





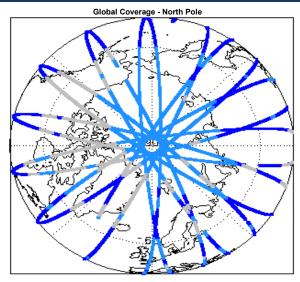
1. Overview

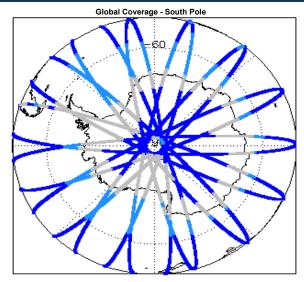
Report Production Date:	11-Jan-2016
Processor Used:	CryoSat Ice Processor
Data Used:	L1B and L2 OFFLINE Data

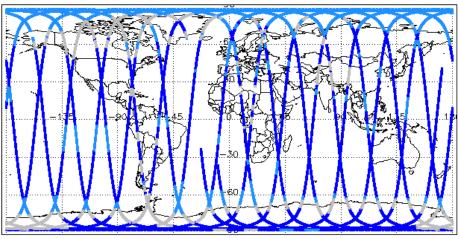
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2 and 5.2
Star Tracker Usage Check	Nominal
L1B Calibration Usage Check	Nominal
L1B & L2 Auxiliary 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

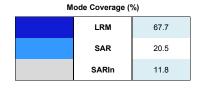
Mission / Instru	ument News
09-Dec-2015	None
10-Dec-2015	None
11-Dec-2015	Nothing planned

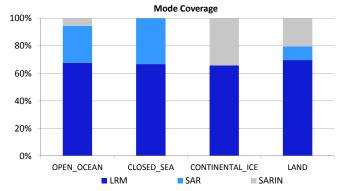
2. Global Coverage

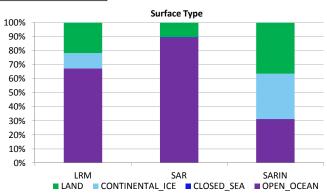












3. Instrument Configuration

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:

Product	Test Failed
CS_OFFL_SIR_SAR_1B_20151210T142853_20151210T142854_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_SIN_1B_20151210T222830_20151210T222832_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

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:

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:

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:

Product	Test Failed
CS_OFFL_SIR_SIN_220151210T222830_20151210T222832_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_SAR_220151210T142853_20151210T142854_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

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.

Number of products with errors:

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.

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.

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220151209T235401_20151210T002737_C001	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
CS_OFFL_SIR_LRM_220151210T003542_20151210T003938_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20151210T004425_20151210T005348_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220151210T013401_20151210T014500_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_2_20151210T014942_20151210T020708_C001	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), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220151210T022455_20151210T023802_C001	Error (Retracker 2) Height Error (Retracker 2), Height Error	records
CS_OFFL_SIR_LRM_220151210T024016_20151210T025343_C001	(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
CS_OFFL_SIR_LRM_220151210T025435_20151210T025646_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T031938_20151210T033001_C001	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
CS_OFFL_SIR_LRM_220151210T033141_20151210T034550_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T040941_20151210T041414_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T042047_20151210T042354_C001	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	records There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_2_20151210T042517_20151210T043210_C001	(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
CS_OFFL_SIR_LRM_2_20151210T050358_20151210T052437_C001	Error (Retracker 2) Height Error (Retracker 2) Height Error (Retracker 2), Backscatter	records
CS_OFFL_SIR_LRM_220151210T053926_20151210T055102_C001	Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T055631_20151210T060515_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T062836_20151210T062929_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T064144_20151210T070425_C001	(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
CS_OFFL_SIR_LRM_220151210T071210_20151210T071536_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220151210T071924_20151210T073015_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T073545_20151210T075130_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T081523_20151210T083559_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T084638_20151210T085442_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220151210T085920_20151210T093155_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T094513_20151210T094617_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T095615_20151210T095828_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T100648_20151210T101450_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T103803_20151210T105943_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T110228_20151210T111207_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T112322_20151210T112417_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20151210T113527_20151210T114833_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T115021_20151210T120049_C001	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
CS_OFFL_SIR_LRM_2_20151210T121724_20151210T125044_C001	(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
CS_OFFL_SIR_LRM_2_20151210T131345_20151210T133806_C001	(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
CS_OFFL_SIR_LRM_220151210T134742_20151210T134937_C001	Error (Retracker 2) Surface Model Unavailable	records No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20151210T134742_20151210T134937_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220151210T144655_20151210T150240_C001	(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
CS_OFFL_SIR_LRM_Z201512101144693_201512101130240_C001 CS_OFFL_SIR_LRM_220151210T150900_20151210T152003_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220151210T152621_20151210T152853_C001	Error (Retracker 2) Surface Model Unavailable	records No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20151210T153605_20151210T155029_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_2_20151210T155209_20151210T155526_C001	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), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220151210T155917_20151210T160700_C001	Error (Retracker 2) Height Error (Retracker 2), Height Error	records
CS_OFFL_SIR_LRM_2_20151210T162857_20151210T163607_C001	(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
CS_OFFL_SIR_LRM_2_20151210T163729_20151210T170111_C001	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
CS_OFFL_SIR_LRM_220151210T170404_20151210T171258_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records

