# JERS SAR User Note

## Title:

**Geolocation errors due to predictive quality Orbit State Vectors**

## Description:

The orbit state vectors included in the L0 JERS SAR WILMA data used for this reprocessing are of predicted quality only. The WILMA metadata provides just a single orbit state vector, which determines the dataset georeferencing. This resulted in some images having large azimuth geolocation errors, with an inaccuracy of up to 1.1 km.

Confirmation that the excessive azimuth georeferencing errors arose from the use of predicted L0 WILMA state vectors was gained by reprocessing a product using JAXA definitive orbit files. By using the definitive JAXA state vector, the azimuth error of the scene originally exhibiting a ~1.1 km offset became ~25 m. Currently there is no plan to reprocess the data with the definitive orbit files.

## Degradation types:

N.A.

## Degradation percentage:

N.A.

## Impacted products:

* **Acquisition modes**: PRI, SLC
* **Product types:** L1
* **Polarizations**: HH
* **IPF version:** IPF v2.05 patch 3
* **Beginning/end of the issue**: Entire mission

## Cause:

N.A.

## Status:

No action.

## References:

* IDEAS+-VEG-OQC-REP-2620\_JERS\_SAR\_Reprocessing\_QC\_V1.4