



ALOS Kyoto & Carbon Initiative

10th K&C Science Team meeting

23-26 June, 2008

RESTEC HQ
(ありがとう RESTEC !)

Roppongi, Tokyo



Project issues

Agenda

K&C time schedule

PALSAR acquisition strategy update

EORC strip data processing - fill-in request procedures

TerraSAR-X

K&C Wiki

K&C#10 Agenda

- Monday, June. 23:
 - Project issues
 - PALSAR & processing update
 - Mosaic generation schedule
 - Data issues - open discussion
- Tuesday, June 24:
 - K&C Wiki site
 - Poster Session
- Wednesday, June 25:
 - Forest Theme session
 - Wetlands Theme session
 - K&C Science Plan up-date
- Thursday, June 26:
 - ALOS follow-on
 - Theme summaries
 - Wrap-up

Mid-term results

The Ganga River basin is the second largest watershed in the world, covering an area of about 3.3 million km². The floodplain subjected to a seasonal inundation cycle in which extensive forest areas are flooded on a regular basis and, consequently, carbon sequestration is an important component of the carbon cycle in the atmosphere. The magnitude and variability of these carbon reservoirs largely unknown due to the lack of adequate measurement techniques to map the bi-ecology of floodplain.

The objective of this GCP project is to use ALOS PALSAR data to map and monitor the spatial extent and temporal dynamics of flooding in the Ganga Basin using [Sentinel-1](#) (S1) path data, processed by JAXA FRC, in accordance of the path data processing, [HLS](#) [v2.0](#), and [pre-processed](#) [S1](#) data were undertaken as a [series](#) of standard [products](#). [S1](#) data covering the central part of the Ganga river basin


Input data: PALMAR ~~2002-2003~~ (WIFI) Food
standard product Level II (3 out of 3 possible
observations) collected every 46 days between July
2001 and June 2003 (May 2003 missing).

Radioactive calibration: Based on the assumption that the background formation of banded forms is negligible over time, the absolute radiometric calibration accuracy of the WLL data available was established using 20 banded reference points distributed across the range in each of the scenes (~ 0.42 d). A calibration factor was then applied to each scene formalin fixation as a common reference.

Classification: Prehistoric beaded ball in of beaded
varn-f beaded fanned wazzunderston by a strip
fresha li me thad, applied on each of the normal
scales. The n-1 value of the over the Congo were
over the a fresha li value of -4.6 dill was used
(varied value of fanned fanned in the Amazon h
JPS-1.5AR dill). Salinity plus le were removed by a
dill med ball filter.

[illegible]

Forthcoming work

Plus Benefits
 Performance Guaranteed 30C
 Core / Performance & Availability
 Global Performance - worldwide Ltd
 30C 30 Days 30C, Only


K&C Time schedule

Nov. 3-7, 2008:

- K&C Special Session at ALOS PI Symposium (Rhodes, Greece)
- Paper submission deadline extended until end of this week (June 27!)

Nov. 30, 2008:

- Science Team member **Project Report** to JAXA
- **Proposal** for extension phase

Jan 13-16, 2009 (tent.):

- Final Science Team meeting (K&C#11)

Jan. 24, 2009 (3 years after ALOS launch):

- Expiration of K&C agreements
- Product delivery

Jan-Mar., 2009:

- Project evaluation by JAXA

(TBC) April 2009 -> :

- Extension phase (2-3 years) for successful projects

Travel support

General rule:

- JAXA aims to support travel for one in every two meetings participated in (10-12 persons/mtg). In case of budget limitations, “support history” applies.
- One person supported per project (team member, or representative)
- Active participation in project issues (e.g. progress reports, Science Plan, Wiki site etc.) requirement for support.

