

Summary of Data Acquisition Status (Basic Observation Scenario)

JAXA ALOS-2 Project Team

ALOS Kyoto & Carbon Initiative
22nd Science Team meeting (KC#22)
@ Tokyo, Japan
Feb. 16, 2015

ALOS-2 BOS (Basic Observation Scenario)

- Designed to achieve the ALOS-2 mission and fulfill requirements from many users.
- Separate plans for Japan and for the rest of the world.
- Detailed information: Please check JAXA/EORC website.

http://www.eorc.jaxa.jp/ALOS-2/en/obs/pal2_obs_guide.htm



Japan BOS

3m (U2) HH Right	3m (U2) HH Right	3m (U3) HH Left	3m (U3) HH Left	6m Full-pol. Right	ScanSAR Right	ScanSAR Left
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Month **26 cycles/year**

8 9 10 11 12 1 2 3 4 5 6 7

Year

		■ 1st Year													■ 2st Year													■ 3st Year																									
		2014													2015													2016													2017												
		Year													Year													Year													Year												
		Month/Day													Month/Day													Month/Day													Month/Day												
1st	Descending	Disaster Base Map					Disaster Base Map					Disaster Base Map					Disaster Base Map																																				
	Ascending	Disaster Base Map					Disaster Base Map					Differential InSAR					Differential InSAR																																				
2nd	Descending	Differential InSAR													Differential InSAR													Differential InSAR													Differential InSAR												
	Ascending	Differential InSAR													Differential InSAR													Differential InSAR													Differential InSAR												
3rd	Descending	Differential InSAR													Differential InSAR													Differential InSAR													Differential InSAR												
	Ascending	Differential InSAR													Differential InSAR													Differential InSAR													Differential InSAR												

KC meeting

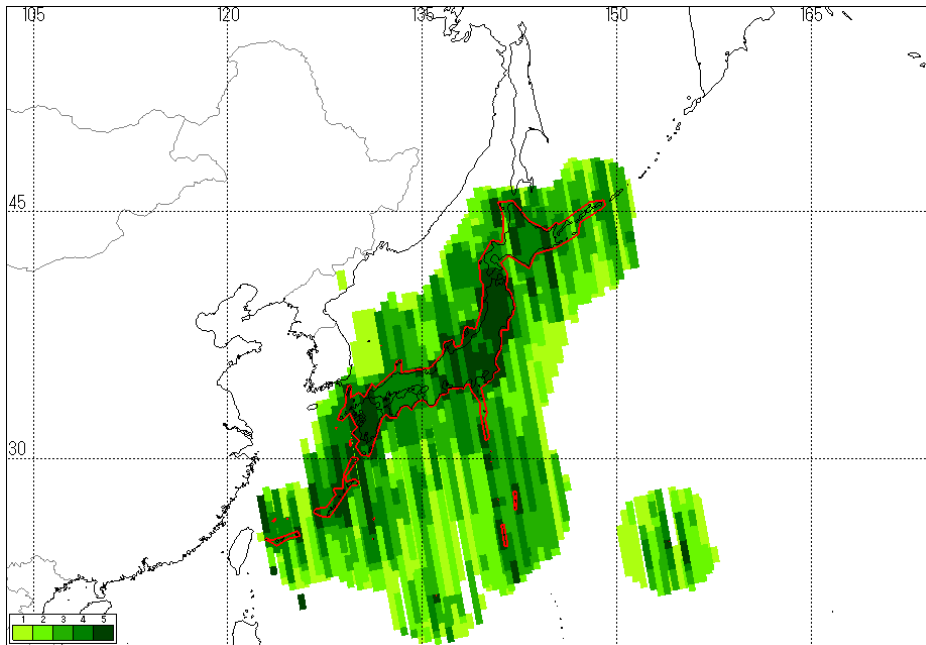


Acquisition Status (Aug. 4, 2014 – Jan. 31, 2016)

Japan
3 m resolution, HH-pol.

Coverage: **100 %**

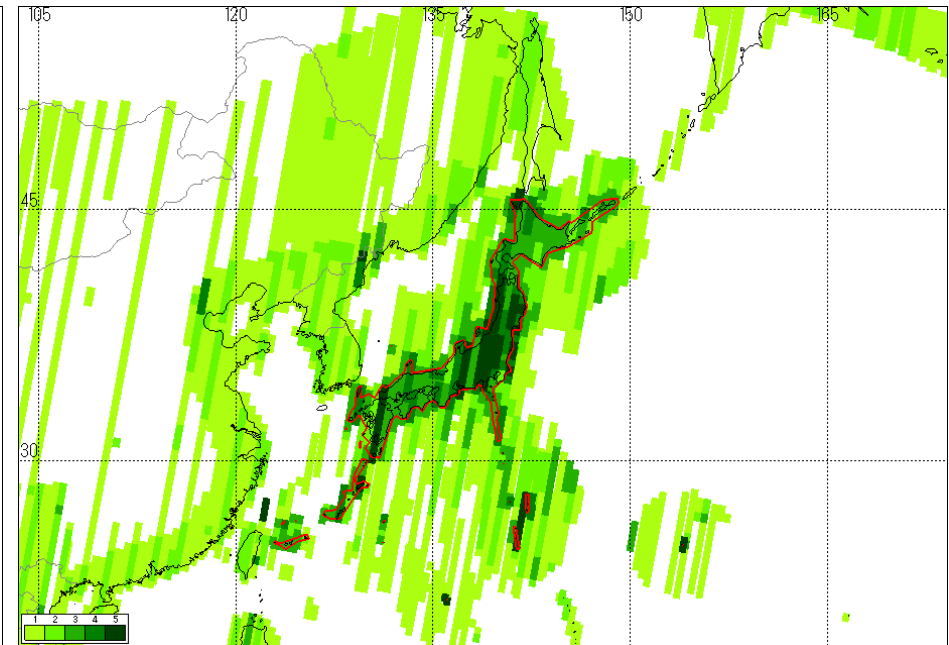
Beam U2-6, 7, 8, 9
Ascending orbit (south to north)



U2 / Right
(incidence angle 30-44 deg.)

