AIRSAR Modes and Output Data Products for PacRim 2000 Mission
(as of September 25, 1999)

AIRSAR Mode/Bandwidth	Swath (km)	Azimuth Pixel Spacing (m)	Range Pixel Spacing (m)
POLSAR at 20 MHz	15	9.26	6.6
POLSAR at 40 MHz	10	4.63	3.3
HI RES SAR (L) at 80 MHz	5	2.06	1.67
XTI1 at 20 MHz	15	10	10
XTI1 at 40 MHz	10	10 or 5	10 or 5
XTI2 at 20 MHz	15	10	10
XTI2 at 40 MHz	10	10 or 5	10 or 5
ATI at 20 MHz	15	TBD	6.6
ATI at 40 MHz	10	TBD	3.3
POLTOP (if available)	*5*	*10 or 5*	*10 or 5*

Notes:

POLSAR: polarimetric synthetic aperture radar collected at all three frequencies at either 20 MHz or 40 MHz bandwidth, with the exception in the US where P-band 40 MHz cannot be transmitted without special permission.

POLSAR data are processed to 18 looks at 20 MHz and 9 looks at 40 MHz.

HI RES SAR:
L-band polarimetric synthetic aperture radar data collected at 80 MHz bandwidth. Due to the hardware configuration C-band data cannot be collected simultaneously with HI RES SAR, however P-band data can be collected at 20 or 40 MHz. HI RES SAR data are processed to 4 looks.

TOPSAR Modes:
Cross track interferometric radar collected at C-band (XTI1) or C-band and L-band (XTI2). When TOPSAR data are collected at a specific frequency, only the VV polarization data are collected and the data are not fully polarimetric for the frequency. Polarimetric SAR data collected in a TOPSAR mode are co-registered with the DEM data.

All TOPSAR data are collected with a doubled baseline where we are transmitting and receiving from both antennas. Data are then processed with the doubled baseline or if it is a particularly rugged area, the single baseline data, collected along with the double baseline data, may be used for increased phase unwrapping and data coverage.

Note that for the 40 MHz TOPSAR data, 10 meter post spacing is the default unless the customer specifies 5 meter post spacing.

ATI: along track interferometry collected at C-band and L-band. The data format of the ATI data is still being specified; infomration will be posted on this web site within the next ~4 months.

POLTOP: polarimetric cross track interferometry collected at C-band. L-band can be used to collect TOPSAR or POLSAR data and P-band can be used to collect POLSAR data. However all frequencies will be collected at the higher POLTOP pulse repetition frequency (PRF) and will have a narrow swath. The data format for the POLTOP data are still being specified; information will be

posted on this web site within the next ~4 months. Note that as of late September 1999 the decision to include POLTOP on the PacRim 2000 mission has not yet been made.

Single Look Data
For customers wanting to investigate single look data, we can provide a limited amount of uncalibrated single look data. See SLC Data Format for a description of the data format.

For information on the standard AIRSAR data formats, go to: