

## ALOS PALSAR Quality Disclaimer

### Title:

**IPF failure due to PRF changes**

### Description:

ESA ALOS PALSAR IPF makes the fundamental assumption that the platform is operated such that no PRF changes occur within imaging sequences and then it considers that each L0 product is sampled at the same frequency for its entire azimuth extent.

During the ALOS PALSAR Quality Control activity it has been observed that this hypothesis is not always confirmed and some images are affected by PRF changes (in particular PLR products, but also FBS, FBD and WB1). These changes are most probably operated in correspondence of SWST change triggered by the instrument to avoid range aliasing issues. In any case the occurrence of these events appears to be quite rare (~2% of the cases).

The current installed IPF V04.16p9 is anyway able to identify and segregate the affected products: the PRF change event has been managed returning a proper error message.

### Degradation types:

Products not generated

### Degradation percentage:

1.8%

### Impacted products:

- **Acquisition modes:** FBS, FBD, PLR, WB1
- **Product types:** L1.0, L1.1, L1.5
- **Polarizations:** All
- **IPF version:** V04.16p9
- **Beginning/end of the issue:** Entire mission

### Cause:

IPF failure is due to PRF changes occurring within imaging sequences.

### Status:

In the current IPF V04.16p9 such occurrences are managed retrieving a proper error message.

### References:

- IDEAS ART ref: IDEAS+ AR 320 - PLR Scenes Artefacts \_PRF Changes