CS_OFFL_SIR_LRM_2_20151210T171517_20151210T173716_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRIVI_2201912101171917_201912101173710_C001	(Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220151210T180606_20151210T182320_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T182849_20151210T183945_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T185432_20151210T192158_C001	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
CS_OFFL_SIR_LRM_220151210T194749_20151210T200233_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T200803_20151210T201808_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T203405_20151210T210209_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T211032_20151210T211124_C001	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
CS_OFFL_SIR_LRM_220151210T212402_20151210T215755_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T222108_20151210T223548_C001	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
CS_OFFL_SIR_LRM_220151210T230320_20151210T231245_C001	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
CS_OFFL_SIR_LRM_220151210T231530_20151210T233705_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220151210T235336_20151211T000406_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_SIN_2_20151210T002911_20151210T003103_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20151210T003938_20151210T004047_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T011818_20151210T011922_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T012209_20151210T012317_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T020726_20151210T020904_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T021638_20151210T021834_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20151210T030015_20151210T030231_C001	SARIn X-track Angle Error, Surface	An ambiguous angle was detected for SARIn mode and no DEM or Slope
CS_OFFL_SIR_SIN_2_20151210T034642_20151210T034830_C001	Model Unavailable SARIn X-track Angle Error	Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20151210T035351_20151210T035357_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20151210T035512_20151210T040206_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20151210T043557_20151210T044108_C001	SARIn X-track Angle Error, Surface	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
CS_OFFL_SIR_SIN_220151210T052548_20151210T052847_C001	Model Unavailable SARIn X-track Angle Error	Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220151210T053250_20151210T053256_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220151210T053516_20151210T053804_C001	SARIn X-track Angle Error	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
CS_OFFL_SIR_SIN_2_20151210T070522_20151210T070637_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20151210T071536_20151210T071656_C001	SARIn X-track Angle Error SARIn X-track Angle Error, Surface	records An ambiguous angle was detected for SARIn mode and no DEM or Slope
CS_OFFL_SIR_SIN_220151210T080403_20151210T080437_C001	Model Unavailable	Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220151210T084514_20151210T084638_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220151210T085443_20151210T085554_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220151210T102448_20151210T102613_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220151210T103130_20151210T103435_C001	SARIn X-track Angle Error	records
CS_OFFL_SIR_SIN_220151210T120432_20151210T120741_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T121030_20151210T121412_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T134508_20151210T134742_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T134937_20151210T135156_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T135431_20151210T135603_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T144016_20151210T144134_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T144530_20151210T144655_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T152004_20151210T152621_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T152854_20151210T152917_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T153344_20151210T153523_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T161952_20151210T162158_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T170229_20151210T170404_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T171258_20151210T171457_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220151210T175903_20151210T180348_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_220151210T184205_20151210T184334_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
	l	-555.55

one or more
ne or more
one or more
one or more
one or more
no DEM or Slope
one or more