Observation Status of PI Supter Sites and Basic Observation Scenario Updates

[Modified from JAXA presentation at ALOS-2 PI meeting]
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RESTEC

1. Basic Observation Scenario

1-1. 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
- The BOS is reviewed periodically to meet user requests

Concepts of the Basic Observation Scenari

- Emergency observations and cal/val have highest priority and the BOS follows with the second highest priority.
- The BOS scenario is designed to fulfill the following general acquisition concepts:
  - Spatial and temporal consistency at global scales with fine spatial resolution
  - Adequate revisit frequency, considering acquisition timing of target areas
  - Sensor operability
  - Long-term systematic observations
- The BOS comprises separate plans for Japan and for the rest of the world
- Observations over Super Sites are undertaken to the extent that they do not affect the BOS.

Notes

- The success rate for acquisitions within the BOS is 70-80%

Basic Observation Scenario (Global) – [1st – 3rd 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	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	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 / W2(2)L	F2 (7)R	F2 (5)R	F2 (6)R			F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R / W2(2)L	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

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											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	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 / W2(2)L	F2 (7)R	F2 (5)R	F2 (6)R			F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R / W2(2)L	W2(2)L	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

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	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&Forest		Crustal Wetland Deforest	Crustal&Forest		Crustal Wetland Deforest	Crustal&Forest		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		W2 (2)R
Ascending	North Polar Crustal	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 / W2(2)L	F2 (7)R	F2 (5)R	F2 (6)R			F2 (7)R	F2 (5)R	F2 (6)R	W2(2)R / W2(2)L	W2(2)L	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

F2 10m 10m(HH+HV)28MHz Right

U2 3m 3m(HH)84MHz Right

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

(*) *Beam No.

W2 350km ScanSAR350km(HH+HV)14MHz Right

W2 350km ScanSAR350km(HH+HV)14MHz Left

V2 490km ScanSAR490km(HH+HV)14MHz Right

F2 10m 10m(HH+HV)28MHz Left

Super sites (TBD)

【Number system】

EX:U2(6)R U2(6) R

- R: Beam direction (R: Right, L: Left)
- 6: Beam Number
- U2: Beam Class

Basic Observation Scenario (Global) – [4th - 5th 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		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(6)L	F2(6)L		F2(6)L	F2(6)L									W2(2)R		F2(7)R	F2(7)R		F2(5)R	F2(5)R		F2(6)R	F2(6)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
		W2(2)L								W2(2)L																

■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 SuperSite	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	W2(2)R		W2(2)R	W2(2)R		W2(2)R	W2(2)R	W2(2)R	W2(2)R
	F2(6)L	F2(6)L		F2(6)L	F2(6)L		F2(7)R		F2(5)R	F2(6)R	W2(2)R			W2(2)R		F2(7)R	F2(7)R		F2(5)R	F2(5)R		F2(6)R	F2(6)R			
Ascending	World E(10m)			North Polar Crustal	North Polar	World F(10m)					World A(10m)			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
														W2(2)L	W2(2)L											

F2 10m 10m(HH+HV)28MHz Right

U2 3m 3m(HH)84MHz Right

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

(*) *Beam No.

W2 350km ScanSAR350km(HH+HV)14MHz Right

W2 350km ScanSAR350km(HH+HV)14MHz Left

V2 490km ScanSAR490km(HH+HV)14MHz Right

F2 10m 10m(HH+HV)28MHz Left

Super sites (TBD)

【Number system】

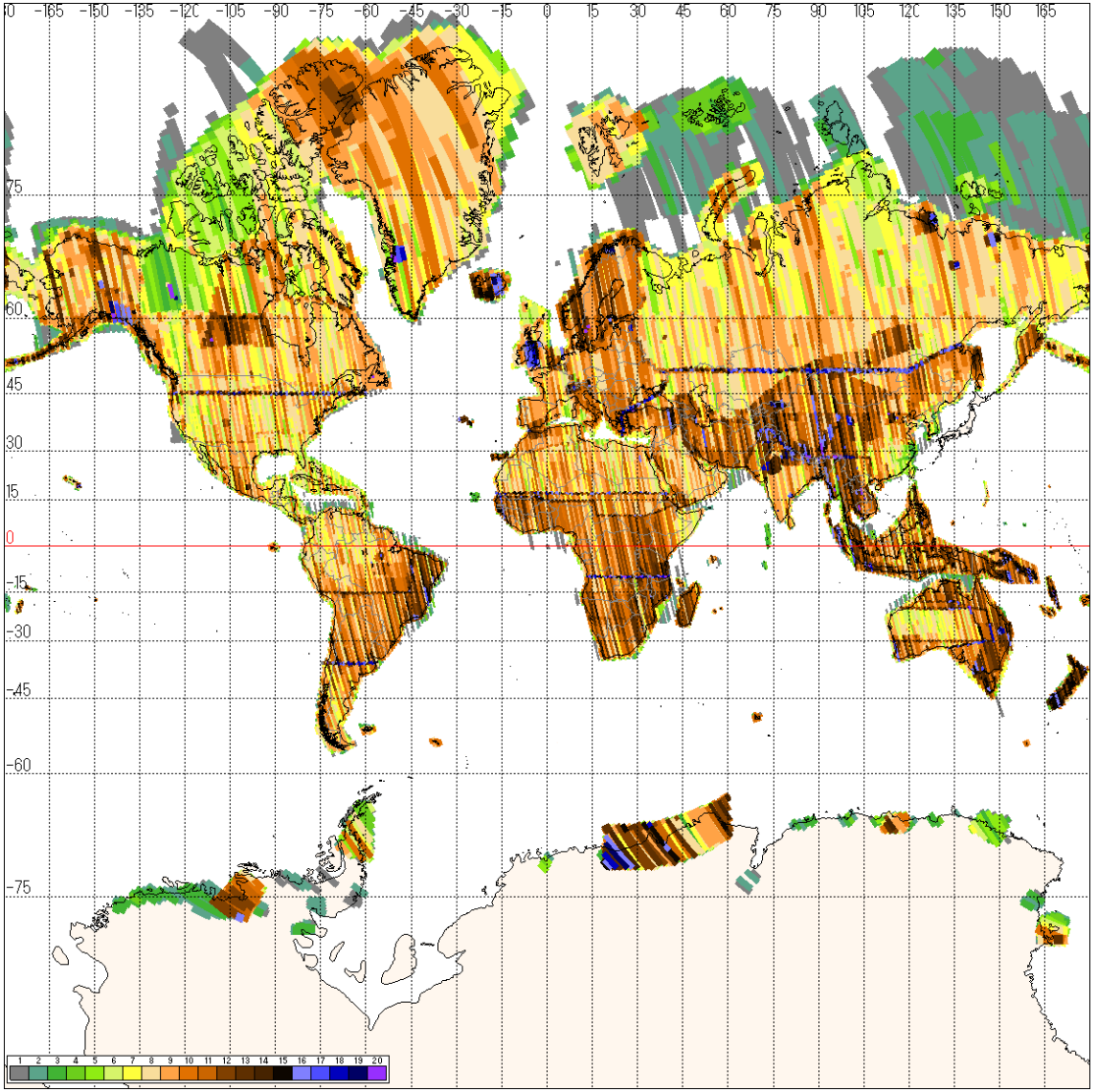
EX: U2(6) R

U2(6) R

- Beam direction (R: Right、L: Left)
- Beam Number
- Beam Class

Fine Beam Dual-pol (HH+HV) 10m - Ascending

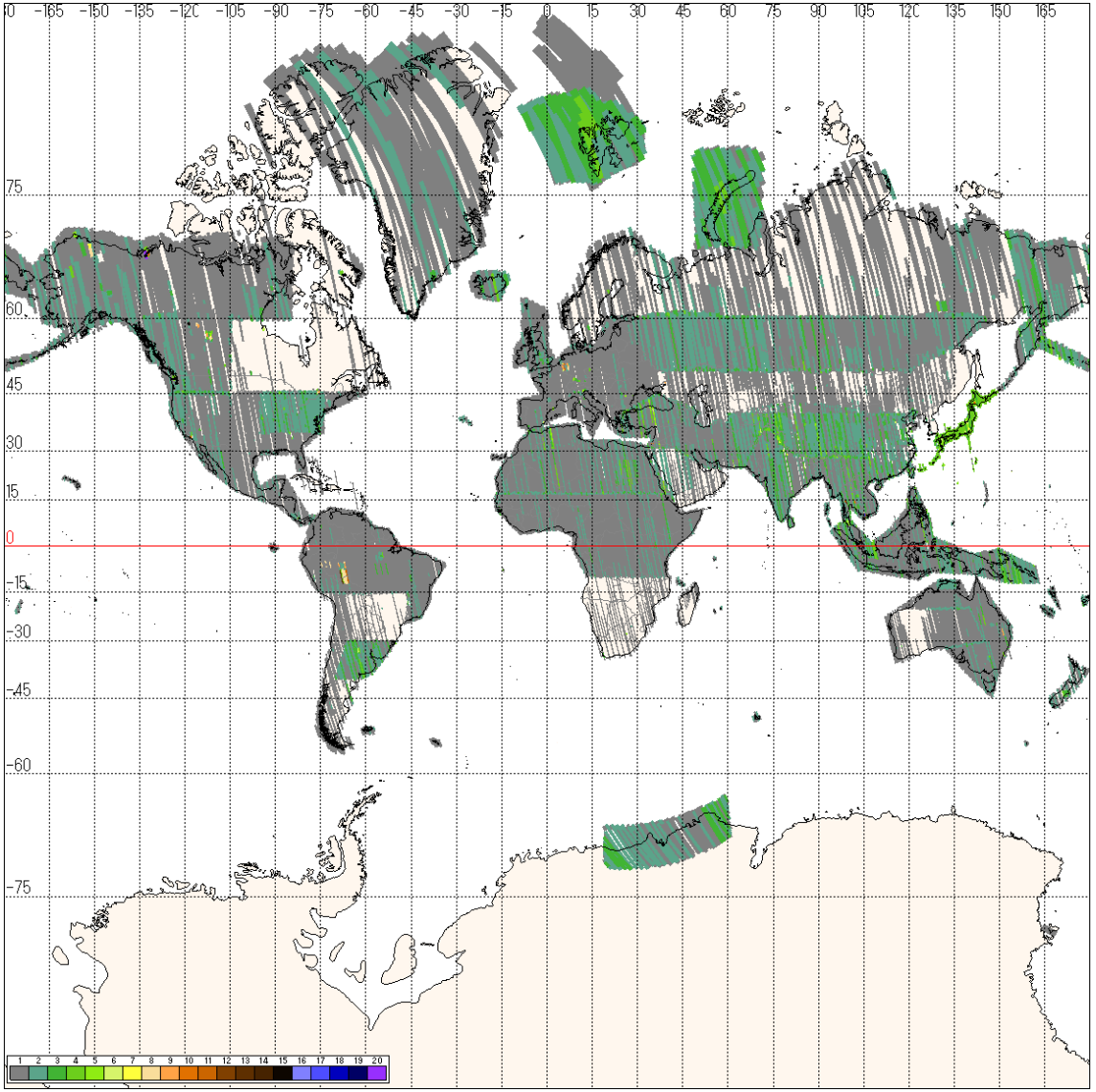
2014/8/4～2018/12/31	
acquired scenes	576,681