Coverage: **100 %**

Beam U2-6, 7, 8, 9
Descending orbit (north to south)





Acquisition Status (Aug. 4, 2014 – Jan. 31, 2016)

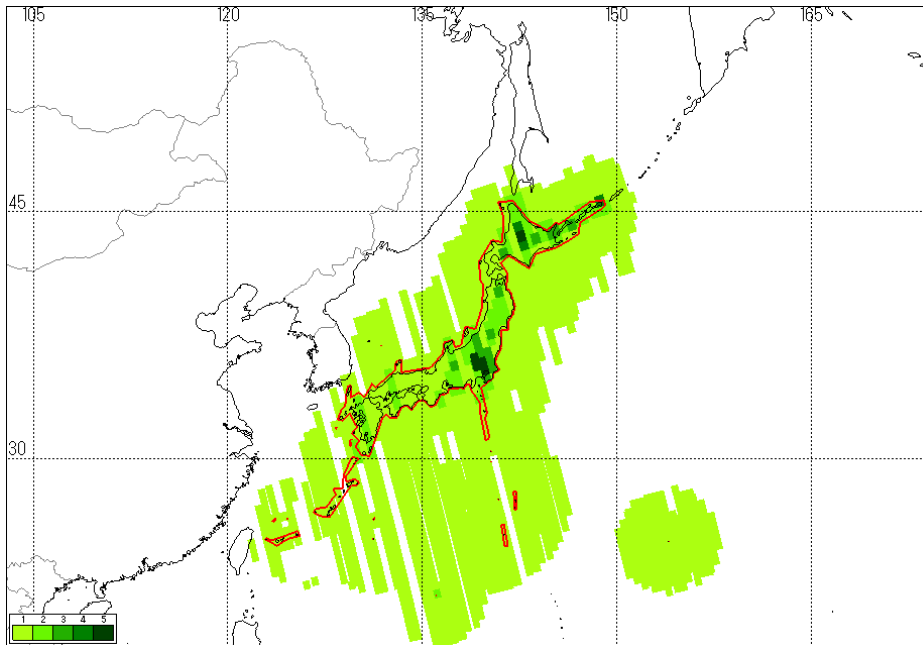
Japan

3 m resolution, HH-pol.

Coverage: **96.9 %**

Beam U2-6, 7, 8, 9

Ascending orbit (south to north)



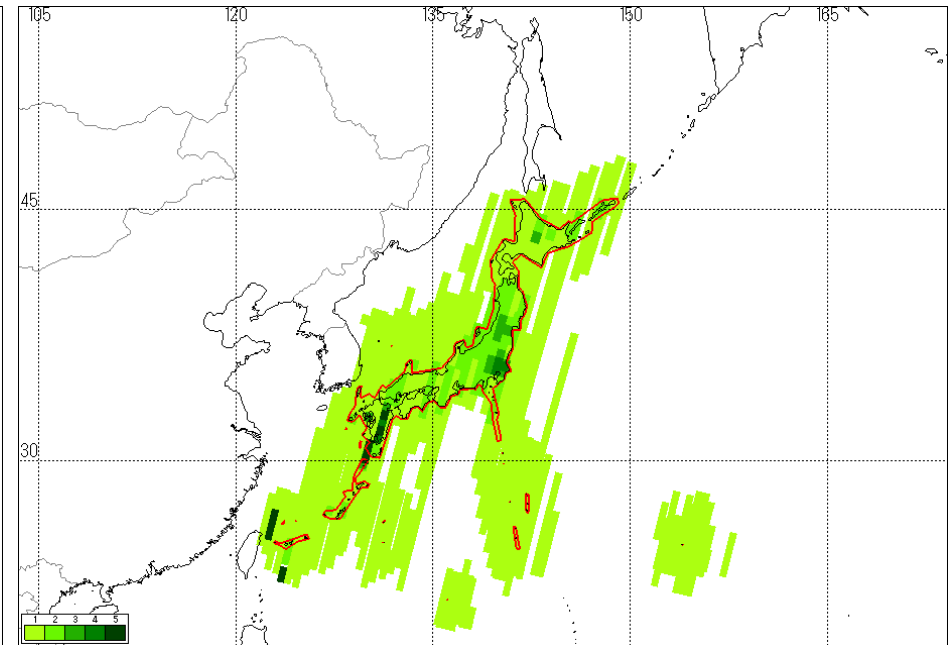
U2 / Left

(incidence angle 30-44 deg.)

Coverage: **98.6 %**

Beam U2-6, 7, 8, 9

Descending orbit (north to south)



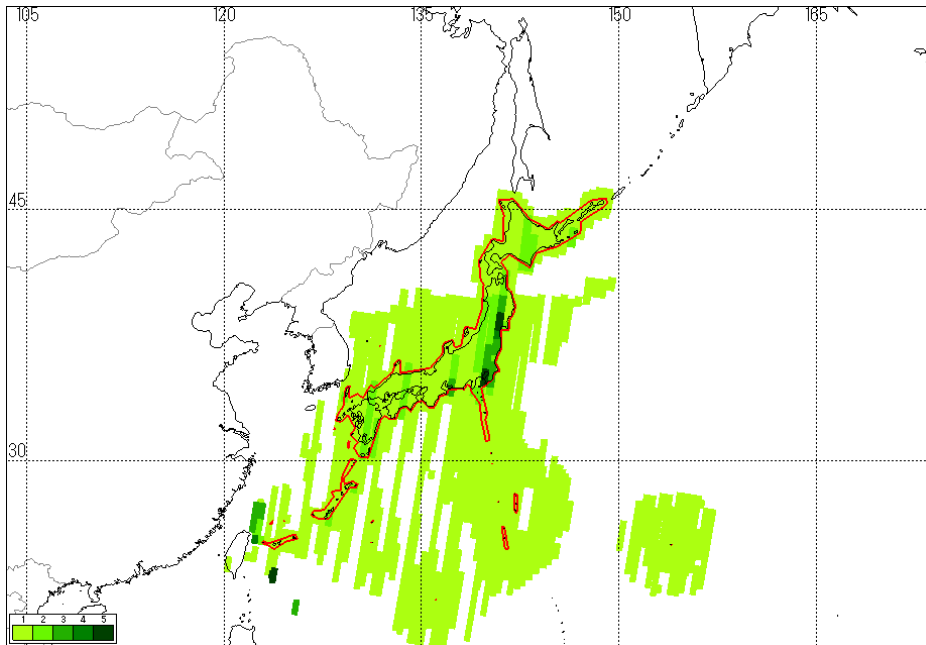


Acquisition Status (Aug. 4, 2014 – Jan. 31, 2016)

Japan
3 m resolution, HH-pol.

Coverage: **96.8 %**

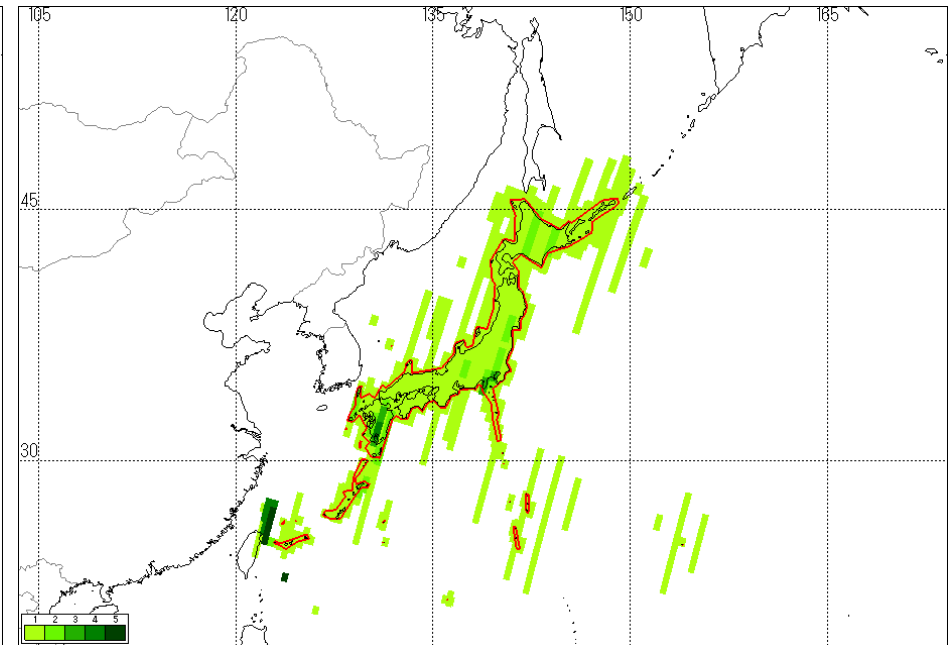
Beam U3-10, 11, 12, 13, 14
Descending, Right



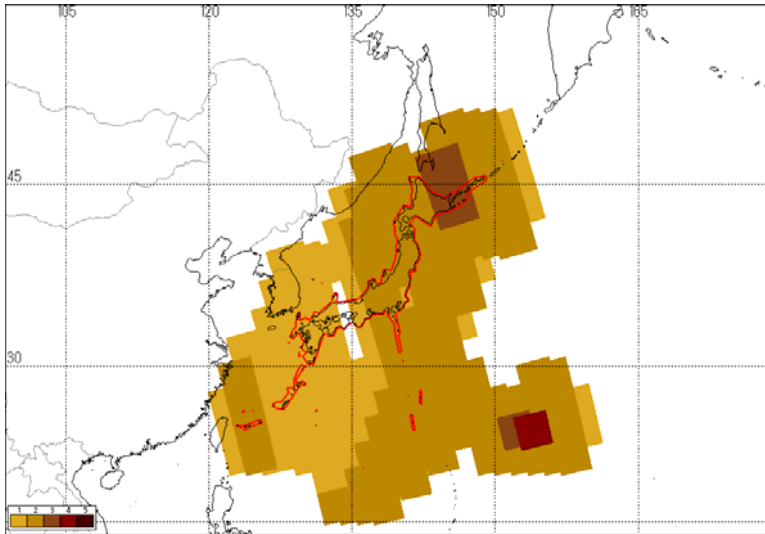
U3 Right | **U3 Left**
(incidence angle 44-56 deg.)

Coverage: **98.2 %**

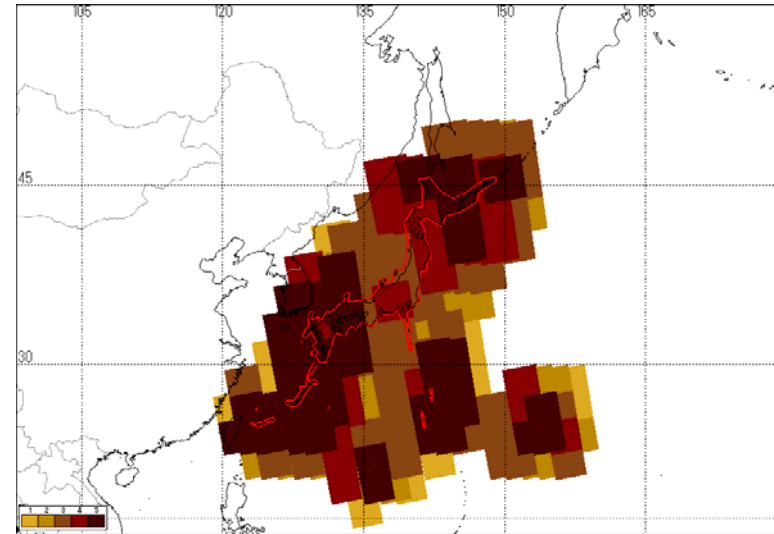
Beam U3-10, 11, 12, 13, 14
Descending, Left



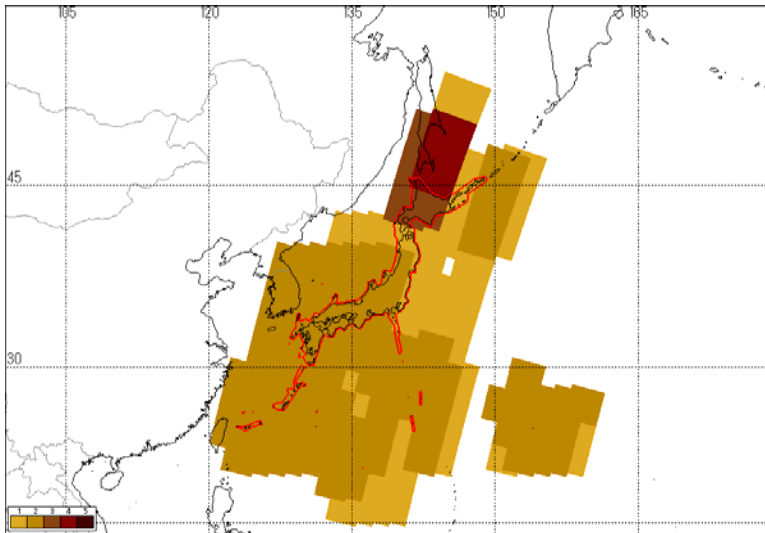
Japan: ScanSAR, HH+HV pol.



