



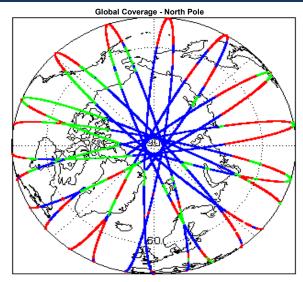
1. Overview

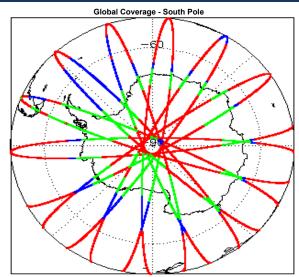
Report Production Date:	20-May-2016	
Processor Used:	CryoSat Ice Processor	
Data Used:	L1B and L2 OFFLINE Data	

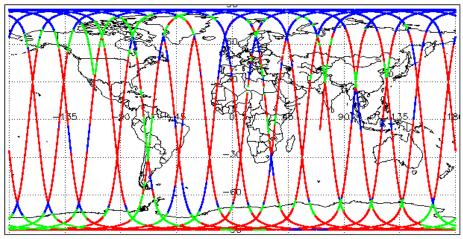
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2
Star Tracker Usage Check	Nominal
L1B Calibration Usage Check	Nominal
L1B & L2 Auxiliary Data File Usage Check	Nominal
L1B & L2 Auxiliary Correction Error Check	Nominal
L1B & L2 Measurement Confidence Data Check	See Section 4.7 and 5.5

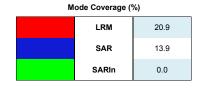
Mission / Instru	ment News
19-Apr-2016	None
20-Apr-2016	None
21-Apr-2016	Nothing planned

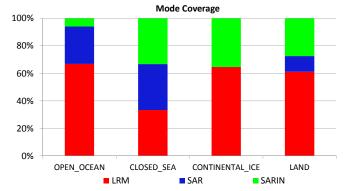
2. Global Coverage

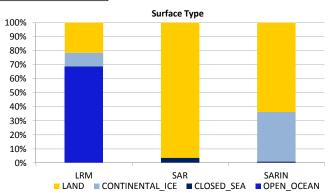












3. Instrument Configuration

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_20160421T074256_20160421T074259_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:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20160420T003105_20160420T003809_C001	IECDO EFFOR LEK ECDO EFFOR	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:

Product	Test Failed
CS_OFFL_SIR_SAR_220160421T074256_20160421T074259_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.

Number of products with errors: 100	-	1-
Product	Test Failed Height Error (Retracker 2), Height Error	Description There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220160420T003916_20160420T010547_C001	(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160420T011928_20160420T013036_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_220160420T013614_20160420T015327_C001	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	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220160420T021613_20160420T022620_C001	(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160420T023914_20160420T024530_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_220160420T025845_20160420T033222_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_220160420T034559_20160420T034655_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 20160420T040046 20160420T042450 C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220160420T042649_20160420T043158_C001	Error (Retracker 2) Surface Model Unavailable	records No DEM or Slope Model was used for the location of one or more records
	Height Error (Retracker 2), Height Error	There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220160420T043754_20160420T051212_C001	(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160420T052419_20160420T052435_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_220160420T052550_20160420T052616_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 OFFI SID I DM 2 20160420T053622 20160420T055025 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_220160420T053632_20160420T055925_C001	(Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160420T060220_20160420T060254_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_20160420T061801_20160420T064722_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 for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160420T070657_20160420T072517_C001	(Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS OFFL SIR LRM 2 201604201070037_201604201072317_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)	records
CS_OFFL_SIR_LRM_220160420T074811_20160420T075009_C001	Surface Model Unavailable Height Error (Retracker 2), Backscatter	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 for one or more
CS_OFFL_SIR_LRM_220160420T075703_20160420T081229_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_220160420T081431_20160420T082353_C001	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220160420T084722_20160420T084803_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_220160420T085113_20160420T090314_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_220160420T091920_20160420T092038_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_220160420T092226_20160420T092245_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_220160420T093621_20160420T095133_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_220160420T102931_20160420T110221_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
	(Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220160420T110446_20160420T110700_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160420T110712_20160420T111305_C001	Surface Model Unavailable Height Error (Retracker 2), Backscatter	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160420T111552_20160420T114120_C001	Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220160420T121234_20160420T122354_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_220160420T122930_20160420T124043_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_220160420T125442_20160420T132118_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 for Retracker 3 for one or more records
OC OFFI CID LDM C. 204404/07140-0712 00100-071	(Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220160420T134659_20160420T140307_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_220160420T140329_20160420T141954_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_220160420T151041_20160420T151201_C001	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220160420T152523_20160420T155911_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_220160420T161237_20160420T164026_C001	(Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220160420T164106_20160420T164226_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_220160420T164344_20160420T164354_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 20160420T164958 20160420T165022 C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
00_011	Error (Retracker 2) Height Error (Retracker 2), Height Error	records There is a height and hackscatter error for Petrasker 2, and a height error.
CS_OFFL_SIR_LRM_220160420T170355_20160420T173734_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_220160420T175155_20160420T181959_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_220160420T182023_20160420T182746_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
	(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_220160420T184414_20160420T185444_C001	Error (Retracker 2) Height Error (Retracker 2), Height Error	records
CS_OFFL_SIR_LRM_220160420T185926_20160420T191700_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_220160420T193517_20160420T194742_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220160420T194952_20160420T200207_C001	Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	records 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_20160420T200412_20160420T200625_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 20160420T202915 20160420T203847 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), 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_220160420T204049_20160420T205605_C001	Error (Retracker 2) Height Error (Retracker 2), Height Error	records
CS_OFFL_SIR_LRM_220160420T212910_20160420T213332_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_220160420T213455_20160420T213858_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_220160420T213901_20160420T214207_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_20160420T221839_20160420T223504_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_20160420T224257_20160420T224430_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20160420T224851_20160420T232327_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_220160420T234841_20160421T001438_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_SIN_220160420T010553_20160420T010725_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T024609_20160420T024724_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2 _20160420T025304_20160420T025403_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_20160420T025506_20160420T025621_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T042523_20160420T042648_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T043158_20160420T043505_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T060602_20160420T060853_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T061101_20160420T061625_C001	SARIn X-track Angle Error	records
CS_OFFL_SIR_SIN_220160420T075010_20160420T075128_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T075512_20160420T075651_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T084050_20160420T084201_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T084327_20160420T084544_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T092246_20160420T092626_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T093413_20160420T093559_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T102010_20160420T102234_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_220160420T102245_20160420T102433_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_220160420T110256_20160420T110446_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T110700_20160420T110712_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T111306_20160420T111523_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T115503_20160420T115534_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_220160420T124230_20160420T124409_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20160420T124526_20160420T124656_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160420T125118_20160420T125408_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_2_20160420T142228_20160420T142607_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more
	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T151240_20160420T151326_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_2_20160420T160153_20160420T160510_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_20160420T161023_20160420T161148_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20160420T165238_20160420T165342_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_20160420T173906_20160420T174248_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20160420T174928_20160420T175035_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_2_20160420T182824_20160420T182955_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T183147_20160420T183300_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T191712_20160420T191849_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T192632_20160420T192818_C001	SARIn X-track Angle Error	records An ambiguous angle was detected for SARIn mode for one or more
CS_OFFL_SIR_SIN_220160420T205629_20160420T205814_C001	SARIn X-track Angle Error	records

r more
r more
EM or Slope
r more
r more
r more
1