Stipmap 10m (F2-5 ~ F2-7) /HH + HV/ Ascending /Right

Quad-pol 6m - Ascending

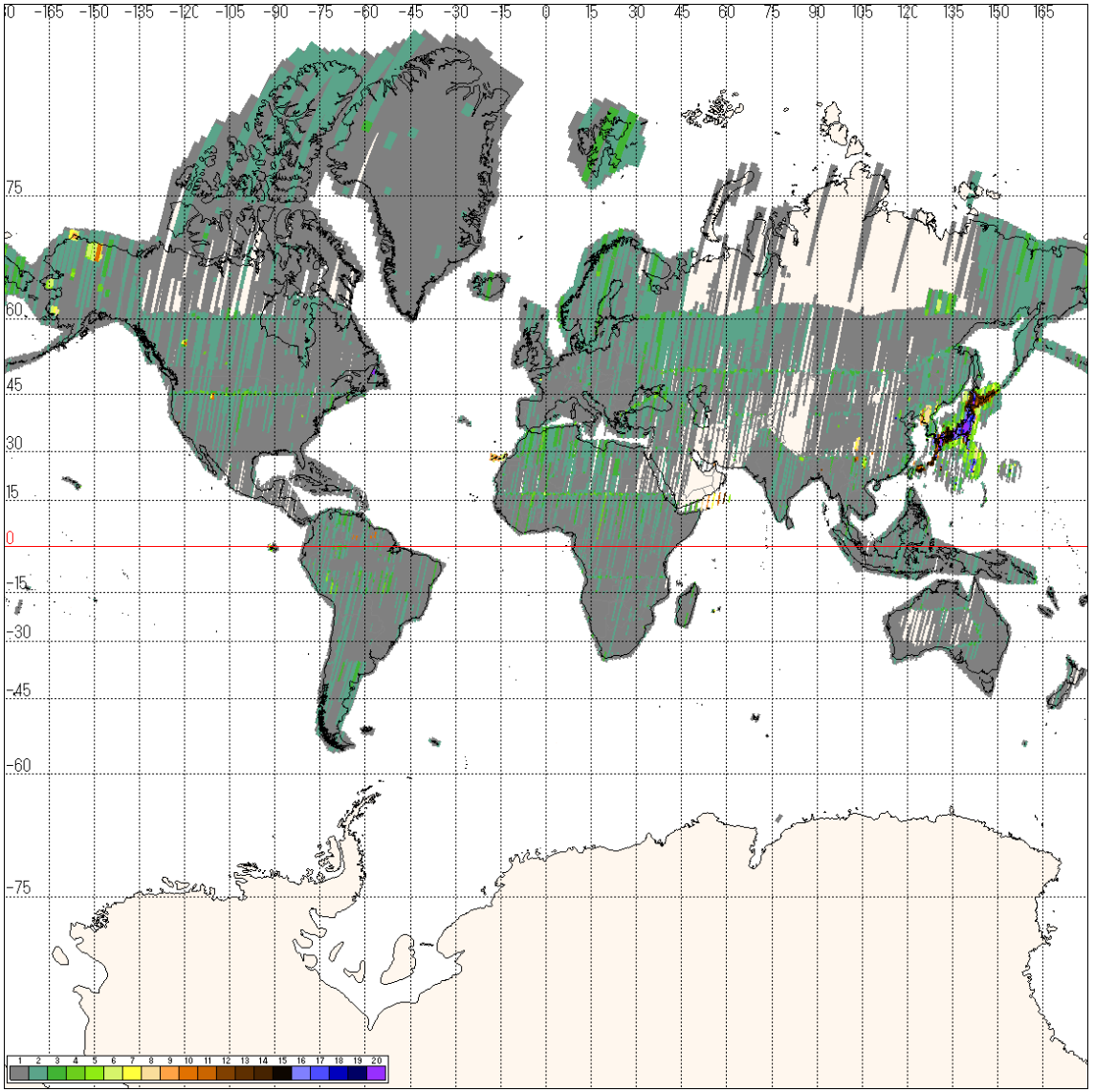
2014/8/4～2018/12/31	
acquired scenes	103,222



Stipmap 6m（FP6-3～FP6-7）/HH＋HV＋VH+VV/ Ascending /Right

Ultra-Fine (HH) 3m - Descending

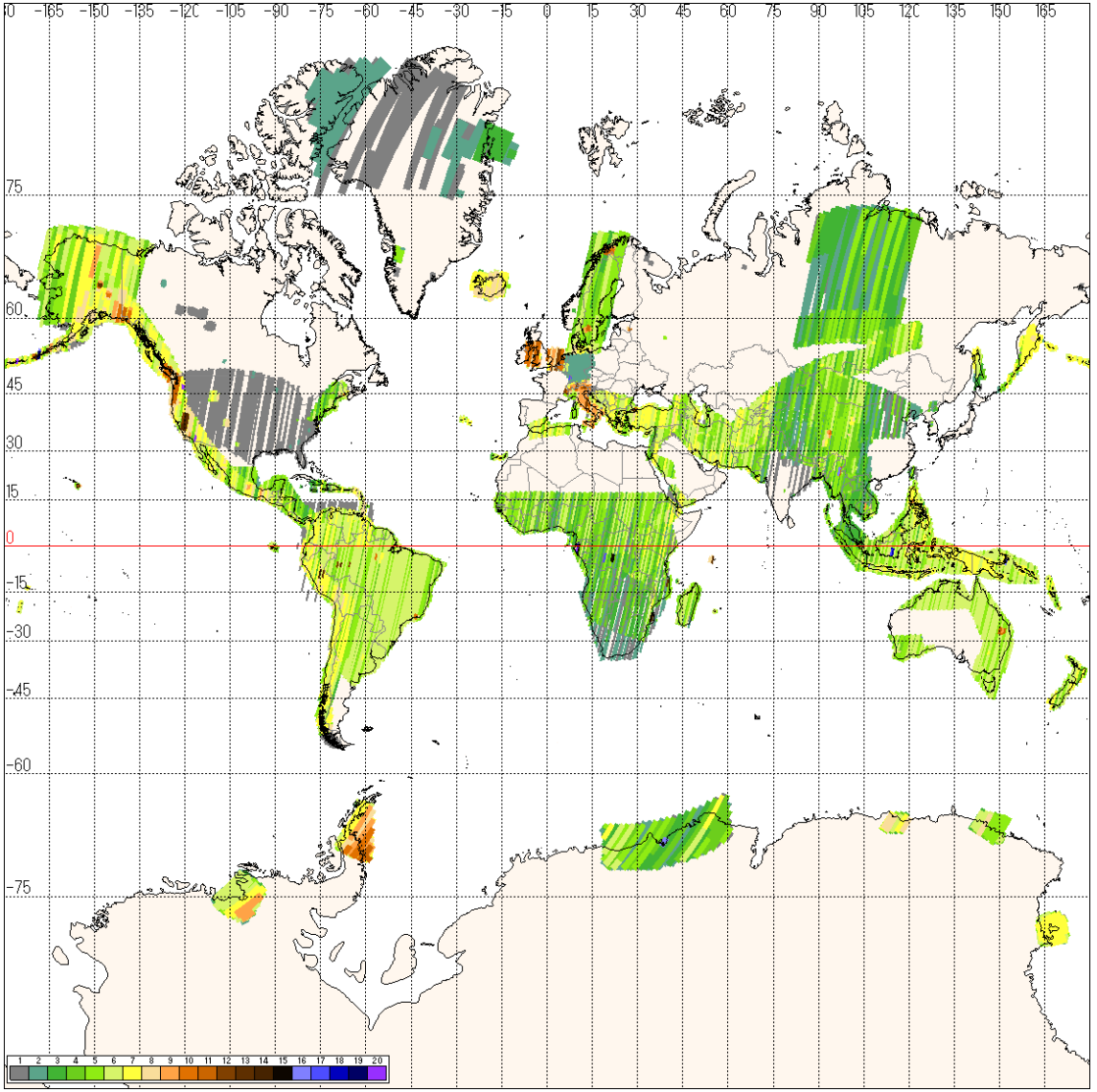
2014/8/4～2018/12/31	
acquired scenes	102,168



