

IDEAS+ Daily Report for OFFLINE data:

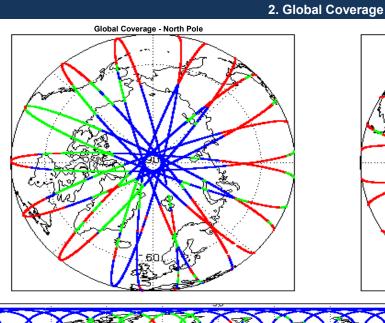
<u>30/07/2018</u>

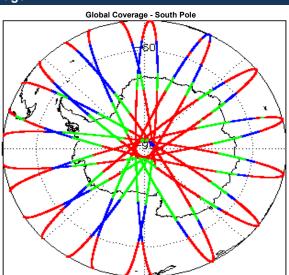


1. Overview

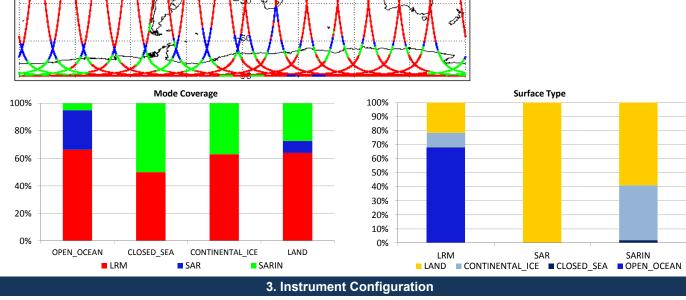
Papart Braduction Data	29-Aug-2018	Check	Status	
Report Production Date:		Server check: science-pds.cryosat.esa.int	Nominal	
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal	
		Product Software Check	Nominal	
Data Used:	L1B and L2 OFFLINE Data	Product Format Check	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				
29-Jul-2018	L0 data missing on 29-Jul-2018 due to an unplanned ground segment anomaly: SARIn 05:13:07 - 07:32:57; SAR & SARIN 11:37:24 - 13:16:20.			
30-Jul-2018	None			
31-Jul-2018	Nothing planned			





Mode Coverage (%)
LRM 21.2
SAR 13.6
SARIn 0.0



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

SIRAL instrument(s) in use: SIRAL - A

35

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

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

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: 2

Product Test Failed Description CS_OFFL_SIR_LRM_1B_20180730T052821_20180730T053852_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_20180730T214621_20180730T215504_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_220180730T001001_20180730T002007_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_220180730T002155_20180730T002912_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_220180730T003008_20180730T003413_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_220180730T005632_20180730T013149_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_220180730T014002_20180730T014235_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220180730T015046_20180730T020315_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_220180730T020342_20180730T022101_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_220180730T023458_20180730T024107_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_220180730T024227_20180730T025406_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_220180730T025610_20180730T031056_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_220180730T032747_20180730T034001_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_220180730T034441_20180730T035952_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_220180730T050546_20180730T052819_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_220180730T052821_20180730T053852_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_220180730T060555_20180730T062709_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_220180730T063730_20180730T064057_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220180730T064420_20180730T071036_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_220180730T074358_20180730T080827_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_220180730T082422_20180730T083434_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_220180730T084009_20180730T085756_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_220180730T090954_20180730T091639_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_220180730T092233_20180730T092410_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_220180730T095121_20180730T095653_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220180730T100407_20180730T103928_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_220180730T104912_20180730T105109_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_220180730T110913_20180730T112531_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_220180730T114246_20180730T121819_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_220180730T122934_20180730T123008_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_220180730T124025_20180730T124504_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_220180730T124541_20180730T130321_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_220180730T131257_20180730T131452_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220180730T132227_20180730T133912_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_220180730T134354_20180730T135817_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_220180730T141054_20180730T142825_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_220180730T143007_20180730T144419_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_220180730T150120_20180730T151619_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_220180730T151821_20180730T152743_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_220180730T155030_20180730T160707_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_220180730T161250_20180730T162039_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_220180730T162212_20180730T162512_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_220180730T163000_20180730T163807_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220180730T173223_20180730T180510_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_220180730T180842_20180730T181047_C001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records