Observation Strategy

PALSAR Results

Cycle #	Start date	
1	24-Jan-06	
2	4-Mar-06	
3	19-Apr-06	
4	4-Jun-06	
5	20-Jul-06	
6	4-Sep-06	
7	20-Oct-06	
8	5-Dec-06	Yellow
9	20-Jan-07	Yellow
10	7-Mar-07	Orange
11	22-Apr-07	Orange
12	7-Jun-07	Blue
13	23-Jul-07	Blue
14	7-Sep-07	Blue
15	23-Oct-07	
16	8-Dec-07	Yellow
17	23-Jan-08	Yellow
18	9-Mar-08	Yellow
19	24-Apr-08	Blue
20	9-Jun-08	Blue
21	25-Jul-08	Blue
22	9-Sep-08	Blue
23	25-Oct-08	
24	10-Dec-08	Yellow
25	25-Jan-09	Yellow
26	12-Mar-09	Orange
27	27-Apr-09	Orange
28	12-Jun-09	Blue
29	28-Jul-09	Blue
30	12-Sep-09	Blue

Observation Strategy - PALSAR Results

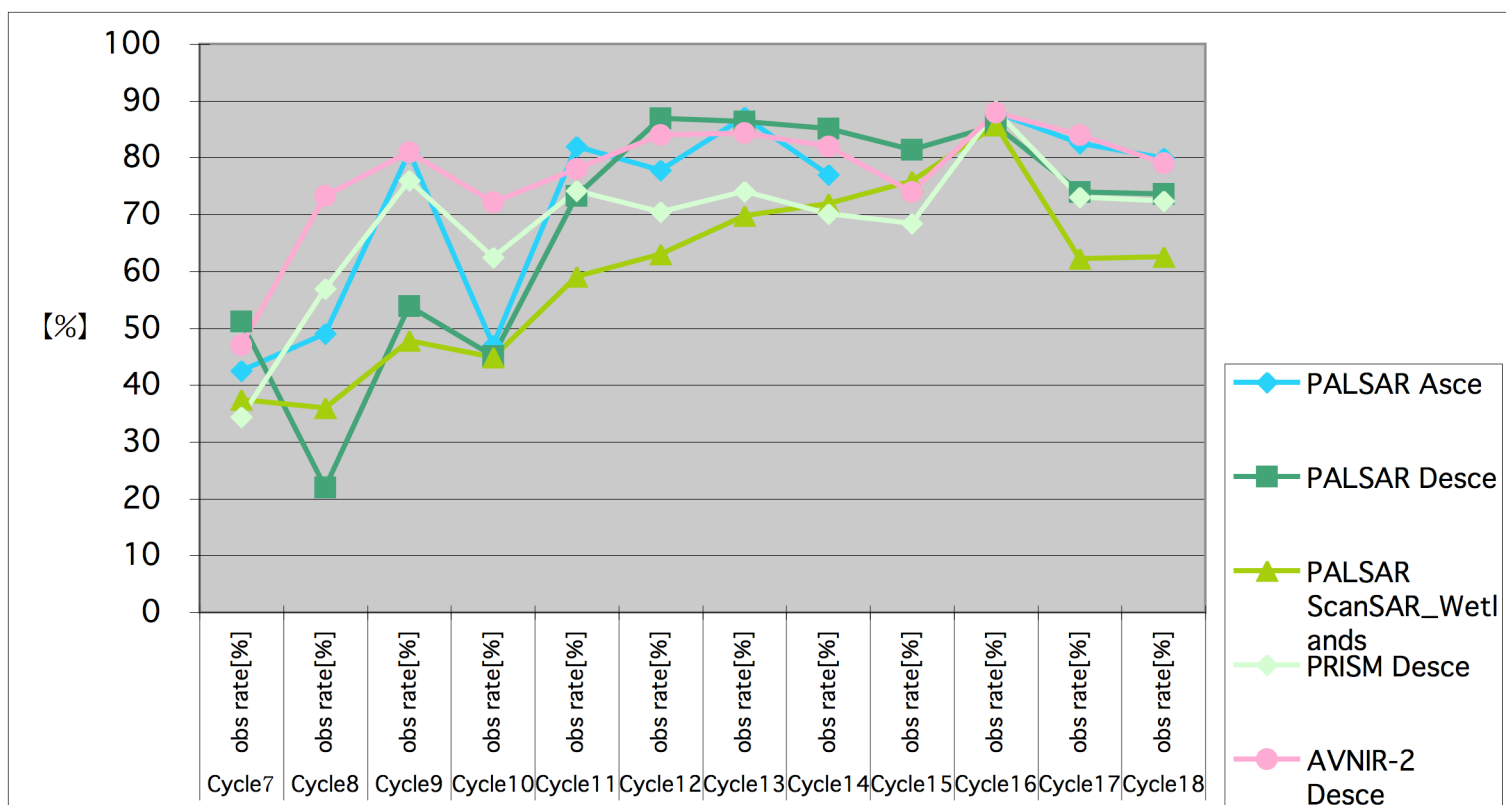
PALSAR	Cycle8 (2006/12/5~2007/1/19)			Cycle9 (2007/1/20~3/6)			Cycle10 (2007/3/7~4/21)			Cycle11 (2007/4/22~6/6)		
	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]
FB – Ascending	60,096	29,488	49	44,967	36,447	81	32,844	15,661	47	32,844	27,236	82
ScanSAR Global	3,662	810	22	6,476	3,490	54	370	167	45	131	96	73
K&C Wetlands	882	317	36	4,336	2,074	48	1,953	877	45	1,932	1,141	59