Stipmap 3m（U2-6～U2-9）/HH/ Descending/Right

Fine Beam Dual-pol (HH+HV) 10m - Descending

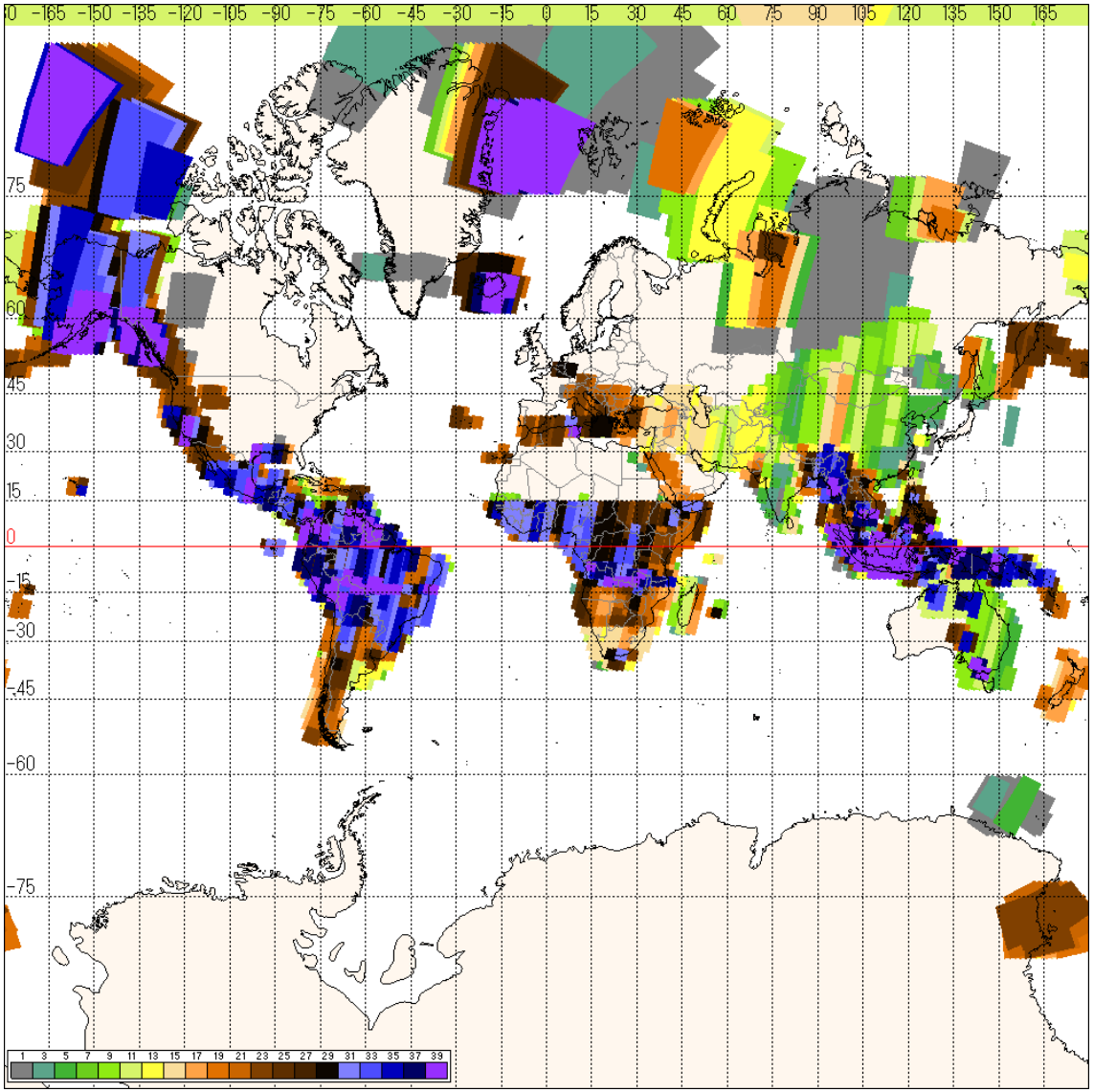
2014/8/4～2018/12/31	
acquired scenes	166,366



Stipmap 10m（F2-5～F2-7）/HH＋HV/ Descending /Right

ScanSAR Dual-pol (HH+HV) 50m - Descending

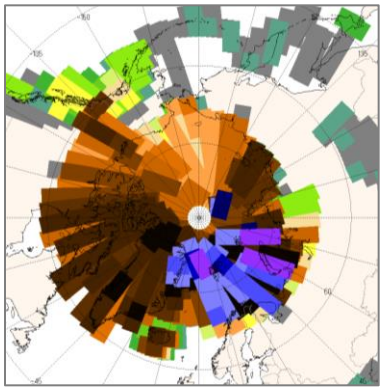
2014/8/4～2018/12/31	
acquired scenes	68,676



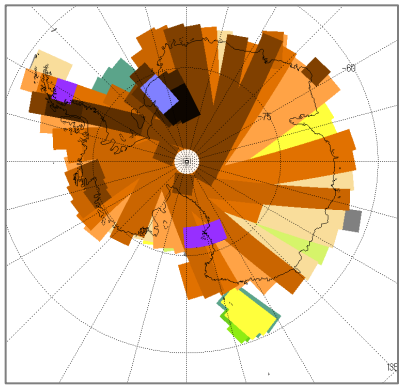
ScanSAR350km（W2）/HH＋HV/14MHz/ Descending /Right

ScanSAR Dual-pol (HH+HV) 50m - Ascending

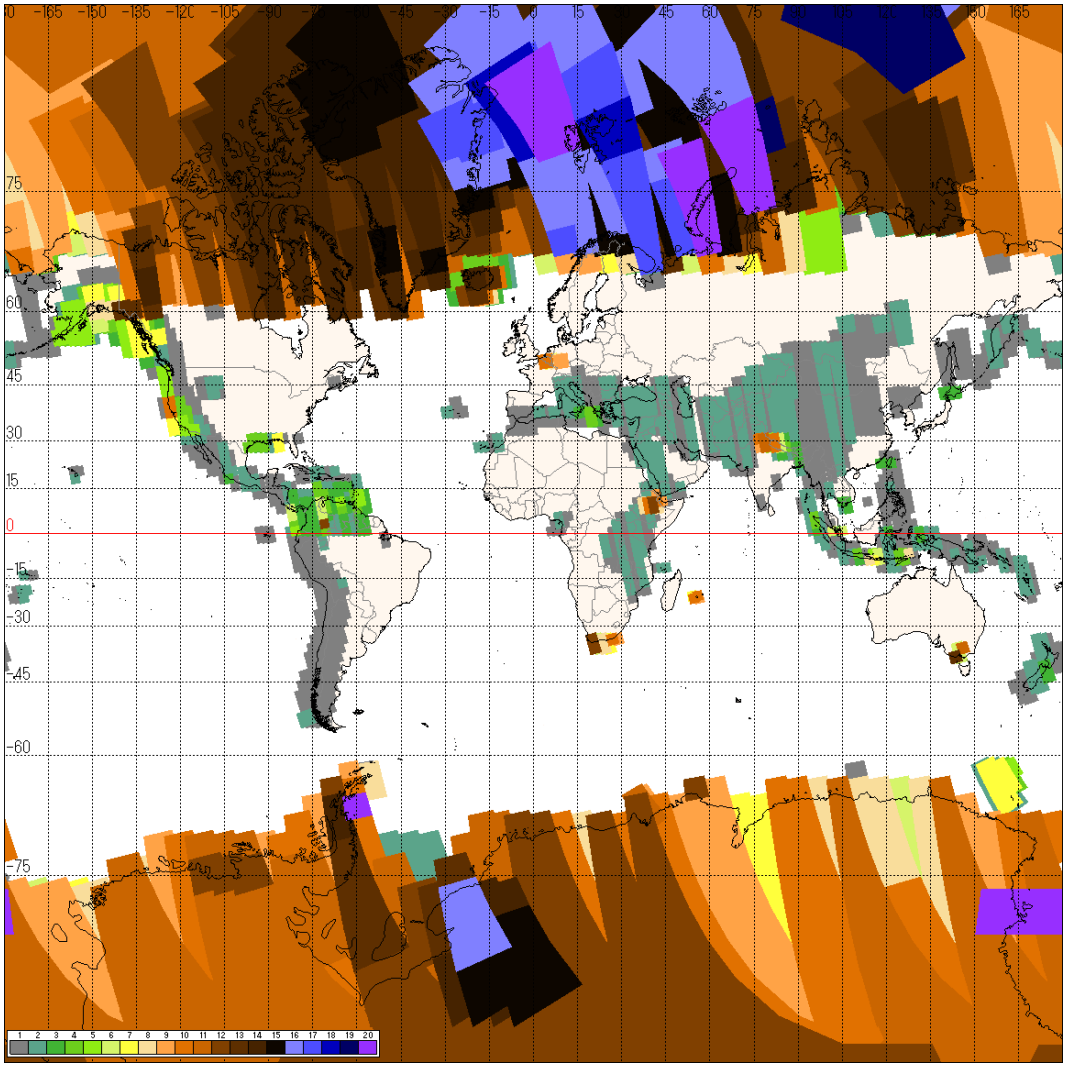
2014/8/4～2018/12/31	
acquired scenes	17,032