CS_OFFL_SIR_LRM_2__20180730T181121_20180730T181648_C001 CS OFFL SIR LRM 2 20180730T182116 20180730T184435 C001 CS_OFFL_SIR_LRM_2__20180730T191808_20180730T192748_C001 CS_OFFL_SIR_LRM_2__20180730T193326_20180730T194342_C001 CS_OFFL_SIR_LRM_2__20180730T195952_20180730T202637_C001 CS_OFFL_SIR_LRM_2__20180730T203103_20180730T203701_C001 CS_OFFL_SIR_LRM_2__20180730T205014_20180730T212159_C001 CS OFFL SIR LRM 2 20180730T221416 20180730T221703 C001 CS OFFL SIR LRM 2 20180730T222903 20180730T230210 C001 CS OFFL SIR LRM 2 20180730T231917 20180730T233554 C001 CS_OFFL_SIR_SIN_2__20180730T000501_20180730T000621_C001 CS_OFFL_SIR_SIN_2__20180730T004425_20180730T004835_C001 CS_OFFL_SIR_SIN_2__20180730T013255_20180730T013414_C001 CS OFFL SIR SIN 2 20180730T014235 20180730T014423 C001 CS_OFFL_SIR_SIN_2__20180730T022102_20180730T022227_C001 CS OFFL SIR SIN 2 20180730T022348 20180730T022446 C001 CS_OFFL_SIR_SIN_2__20180730T022638_20180730T022717_C001 CS_OFFL_SIR_SIN_2__20180730T031200_20180730T031342_C001 CS OFFL SIR SIN 2 20180730T031912 20180730T031919 C001 CS_OFFL_SIR_SIN_2__20180730T032041_20180730T032305_C001 CS_OFFL_SIR_SIN_2__20180730T040058_20180730T040354_C001 CS OFFL SIR SIN 2 20180730T040433 20180730T040643 C001 CS OFFL SIR SIN 2 20180730T045045 20180730T045303 C001 CS OFFL SIR SIN 2 20180730T045811 20180730T045816 C001 CS OFFL SIR SIN 2 20180730T045826 20180730T045833 C001 CS_OFFL_SIR_SIN_2__20180730T045943_20180730T050407_C001 CS OFFL SIR SIN 2 20180730T063103 20180730T063335 C001 CS OFFL SIR SIN 2 20180730T063708 20180730T063715 C001 CS_OFFL_SIR_SIN_2__20180730T064058_20180730T064240_C001 CS_OFFL_SIR_SIN_2_20180730T080955_20180730T081123_C001 CS_OFFL_SIR_SIN_2__20180730T081622_20180730T081628_C001 CS_OFFL_SIR_SIN_2__20180730T081957_20180730T082135_C001 CS OFFL SIR SIN 2 20180730T090837 20180730T090901 C001 CS_OFFL_SIR_SIN_2__20180730T095003_20180730T095121_C001 CS_OFFL_SIR_SIN_2_20180730T095653_20180730T100010_C001 CS OFFL SIR SIN 2 20180730T104803 20180730T104852 C001 CS OFFL SIR SIN 2 20180730T112925 20180730T113040 C001 CS_OFFL_SIR_SIN_2__20180730T113549_20180730T113902_C001 CS_OFFL_SIR_SIN_2__20180730T131021_20180730T131257_C001 CS_OFFL_SIR_SIN_2__20180730T131453_20180730T132029_C001 CS OFFL SIR SIN 2 20180730T140539 20180730T141043 C001 CS_OFFL_SIR_SIN_2__20180730T144908_20180730T145158_C001 CS_OFFL_SIR_SIN_2__20180730T145403_20180730T145503_C001 CS_OFFL_SIR_SIN_2__20180730T145905_20180730T150042_C001 CS_OFFL_SIR_SIN_2__20180730T154516_20180730T154554_C001 CS_OFFL_SIR_SIN_2__20180730T154654_20180730T154803_C001 CS OFFL SIR SIN 2 20180730T162748 20180730T162959 C001 CS_OFFL_SIR_SIN_2__20180730T163807_20180730T163955_C001 CS_OFFL_SIR_SIN_2__20180730T172401_20180730T172954_C001 CS OFFL SIR SIN 2 20180730T180655 20180730T180842 C001

Surface Model Unavailable Height Error (Retracker 2), 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 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 SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error, Surface Aodel Unavailable 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 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 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 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 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 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

CS_OFFL_SIR_SIN_220180730T181048_20180730T181121_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220180730T181649_20180730T181916_C001	SARIn X-track Angle Error	An ambiguous angle was detected for SARIn mode for one or more records
CS_OFFL_SIR_SIN_220180730T185728_20180730T185753_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

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	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_LRM_1B	141	141	141	0	0
SIR_LRM_2	139	139	139	0	0
SIR_LRMI2_	139	139	139	0	0
SIR_SAR_1B	94	94	94	0	0
SIR_SAR_2	94	94	94	0	0
SIR_SARI2_	94	94	94	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	15	15	15	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: 192