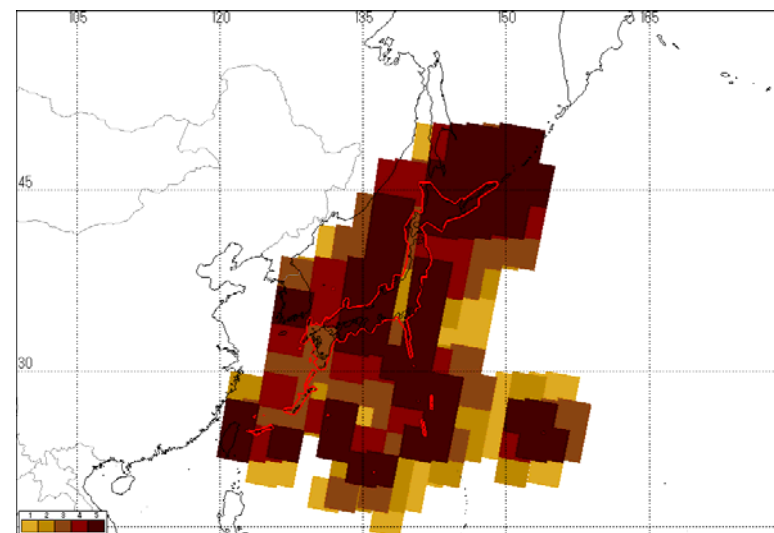
Beam W2, Ascending, Left



Beam W2, Ascending, Right



Beam W2, Descending, Left



Beam W2, Descending, Right

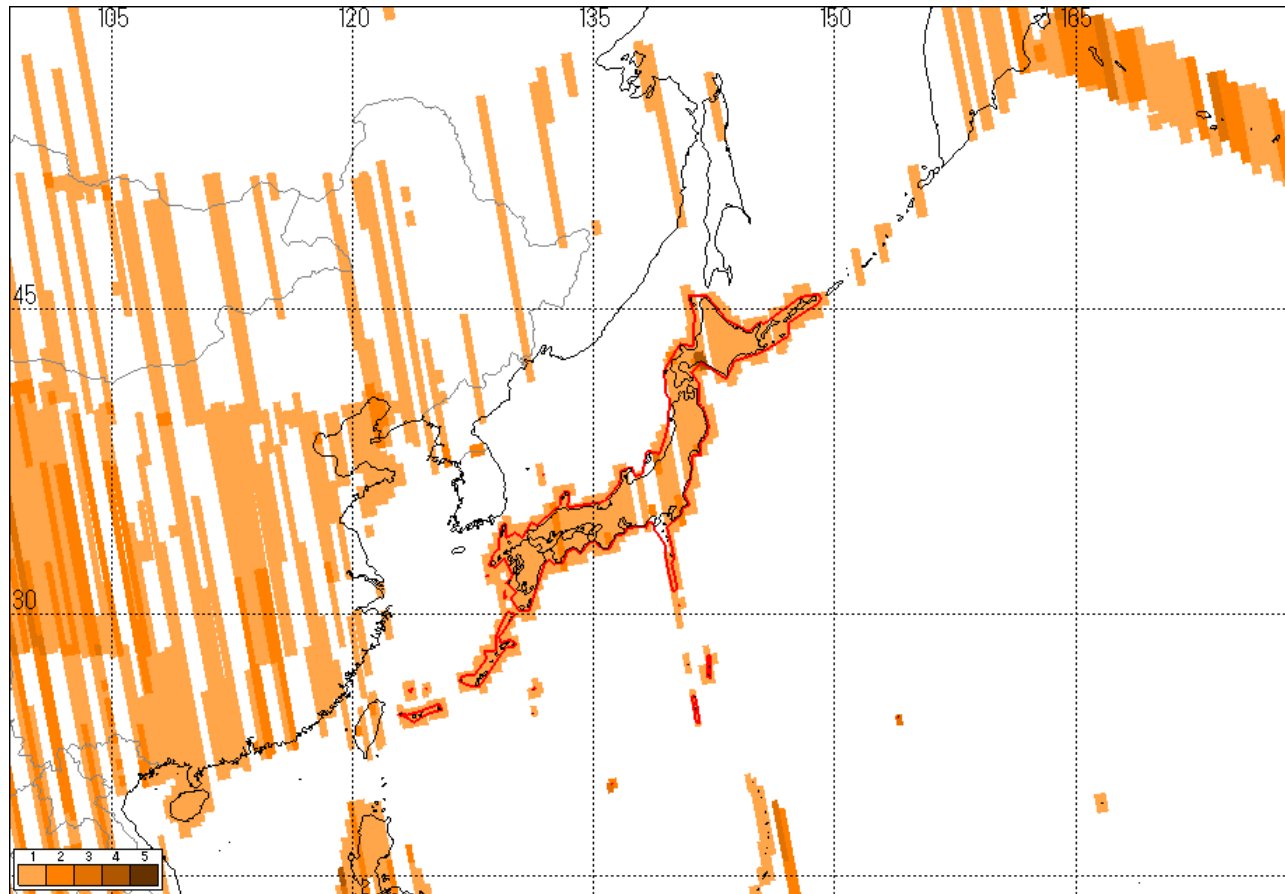


Acquisition Status (Aug. 4, 2014 – Jan. 31, 2016)

Japan: 6 m resolution, Full-pol.

