Issues on the discussions: Shimada

1) PI workshop:
   1) Akihabara Convension hall (Dec. 13-16, 2010)
   2) Ohtemachi Sankei Plaza (Tokyo-station), Nov. 15-18,2010)

2) PALSAR-2: preference of the observation mode
   Unavailability of the high accurate positions: GPSL12when using the 84 MHz SAR. The position accuracy is 1m.

3) Needs of the full polarimetry
   Which is more important on forest monitoring
   50km 6m resolution dual mode or
   60km 10m resolution full polarimetry

RF Specification of observation modes

- RF specification of observation modes is as follows,

		Spotlight	Ultra Fine	High sensitive	Fine	ScanSAR
Bandwidth		84MHz	84MHz	42MHz	28MHz	14MHz
Resolution		Rg × Az : 3 × 1m	3m	6m	10m	100m
Swath		Rg × Az : 25 × 25km	50km	50km	70km	350km
Polarization		SP	SP/DP	SP/DP/FP/CP	SP/DP/FP/CP	SP/DP
Data rate		800Mbps	800Mbps	800Mbps	400Mbps	400Mbps
NESZ		-24dB	-24dB	-28dB	-26dB	-26dB
S/A	Rg	25dB	25dB	23dB	25dB	25dB
	Az	20dB	25dB	20dB	23dB	20dB

The specification is defined that,
- the incidence angle is 37deg
- above the equator

The polarization is as follows,
- SP :Single polarization
- DP : Dual polarization
- FP : Full polarization
- CP : Compact polarization(experimental mode)

KC#13 feed-back to Shimada

		Spotlight	Ultra Fine	High sensitive	new	Fine	ScanSAR
Usage			Local	Local		Global	Regional
Usage		No thanks	Logging/ degrad.	Biomass	No thanks	Forest & LCC	Rapid deforest. wetlands
Bandwidth		84MHz	84MHz	42MHz	14MHz	28MHz	14MHz
Resolution		Rg × Az : 3 × 1m	3m	6m	20m	10m	100m
Orbit determination accuracy		1m	1m	40cm	40cm	40cm	40cm
Swath		Rg × Az : 25 × 25km	50km	50km (25km FP)	60-70 km	70km (35km FP)	350km
Polarization		(HH or V or HV or VH)	SP/DP	SP/DP/FP/CP	FP	SP/DP/FP/CP	SP/DP
Data rate		800Mbps	800Mbps	800Mbps		400Mbps	400Mbps
Incidence angle angle 7-70 deg							
NESZ		-24dB	-24dB	-28dB	?	-26dB	-26dB
S/A	Rg	25dB	25dB	23dB	?	25dB	25dB
	Az	20dB	25dB	20dB	?	23dB	20dB

The frequency issues

- The frequency band of L-band SAR is allocated from 1215 to 1300MHz.
  - ALOS-2 has the maximum bandwidth 84MHz.
- In this band, not only L-band SAR but also Radio navigation satellite service(RNSS).
- ALOS-2 has started the coordination with RNSS.