PALSAR	Cycle12 (2007/6/7~7/22)			Cycle13 (2007/7/23~9/6)			Cycle14 (2007/9/7~10/22)			Cycle15 (2007/10/23~12/7)		
	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]
FB	53,113	41,323	78	48,123	41,947	87	55,495	42,701	77	47,492	7,428	16
Global	230	200	87	2,844	2,455	86	1,094	931	85	291	237	81
K&C Wetlands	2,095	1,321	63	2,102	1,466	70	2,113	1,409	67	2,004	1,521	76

PALSAR	Cycle16 (2007/12/8~2008/1/22)			Cycle17 (2008/1/23~2008/3/8)			Cycle18(2008/3/9~2008/4/23)			Cycle19(2008/4/24~2008/6/8)		
	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]	req[scene]	obs[scene]	obs rate[%]	req[time]	obs[time]	obs rate[%]
FB	56,332	49,536	88	46,123	38,087	83	26,106	20,860	80	248,667	203,113	82
Global	3,692	3,165	86	2,368	1,751	74	501	369	74	931	695	75
K&C Wetlands	2,004	1,716	86	1,187	739	62	1,182	740	63	39,189	29,475	75

Observation Strategy - PALSAR Results

	Results summary		
	req[scene]	obs[scene]	obs rate[%]
Cycles 8-9	105,063	65,935	63
Cycles 10-11	65,688	42,897	65
Cycles 12-14	156,731	125,971	80
Cycles 16-18	128,561	108,483	84
Cycle 19			82
ScanSAR 8-18	21790	13321	61



EORC processing

- What has been acquired?
 - Search individual RSP passes in AUIG
- What has been processed?
 - Numerical listing in FTP/Aspera directory
 - Global graphic overview on AGAP main page (K&C View Port)
 - (AGAP member accounts (suspended -> Mukaida-san))
- How to request replacement processing of missing strips
 -

Missing strips and replacement data

How to search and request processing of replacement data

There is a good probability that suitable replacement data exist for at least a part of the passes missing in your FTP directories, acquired during cycles other than the ones specifically requested by you in your Excel processing form.

Use AUIG to search for replacement data, and let JAXA know the following information:

- (1) RSP number
- (2) acquisition date
- (3) start and end latitude you want processed (verify in AUIG that the segment you select actually covers your entire latitude range)
- (4) downlink segment number.

AUIG 3.0 Product Order and Obs. Request Customize Help UserID:PICV0017

LatLong Map

Archives
Obs. Plan
Obs.

