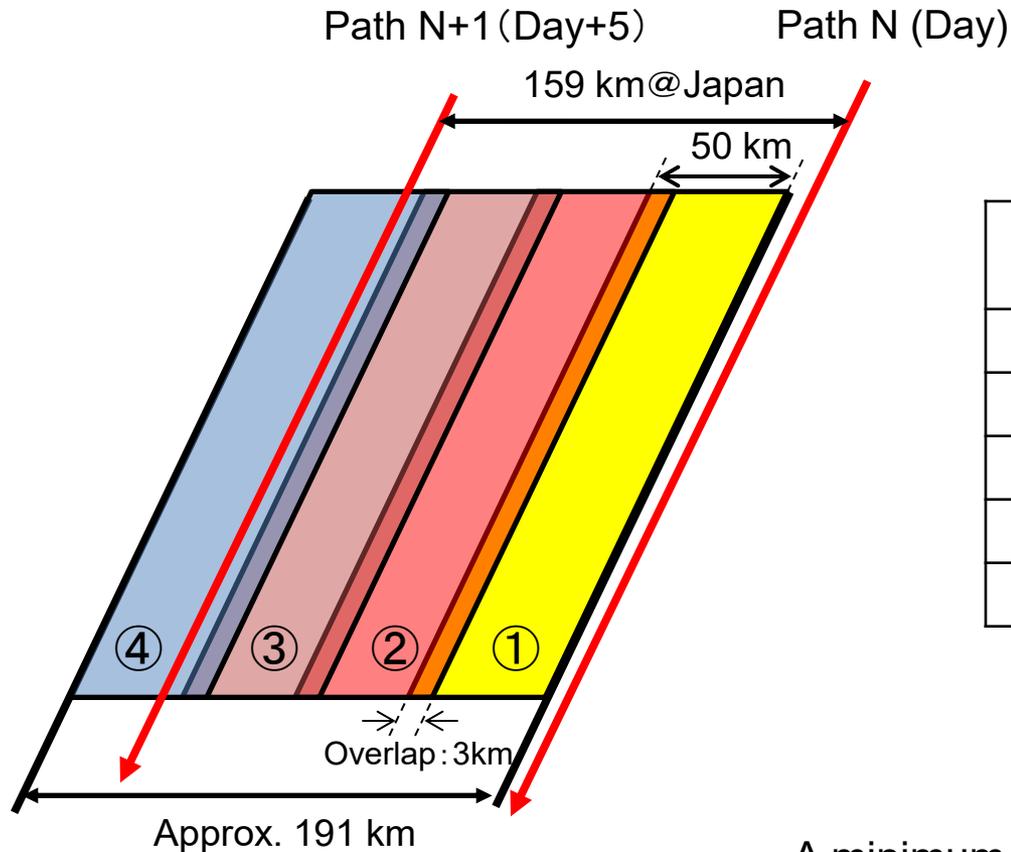
[Number system]

EX: U2(6)R



\* Several descending ScanSAR observations are planned for monitoring the sea ice from December to April.

# Japan coverage in Ultra-Fine Stripmap Mode [3 m]



Stripmap mode [3m]

Beam Group	Incidence Angle	Number of beams to cover
U1	8-30 deg.	5 beams
U2	30-44 deg.	4 beams
U3	44-56 deg.	5 beams
U4	56-64 deg.	5 beams
U5	64-70 deg.	5 beams

U2: Nominal

A minimum of 4 beams is required for gap-free coverage of Japan

⇒ Minimum: 14 days × 4 cycles = 56 days

## Observation conditions for disaster base map

Items	Stripmap [3m]		ScanSAR [350km]
Satellite direction	Descending (towards south) and Ascending (towards north)	Descending and Ascending	Descending and Ascending
Beam direction	Left and right		
Beam range (incidence angle)	U2 (30.2°~44.4°)	U3 (44.3° ~55.8° )	W2 (19.7° ~45.3° )
Polarisation	Single (HH)		Dual (HH+HV)
Frequency band	84 MHz		28 MHz

# Observation conditions for Differential InSAR base map

Items	Stripmap [3m]	ScanSAR [350km]
Satellite direction	Descending (towards south) and Ascending (towards north)	
Beam direction	Right	
Beam range (incidence angle)	U2 (30.2° ~44.4° )	W2 (25.7° ~49° )
Polarisation	Single (HH)	Dual (HH+HV)
Frequency band	84 MHz	28 MHz

Temporal frequency is a priority for interferometry. Observations are carried out during the same time periods each year.

