

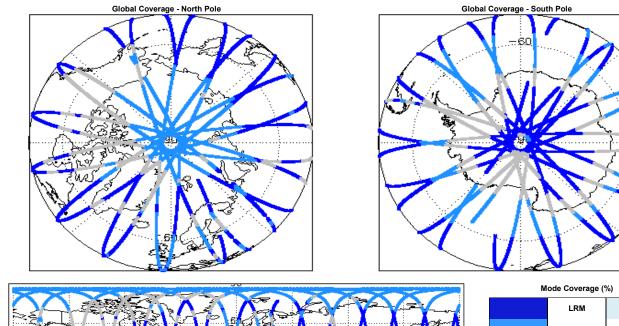
IDEAS+ Daily Report for OFFLINE data:

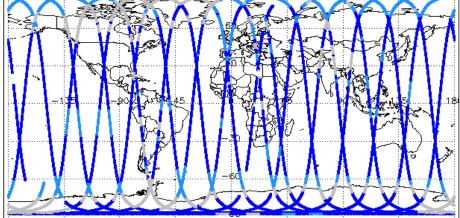
<u>13/10/2015</u>

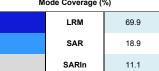
Report Production Date:	12-Nov-2015	Check	Status
		Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Data Used:	L1B and L2 OFFLINE Data	Product Format Check	Nominal
Data Used:		Product Header Analysis	Nominal
•		Star Tracker Usage Check	Nominal
		L1B Calibration Usage Check	Nominal
		L1B & L2 Auxiliary Data File Usage Check	Nominal
		L1B & L2 Auxiliary Correction Error Check	Nominal
		L1B & L2 Measurement Confidence Data Check	See Section 4.7 and 5.5

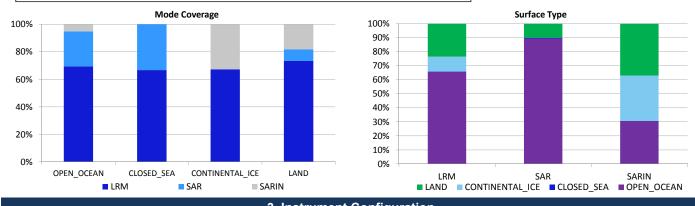
	13-Oct-2015	None
14-Oct-2015		Nothing planned











3. Instrument Configuration

The SIRAL instrument configuration for the day of acquisition is provided below.

SIRAL instrument(s) in use: SIRAL - A

4. Level 1B Data Quality Check

4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a product file (.DBL)

Number of products with errors:

4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors:

4.3 Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing

Number of products with errors:

4.4 L1B Calibration Usage Check

Each product is checked in order to ensure that the necessary calibration files have been used in processing

Number of products with errors:

4.5 L1B Auxilary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 0

Number of products with errors.

4.6 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

4.7 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 18) for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 1B products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Block Degraded Flag: This flag is currently set for a number of individual records generally at the start or end of products (all modes), but this is to be expected.

Phase Perturbation Flag: This flag is currently set for all L1B SARIn products, indicating that the ADC correction application is deactivated, but this is in line with the current configuration. Number of products with errors: 1

Test Failed

Product

CS_OFFL_SIR_LRM_1B_20151013T235535_20151013T235658_C001

Echo error, TRK echo error

Description The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

5. Level 2 Data Quality Check

5.1 L2 Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a product file (.DBL).

Number of products with errors:

5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0

5.3 L2 Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

5.4 L2 Auxiliary Correction Error Check

CryoSat L2 data includes a correction error flag (field 30) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 2 products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Freeboard error: This flag is correctly set in all L2 SAR products that are not discriminated as sea-ice, and for which freeboard cannot be calculated.

Height and Backscatter errors: These flags are currently set for products over land, but this is to be expected. Retracker 1 Height and Backscatter error flags are also set for products over sea-ice, but this is to be expected.

Peakiness error: This flag is currently set for products over sea-ice, but this is to be expected.

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SARIN X-Track Angle Error: This flag is set when the difference between the computed surface elevation and the DEM is >50 m. The DEM is only available over Greenland and Antarctica and as a result this flag is set for L2 SARIn products in all other locations as expected.

SSHA interpolation error: This flag is currently set for a number of SAR products occurring at surface type boundaries, but this is to be expected.