NO DATA

Search Detail PlaceName

No.5
Sensor PALSAR
Scene ID ALPSRP051497140
Observation Mode FBS
Off-nadir angle 34.3
Observation Path Number 76
Center Frame Number 7140
Orbit Direction Ascending
Scene Center Day 2007/01/12
Scene Center Time 02:49:45.037
Scene Center Latitude -2.067
Scene Center Longitude -60.305
Latitude of Upper-Left Corner -1.878
Longitude of Upper-Left Corner -60.648
Latitude of Upper-Right Corner -1.752
Longitude of Upper-Right Corner -60.071
Latitude of Bottom-Left Corner -2.383
Longitude of Bottom-Left Corner -60.541
Latitude of Bottom-Right Corner -2.257
Longitude of Bottom-Right Corner -59.963
GRS Column Number -6025
GRS Line Number -200
Pointing Angle -
Cloud Coverage (Scene) -
Data Quality -
Line Loss Number -
Ground Station Code HEOC
Downlink Number W0354122001-01

Print

PSM AV2 PSR #

Cart #	✓	Sensor	Scene ID	Obs. Mode	Off-nadir	Obs. Path No.	Center Frame No.	Orbit Direction	Scene Center Day	Scene Center Time	Scene Ca
1	✓	PALSAR	ALPSRP048287140	FBS	34.3	72	7140	Ascending	2006/12/21	02:40:56.829	-2.060
2	✓	PALSAR	ALPSRP049747140	FBS	34.3	78	7140	Ascending	2006/12/31	02:53:56.700	-2.068
3	✓	PALSAR	ALPSRP050037140	FBS	34.3	70	7140	Ascending	2007/01/02	02:36:47.981	-2.060
4	✓	PALSAR	ALPSRP050767140	FBS	34.3	73	7140	Ascending	2007/01/07	02:43:16.852	-2.062
5	✓	PALSAR	ALPSRP051497140	FBS	34.3	76	7140	Ascending	2007/01/12	02:49:45.037	-2.067
6	✓	PALSAR	ALPSRP052227140	FBS	34.3	79	7140	Ascending	2007/01/17	02:56:12.764	-2.070
7	✓	PALSAR	ALPSRP052517140	FBS	34.3	71	7140	Ascending	2007/01/19	02:39:03.280	-2.059

Archives narrow list: ALL (53)

AUIG 3.0

Product Order and Obs. Request

Customize

Help

UserID:PICV0017

LatLong

Map

Saint George's

Bridgetown

NO DATA

Search

Detail

PlaceName

Search result display menu customize (Archives)

Pattern Selection Setting of present Load The registered settings are loaded.

Non-display item		Display item
[0:0:0]Downlink Path No.		[0:0:0]Sensor(*)
[0:0:0]Operation Segment No.		[0:0:0]Scene ID(*)
[0:0:0]Acquisition Mode		[0:0:0]Observation Mode
[0:0:0]Reception Path No.		[0:0:0]Off-nadir
[0:0:0]Table No.		[0:0:0]Obs. Path No
[0:0:0]REV Correction		[0:0:0]Center Frame Nor
[0:0:0]Calibration Flag		[0:0:0]Orbit Direction
[0:0:0]Yawsteering Flag		[0:0:0]Scene Center Day
[0:0:0]Orbit Data		[0:0:0]Scene Center Time
[0:0:0]Total Orbit No.		[0:0:0]Scene Center Lat.
[0:0:0]Sun Elevation		[0:0:0]Scene Center Lon.
[0:0:0]Sun Azimuth		[0:0:0]Lat. of Upper-Left Corner
[0:0:0]Scene Begin Day	>>	[0:0:0]Lon. of Upper-Left Corner
[0:0:0]Scene Begin Time		[0:0:0]Lat. of Upper-Right Corner
[0:0:0]Pointing Change Flag		[0:0:0]Lon. of Upper-Right Corner
[0:0:0]Nadir View Extraction Position		[0:0:0]Lat. of Bottom-Left Corner
[0:0:0]Forward View Extraction Position		[0:0:0]Lon. of Bottom-Left Corner
[0:0:0]Backward View Extraction Position	<<	[0:0:0]Lat. of Bottom-Right Corner
[0:0:0]Gain(nadir)		[0:0:0]Lon. of Bottom-Right Corner
[0:0:0]Gain(forward)		[0:0:0]GRS Column No.
[0:0:0]Gain(backward)		[0:0:0]GRS Line Number
[0:0:0]Gain Status		[0:0:0]Pointing Angle
[0:0:0]Set of Exposure coefficient status		[0:0:0]Cloud Coverage (Scene)
[0:0:0]Cloud Coverage (16 division)		[0:0:0]Data Quality
[0:0:0]Valid Start Date		[0:0:0]Line Loss No.
[0:0:0]Begin Date of Transmission		[0:0:0]Ground Station Code
[0:0:0]Beginning Date of Observation (UTC)		[0:0:0]Downlink Path No
[0:0:0]End Date of Obs. (UTC)		
[0:0:0]Sat Code		
[0:0:0]Begin Date of Effective Data(UTC)		