# Analysis results: Revisit-times for Basic Observation Scenario over Japan and frequency of Differential InSAR

(1) Revisit-times after completion of base map observations of Japan

Observation mode	Average	Maximum
U2 (Ascending, Descending) U3 (Descending only)	65 hr	74 hr*
U2 (Ascending, Descending) U3 (Ascending, Descending)	53 hr	62 hr*
<i>Reference: U2 (Ascending, Descending) W2 (Ascending, Descending)</i>	61 hr	132 hr

\*excluding parts of Kyushu, Okinawa and some areas in southern Japan

(2) Frequency of Differential InSAR

(note: Emergency observations in case of disasters are undertaken separately )

Orbit direction	Stripmap 3m		ScanSAR 100m	
	Maximum number of observations (year)**	InSAR interval	Maximum number of observations (year)**	InSAR interval
Descending · right	4	3~3.5 months	6	1.5~4.5 months
Ascending · right	4	2.5~3.5 months	6	1.5~4.5 months

\*\* In case of no conflict with crustal movement users

# Basic Observation Scenario (Global) - [1<sup>st</sup> -3<sup>th</sup>year] -

1st Year		2014																										
Cycle	Year	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	
Month/Day	Year	08/04	08/18	09/01	09/15	09/29	10/13	10/27	11/10	11/24	12/08	12/22	01/05	01/19	02/02	02/16	03/02	03/16	03/30	04/13	04/27	05/11	05/25	06/08	06/22	07/06	07/20	
Descending	Crustal Wetland Deforest	Crustal Wetland Deforest	Glacier Super Site	Crustal Wetland Deforest	Glacier Super Site	sub-Arctic Super Site	Crustal Wetland Deforest	Global 3m (1/3)	Crustal Wetland Deforest	Global 3m (1/3)	Crustal Wetland Deforest		sub-Arctic Super Site	Crustal Wetland Deforest	Crustal & Forest 14-day InSAR	Crustal Wetland Deforest	Crustal & Forest 14-day InSAR	Crustal Wetland Deforest	Crustal & Forest 14-day InSAR	Crustal Wetland Deforest	Crustal & Forest 14-day InSAR	Crustal Wetland Deforest	Crustal & Forest 14-day InSAR	Crustal Wetland Deforest	sub-Arctic Super Site	Crustal Wetland Deforest		
	W2 (2)R	F2(6)L	W2 (2)R	F2(6)L	V2(2)R	W2 (2)R	U2 (6)R	U2 (7)R	W2 (2)R	U2 (8)R	U2 (9)R	W2 (2)R		V2(2)R	W2 (2)R	F2 (5)R	F2 (5)R	W2 (2)R	F2 (6)R	F2 (6)R	W2 (2)R	F2 (7)R	F2 (7)R	W2 (2)R	V2(2)R	W2 (2)R		
Ascending	Crustal	Polar	World 1-1(10m)				World 2-1(10m)					Polar	North Polar	World 1-2(10m)				GR Super Site	GR Super Site	Global FP6m (1/5)					World 2-2(10m)			
	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R	F2(6)R	F2(6)R	FP (6)R	FP (5)R	FP (4)R	FP (3)R	FP (7)R			F2 (7)R	F2 (5)R	F2 (6)R		

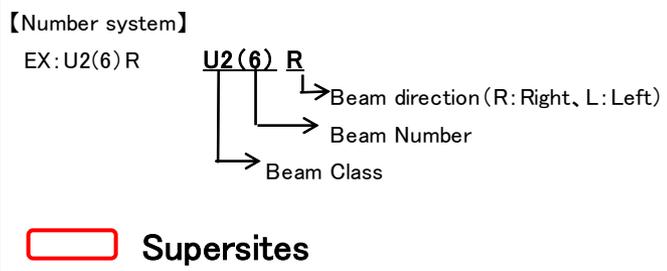
  

2nd Year		2015																										
Cycle	Year	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	
Month/Day	Year	08/03	08/17	08/31	09/14	09/28	10/12	10/26	11/09	11/23	12/07	12/21	01/04	01/18	02/01	02/15	02/29	03/14	03/28	04/11	04/25	05/09	05/23	06/06	06/20	07/04	07/18	
Descending	Glacier Super Site	Glacier Super Site	Crustal Wetland Deforest	Glacier Super Site	sub-Arctic Super Site	Crustal Wetland Deforest	Global 3m (2/3)	Crustal Wetland Deforest	Global 3m (2/3)	Crustal Wetland Deforest		sub-Arctic Super Site	Crustal Wetland Deforest	Crustal & Forest	Crustal Wetland Deforest	Crustal & Forest	Crustal Wetland Deforest	Crustal & Forest	Crustal Wetland Deforest	sub-Arctic Super Site	Crustal Wetland Deforest							
	F2(6)L	F2(6)L	W2 (2)R	F2(6)L	V2(2)R	W2 (2)R	U2 (6)R	U2 (7)R	W2 (2)R	U2 (8)R	U2 (9)R	W2 (2)R		V2(2)R	W2 (2)R	F2 (5)R	F2 (6)R	W2 (2)R	F2 (7)R	F2 (5)R	W2 (2)R	F2 (6)R	F2 (7)R	W2 (2)R	V2(2)R	W2 (2)R		
Ascending	North Polar	Polar	World 1-1(10m)				World 2-1(10m)					Polar	South Polar	World 1-2(10m)				GR Super Site	GR Super Site	Global FP6m (2/5)					World 2(10m)			
	W2(2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R	F2(6)R	F2(6)R	FP (6)R	FP (5)R	FP (4)R	FP (3)R	FP (7)R			F2 (7)R	F2 (5)R	F2 (6)R		