Arctic/Right



Antarctic/Left



ScanSAR350km（W2）/HH＋HV/14MHz/ Ascending /Right＆Left

3. PI Super Sites

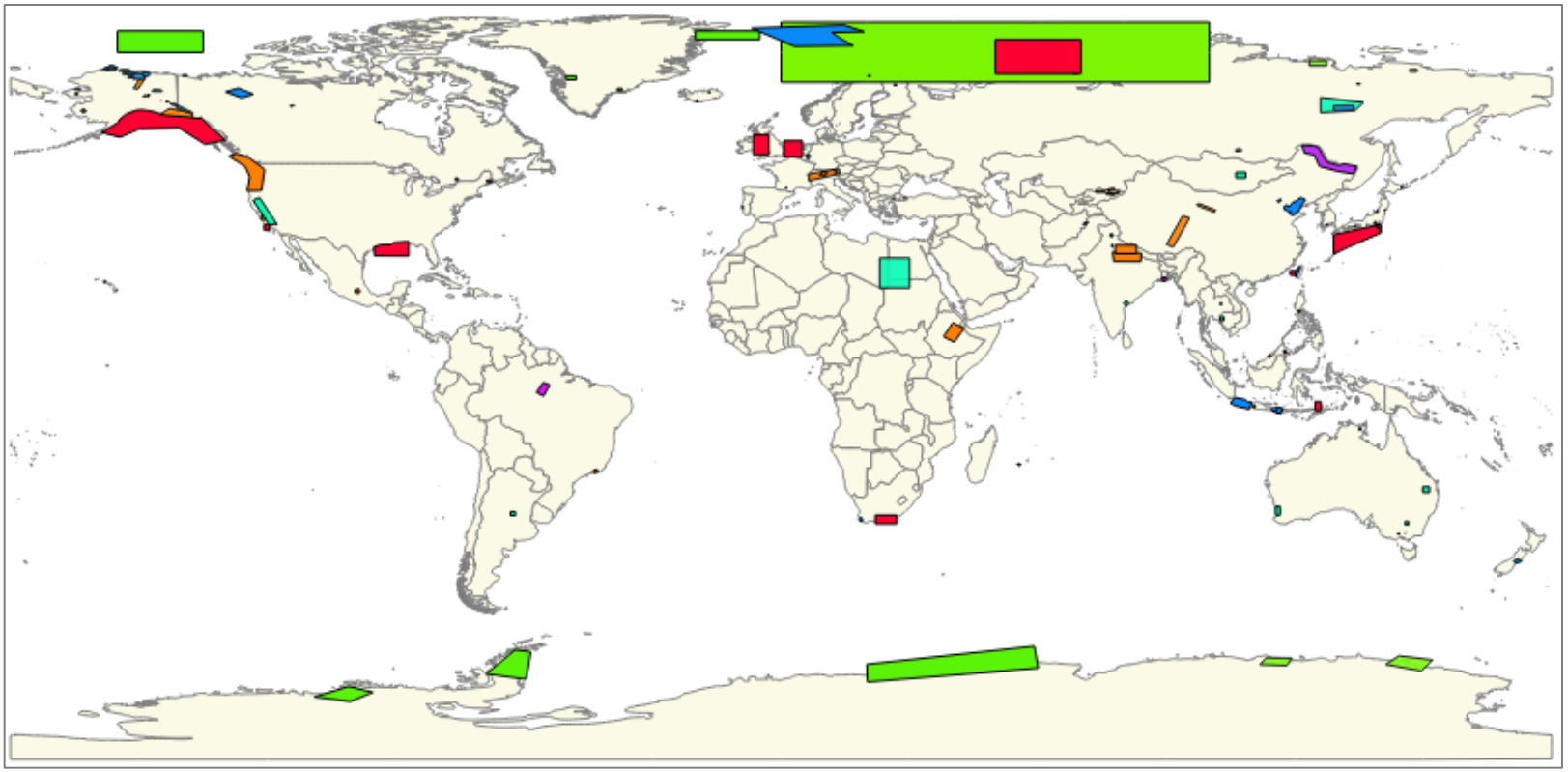
PI Super Sites（until 2019/4/21）

Temporal frequency: when not affecting the BOS

Resolution: as PI requested

Mode: as PI requested

- Polar research and Snow
- Polarimetry
- Ocean
- Disaster
- Hydrology and Agriculture
- Land use and Forestry



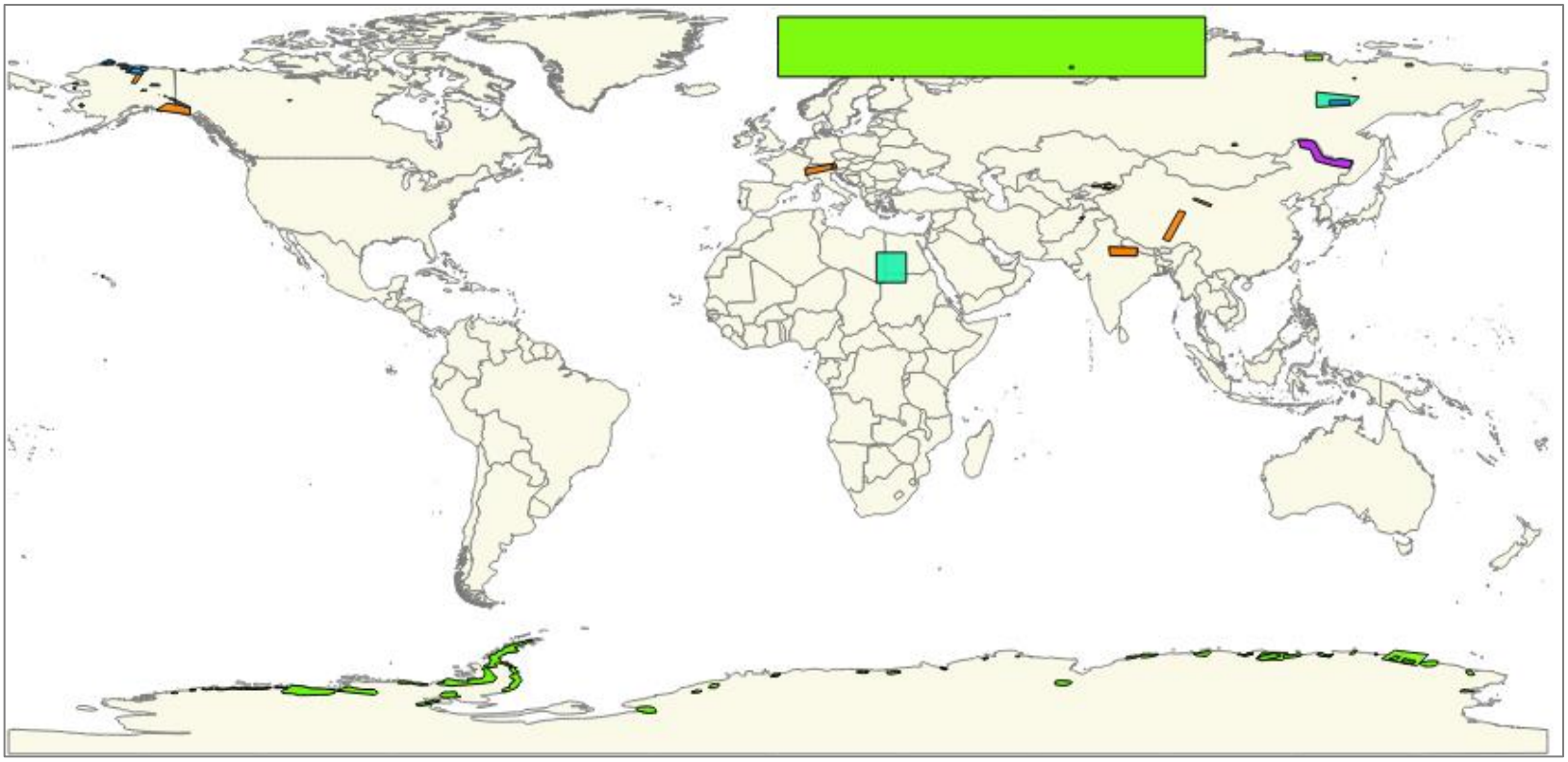
PI Super Sites（from 2019/4/22）

Temporal frequency: when not affecting the BOS

Resolution: as PI requested

Mode: as PI requested

- Polar research and Snow
- Polarimetry
- Ocean
- Disaster
- Hydrology and Agriculture
- Land use and Forestry



Acquired Scenes of PI Super Sites

Research Category	Observation Mode					Total
	SM1 (3m)	SM2 (6m)	SM3 (10m)	WD1 (ScanSAR)	SPT (Spotlight)	
Ocean	135	198	662	2,465	-	3,460
Disaster	31	-	2,953	935	476	4,395
Hydrology and Agriculture	47	271	378	369	584	1,649
Polar research and Snow	147	264	4,226	1,896	-	6,533
Polarimetry	-	543	-	-	-	543
Land use and Forestry	-	98	706	194	-	998

>17,000 scenes acquired in total.