Up Down

In the square brackets "[]" of each item, "0" indicates "Display" and "-" indicates "Non-display" for the following in the format shown: [PRISM : AVNIR-2 : PALSAR].
An item that has "(*)" on its right must be displayed, and its display position is fixed.

OK Cancel

PSM AV2

Cart #

1

2

3

4

5

6

7








Archives

narrow list: ☐ ALL ☒

<< 1/2 >> (53)



Search	Detail	PlaceName
No.6		Print
Sensor		PALSAR
Scene ID		ALPSRP076587140
Observation Mode		FBD
Observation Path Number		78
Center Frame Number		7140
GRS Line Number		-200
Orbit Direction		Ascending
Scene Center Day		2007/07/03
Scene Center Time		02:54:10.444
Scene Center Latitude		-2.057
Scene Center Longitude		-61.363
Latitude of Upper-Left Corner		-1.867
Longitude of Upper-Left Corner		-61.707
Latitude of Upper-Right Corner		-1.742
Longitude of Upper-Right Corner		-61.129
Latitude of Bottom-Left Corner		-2.372
Longitude of Bottom-Left Corner		-61.597
Latitude of Bottom-Right Corner		-2.246
Longitude of Bottom-Right Corner		-61.019
Pointing Angle		-
Cloud Coverage (Scene)		-
Data Quality		-
Line Loss Number		-
GRS Column Number		-6125
Off-nadir angle		34.3
Download Number		W0526124001-04

Cart #	✓	Sensor	Scene ID	Obs. Mode	Obs. Path No.	Center Frame No.	GRS Line No.	Orbit Direction	Scene Center Day	Scene Center Time	Scene	
	1	✓	PALSAR	ALPSRP07337140	FBD	74	7140	-200	Ascending	2007/06/11	02:45:36.983	-2.08
	2	✓	PALSAR	ALPSRP074107140	FBD	77	7140	-200	Ascending	2007/06/16	02:52:03.265	-2.06
	3	✓	PALSAR	ALPSRP074837140	FBD	80	7140	-200	Ascending	2007/06/21	02:58:28.759	-2.06
	4	✓	PALSAR	ALPSRP075127140	FBD	72	7140	-200	Ascending	2007/06/23	02:41:18.336	-2.06
	5	✓	PALSAR	ALPSRP075857140	FBD	75	7140	-200	Ascending	2007/06/28	02:47:44.506	-2.06
	6	✓	PALSAR	ALPSRP076587140	FBD	78	7140	-200	Ascending	2007/07/03	02:54:10.444	-2.05
	7	✓	PALSAR	ALPSRP076877140	FBD	70	7140	-200	Ascending	2007/07/05	02:36:59.946	-2.06