Beam FP6-3,4,5,6,7

Ascending, Right





Global BOS

3m HH Right	6m Full-pol. Right	10m HH/HV	10m HH/HV	Scan350 Right	Scan350 Left	Scan490 HH Right
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26 cycles/year

Month

8 9 10 11 12 1 2 3 4 5 6 7

Year

1st

1st Year		2014年																										
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	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	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 (6)R	W2 (2)R	F2 (6)R	F2 (7)R	W2 (2)R	F2 (7)R	F2 (7)R	W2 (2)R	V2(2)R	W2 (2)R	
Ascending	Crustal		Pole	World 1-1(10m)					World 2-1(10m)			Pole	North Pole	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			FP (3)R	FP (7)R			F2 (7)R	F2 (5)R	F2 (6)R

KC meeting

2nd

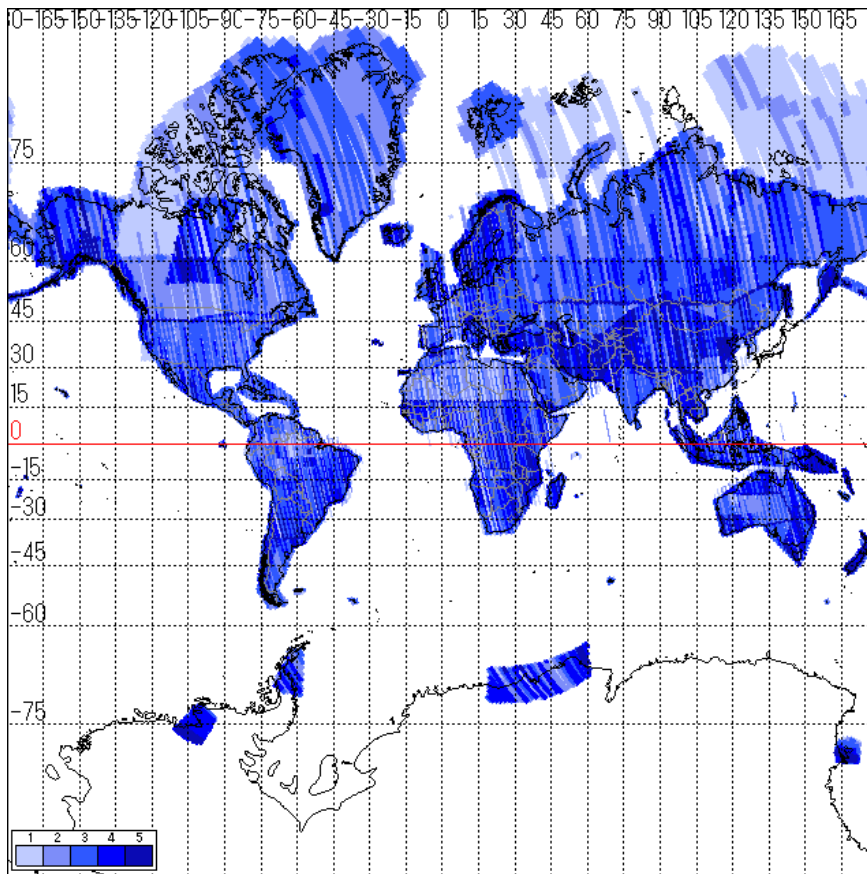
2nd Year		2015年																										
Cycle	Year	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	
Month/Day	Year	08/03	08/17	08/31	09/14	09/28	10/12	10/26	11/09	11/23	12/07	12/21	01/04	01/18	02/01	02/15	02/29	03/14	03/28	04/11	04/25	05/09	05/23	06/06	06/20	07/04	07/18	
Descending	Crustal 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	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 Pole		Pole	World 1-1(10m)					World 2-1(10m)			Pole	South Pole	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			FP (6)R	FP (5)R	FP (4)R	FP (3)R	FP (7)R	F2 (7)R	F2 (5)R

3rd

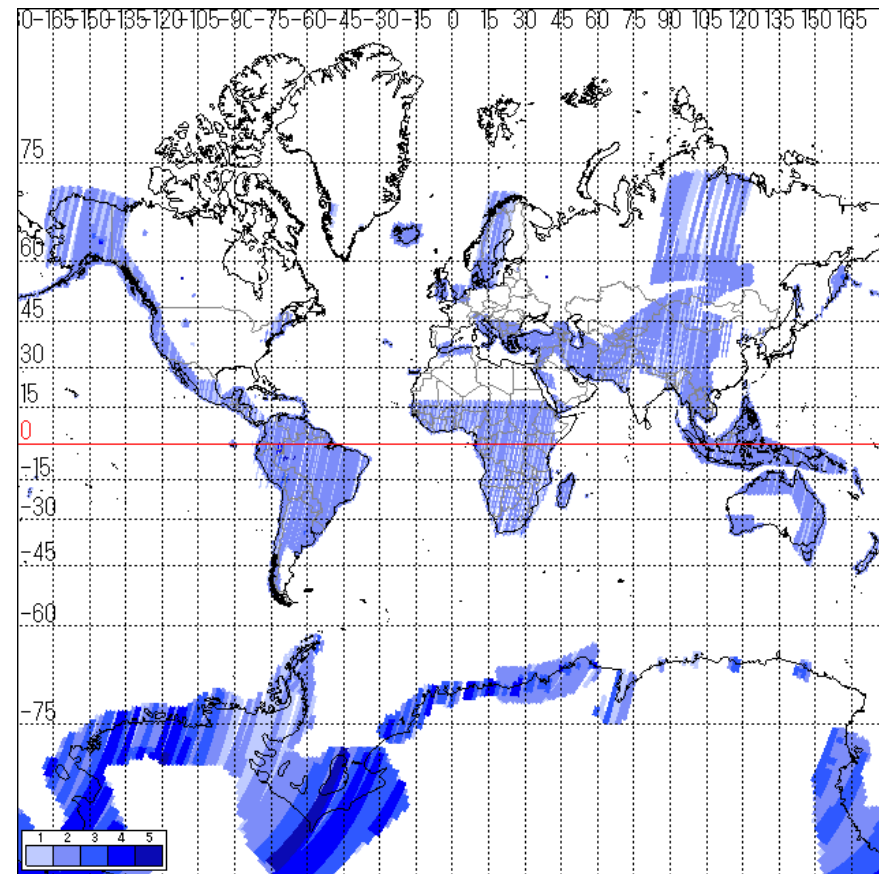
3rd Year		2016年																										
Cycle	Year	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	
Month/Day	Year	08/01	08/15	08/29	09/12	09/26	10/10	10/24	11/07	11/21	12/05	12/19	01/02	01/16	01/30	02/13	02/27	03/13	03/27	04/10	04/24	05/08	05/22	06/05	06/19	07/03	07/17	
Descending	Glacier Super Site			D+W+F	Glacier Super Site	sub-Arctic Super Site	Crustal Wetland Deforest	Global 3m (3/3)		Crustal Wetland Deforest	Global 3m (3/3)	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	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 Pole		Pole	World 1-1(10m)					World 2-1(10m)			Pole	South Pole	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			FP (6)R	FP (5)R	FP (4)R	FP (3)R	FP (7)R	F2 (7)R	F2 (5)R

Global 10 m resolution, HH/HV pol.