3rd Year		2016																										
Cycle	Year	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	
Month/Day	Year	08/01	08/15	08/29	09/12	09/26	10/10	10/24	11/07	11/21	12/05	12/19	01/02	01/16	01/30	02/13	02/27	03/13	03/27	04/10	04/24	05/08	05/22	06/05	06/19	07/03	07/17	
Descending	Glacier Super Site	Glacier Super Site	Crustal Wetland Deforest	Glacier Super Site		Crustal Wetland Deforest	Global 3m (3/3)	Crustal Wetland Deforest	Global 3m (3/3)	Crustal Wetland Deforest		Crustal Wetland Deforest		Crustal Wetland Deforest	Crustal & Forest	Crustal Wetland Deforest	Crustal Wetland Deforest	Crustal Wetland Deforest										
	F2(6)L	F2(6)L	W2 (2)R	F2(6)L		W2 (2)R	U2 (6)R	U2 (7)R	W2 (2)R	U2 (8)R	U2 (9)R	W2 (2)R			W2 (2)R	F2 (5)R	F2 (6)R	W2 (2)R	F2 (7)R	F2 (5)R	W2 (2)R	F2 (6)R	F2 (7)R	W2 (2)R	V2(2)R	W2 (2)R		
Ascending	North Polar	Polar	World 1-1(10m)				World 2-1(10m)					Polar	South Polar	World 1-2(10m)				GR Super Site	GR Super Site	Global FP6m (3/5)					World 2-2(10m)			
	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R	F2(6)R	F2(6)R	FP (6)R	FP (5)R	FP (4)R	FP (3)R	FP (7)R			F2 (7)R	F2 (5)R	F2 (6)R		

Mode	R/L	Polarization	Beam
U2	R	HH	6-9
FP	R	HH+HV+VH+VV	3-7
F2	R	HH+HV	5-7
F2	L	HH+HV	6
W2	R	HH+HV	2
W2	R	HH	2
W2	L	HH+HV	2
V2	R	HH+HV	2
(Any Mode)	Open Cycle for the Recovery Observations		



# Basic Observation Scenario (Global) - [ 4<sup>th</sup> -6<sup>th</sup>year ] -

■ 4th Year																										
Cycle	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Year	2017											2018														
Month/Day	07/31	08/14	08/28	09/11	09/25	10/09	10/23	11/06	11/20	12/04	12/18	01/01	01/15	01/29	02/12	02/26	03/12	03/26	04/09	04/23	05/07	05/21	06/04	06/18	07/02	07/16
Descending	Glacier Super Site	Crustal Glacier Super Site	Wetland Deforest	Glacier Super Site	Crustal Glacier Super Site	Wetland Deforest	10m (SuperSite)		Wetland Deforest	10m (SuperSite)	Crustal	Wetland Deforest 1&2	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Wetland Deforest 2	Wetland Deforest 1
		W2(2)R	W2 (2)R		W2(2)R	W2 (2)R	F2(7)R	F2(5)R	W2 (2)R	F2(6)R	W2(2)R	W2 (2)R	W2 (2)R	W2(2)R	W2 (2)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (5)R	W2(2)R	W2 (2)R	F2 (6)R	W2(2)R	W2 (2)R	W2 (2)R	W2 (2)R
Ascending	North Polar Crustal	Polar	World 1-1(10m)			World 2-1(10m)			Polar	South Polar	World A(10m)			GR Super Site	World B(10m)			World C(10m)			South Polar	World D(10m)				
	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R	F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R	W2(2)L	F2 (7)R	F2 (5)R	F2 (6)R	F2(6)R	F2 (6)R	F2 (7)R	F2 (5)R		F2 (7)R	F2 (5)R	F2 (6)R	W2(2)L	F2 (7)R	F2 (5)R	F2 (6)R	