Basic Observation Scenario (2019)

Basic Observation Scenario (Global) – [4th - 5th 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		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(6)L	F2(6)L		F2(6)L	F2(6)L									W2(2)R		F2(7)R	F2(7)R		F2(5)R	F2(5)R		F2(6)R	F2(6)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
		W2(2)L								W2(2)L																

■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 SuperSite	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	W2(2)R		W2(2)R	W2(2)R		W2(2)R	W2(2)R	W2(2)R	W2(2)R
	F2(6)L	F2(6)L		F2(6)L	F2(6)L		F2(7)R		F2(5)R	F2(6)R	W2(2)R			W2(2)R		F2(7)R	F2(7)R		F2(5)R	F2(5)R		F2(6)R	F2(6)R			
Ascending	World E(10m)			North Polar Crustal	North Polar	World F(10m)					World A(10m)			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
														W2(2)L	W2(2)L											

F2 10m — 10m(HH+HV)28MHz Right

U2 3m — 3m(HH)84MHz Right

FP 6m — 6m(HH+HV+VH+VV)42MHz Right

(*) *Beam No.

W2 350km — ScanSAR350km(HH+HV)14MHz Right

W2 350km — ScanSAR350km(HH+HV)14MHz Left

V2 490km — ScanSAR490km(HH+HV)14MHz Right

F2 10m — 10m(HH+HV)28MHz Left

Super sites (TBD)

【Number system】

EX: U2(6) R

U2(6) R

- U2: Beam Class
- (6): Beam Number
- R: Beam direction (R: Right、L: Left)

Basic Observation Scenario (Global)

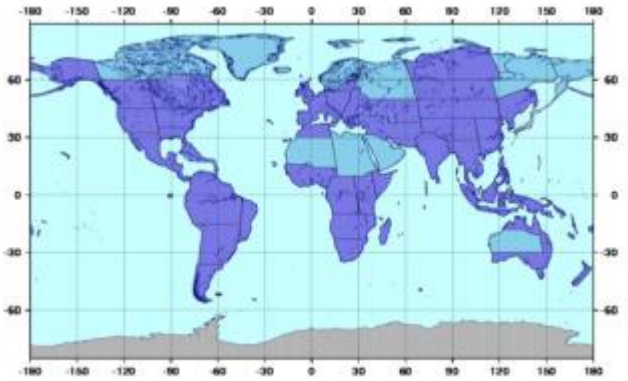
Global land areas – baseline mapping

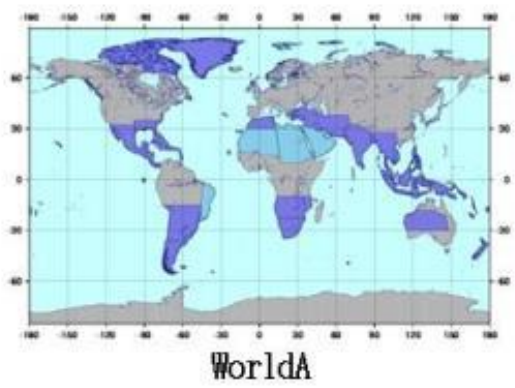
【Cycle 99-124：2018/4/23-2019/4/21】

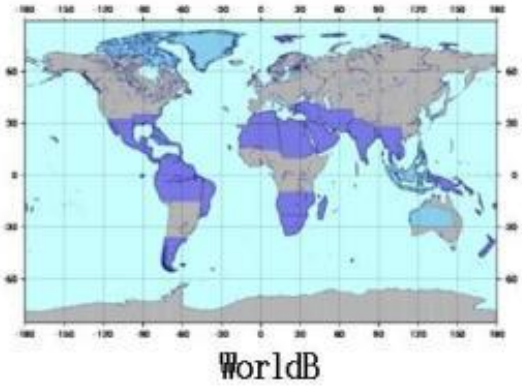
Temporal repeat: Ascending 2 cov/year - 4 cov/year

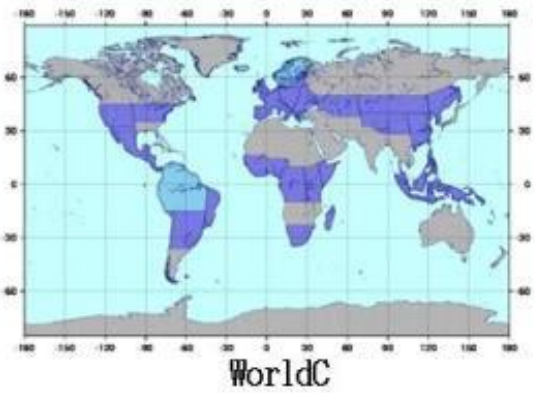
Resolution: 10 m (off-nadir 28.2° -36.2°)

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

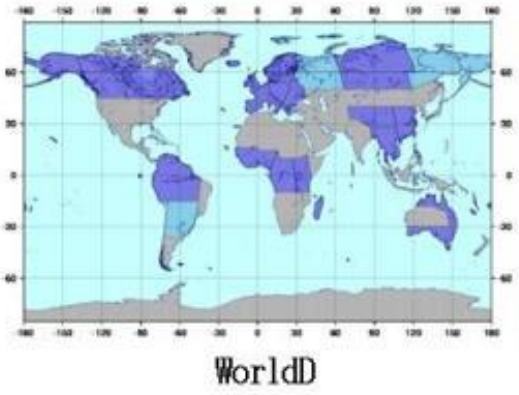


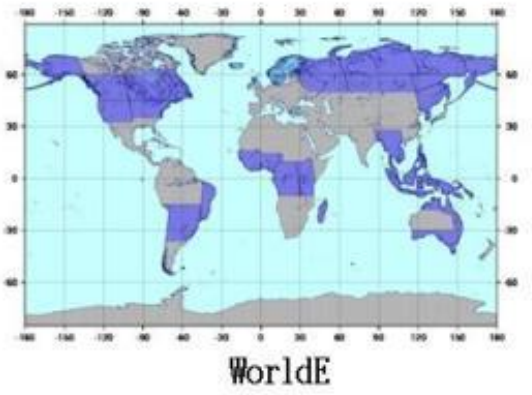


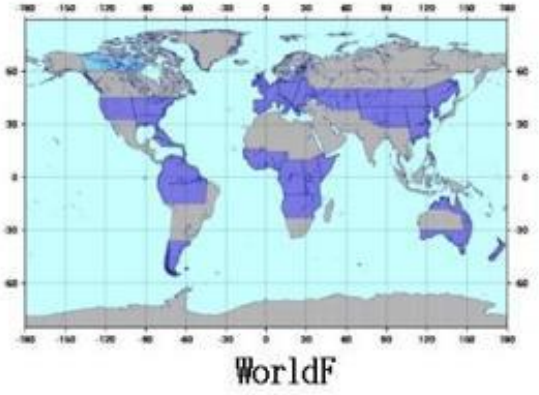




High Priority
Low Priority







Basic Observation Scenario (Global)

Global land areas – baseline mapping

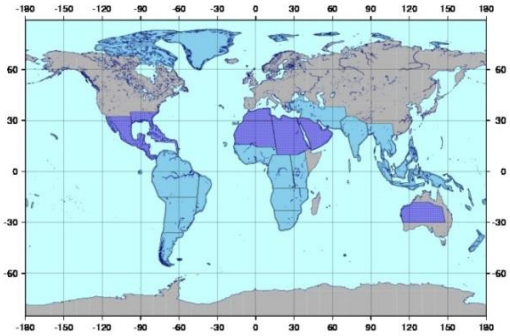
【Cycle 125-157：2019/4/22-2020/7/26】

Update
(applied from 6th year~)

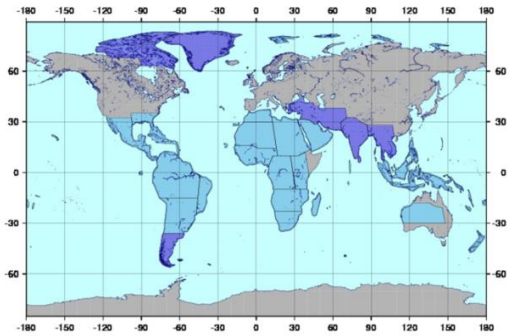
Temporal repeat: Ascending 1 cov/year

Resolution: 10 m (off-nadir 28.2° -36.2°)

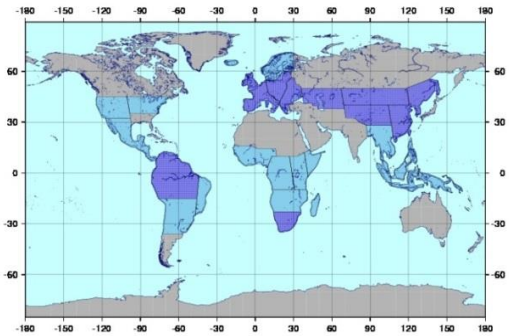
Mode: Stripmap Dual-pol (HH+HV/28MHz)