Beam F2-5,6,7
Ascending, Right
(Global land observation)

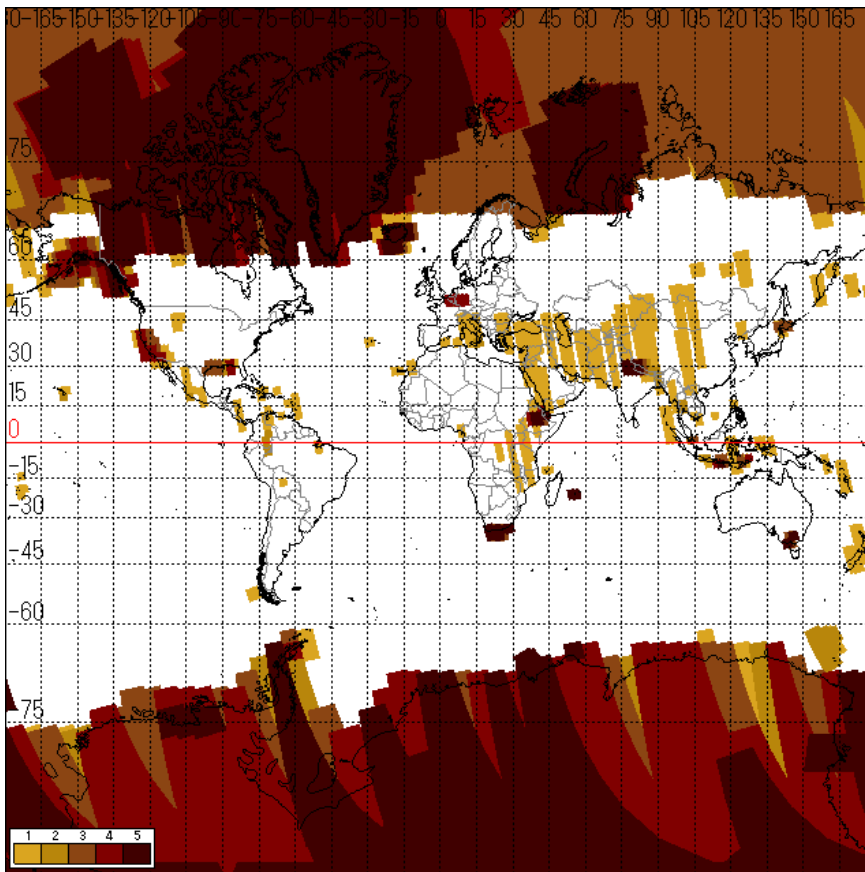


Beam F2-5,6,7
Descending, Right
(Deformation, Forest, Ice)

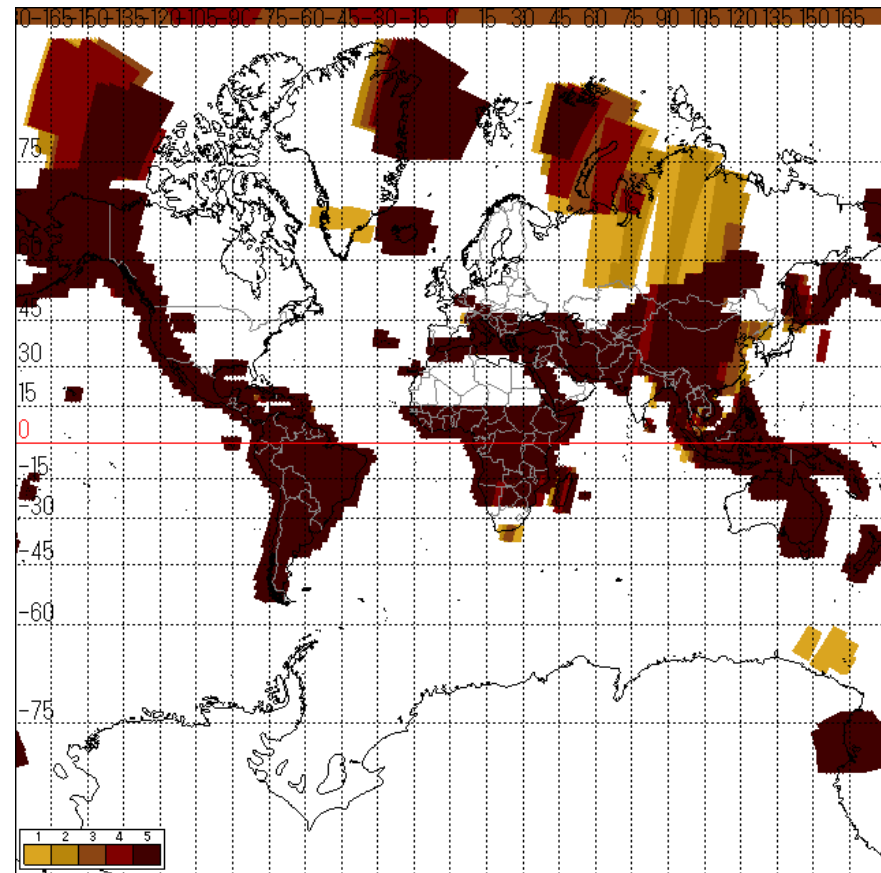


Global ScanSAR, HH/HV pol.