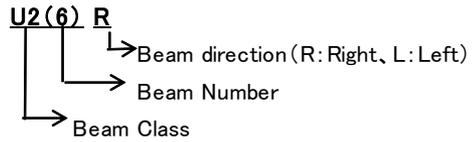
■ 5th Year																										
Cycle	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131
Year	2018											2019														
Month/Day	07/30	08/13	08/27	09/10	09/24	10/08	10/22	11/05	11/19	12/03	12/17	12/31	01/14	01/28	02/11	02/25	03/11	03/25	04/08	04/22	05/06	05/20	06/03	06/17	07/01	07/15
Descending	Glacier Super Site	Wetland Deforest 2 Glacier Super Site	Wetland Deforest 1	Crustal 1 Glacier Super Site	Wetland Deforest 2 Crustal 2 Glacier Super	Wetland Deforest 1	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1 10m Super	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Wetland Deforest 2	Wetland Deforest 1
		W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R	W2 (2)R	W2(2)R	W2 (2)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (5)R	W2(2)R	W2 (2)R	F2 (6)R	W2(2)R	W2 (2)R	W2 (2)R
Ascending	World E(10m)			North Polar Crustal	North Polar	World F(10m)			World A(10m)			North Polar	GR Super Site South Polar	World B(10m)			World C(10m)			World D(10m)						
	F2 (7)R	F2 (5)R	F2 (6)R	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R	F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R	F2(6)R	F2 (6)R	F2 (7)R	F2 (5)R		F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R		

■ 6th Year																										
Cycle	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157
Year	2019											2020														
Month/Day	07/29	08/12	08/26	09/09	09/23	10/07	10/21	11/04	11/18	12/02	12/16	12/30	01/13	01/27	02/10	02/24	03/09	03/23	04/06	04/20	05/04	05/18	06/01	06/15	06/29	07/13
Descending	Glacier Super Site	Wetland Deforest 2 Glacier Super Site	Wetland Deforest 1	Crustal 1 Glacier Super Site	Wetland Deforest 2 Crustal 2 Glacier Super	Wetland Deforest 1	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1 10m Super	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Wetland Deforest 2	Wetland Deforest 1
		W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R	W2 (2)R	W2(2)R	W2 (2)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (5)R	W2(2)R	W2 (2)R	F2 (6)R	W2(2)R	W2 (2)R	W2 (2)R
Ascending	World E(10m)			North Polar Crustal	Polar	World F(10m)			World A(10m)			North Polar	GR Super Site South Polar	World B(10m)			World C(10m)			World D(10m)						
	F2 (7)R	F2 (5)R	F2 (6)R	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R	F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R	F2(6)R	F2 (6)R	F2 (7)R	F2 (5)R		F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R		

Mode	R/L	Polarization	Beam
U2	R	HH	6-9
FP	R	HH+HV+VH+VV	3-7
F2	R	HH+HV	5-7
F2	L	HH+HV	6
W2	R	HH+HV	2
W2	R	HH	2
W2	L	HH+HV	2
V2	R	HH+HV	2
(Any Mode)	Open Cycle for the Recovery Observations		

【Number system】

EX: U2(6) R



     Supersites

# Basic Observation Scenario (Global) - [ 7<sup>th</sup> -9<sup>th</sup>year ] -

7th Year		158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183
Year		2020												2021													
Month/Day		07/27	08/10	08/24	09/07	09/21	10/05	10/19	11/02	11/16	11/30	12/14	12/28	01/11	01/25	02/08	02/22	03/08	03/22	04/05	04/19	05/03	05/17	05/31	06/14	06/28	07/12
Descending	Super Site	Glacier Super Site	Wetland Deforest 2 Glacier Super Site	Wetland Deforest 1	Crustal 1 Glacier Super Site	Wetland Deforest 2 Crustal 2 Glacier Super	Wetland Deforest 1	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1 10m Super	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Wetland Deforest 2	Wetland Deforest 1
	Super Site		W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R	W2 (2)R	W2(2)R	W2 (2)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (5)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (6)R	W2(2)R	W2 (2)R	F2 (6)R
Ascending	World E(10m)	World E(10m)			Crustal	Polar	World F(10m)				World A(10m)			North Polar	GR Super Site South Polar	World B(10m)			World C(10m)			World D(10m)					
	World E(10m)	F2 (7)R	F2 (5)R	F2 (6)R	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R		W2(2)R	F2(6)R	F2 (6)R	F2 (7)R	F2 (5)R		F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R

