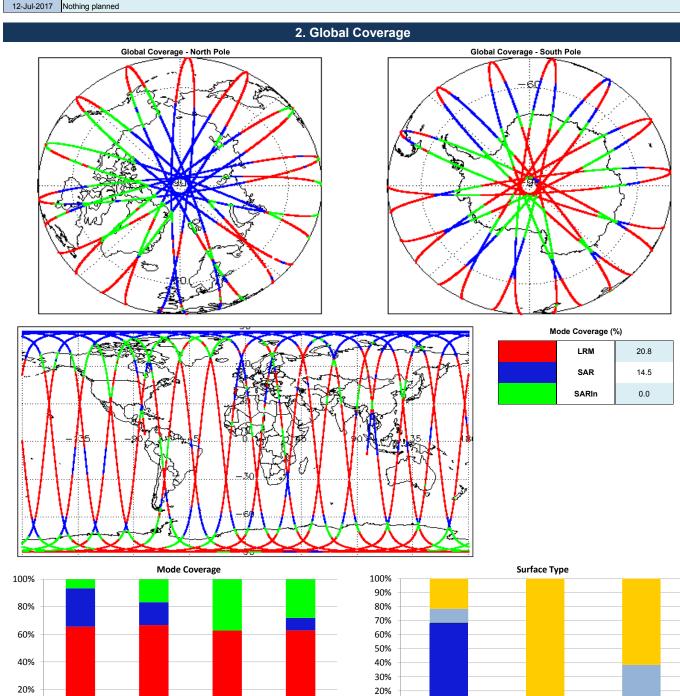


IDEAS+ Daily Report for OFFLINE data:

<u>11/07/2017</u>

1. Overview				
		Check	Status	
Report Production Date:	09-Aug-2017	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	
		<u> </u>		
ission / Instrument News				
10-Jul-2017 None				
11-Jul-2017 None				
40 bil 0047 Nothing along a				



10%

0%

LRM SAR SARIN LAND CONTINENTAL_ICE CLOSED_SEA OPEN_OCEAN

SAR 3. Instrument Configuration

CONTINENTAL_ICE

LAND

SARIN

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

CLOSED_SEA

SIRAL instrument(s) in use: SIRAL - A

LRM

OPEN_OCEAN

0%

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

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:
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: 2

Product Test Failed Description CS_OFFL_SIR_LRM_1B_20170711T104641_20170711T105511_C001 Echo error, TRK echo error The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo CS_OFFL_SIR_LRM_1B_20170711T113833_20170711T113945_C001 Echo error, TRK echo error 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: 0

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.

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:

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:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220170710T235726_20170711T000308_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_220170711T000551_20170711T001238_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_220170711T001554_20170711T001603_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_220170711T004200_20170711T010303_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_220170711T011914_20170711T014526_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_220170711T020817_20170711T020848_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_220170711T021828_20170711T024302_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_220170711T025850_20170711T030918_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_220170711T031456_20170711T033148_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_220170711T034452_20170711T035133_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220170711T035446_20170711T041238_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170711T042604_20170711T043149_C001	Error (Retracker 2) Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220170711T043906_20170711T051127_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_220170711T052406_20170711T052535_C001	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220170711T054258_20170711T060027_C001	Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2)	records There is a height and backscatter error for Retracker 2 for one or more records
	Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
	Error (Retracker 2) Height Error (Retracker 2), Backscatter	records There is a height and backscatter error for Retracker 2 for one or more
	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_220170711T072047_20170711T074010_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_220170711T074726_20170711T074944_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220170711T075713_20170711T083318_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_220170711T084514_20170711T090430_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_220170711T090500_20170711T091800_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_220170711T092656_20170711T092852_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220170711T093619_20170711T095115_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_220170711T095317_20170711T100239_C001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height 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_220170711T102505_20170711T104200_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_220170711T110520_20170711T110816_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220170711T120820_20170711T121406_C001	Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170711T121650_20170711T123956_C001	Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220170711T124327_20170711T125155_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220170711T125521_20170711T132000_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_220170711T132937_20170711T133008_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_220170711T135122_20170711T140239_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_220170711T140812_20170711T141852_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_220170711T143443_20170711T150013_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_220170711T150547_20170711T151204_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_220170711T152613_20170711T154154_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_220170711T154723_20170711T155707_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_220170711T164937_20170711T165114_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_220170711T170348_20170711T173652_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_20170711T175343_20170711T181028_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_220170711T182843_20170711T182934_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_220170711T182949_20170711T183012_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_220170711T184034_20170711T191104_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), Backscatter	There is a height and backscatter error for Retracker 2 for one or more