Beam W2
Ascending, Right/Left
(Arctic/Antarctic)



Beam W2
Descending, Right
(Deformation, Forest, Wetland)





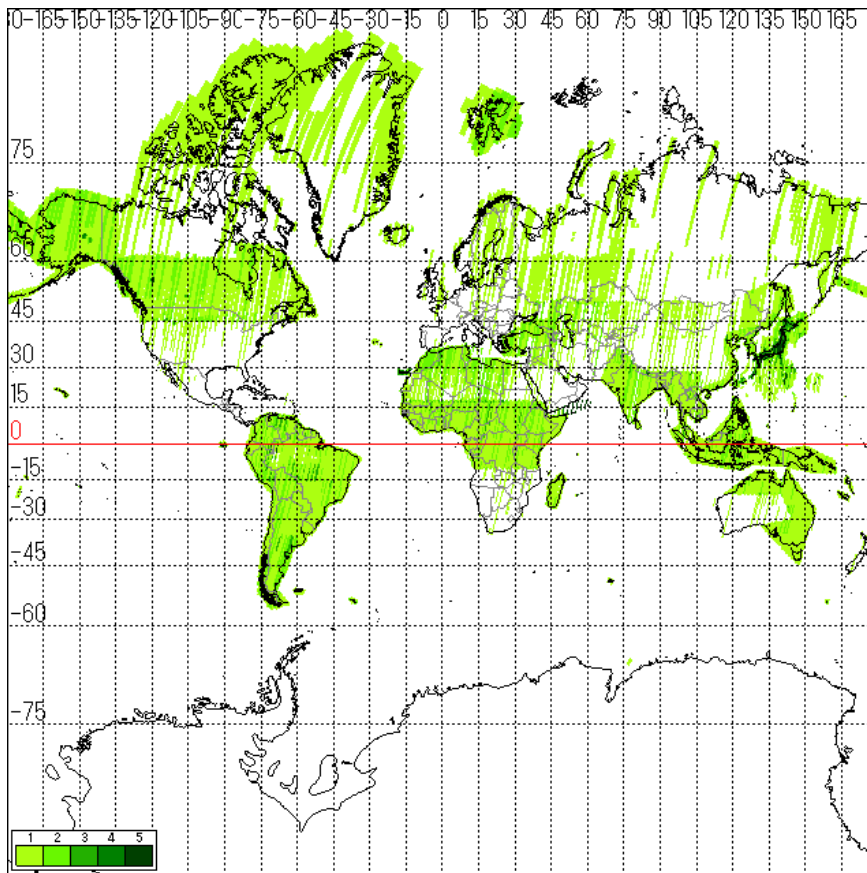
Acquisition Status (Aug. 4, 2014 – Jan. 31, 2016)

3 m resolution, HH pol.

Beam U2-6,7,8,9

Descending, Right

(1 global coverage in 3 years)

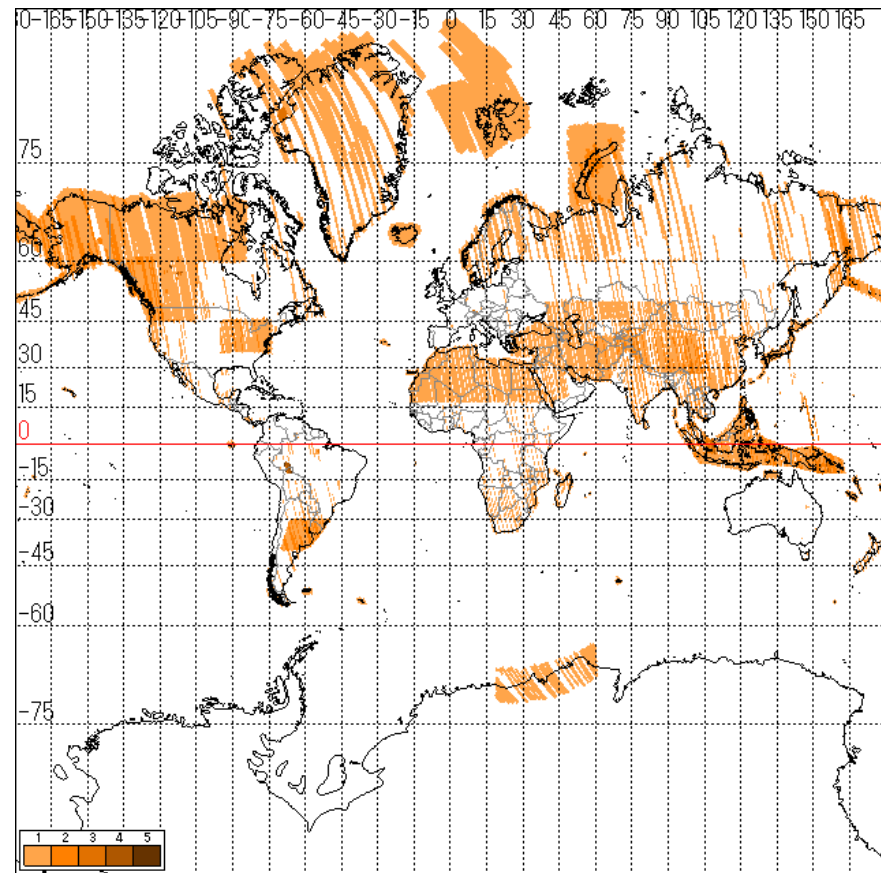


6 m resolution, Full pol.

Beam FP6-3,4,5,6,7

Ascending, Right

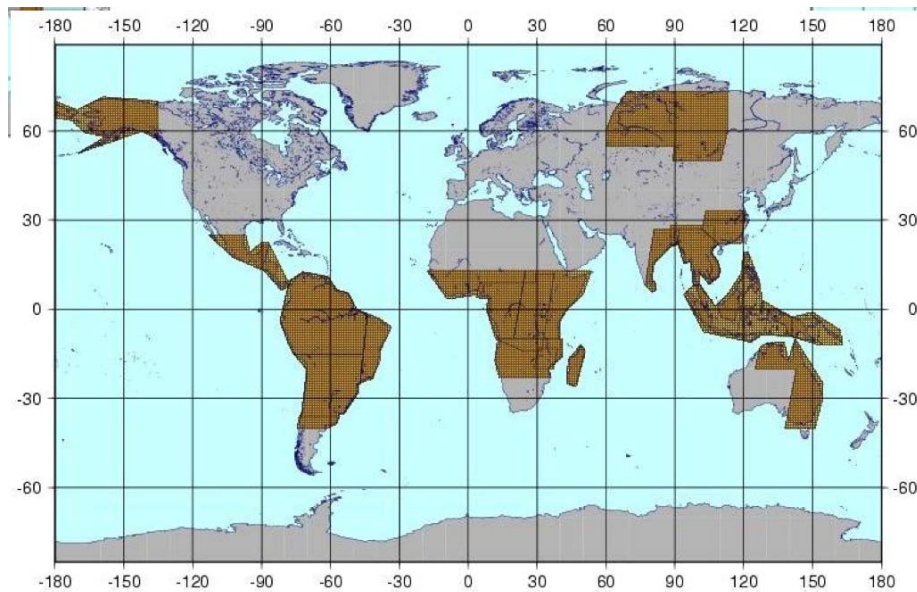
(1 global coverage in 5 years)