8th Year		184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209
Year		2021												2022													
Month/Day		07/26	08/09	08/23	09/06	09/20	10/04	10/18	11/01	11/15	11/29	12/13	12/27	01/10	01/24	02/07	02/21	03/07	03/21	04/04	04/18	05/02	05/16	05/30	06/13	06/27	07/11
Descending	Super Site	Glacier Super Site	Wetland Deforest 2 Glacier Super Site	Wetland Deforest 1	Crustal 1 Glacier Super Site	Wetland Deforest 2 Crustal 2 Glacier Super	Wetland Deforest 1	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1 10m Super	Crustal 1 10m Super Site	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Wetland Deforest 2	Wetland Deforest 1
	Super Site		W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2 (2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2(2)R	W2 (2)R	W2 (2)R	W2(2)R	W2 (2)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (5)R	F2 (7)R	W2(2)R	W2 (2)R	F2 (6)R	W2(2)R	W2 (2)R	F2 (6)R
Ascending	World E(10m)	World E(10m)			Crustal	Polar	World F(10m)				World A(10m)			North Polar	GR Super Site South Polar	World B(10m)			World C(10m)			World D(10m)					
	World E(10m)	F2 (7)R	F2 (5)R	F2 (6)R	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R		W2(2)R	F2(6)R	F2 (6)R	F2 (7)R	F2 (5)R		F2 (7)R	F2 (5)R	F2 (6)R		F2 (7)R	F2 (5)R	F2 (6)R

9th Year		210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235
Year		2022												2023													
Month/Day		07/25	08/08	08/22	09/05	09/19	10/03	10/17	10/31	11/14	11/28	12/12	12/26	01/09	01/23	02/06	02/20	03/06	03/20	04/03	04/17	05/01	05/15	05/29	06/12	06/26	07/10
Descending	Super Site		Wetland Deforest 2	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1	Wetland Deforest 2	Wetland Deforest 1																		
	Super Site		W2 (2)R	W2 (2)R	W2 (2)R	W2(2)R	W2 (2)R		W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R															
Ascending	World E(10m)	World E(10m)			Crustal	Polar	World F(10m)				World A(10m)			North Polar	South Polar	World B(10m)			World C(10m)			World C(10m)	World D(10m)				
	World E(10m)	F2 (7)R	F2 (5)R	F2 (6)R	W2 (2)R	W2(2)R	F2 (7)R	F2 (5)R	F2 (6)R		F2 (6)R	F2 (7)R	F2 (5)R		W2(2)R		F2 (6)R	F2 (7)R	F2 (5)R		F2 (6)R	F2 (7)R		F2 (5)R		F2 (6)R	F2 (7)R

	Mode	R/L	Polarization	Beam	
U2	Stripmap 3m	R	HH	6-9	
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7	
F2	Stripmap 10m	R	HH+HV	5-7	
F2		L	HH+HV	6	
W2	ScanSAR 350km	R	HH+HV	2	
W2		R	HH	2	
W2		L	HH+HV	2	
V2	ScanSAR 490km	R	HH+HV	2	
	(Any Mode)	Open Cycle for the Recovery Observations			

[Number system]

EX: U2(6)R

U2(6)R

↳ Beam direction (R: Right, L: Left)

↳ Beam Number

↳ Beam Class



Supersites

\*The scenarios from 9<sup>th</sup> year onward only show observations with a priority of 3050 or higher.

# 4.3 Basic Observation Scenario (Global) - [ 10<sup>th</sup>-11<sup>th</sup>year ] -

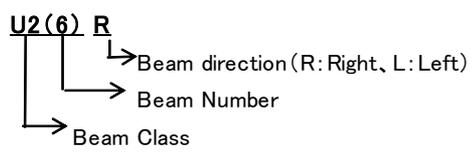
10th Year																										
Cycle	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261
Year	2023												2024													
Month/Day	07/24	08/07	08/21	09/04	09/18	10/02	10/16	10/30	11/13	11/27	12/11	12/25	01/08	01/22	02/05	02/19	03/04	03/18	04/01	04/15	04/29	05/13	05/27	06/10	06/24	07/08
Descending		Wetland Deforest	Wetland Deforest 1	Crustal 1	Wetland Deforest 2 Crustal 2	Wetland Deforest 1		Wetland Deforest 2	Wetland Deforest 1		Wetland Deforest 2	Wetland Deforest 1		Wetland Deforest 2	Wetland Deforest 1		Wetland Deforest 2	Wetland Deforest 1		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)
		W2 (2)R	W2 (2)R	W2 (2)R	W2(2)R W2(2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R
Ascending	World E(10m)			Crustal ScanSAR Replace 1	Polar	World F(10m)				ScanSAR Replace 2	World A(10m)			North Polar	South Polar	World B(10m)			World C(10m)			World C(10m)		World D(10m)		
	F2 (6)R	F2 (7)R	F2 (5)R	W2(2)R W2(2)R	W2(2)R	F2 (6)R	F2 (7)R	F2 (5)R		W2 (2)R	F2 (6)R	F2 (7)R	F2 (5)R	W2(2)R		W2(2)L	F2 (6)R	F2 (7)R	F2 (5)R	F2 (6)R	F2 (7)R		F2 (5)R		F2 (6)R	F2 (7)R

