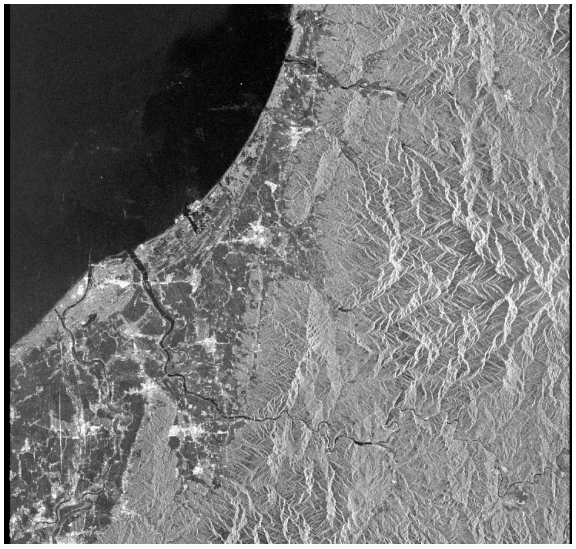
MSP JERS SAR processing: Absolute radiometric calibration

Determination of MSP JERS calibration factor



JERS data over Japanese Calibration Site

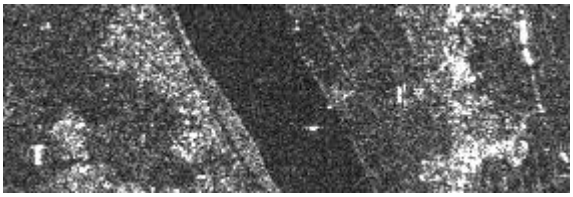


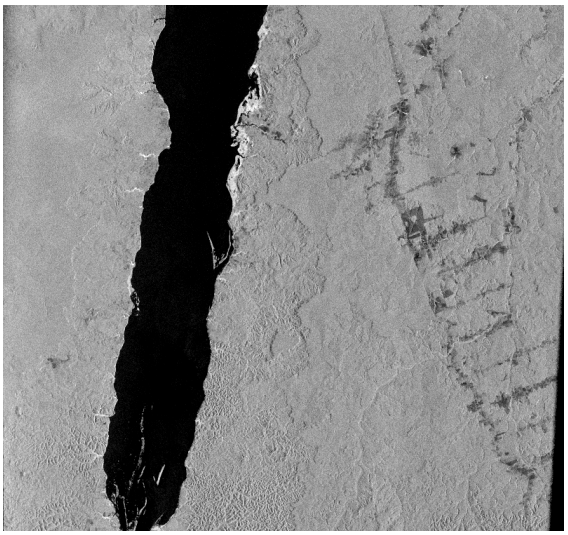
Image section with one transponder

The scene contains 2 transponders, each with a gain of 44.2 dBm2. One of the transponders shows up in the very low backscatter background of a river.

Based on these active calibration targets the calibration factor required for the absolute radiometric calibration of MSP JERS SAR processing was determined.

The MSP JERS calibration factor is -22.1 dB.

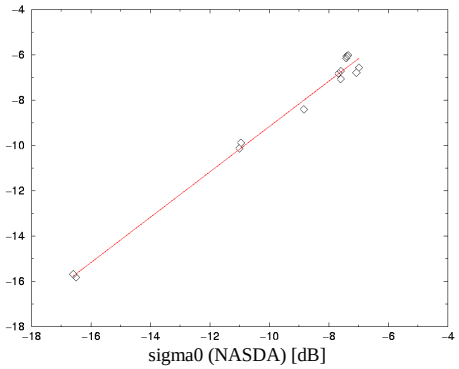
Validation of MSP JERS calibration by comparison with NASDA processed PRI



Calibrated JERS backscattering over Tapajos, 930626, derived from NASDA processed PRI product .



Calibrated JERS backscattering over Tapajos, 930626, processed with Gamma MSP.



Average calibrated backscattering coefficients sigma0 of image segments across JERS image processed by Gamma MSP versus corresponding value extracted from data processed by NASDA. The linear regression between shown is: y = 0.775 + 1.0007x.