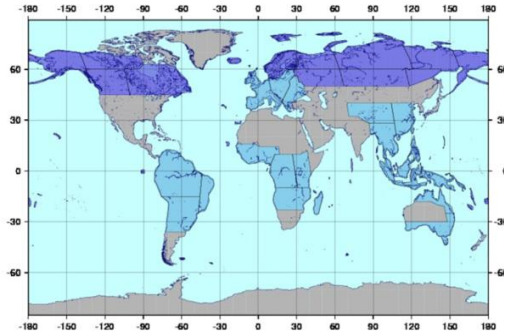
WorldA



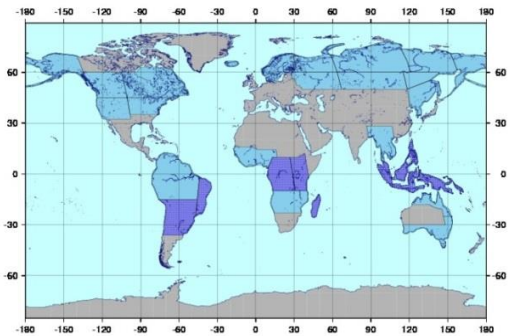
WorldB



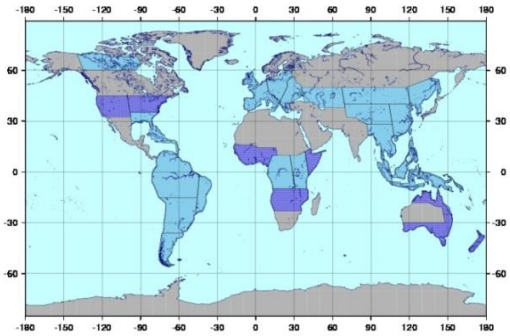
WorldC



WorldD



WorldE



WorldF

High Priority
Low Priority

Basic Observation Scenario (Global)

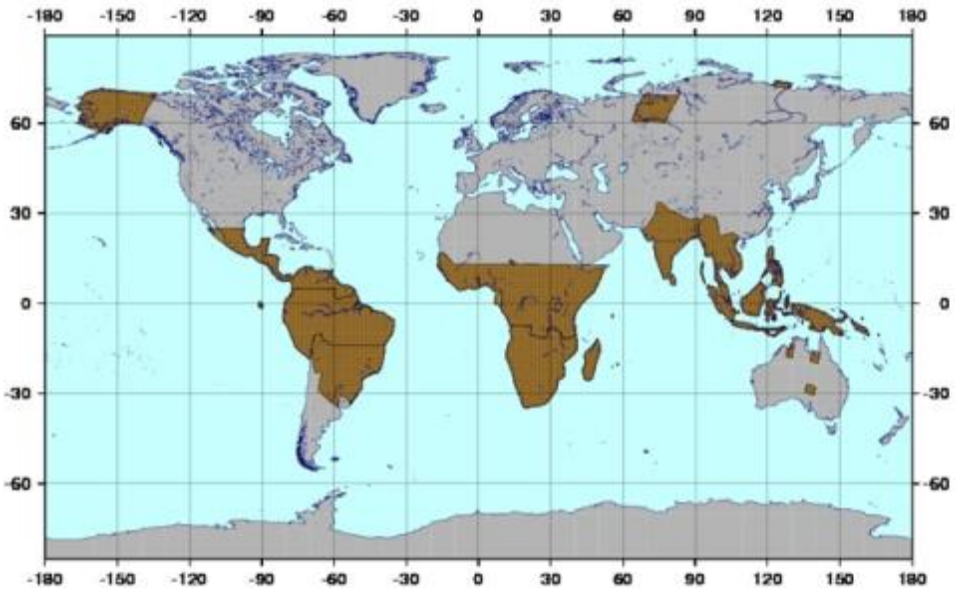
Wetlands & Rapid deforestation monitoring

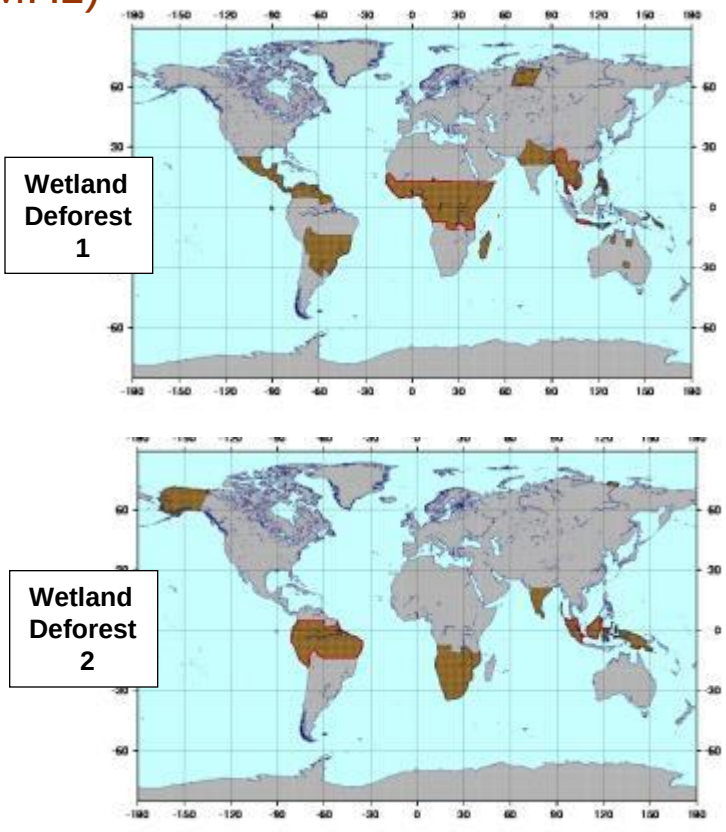
【Cycle 91-157：2018/1/1-2020/7/26】

Temporal repeat: Descending 9 cov/year

Resolution: 100 m (off-nadir 26.2° -41.8°)

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





: High priority

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.

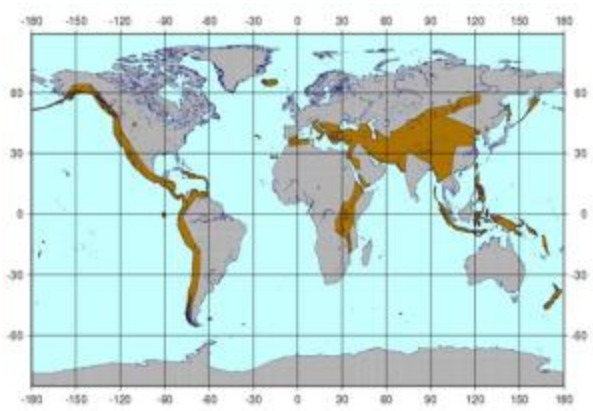
Basic Observation Scenario (Global)

Crustal Deformation 【Cycle 91-124：2018/1/1-2019/4/21】

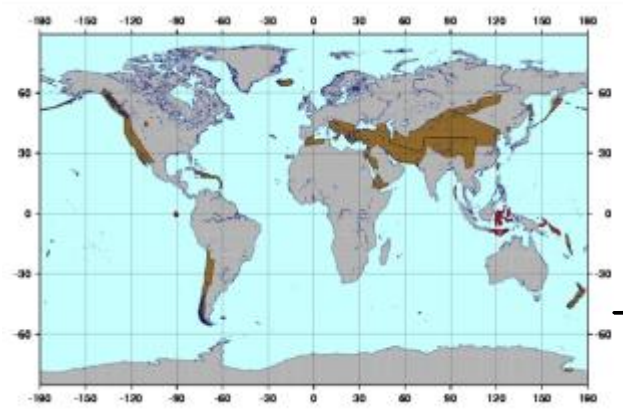
Temporal repeat: Ascending 1 cov/year, Descending 4 cov/year

Resolution: 100 m (off-nadir 26.2° – 41.8°)

Mode: ScanSAR 350km (HH/14MHz)

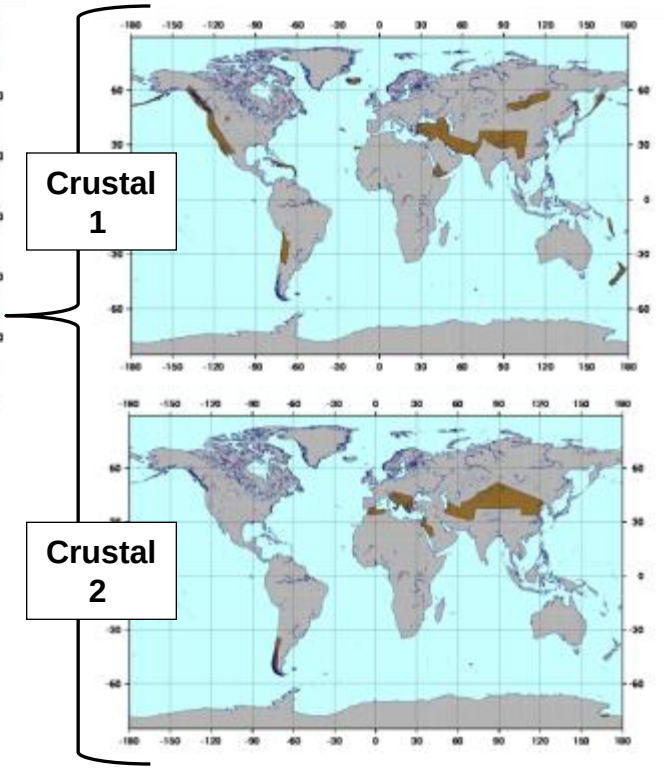


Ascending: 1cov/year



Descending: 4cov/year

The observation area is divided into "Crustal 1" and "Crustal 2".
*The red area is observed in ScanSAR (HH+HV) mode at the Cycle of Wetland Deforest.



Basic Observation Scenario (Global)

Crustal Deformation 【Cycle 125-157：2019/4/22-2020/7/26】

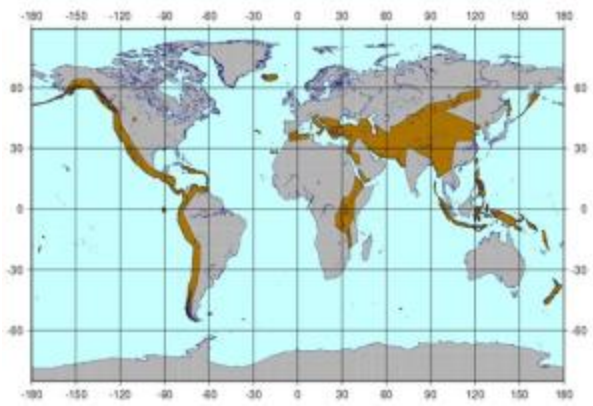
Temporal repeat: Ascending 1 cov/year, Descending 4 cov/year

Resolution: 100 m (off-nadir 26.2° – 41.8°)

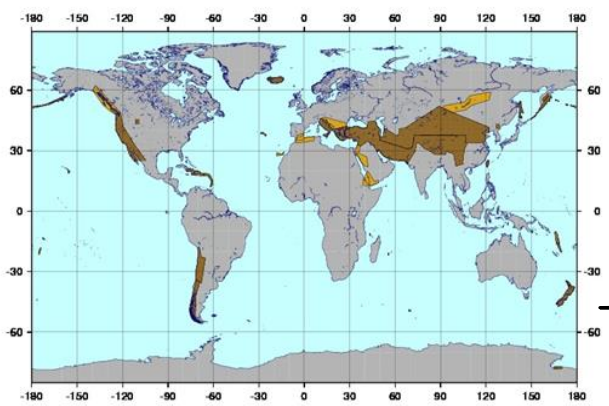
Mode: ScanSAR 350km (HH/14MHz)

Update
(applied from 6th year~)

High Priority
Low Priority

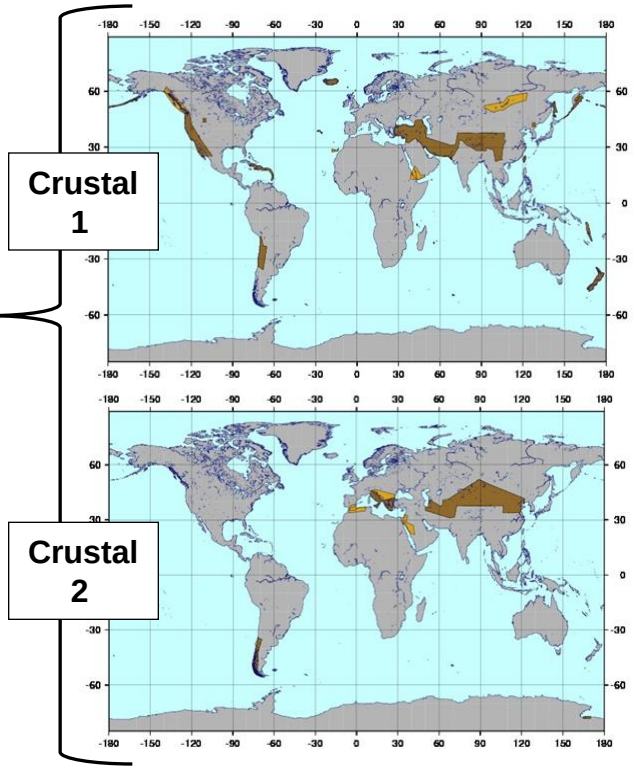


Ascending: 1cov/year



Descending: 4cov/year

The observation area is divided into "Crustal 1" and "Crustal 2".
*The red area is observed in ScanSAR (HH+HV) mode at the Cycle of Wetland Deforest.



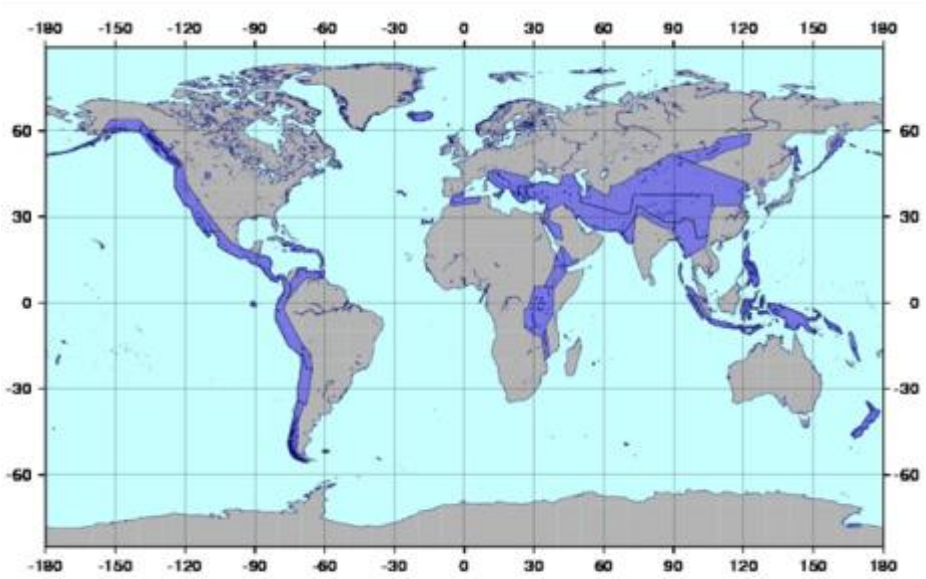
Basic Observation Scenario (Global)

Crustal Deformation 【Cycle 91-157：2018/1/1-2020/7/26】

Temporal repeat: Descending 1 cov/year

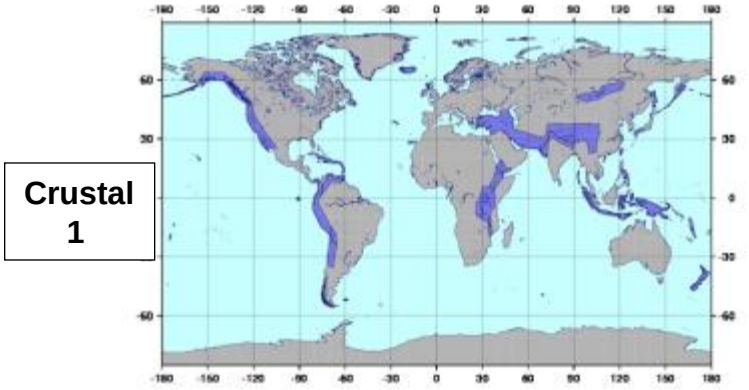
Resolution: 10 m (off-nadir 28.2° – 36.2°)

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

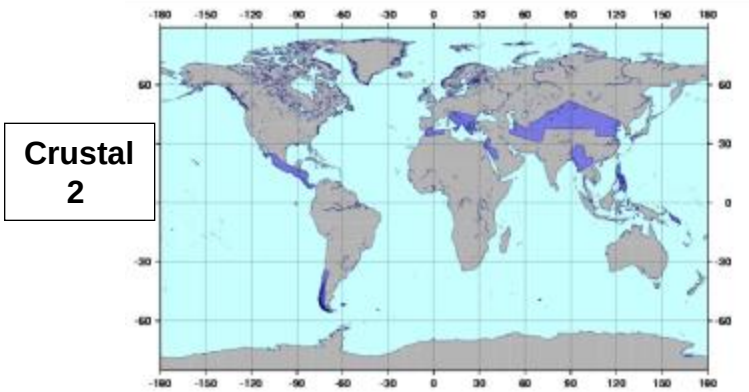


Crustal 10m

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



Crustal 1



Crustal 2

ALOS-2 BOS – Year 4

Descending	Month	Aug		Sep		Oct		Nov			Dec		Jan		Feb		Mar			Apr		May			Jun		Jul	
	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
Wetlands-Deforest 1 (W2)				834			834			834			507			507			507			507			507		507	
Wetlands-Deforest 2 (W2)															432			432			432			432		432	
Crustal Def 1 (W2 & F2)		572				572						572		398			398			398			398					
Crustal Def 2 (W2 & F2)															222			222			222			222				
Germany, Italy, USA (F2)								23	23		23																	
Antarctica Super Sites (F2(6)L)	319	319		319																								
Total Descending [min]	319	891	834	319	572	834	23	23	834	23	572	507	398	654	507	398	654	507	398	654	507	398	654	507	432	507		