11th Year																										
Cycle	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287
Year	2024												2025													
Month/Day	07/22	08/05	08/19	09/02	09/16	09/30	10/14	10/28	11/11	11/25	12/09	12/23	01/06	01/20	02/03	02/17	03/03	03/17	03/31	04/14	04/28	05/12	05/26	06/09	06/23	07/07
Descending		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Crustal 1	Wetland Deforest 2 (A+B) Crustal 2	Wetland Deforest 1 (A+B)			Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)		Wetland Deforest 2 (A)	Wetland Deforest 1 (A)	Wetland Deforest 2 (A+B)	Wetland Deforest 1 (A+B)
		W2 (2)R	W2 (2)R	W2 (2)R	W2(2)R W2(2)R	W2 (2)R			W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R		W2 (2)R	W2 (2)R	W2 (2)R	W2 (2)R
Ascending	World E(10m)			Crustal ScanSAR Replace 1	Polar	World F(10m)				ScanSAR Replace 2	World A(10m)			North Polar	South Polar	World B(10m)			World C(10m)			World C(10m)		World D(10m)		
	F2 (6)R	F2 (7)R	F2 (5)R	W2(2)R W2(2)R	W2(2)R	F2 (6)R	F2 (7)R	F2 (5)R		W2 (2)R	F2 (6)R	F2 (7)R	F2 (5)R	W2(2)R		W2(2)L	F2 (6)R	F2 (7)R	F2 (5)R	F2 (6)R	F2 (7)R		F2 (5)R		F2 (6)R	F2 (7)R

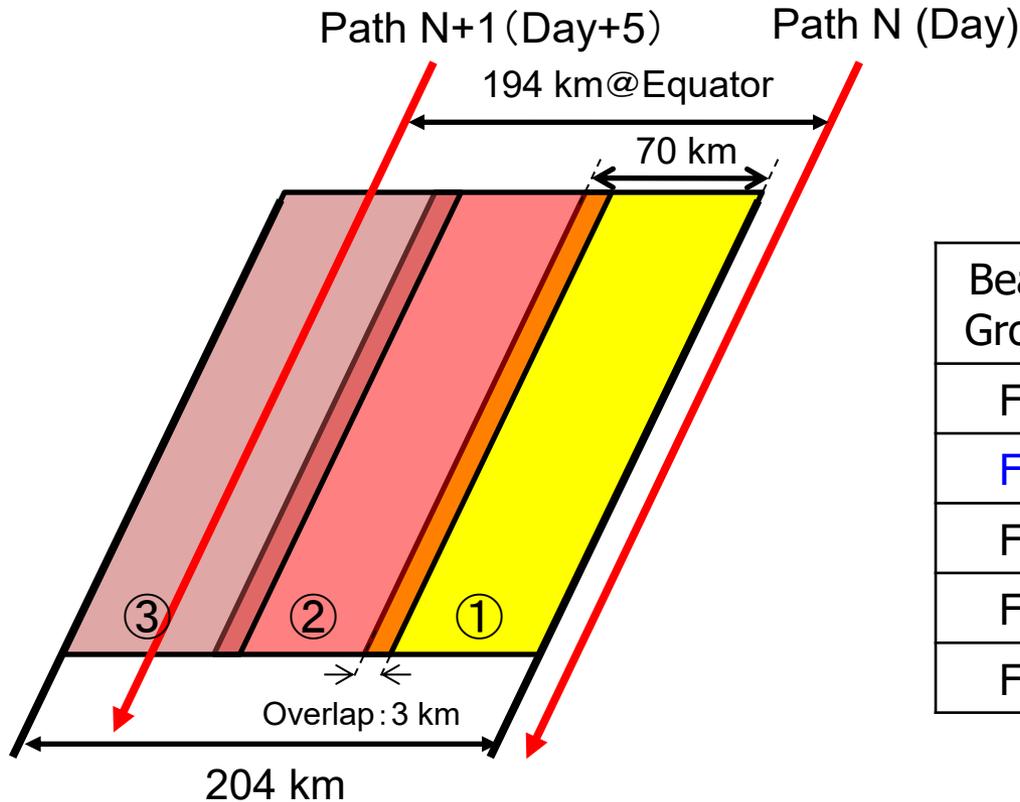
	Mode	R/L	Polarization	Beam
U2	Stripmap 3m	R	HH	6-9
FP	Stripmap 6m	R	HH+HV+VH+VV	3-7
F2	Stripmap 10m	R	HH+HV	5-7
F2		L	HH+HV	6
W2	ScanSAR 350km	R	HH+HV	2
W2		R	HH	2
W2		L	HH+HV	2
V2	ScanSAR 490km	R	HH+HV	2
	(Any Mode)	Open Cycle for the Recovery Observations		

[Number system]  
EX: U2(6) R



\*The scenarios from 9<sup>th</sup> year onward only show observations with a priority of 3050 or higher.

