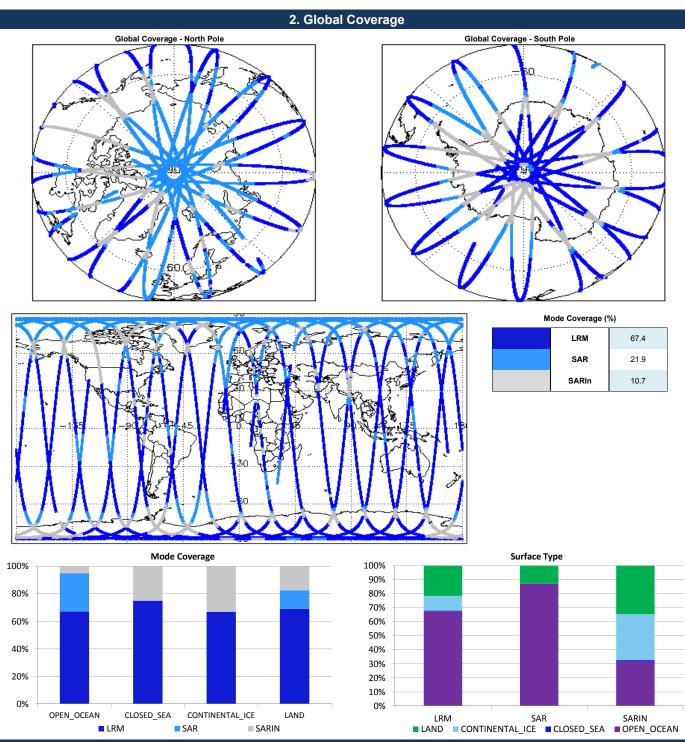


# IDEAS+ Daily Report for OFFLINE data:

# <u>15/04/2015</u>

1. Overview						
		Check Status				
Report Production Date:	14-Aug-2015	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	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 / Instrument News						
14-Apr-2015 None	None					
15-Apr-2015 None	None					
16-Apr-2015 Nothing planned	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:

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: 1	
Product	Test Failed
CS_OFFL_SIR_SAR_1B_20150415T002001_20150415T002001_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

Number of products with errors: 0

#### 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: 0

1

# 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_20150415T135434_20150415T140934_C001		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:

## 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.

98

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_220150414T235244_20150415T001901_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_220150415T003948_20150415T010755_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_220150415T012619_20150415T014346_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_220150415T014827_20150415T015722_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_220150415T021707_20150415T023228_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_220150415T023441_20150415T024940_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_220150415T030521_20150415T032014_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T032153_20150415T032331_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T032333_20150415T033748_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T035958_20150415T040556_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T040718_20150415T040935_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_220150415T041556_20150415T043116_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_220150415T044458_20150415T050751_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_220150415T054702_20150415T055306_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T055835_20150415T061028_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_220150415T061602_20150415T062045_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more record
CS_OFFL_SIR_LRM_220150415T062351_20150415T062644_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 err for Retracker 3 for one or more records
S_OFFL_SIR_LRM_220150415T062652_20150415T065002_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T072028_20150415T073220_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_220150415T073749_20150415T074918_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
S_OFFL_SIR_LRM_220150415T080249_20150415T083149_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_220150415T083917_20150415T084003_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 err for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220150415T085400_20150415T092818_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 err for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220150415T095025_20150415T095424_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_220150415T100720_20150415T100945_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_220150415T101729_20150415T102126_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 err for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220150415T103354_20150415T104232_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_220150415T104517_20150415T110733_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 err for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220150415T113537_20150415T114813_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 err for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220150415T121244_20150415T124559_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 err for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_220150415T130428_20150415T133511_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_220150415T135434_20150415T140934_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_220150415T140949_20150415T142527_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_220150415T144203_20150415T145204_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_220150415T145824_20150415T150959_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_220150415T153622_20150415T154812_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_220150415T154951_20150415T160417_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_220150415T161924_20150415T164202_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 err for Retracker 3 for one or more records

CS\_OFFL\_SIR\_LRM\_2\_\_20150415T164324\_20150415T165148\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20150415T172053\_20150415T174350\_C001 CS OFFL SIR LRM 2 20150415T175703 20150415T180909 C001 CS\_OFFL\_SIR\_LRM\_2\_20150415T181439\_20150415T182601\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20150415T184705\_20150415T184839\_C001 CS OFFL SIR LRM 2 20150415T193703 20150415T194823 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20150415T195353\_20150415T201100\_C001 CS OFFL SIR LRM 2 20150415T203344 20150415T205143 C001 CS OFFL SIR LRM 2 20150415T211619 20150415T215001 C001 CS OFFL SIR LRM 2 20150415T221416 20150415T221641 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20150415T221824\_20150415T222752\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20150415T225530\_20150415T232959\_C001 CS OFFL SIR LRM 2 20150415T235410 20150416T001658 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T003545\_20150415T003636\_C001 CS OFFL SIR SIN 2 20150415T011453 20150415T011728 C001 CS OFFL SIR SIN 2 20150415T011921 20150415T012246 C001 CS OFFL SIR SIN 2 20150415T012330 20150415T012549 C001 CS OFFL SIR SIN 2 20150415T021006 20150415T021127 C001 CS OFFL SIR SIN 2 20150415T021440 20150415T021700 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T025016\_20150415T025618\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T025835\_20150415T025912\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T030333\_20150415T030510\_C001 CS OFFL SIR SIN 2 20150415T034429 20150415T034514 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T034929\_20150415T035142\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T035326\_20150415T035539\_C001 CS\_OFFL\_SIR\_SIN\_2\_20150415T043220\_20150415T043407\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T044238\_20150415T044430\_C001 CS OFFL SIR SIN 2 20150415T052842 20150415T053332 C001 CS OFFL SIR SIN 2 20150415T061153 20150415T061314 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T061508\_20150415T061602\_C001 CS OFFL SIR SIN 2 20150415T062045 20150415T062300 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T070327\_20150415T070351\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T075122\_20150415T075243\_C001 CS OFFL SIR SIN 2 20150415T075302 20150415T075520 C001 CS OFFL SIR SIN 2 20150415T080116 20150415T080243 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T084232\_20150415T084254\_C001 CS\_OFFL\_SIR\_SIN\_2\_20150415T093114\_20150415T093427\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T093947\_20150415T094104\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T110956\_20150415T111315\_C001 CS OFFL SIR SIN 2 20150415T111843 20150415T112007 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T115643\_20150415T115728\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T115911\_20150415T120223\_C001 CS OFFL SIR SIN 2 20150415T124633 20150415T124819 C001 CS OFFL SIR SIN 2 20150415T125647 20150415T125827 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T133529\_20150415T133657\_C001 CS\_OFFL\_SIR\_SIN\_2\_20150415T134024\_20150415T134121\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T142537\_20150415T142719\_C001 CS OFFL SIR SIN 2 20150415T143256 20150415T143303 C001 CS OFFL SIR SIN 2 20150415T161154 20150415T161200 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20150415T161210\_20150415T161217\_C001

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, 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 SARIn X-track Angle Error, Surface Aodel 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 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 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 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 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 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 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 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 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 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 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

CS_OFFL_SIR_SIN_220150415T161320_20150415T161924_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T174443_20150415T174716_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T175052_20150415T175059_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T175426_20150415T175623_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T193006_20150415T193012_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T193341_20150415T193510_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T210338_20150415T210457_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T211241_20150415T211355_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T224257_20150415T224422_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220150415T224933_20150415T225238_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records