Ascending	Month	Aug		Sep		Oct		Nov			Dec		Jan		Feb		Mar			Apr		May			Jun		Jul	
	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
				World 1-1				World 2-1					World A				World B				World C				World D			
				Old version				Old version					NH Winter				NH Winter				NH Spring				NH Summer			
Siberia (Cull 1)	A01-07, A13			246	246	246																			246	246	246	
Central Asia	A08-09							116	116	116											116	116	116					
China	A10-11							130	130	130											130	130	130		130	130	130	
East Asia	A12							50	50	50											50	50	50					
India	B01			54	54	54							54	54	54		54	54	54									
Mainland SE-Asia	B02			46	46	46							46	46	46		46	46	46						46	46	46	
Insular SE-Asia & PNG	B03, C01			133	133	133							133	133	133		133	133	133		133	133	133					
Australia (N,E,S)	C02, 04			76	76	76																			76	76	76	
Australia (C&W)	C03							61	61	61			61	61	61		61	61	61									
NZ	C05							10	10	10			10	10	10		10	10	10									
Greenland (Cull 1)	D01							68.5	68.5	68.5			68.5	68.5	68.5		68.5	68.5	68.5									
Iceland (Cull 1)	D02							3	3	3											3	3	3		3	3	3	
Europe North	D03			48	48	48															48	48	48		48	48	48	
Europe (W, C, E)	D04-06			132	132	132															132	132	132		132	132	132	
Mid East, Arabian P.	D07-08							111	111	111			111	111	111		111	111	111									
Africa North	E01-03							134	134	134			134	134	134		134	134	134									
Africa Central	E04-06			183	183	183															183	183	183		183	183	183	
Africa Horn	E07			16	16	16															16	16	16					
Africa Central-South	E08							45	45	45			45	45	45		45	45	45									
Africa South	E09							40	40	40			40	40	40		40	40	40		40	40	40					
Madagascar	E10			12	12	12											12	12	12		12	12	12		12	12	12	
Canadian Arctic (Cull 1)	F01							62	62	62			62	62	62		62	62	62									
Alaska, Canada	F02-05, F10							340	340	340															340	340	340	
USA	F06-07			150	150	150															150	150	150					
Central America	F08			38	38	38							38	38	38		38	38	38		38	38	38					
Carribean	F09			27	27	27							27	27	27		27	27	27									
South America - North	G01			130	130	130											130	130	130		130	130	130		130	130	130	
South America - East	G02			26	26	26							26	26	26		26	26	26		26	26	26					
South America - Central	G03			78	78	78							78	78	78						78	78	78		78	78	78	
South America - South	G04							37	37	37			37	37	37		37	37	37									
Islands	Ixx							30	30	30			30	30	30		30	30	30						30	30	30	
Greenland Super Sites (F2(6)R)	30															30												
North Pole Base map (W2R)	303.5	303.5	303.5								303.5																	
South Pole Base map (W2L)	276.5		276.5								276.5	276.5																
Total Ascending [min]		303.5	580	1395	1395	1395	0	1238	1238	1238	580	276.5	1121	1121	1121	30	1184	1184	1184	0	1195	1195	1195	0	1552	1552	1552	

Total Desc + Asc [min]		622.5	1471	2229	1714	1967	834	1261	1261	2072	603	848.5	1628	1519	1775	537	1582	1838	1691	398	1849	1702	1593	654	2059	1984	2059	

ALOS-2 BOS – Year 5

Descending	Month	Aug		Sep		Oct			Nov		Dec		Jan		Feb		Mar			Apr		May			Jun		Jul	
	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
Wetlands-Deforest 1 (W2)				507			507			507			507			507			507			507			507		507	
Wetlands-Deforest 2 (W2)			432			432			432			432			432			432			432			432		432	
Crustal Def 1 (W2 & F2)					398			398			398			398			398			398			398				
Crustal Def 2 (W2 & F2)						222	K45		222	K03		222			222			222			222			222				
Germany, Italy, USA (F2)								23	23		23																	
Antarctica Super Sites (F2(6)L)	319	319		319	319																							
Total Descending [min]	319	751	507	717	973	507	421	677	507	421	654	507	398	654	507	398	654	507	398	654	507	398	654	507	432	507		

Ascending	Month	Aug		Sep		Oct			Nov		Dec		Jan		Feb		Mar			Apr		May			Jun		Jul	
	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
		World E					World F					World A					World B				World C				World D			
		NH Summer					NH Autumn					NH Winter					NH Winter				NH Spring				NH Summer			
Siberia (Cull 1)	A01-07, A13	246	246	246																					246	246	246	
Central Asia	A08-09						116	116	116												116	116	116					
China	A10-11						130	130	130												130	130	130		130	130	130	
East Asia	A12	50	50	50			50	50	50												50	50	50					
India	B01											54	54	54			54	54	54									
Mainland SE-Asia	B02	46	46	46								46	46	46			46	46	46						46	46	46	
Insular SE-Asia & PNG	B03, C01	133	133	133								133	133	133			133	133	133		133	133	133					
Australia (N,E,S)	C02, 04	76	76	76			76	76	76																76	76	76	
Australia (C&W)	C03											61	61	61			61	61	61									
NZ	C05						10	10	10			10	10	10			10	10	10									
Greenland (Cull 1)	D01											68.5	68.5	68.5			68.5	68.5	68.5									
Iceland (Cull 1)	D02	3	3	3																	3	3	3		3	3	3	
Europe North	D03	48	48	48																	48	48	48		48	48	48	
Europe (W, C, E)	D04-06						132	132	132												132	132	132		132	132	132	
Mid East, Arabian P.	D07-08											111	111	111			111	111	111									
Africa North	E01-03											134	134	134			134	134	134									
Africa Central	E04-06	183	183	183			183	183	183												183	183	183		183	183	183	
Africa Horn	E07						16	16	16												16	16	16					
Africa Central-South	E08						45	45	45			45	45	45			45	45	45									
Africa South	E09											40	40	40			40	40	40		40	40	40					
Madagascar	E10	12	12	12													12	12	12		12	12	12		12	12	12	
Canadian Arctic (Cull 1)	F01											62	62	62			62	62	62									
Alaska, Canada	F02-05, F10	340	340	340																					340	340	340	
USA	F06-07	150	150	150			150	150	150												150	150	150					
Central America	F08											38	38	38			38	38	38		38	38	38					
Carribean	F09						27	27	27			27	27	27			27	27	27									
South America - North	G01						130	130	130								130	130	130		130	130	130		130	130	130	
South America - East	G02	26	26	26								26	26	26			26	26	26		26	26	26					
South America - Central	G03	78	78	78								78	78	78							78	78	78		78	78	78	
South America - South	G04						37	37	37			37	37	37			37	37	37									
Islands	Ixx											30	30	30			30	30	30						30	30	30	
Greenland Super Sites (F2(6)R)	30															30												
North Pole Base map (W2R)	303.5				304	304									304													
South Pole Base map (W2L)	276.5					277									277	277												
Total Ascending [min]		1372	1372	1372	303.5	580	1095	1095	1095	0	0	1121	1121	1121	580	306.5	1184	1184	1184	0	1195	1195	1195	0	1552	1552	1552	

Total Desc + Asc [min]		1691	2123	1879	1021	1553	1602	1516	1772	507	421	1775	1628	1519	1234	813.5	1582	1838	1691	398	1849	1702	1593	654	2059	1984	2059	

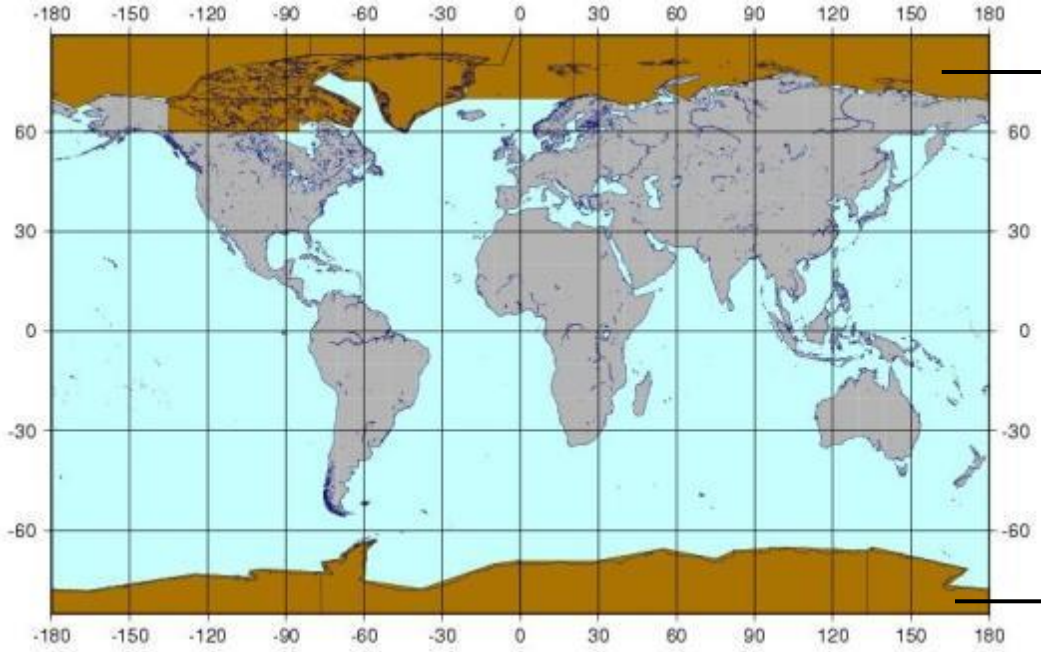
Basic Observation Scenario (Global)

Polar Ice

Temporal repeat: Ascending 3 cov/year

Resolution: 100 m (off-nadir 26.2° – 41.8°)

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



ALOS-2 observation scenario available online

- In English
  http://www.eorc.jaxa.jp/ALOS-2/en/obs/pal2_obs_guide.htm
- In Japanese
  http://www.eorc.jaxa.jp/ALOS/top/obs_jtop.htm