## 4.2 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

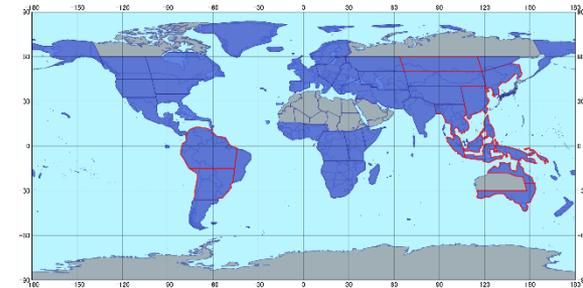
# Basic Observation Scenario (Global)

Global land areas – baseline mapping (Cycle 233-297)

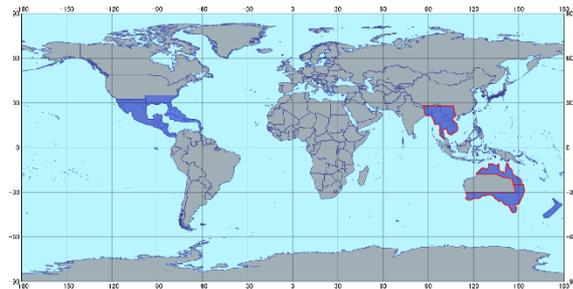
Temporal repeat: Ascending 1 cov/year

GSD: 10 m (off-nadir  $28.2^\circ$  -  $36.2^\circ$  )

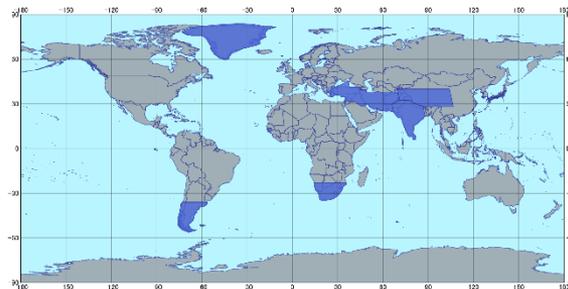
Mode: Stripmap Dual-pol (HH+HV/28MHz)