CS_OFFL_SIR_LRM_2__20170711T192401_20170711T192815_C001 CS_OFFL_SIR_LRM_2_20170711T193302_20170711T200659_C001 CS OFFL SIR LRM 2 20170711T201918 20170711T203456 C001 CS_OFFL_SIR_LRM_2_20170711T203811_20170711T205503_C001 CS_OFFL_SIR_LRM_2__20170711T211402_20170711T212441_C001 CS OFFL SIR LRM 2 20170711T212804 20170711T214511 C001 CS OFFL SIR LRM 2 20170711T220724 20170711T221730 C001 CS_OFFL_SIR_LRM_2__20170711T221932_20170711T223401_C001 CS OFFL SIR LRM 2 20170711T230753 20170711T232051 C001 CS_OFFL_SIR_SIN_2_20170711T010530_20170711T010823_C001 CS_OFFL_SIR_SIN_2__20170711T011526_20170711T011727_C001 CS OFFL SIR SIN 2 20170711T024429 20170711T024605 C001 CS_OFFL_SIR_SIN_2__20170711T025117_20170711T025123_C001 CS_OFFL_SIR_SIN_2__20170711T025451_20170711T025616_C001 CS OFFL SIR SIN 2 20170711T034320 20170711T034351 C001 CS_OFFL_SIR_SIN_2__20170711T042439_20170711T042604_C001 CS OFFL SIR SIN 2 20170711T043150 20170711T043211 C001 CS OFFL SIR SIN 2 20170711T043351 20170711T043505 C001 CS_OFFL_SIR_SIN_2__20170711T060406_20170711T060532_C001 CS_OFFL_SIR_SIN_2__20170711T061043_20170711T061346_C001 CS_OFFL_SIR_SIN_2__20170711T074427_20170711T074726_C001 CS_OFFL_SIR_SIN_2__20170711T074945_20170711T075502_C001 CS OFFL SIR SIN 2 20170711T084043 20170711T084456 C001 CS_OFFL_SIR_SIN_2__20170711T092421_20170711T092655_C001 CS_OFFL_SIR_SIN_2__20170711T092853_20170711T093027_C001 CS_OFFL_SIR_SIN_2_20170711T093355_20170711T093527_C001 CS_OFFL_SIR_SIN_2__20170711T101935_20170711T102049_C001 CS OFFL SIR SIN 2 20170711T102233 20170711T102317 C001 CS OFFL SIR SIN 2 20170711T102319 20170711T102504 C001 CS OFFL SIR SIN 2 20170711T105923 20170711T110520 C001 CS OFFL SIR SIN 2 20170711T111256 20170711T111439 C001 CS_OFFL_SIR_SIN_2__20170711T115858_20170711T115951_C001 CS_OFFL_SIR_SIN_2__20170711T115956_20170711T120119_C001 CS OFFL SIR SIN 2 20170711T124137 20170711T124327 C001 CS OFFL SIR SIN 2 20170711T125155 20170711T125352 C001 CS_OFFL_SIR_SIN_2__20170711T133238_20170711T133257_C001 CS_OFFL_SIR_SIN_2_20170711T142115_20170711T142252_C001 CS_OFFL_SIR_SIN_2__20170711T142417_20170711T142538_C001 CS_OFFL_SIR_SIN_2__20170711T142956_20170711T143245_C001 CS OFFL SIR SIN 2 20170711T160104 20170711T160450 C001 CS_OFFL_SIR_SIN_2__20170711T161035_20170711T161149_C001 CS_OFFL_SIR_SIN_2_20170711T165117_20170711T165215_C001 CS OFFL SIR SIN 2 20170711T174039 20170711T174355 C001 CS OFFL SIR SIN 2 20170711T174907 20170711T175029 C001 CS_OFFL_SIR_SIN_2__20170711T183133_20170711T183219_C001 CS OFFL SIR SIN 2 20170711T191754 20170711T192157 C001 CS_OFFL_SIR_SIN_2__20170711T192815_20170711T192922_C001 CS OFFL SIR SIN 2 20170711T200714 20170711T200927 C001 CS OFFL SIR SIN 2 20170711T201030 20170711T201148 C001 CS_OFFL_SIR_SIN_2_20170711T205602_20170711T205732_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), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) 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 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

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 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 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 and a height error for Retracker 3 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 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 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 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

CS_OFFL_SIR_SIN_220170711T210522_20170711T210706_C001		An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170711T214512_20170711T214910_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170711T214932_20170711T215012_C001		An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170711T223514_20170711T223657_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220170711T224345_20170711T224959_C001		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_220170711T232709_20170711T232950_C001		An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records

6. QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors
SIR_LRM_1B	139	139	139	0	0
SIR_LRM_2	137	137	137	0	0
SIR_LRMI2_	137	137	137	0	0
SIR_SAR_1B	98	98	98	0	0
SIR_SAR_2	98	98	98	0	0
SIR_SARI2	98	98	98	0	0
SIR_SIN_1B	107	107	107	0	0
SIR_SIN_2	107	107	107	0	0
SIR_SINI2	107	107	107	0	0
SIR_GDR_2	13	13	13	0	0

6.1 QCC Errors			
Number of products with QCC errors:	0		
6.2 QCC Warnings			
Number of QCC reports with warnings	0		
6.2 Missing QCC Reports			
Number of products with missing QCC reports:	178		