Number of products with errors:

Product	Test Failed	Description
	(Retracker 3) Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records

CS_OFFL_SIR_LRM_220151013T005036_20151013T005323_C001
CS_OFFL_SIR_LRM_220151013T010525_20151013T013818_C001
CS_OFFL_SIR_LRM_220151013T015556_20151013T021521_C001
CS_OFFL_SIR_LRM_220151013T024139_20151013T031703_C001
CS_OFFL_SIR_LRM_220151013T032533_20151013T032928_C001
CS_OFFL_SIR_LRM_220151013T033450_20151013T040813_C001
CS_OFFL_SIR_LRM_220151013T042022_20151013T043454_C001
CS_OFFL_SIR_LRM_220151013T043936_20151013T045621_C001
CS_OFFL_SIR_LRM_220151013T051449_20151013T052750_C001
CS_OFFL_SIR_LRM_220151013T053004_20151013T054830_C001
CS_OFFL_SIR_LRM_220151013T060931_20151013T061955_C001
CS_OFFL_SIR_LRM_220151013T062134_20151013T063506_C001
CS_OFFL_SIR_LRM_220151013T065959_20151013T070355_C001
CS_OFFL_SIR_LRM_220151013T071042_20151013T071341_C001
CS_OFFL_SIR_LRM_220151013T071504_20151013T072215_C001
CS_OFFL_SIR_LRM_220151013T072338_20151013T072547_C001
CS_OFFL_SIR_LRM_220151013T075356_20151013T081354_C001
CS_OFFL_SIR_LRM_220151013T084619_20151013T090336_C001
CS_OFFL_SIR_LRM_220151013T091825_20151013T091921_C001
CS_OFFL_SIR_LRM_220151013T093143_20151013T095305_C001
CS_OFFL_SIR_LRM_220151013T100201_20151013T100526_C001
CS_OFFL_SIR_LRM_220151013T102533_20151013T104112_C001
CS_OFFL_SIR_LRM_220151013T105515_20151013T105542_C001
CS_OFFL_SIR_LRM_220151013T105703_20151013T105721_C001
CS_OFFL_SIR_LRM_220151013T110518_20151013T112607_C001
CS_OFFL_SIR_LRM_220151013T112819_20151013T113226_C001
CS_OFFL_SIR_LRM_220151013T113629_20151013T114433_C001
CS_OFFL_SIR_LRM_220151013T115008_20151013T122151_C001
CS_OFFL_SIR_LRM_220151013T123414_20151013T123610_C001
CS_OFFL_SIR_LRM_220151013T123628_20151013T123710_C001
CS_OFFL_SIR_LRM_220151013T124613_20151013T124823_C001
CS_OFFL_SIR_LRM_220151013T125637_20151013T130444_C001
CS_OFFL_SIR_LRM_220151013T132838_20151013T134931_C001
CS_OFFL_SIR_LRM_220151013T135216_20151013T140404_C001
CS_OFFL_SIR_LRM_220151013T141309_20151013T141753_C001
CS_OFFL_SIR_LRM_220151013T142521_20151013T143827_C001
CS_OFFL_SIR_LRM_220151013T144014_20151013T145001_C001
CS_OFFL_SIR_LRM_220151013T150738_20151013T154235_C001
CS_OFFL_SIR_LRM_220151013T155514_20151013T155550_C001
CS_OFFL_SIR_LRM_220151013T155637_20151013T160328_C001
CS_OFFL_SIR_LRM_220151013T160342_20151013T162759_C001
CS_OFFL_SIR_LRM_220151013T163733_20151013T163927_C001
CS_OFFL_SIR_LRM_220151013T164654_20151013T170259_C001
CS_OFFL_SIR_LRM_220151013T170303_20151013T172004_C001
CS_OFFL_SIR_LRM_220151013T173649_20151013T175234_C001

Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error
(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	for Retracker 3 for one or more records
(Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
(Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more records
Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
(Retracker 2) Height Error (Retracker 2), Height Error (Retracker 2), Backgootter Error	There is a height and backscatter error for Retracker 2 and a height error
(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
(Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error
(Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2) Height Error (Retracker 2), Height Error	records
(Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
(Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	records There is a height and backscatter error for Retracker 2 and a height error for Retracker 2 for one or more records
(Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2), Backscatter Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one of more There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	records
(Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error
(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more
Error (Retracker 2)	records