narrow list: ☐ ALL ☒

$$|\langle \langle 1/1 \rangle \rangle| \quad (50)$$

batch order



Search	Detail	PlaceName
SearchType	<input checked="" type="checkbox"/> Archives <input type="checkbox"/> Obs. Plan <input type="checkbox"/> Obs. Request	
Sensor	<input checked="" type="radio"/> Single sensor <input type="radio"/> Synchronized <input type="checkbox"/> PRISM <input type="checkbox"/> AVNIR-2 <input checked="" type="checkbox"/> PALSAR	
Search Method	<input type="radio"/> Rectangle <input type="radio"/> Point <input type="radio"/> Path/Frame <input type="radio"/> Scene ID <input checked="" type="radio"/> Download No.	
	<input checked="" type="checkbox"/> by Download No. only	
Obs. Day year/day/month	2007/06/07 2008/05/02 2006/01/24.-2009/12/31.	<input type="text"/> <input type="text"/>
	<input type="checkbox"/> Seasonal	
catalogs per page	50 <input type="text"/>	
Auto. display in Map	<input checked="" type="checkbox"/>	

Search

Save Condition

Load Condition

Reset

PALSAR

Archives

Op.	Mode
-----	------

Select A

Remove All

Polarization Off-nadir[deg]

BS Any ▾

34.3 ▼

BD	Any
----	-----

34.3 ▼

B1 Any

24.6 ▼

B2 Any ▾

24.6 ▼

SN Any ▾

9.9

L.R. -

9.7 ▼

Orbit	Any
-------	-----

Browse Image	Any
--------------	-----

Search

Cart #	✓	Sensor	Scene ID	Obs. Mode	Obs. Path No.	Center Frame No.	GRS Line No.	Orbit Direction	Scene Center Day	Scene Center Time	Scene
1	✓	PALSAR	ALPSRP076586870	FBD	78	6870	-1550	Ascending	2007/07/03	02:50:28.269	-15.4
2	✓	PALSAR	ALPSRP076586880	FBD	78	6880	-1500	Ascending	2007/07/03	02:50:36.500	-14.9
3	✓	PALSAR	ALPSRP076586890	FBD	78	6890	-1450	Ascending	2007/07/03	02:50:44.731	-14.4
4	✓	PALSAR	ALPSRP076586900	FBD	78	6900	-1400	Ascending	2007/07/03	02:50:52.962	-13.9
5	✓	PALSAR	ALPSRP076586910	FBD	78	6910	-1350	Ascending	2007/07/03	02:51:01.193	-13.4
6	✓	PALSAR	ALPSRP076586920	FBD	78	6920	-1300	Ascending	2007/07/03	02:51:09.422	-12.9
7	✓	PALSAR	ALPSRP076586930	FBD	78	6930	-1250	Ascending	2007/07/03	02:51:17.652	-12.4

Archives

narrow list: ☐ ALL ☒

$$|< < 1/2 > >| \quad (58)$$

batch order

Missing strips and replacement data

JRC-Fill-in request#1_27apr08.xls								
	A	B	C	D	E	F	G	H
1		Fill-in processing request 1						
2		27-Apr-08						
3		Product Leader:	De Grandi/Rosenqvist					
4		Prototype area:	Central Africa - (E5, E6, E8)					
5								
6								
7		RSP #	570	569	567	558	556	552
8		N-Lat. [XX.x deg.]	18.0	18.0	18.0	18.0	18.0	18.0
9		S-Lat. [YY.y deg.]	-18.0	-18.0	-17.5	-3.0	-2.0	-1.0
10		Obs date	25/9/07	8/9/07	20/9/07	21/10/07	17/9/07	11/10/07
11		Downlink segm.#	W0610570001-06	W0593569001-04	W0605567001-05	W0636558001-06	W0602556001-06	W0626552001-04
12								
13		RSP #	589	588	585	581		
14		N-Lat. [XX.x deg.]	18.0	18.0	18.0	18.0		
15		S-Lat. [YY.y deg.]	-24.0	-24.0	-24.0	-24.0		
16		Obs date	26/9/07	9/9/07	20/10/07	28/9/08		
17		Downlink segm.#	W0611589001-05	W0594588001-06	W0635585001-05	W0613581001-06		
18								
19		RSP #	611	609	606	605	604	602
20		N-Lat. [XX.x deg.]	-7.0	-3.0	4.0	6.0	9.0	13.0
21		S-Lat. [YY.y deg.]	-24.0	-24.0	-24.0	-24.0	-24.0	-24.0
22		Obs date	2/9/07	14/10/07	9/10/07	22/9/07	21/10/07	17/9/07
23		Downlink segm.#	W0617611001-06	W0629609001-07	W0624606001-08	W0607605001-06	W0636604001-08	W0602602001-07
24								