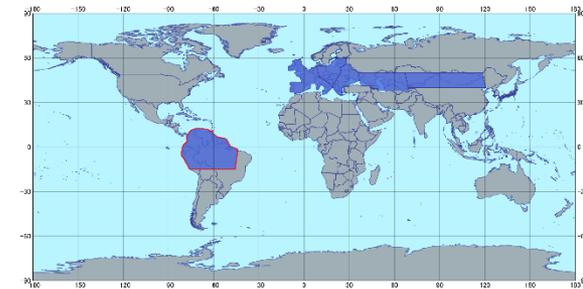
Red frame: Priority area



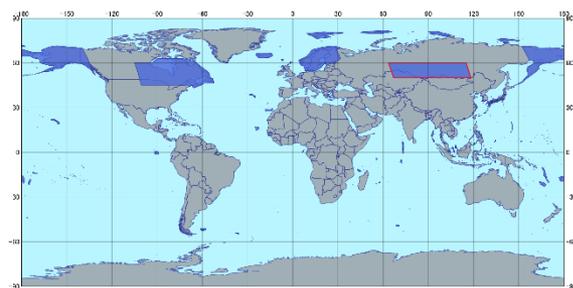
WorldA



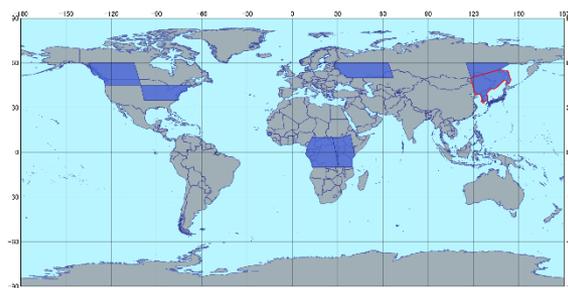
WorldB



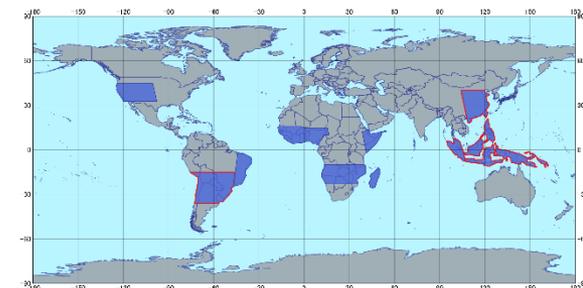
WorldC



WorldD



WorldE



WorldF

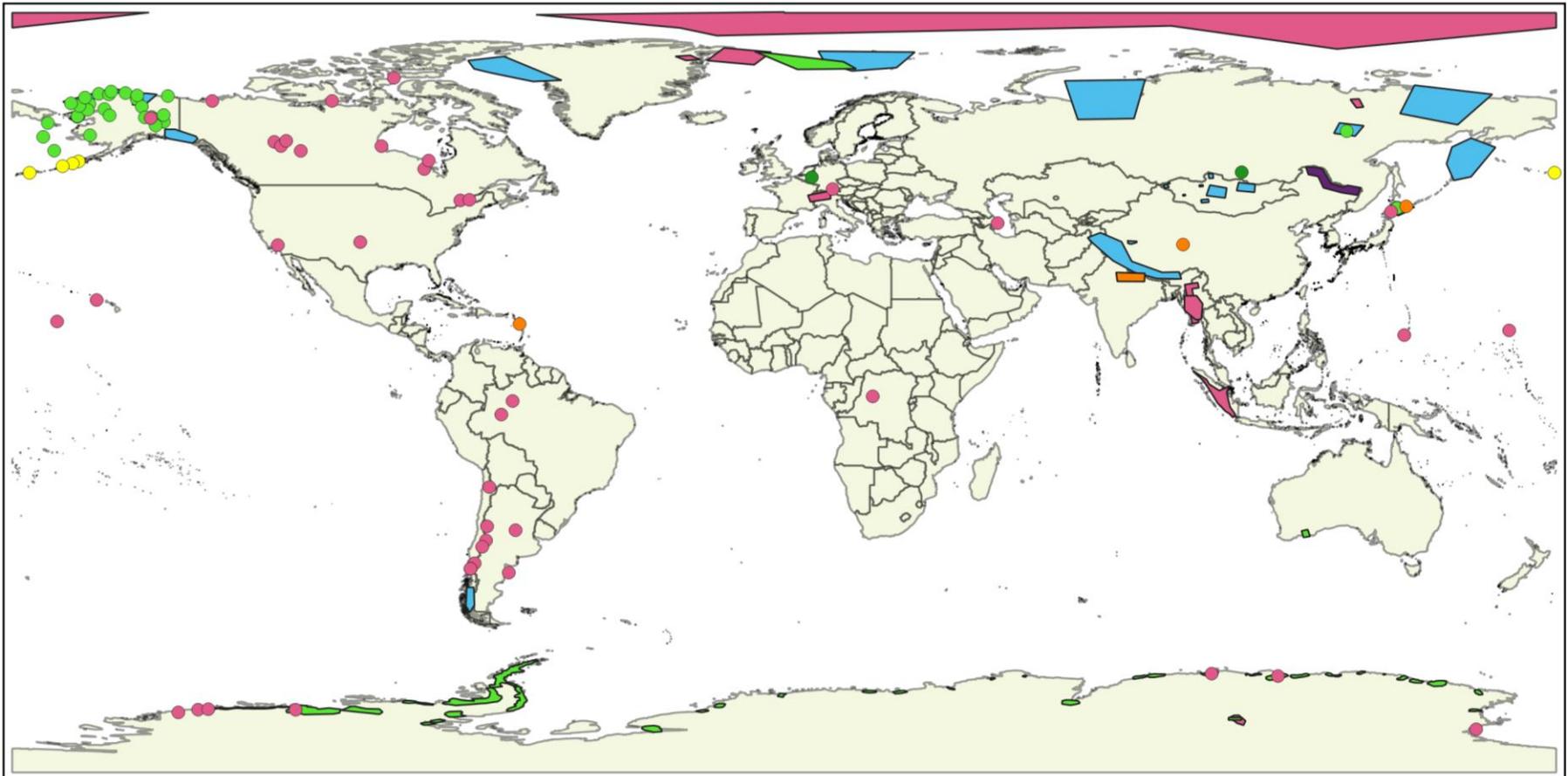
# Supersites (PI)

## PI Supersites (Cycle 294-306)

Temporal repeat: When observation requests do not conflict with the BOS

GSD/Mode: based on the PI requests

- : Polar research and Snow
- : Disaster
- : Hydrology and Agriculture
- : Land use and Forestry
- : Cryosphere
- : Volcano
- : ALOS-4 CVST



# Supersites (CEOS)

## CEOS Supersites (until Cycle 299)

Temporal repeat: When observation requests match the BOS

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)