CS_OFFL_SIR_LRM_2__20151013T180128_20151013T181011_C001 CS_OFFL_SIR_LRM_2_20151013T181613_20151013T181844_C001 CS OFFL SIR LRM 2 20151013T182635 20151013T184017 C001 CS_OFFL_SIR_LRM_2_20151013T184156_20151013T184639_C001 CS_OFFL_SIR_LRM_2_20151013T191520_20151013T191727_C001 CS_OFFL_SIR_LRM_2__20151013T191850_20151013T192600_C001 CS OFFL SIR LRM 2 20151013T192723 20151013T195007 C001 CS_OFFL_SIR_LRM_2_20151013T200619_20151013T202712_C001 CS OFFL SIR LRM 2 20151013T210357 20151013T211313 C001 CS OFFL SIR LRM 2 20151013T214537 20151013T221202 C001 CS_OFFL_SIR_LRM_2__20151013T223748_20151013T225227_C001 CS_OFFL_SIR_LRM_2__20151013T232443_20151013T233957_C001 CS_OFFL_SIR_LRM_2_20151013T234002_20151013T234836_C001 CS_OFFL_SIR_LRM_2__20151013T234839_20151013T235201_C001 CS_OFFL_SIR_SIN_2__20151013T000243_20151013T000613_C001 CS OFFL SIR SIN 2 20151013T001144 20151013T001300 C001 CS_OFFL_SIR_SIN_2__20151013T014155_20151013T014515_C001 CS_OFFL_SIR_SIN_2_20151013T015028_20151013T015152_C001 CS OFFL SIR SIN 2 20151013T023228 20151013T023401 C001 CS OFFL SIR SIN 2 20151013T031905 20151013T032059 C001 CS_OFFL_SIR_SIN_2__20151013T032929_20151013T033037_C001 CS_OFFL_SIR_SIN_2__20151013T040813_20151013T040914_C001 CS_OFFL_SIR_SIN_2__20151013T041200_20151013T041308_C001 CS OFFL SIR SIN 2 20151013T045718 20151013T045856 C001 CS_OFFL_SIR_SIN_2__20151013T050630_20151013T050824_C001 CS_OFFL_SIR_SIN_2__20151013T055005_20151013T055222_C001 CS OFFL SIR SIN 2 20151013T063634 20151013T063821 C001 CS_OFFL_SIR_SIN_2__20151013T064342_20151013T064348_C001 CS_OFFL_SIR_SIN_2__20151013T064503_20151013T065155_C001 CS OFFL SIR SIN 2 20151013T072858 20151013T073100 C001 CS_OFFL_SIR_SIN_2__20151013T081539_20151013T081835_C001 CS_OFFL_SIR_SIN_2__20151013T082241_20151013T082247_C001 CS OFFL SIR SIN 2 20151013T082500 20151013T082753 C001 CS OFFL SIR SIN 2 20151013T095515 20151013T095629 C001 CS_OFFL_SIR_SIN_2__20151013T100526_20151013T100645_C001 CS OFFL SIR SIN 2 20151013T105354 20151013T105426 C001 CS OFFL SIR SIN 2 20151013T145423 20151013T145728 C001 CS OFFL SIR SIN 2 20151013T150021 20151013T150401 C001 CS OFFL SIR SIN 2 20151013T163459 20151013T163733 C001 CS_OFFL_SIR_SIN_2__20151013T163927_20151013T164151_C001 CS OFFL SIR SIN 2 20151013T164417_20151013T164552_C001 CS_OFFL_SIR_SIN_2__20151013T173007_20151013T173126_C001 CS_OFFL_SIR_SIN_2__20151013T173526_20151013T173649_C001 CS_OFFL_SIR_SIN_2_20151013T181011_20151013T181613_C001 CS_OFFL_SIR_SIN_2__20151013T181844_20151013T181908_C001 CS_OFFL_SIR_SIN_2__20151013T182333_20151013T182513_C001 CS OFFL SIR SIN 2 20151013T190446 20151013T190526 C001 CS OFFL SIR SIN 2 20151013T190941 20151013T191149 C001 CS OFFL SIR SIN 2 20151013T195221 20151013T195356 C001

Height Error (Retracker 2), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error

There is a height and backscatter error for Retracker 2 for one or more ecords No DEM or Slope Model was used for the location of one or more records. There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more ecords There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records

CS_OFFL_SIR_SIN_220151013T200248_20151013T200449_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151013T204853_20151013T205339_C001	SARIn X-track Angle Error, Surface Model Unavailable	An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records
CS_OFFL_SIR_SIN_220151013T213157_20151013T213325_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151013T213505_20151013T213612_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151013T214037_20151013T214304_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151013T231135_20151013T231526_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151013T232115_20151013T232240_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records