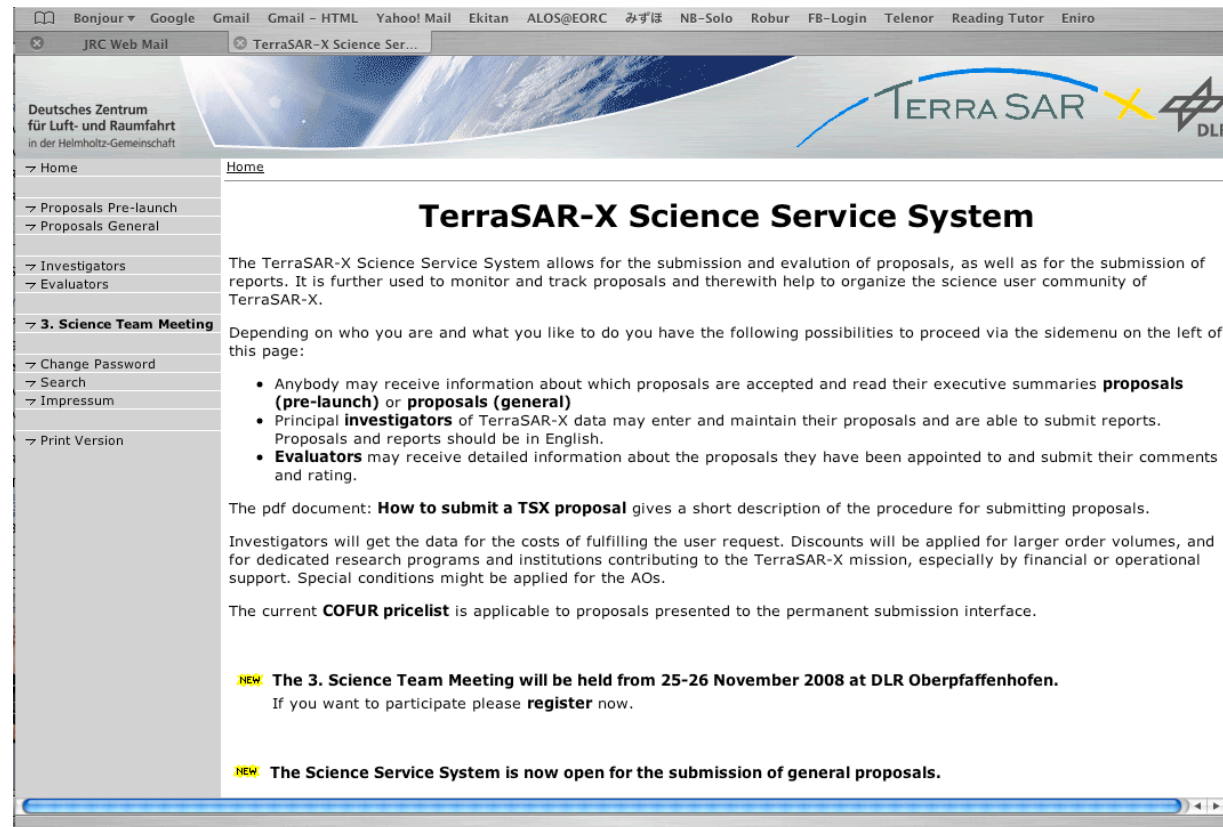
Email to ALOS-KC@jaxa.jp

TerraSAR-X

Data available for K&C Science Team

TerraSAR-X data available for K&C

<http://sss.terrasar-x.dlr.de>



- Register as general investigator
- Submit a short project proposal

K&C Wiki site up running!

Wiki Bulletin Board replaces the
K&C Newsletters