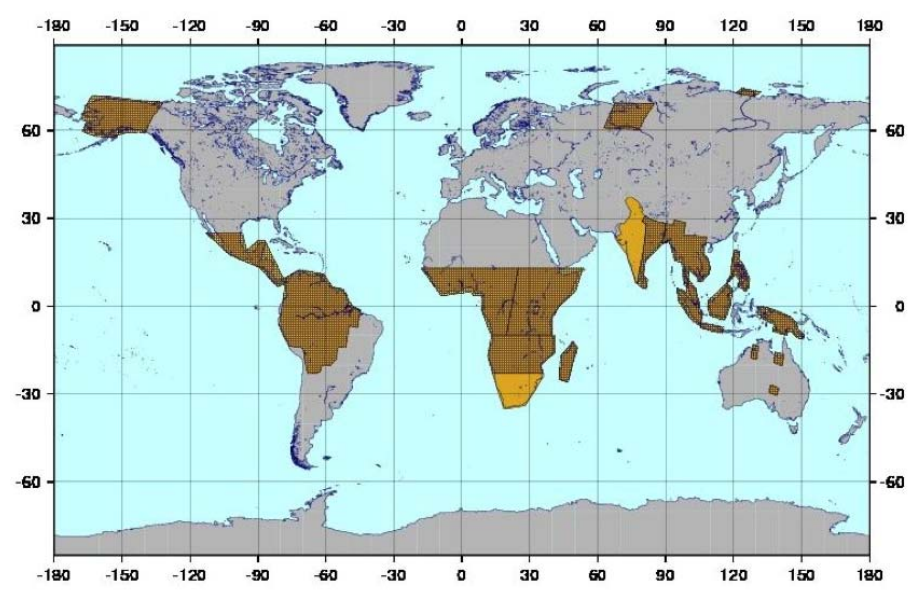
- Minor revision of ALOS-2 BOS (January 2016~)
- ALOS-2 BOS after 3rd year ... under discussion in JAXA

ScanSAR (for forest/wetland) Descending, 9 times/year

Revision B (old)



Revision C (new)



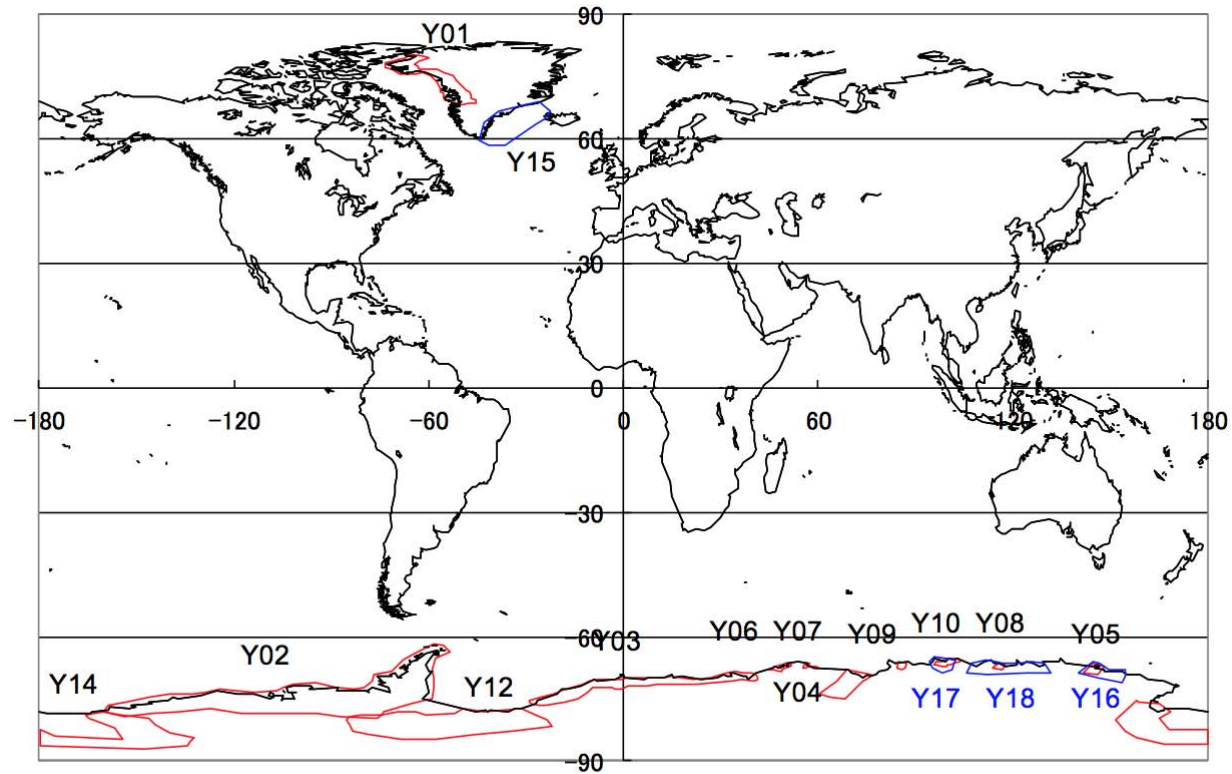


図 12-1 氷河ユーザ観測エリア

- ・ 観測場所＝グリーンランド（Y01、Y15）（A/右観測）
南極（Y02～Y14、Y16～18）（D/左観測）
- ・ 観測モード＝高分解能 10m：HH（ビーム No.6）
- ・ 観測回帰＝グリーンランド：47,48,53,54,55,68,69,70 回帰
（53 回帰は BOS に合わせて HH+HV）
南極：54,55,57 回帰