Title:

Failure on Tile amplifier #5 of the receiving antenna between 2015-05-26 and 2015-05-27.

Description:

Failure on Tile amplifier #5 of the receiving antenna from 26/05/2015 19:06 UT to 27/05/2015 06:07 UT.

A similar failure occurred previously (refer to Quality Disclaimer #2 for instance)

Degradation types:

- ☐ DEGRADED_PRODUCT_RADIOMETRY
- ☐ DEGRADED_RADIOMETRIC_CALIBRATION
- ☐ DEGRADED_ORBIT_CONTROL
- ☐ COMPLETE_PRODUCT_DEGRADATION
- ☐ OTHER
- ☐ DEGRADED_PRODUCT_GEOLOCATION
- ☐ DEGRADED_PLATFORM_POINTING
- ☒ DEGRADED_PERFORMANCE_INSTRUMENT_ANOMALY
- ☐ SLICE_PRODUCT_NON_CONCATENABLE

Degradation percentage[1]:

0%

Impacted products:

Platform: ☒ S-1A ☐ S-1B

Acquisition mode: ☒ EW ☒ IW ☒ SM ☒ WV ☒ RF

Product type: ☒ RAW ☒ SLC ☒ GRD ☐ OCN

Resolution class: ☒ MR ☒ HR ☒ FR ☐ N/A

Polarization: ☒ SH (Single pol. H) ☒ SV (Single pol. V)
☒ DH (Double pol. H) ☒ DV (Double pol. V)
☒ HH ☒ HV ☒ VV ☒ VH

Processing facility: ☒ PAC1 / UPA ☒ PAC2 / DPA
☒ CGS1 / Matera ☒ CGS2 / Svalbard ☒ CGS3 / Maspalomas

IPF version: all

Instrument Configuration ID (RDB): 3

ADF files:

AUX_INS	N/A
AUX_CAL	N/A
AUX_PP1	N/A
AUX_PP2	N/A
AUX_SCS	N/A

Beginning of the issue:

Start acquisition date: 2015-05-26 21:10:28 UTC
Start generation date: 2015-05-26 22:20:39 UTC
Orbit: 6097
Datatake (hex): 007E78

End of the issue:

☐ not yet defined ☒ available

End acquisition date: 2015-05-27 05:53:00 UTC
End generation date: 2015-05-27 11:39:41 UTC
Orbit: 6102
Datatake (hex): 007EA7

[1] Percentage of degradation of the data in the product (100% means that the product should be masked in the product catalogue)

Cause:

Failure on Tile Amplifier #5: the consequence is all the TRMs sharing the same Tile Amplifier are failing in both Rx H and V polarisations.

Status:

Slight degradation of the radiometric characteristics products due to slight change of antenna patterns.

On previous similar issues, the worse azimuth ambiguity ratios due to higher azimuth sidelobes of 0.3 to 4.4 dB depending on the acquisition mode & sub-swath and a reduction in the NESZ due to loss of power (by approx 0.7)

Refer to detailed technical description provided with Quality Disclaimer #2

References:

- **MPC ref:** MPCS-894
- **PDGS ref:** N/A
- **ARTS ref:** N/A