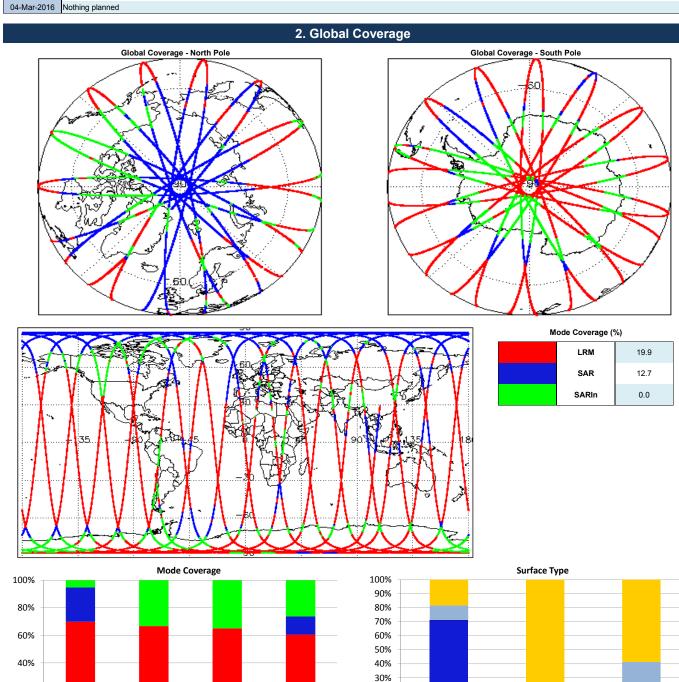


# IDEAS+ Daily Report for OFFLINE data:

<u>03/03/2016</u>

1. Overview					
Report Production Date:	01-Apr-2016	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		
		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		
Mission / Instrument News					
02-Mar-2016 None					
03-Mar-2016 None					



20% 10%

0%

LRM SAR SARIN LAND CONTINENTAL\_ICE CLOSED\_SEA OPEN\_OCEAN

LRM SAR SARIN LAI 3. Instrument Configuration

CONTINENTAL\_ICE

LAND

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

CLOSED\_SEA

OPEN\_OCEAN

20%

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# 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:
0

#### 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

0

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

#### 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\_20160303T174050\_20160303T174141\_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. Number of products with errors: 0

#### 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:

U

### 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
CS_OFFL_SIR_LRM_220160303T000931_20160303T002431_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_220160303T003805_20160303T011218_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_220160303T014212_20160303T014357_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_220160303T014504_20160303T020440_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_220160303T021126_20160303T021453_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160303T021712_20160303T024618_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_220160303T031359_20160303T034348_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_220160303T035024_20160303T035352_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160303T035702_20160303T043152_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_220160303T045718_20160303T045809_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_220160303T053615_20160303T061012_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_220160303T063406_20160303T063451_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_220160303T063840_20160303T070229_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_220160303T070435_20160303T070944_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160303T071500_20160303T074941_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_220160303T081424_20160303T083717_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_220160303T085538_20160303T091310_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_220160303T091751_20160303T092507_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_220160303T094458_20160303T100228_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_220160303T100405_20160303T101811_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_220160303T103438_20160303T105017_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_220160303T105219_20160303T110142_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_220160303T112941_20160303T114044_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_220160303T114651_20160303T115259_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_220160303T120357_20160303T121202_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160303T121350_20160303T122931_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_220160303T130614_20160303T131642_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_220160303T131644_20160303T134009_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_220160303T134514_20160303T135045_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160303T135311_20160303T141554_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_220160303T145015_20160303T151847_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_220160303T153207_20160303T160429_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_220160303T162417_20160303T165801_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_220160303T174819_20160303T175018_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_220160303T180338_20160303T183740_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_220160303T184944_20160303T191306_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 20160303T191840 20160303T192023 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160303T194141\_20160303T201534\_C001 CS OFFL SIR LRM 2 20160303T202314 20160303T202709 C001 CS OFFL SIR LRM 2 20160303T202904 20160303T210533 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160303T213716\_20160303T213838\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160303T213844\_20160303T215458\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160303T221227\_20160303T222534\_C001 CS OFFL SIR LRM 2 20160303T222748 20160303T223940 C001 CS OFFL SIR LRM 2 20160303T230711 20160303T231735 C001 CS OFFL SIR LRM 2 20160303T231915 20160303T233413 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160303T235716\_20160304T000145\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T002443\_20160303T002656\_C001 CS OFFL SIR SIN 2 20160303T003206 20160303T003212 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T003337\_20160303T003804\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T020459\_20160303T020732\_C001 CS OFFL SIR SIN 2 20160303T021103 20160303T021110 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T021453\_20160303T021636\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T034349\_20160303T034518\_C001 CS OFFL SIR SIN 2 20160303T035017 20160303T035024 C001 CS OFFL SIR SIN 2 20160303T035352 20160303T035530 C001 CS OFFL SIR SIN 2 20160303T044237 20160303T044301 C001 CS OFFL SIR SIN 2 20160303T052359 20160303T052516 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T053048\_20160303T053406\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T062203\_20160303T062256\_C001 CS OFFL SIR SIN 2 20160303T070319 20160303T070435 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T070944\_20160303T071257\_C001 CS\_OFFL\_SIR\_SIN\_2\_20160303T084416\_20160303T084651\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T084848\_20160303T085406\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T102312\_20160303T102554\_C001 CS OFFL SIR SIN 2 20160303T102758 20160303T102859 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T103300\_20160303T103438\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T111846\_20160303T111954\_C001 CS OFFL SIR SIN 2 20160303T112056 20160303T112211 C001 CS OFFL SIR SIN 2 20160303T115259 20160303T115624 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T120141\_20160303T120356\_C001 CS OFFL SIR SIN 2 20160303T121202 20160303T121350 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T125801\_20160303T130356\_C001 CS OFFL SIR SIN 2 20160303T134049 20160303T134236 C001 CS OFFL SIR SIN 2 20160303T134444 20160303T134514 C001 CS OFFL SIR SIN 2 20160303T135045 20160303T135311 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T143130\_20160303T143154\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T143252\_20160303T143320\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T152015\_20160303T152157\_C001 CS OFFL SIR SIN 2 20160303T152301 20160303T152444 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T152931\_20160303T152946\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T153044\_20160303T153207\_C001 CS OFFL SIR SIN 2 20160303T170024 20160303T170354 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T170925\_20160303T171041\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160303T183935\_20160303T184256\_C001

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

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 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 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 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 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 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 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 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 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

CS_OFFL_SIR_SIN_220160303T184810_20160303T184934_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T193003_20160303T193146_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T201643_20160303T201836_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T202709_20160303T202819_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T210554_20160303T210657_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T210944_20160303T211052_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T215459_20160303T215636_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T220410_20160303T220606_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T224749_20160303T225006_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_220160303T233413_20160303T233602_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T234123_20160303T234129_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T234244_20160303T234751_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160303T234755_20160303T234937_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records