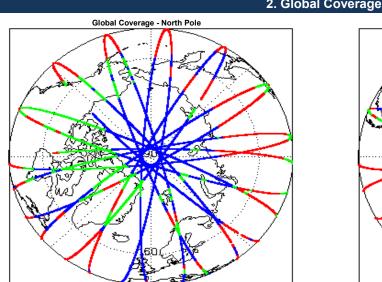
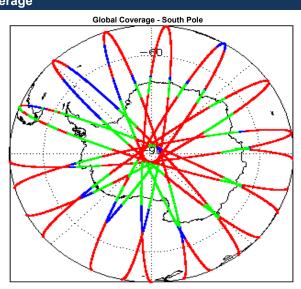


# IDEAS+ Daily Report for OFFLINE data:

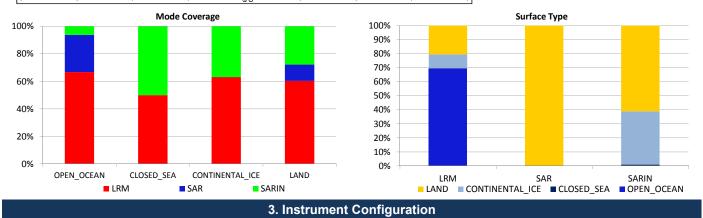
24/03/2016

Report Production Date:	21-Apr-2016	Check	Status
		Server check: science-pds.cryosat.esa.int	Nominal
		Server check: calval-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ice Processor	Product Software Check	Nominal
		Product Format Check	Nominal
Data Used:	L1B and L2 OFFLINE Data	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
lission / Instrument News			
23-Mar-2016 None			
24-Mar-2016 None			
25-Mar-2016 Nothing planned			





Mode Coverage (%)			
	LRM	21.0	
	SAR	14.2	
	SARIn	0.0	



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

## 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	
	r 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_20160324T211018_20160324T211023_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
4.3 Star Tracker Usage Check	
Fach product is shapled in order to ensure a valid star tracker file has been used in process	in a

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

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: 0

2

0

## 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_20160324T051426_20160324T051533_C001		The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_LRM_1B_20160324T160554_20160324T161117_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:

Number of products with errors:

Product CS\_OFFL\_SIR\_SAR\_2\_20160324T211018\_20160324T211023\_C001

# Test Failed 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.

95

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_220160324T002449_20160324T004906_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_220160324T010156_20160324T013109_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_220160324T020134_20160324T022826_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_220160324T024121_20160324T025312_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_220160324T025850_20160324T031609_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_220160324T033835_20160324T034853_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_220160324T040957_20160324T041536_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160324T042044_20160324T045448_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_220160324T052319_20160324T054747_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_220160324T055949_20160324T063434_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_220160324T065905_20160324T072157_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_220160324T073127_20160324T073333_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160324T074030_20160324T080954_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_220160324T082935_20160324T084743_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_220160324T084848_20160324T090224_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_220160324T091043_20160324T091242_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160324T091926_20160324T093504_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_220160324T093706_20160324T094628_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_220160324T101415_20160324T102546_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_220160324T104147_20160324T104310_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_220160324T105835_20160324T111409_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_220160324T115206_20160324T122453_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_220160324T122719_20160324T122932_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160324T122948_20160324T123537_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220160324T123804_20160324T130347_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_220160324T133506_20160324T133751_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_220160324T133755_20160324T134627_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_220160324T141643_20160324T144608_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_220160324T150927_20160324T151551_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_220160324T163315_20160324T163443_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_220160324T164801_20160324T172222_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_220160324T173440_20160324T180258_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_220160324T180335_20160324T180503_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_220160324T182626_20160324T190005_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\_2\_\_20160324T190759\_20160324T191159\_C001 CS OFFL SIR LRM 2 20160324T191402 20160324T194249 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160324T200920\_20160324T201717\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160324T202158\_20160324T202344\_C001 CS OFFL SIR LRM 2 20160324T202347 20160324T203942 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160324T205745\_20160324T211018\_C001 CS OFFL SIR LRM 2 20160324T215149 20160324T220120 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160324T220357\_20160324T221858\_C001 CS OFFL SIR LRM 2 20160324T225354 20160324T225608 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160324T225732\_20160324T230121\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20160324T230138\_20160324T230443\_C001 CS OFFL SIR LRM 2 20160324T234059 20160324T235802 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T000912\_20160324T000946\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T004944\_20160324T005216\_C001 CS OFFL SIR SIN 2 20160324T005550 20160324T005557 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T005934\_20160324T010125\_C001 CS OFFL SIR SIN 2 20160324T022826 20160324T022958 C001 CS OFFL SIR SIN 2 20160324T023504 20160324T023511 C001 CS OFFL SIR SIN 2 20160324T023839 20160324T024011 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T040844\_20160324T040957\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T041536\_20160324T041649\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T041738\_20160324T041853\_C001 CS OFFL SIR SIN 2 20160324T050648 20160324T050710 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T050724\_20160324T050741\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T054756\_20160324T054920\_C001 CS\_OFFL\_SIR\_SIN\_2\_20160324T055431\_20160324T055451\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T072839\_20160324T073127\_C001 CS OFFL SIR SIN 2 20160324T073333 20160324T073859 C001 CS OFFL SIR SIN 2 20160324T082426 20160324T082851 C001 CS OFFL SIR SIN 2 20160324T091242 20160324T091358 C001 CS OFFL SIR SIN 2 20160324T091745 20160324T091925 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T100325\_20160324T100436\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T100557\_20160324T100802\_C001 CS OFFL SIR SIN 2 20160324T104522 20160324T104855 C001 CS OFFL SIR SIN 2 20160324T105646 20160324T105833 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T114245\_20160324T114509\_C001 CS\_OFFL\_SIR\_SIN\_2\_20160324T114515\_20160324T114728\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T122529\_20160324T122719\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T122932\_20160324T122947\_C001 CS OFFL SIR SIN 2 20160324T123537 20160324T123758 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T131736\_20160324T131809\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T140502\_20160324T140642\_C001 CS OFFL SIR SIN 2 20160324T140757 20160324T140929 C001 CS OFFL SIR SIN 2 20160324T141355 20160324T141643 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T154501\_20160324T154839\_C001 CS OFFL SIR SIN 2 20160324T155417 20160324T155532 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T163531\_20160324T163601\_C001 CS OFFL SIR SIN 2 20160324T172424 20160324T172743 C001 CS OFFL SIR SIN 2 20160324T173256 20160324T173421 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20160324T181512\_20160324T181619\_C001

Surface Model Unavailable Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), 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, Surface Model Unavailable 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 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

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 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 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 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 and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode 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 and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more

CS_OFFL_SIR_SIN_220160324T190137_20160324T190513_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T191200_20160324T191308_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T195059_20160324T195220_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T195423_20160324T195535_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T204903_20160324T205051_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T213158_20160324T213449_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_220160324T221901_20160324T222046_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T222610_20160324T222615_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T222732_20160324T223340_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220160324T230915_20160324T231333_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_220160324T235807_20160325T000039_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records