

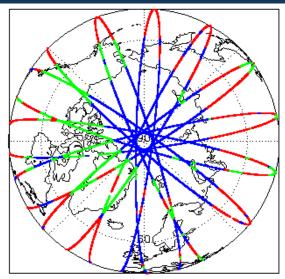
1. Overview

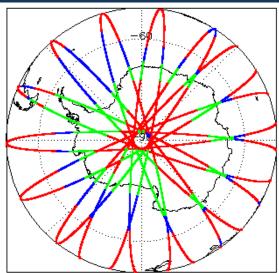
Report Production Date:	26-Jun-2020
Processor Used:	CryoSat Ice Processor
Data Used:	L1B and L2 OFFLINE Data

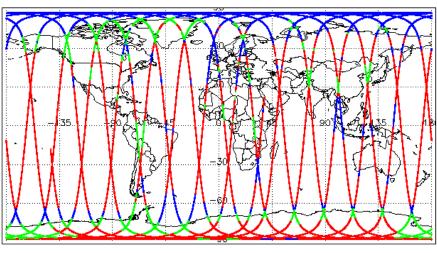
Check	Status		
Server check: science-pds.cryosat.esa.int	Nominal		
Server check: calval-pds.cryosat.esa.int	Nominal		
Product Software Check	Nominal		
Product Format Check	Nominal		
Product Header Analysis	Nominal		
Star Tracker Usage Check	Nominal		
L1B Tracking Flag Check	See Section 4.4		
L1B Calibration 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 4.8 and 5.5		
QCC Errors/ Warnings	See Section 6.1, 6.2 and 6.3		

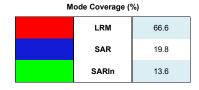
Mission / Instru	Mission / Instrument News			
26-May-2020	None			
27-May-2020	None			
28-May-2020	Nothing planned			

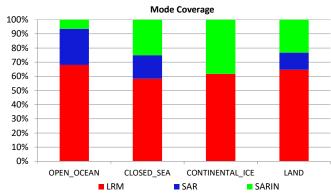
2. Global Coverage

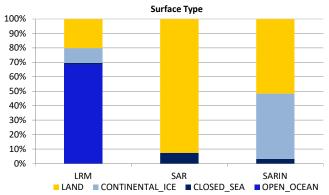












3. Instrument Configuration

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:

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.

Test Failed

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 Tracking Flags Check

CryoSat L1B data includes a tracking flag for each measurement record. The bit value of this flag indicates any problems when set.

Loss of Echo Flag: This flag is currently set for some products over land, but this is to be expected.

umber of products with errors:

ict Test Failed		Description		
CS_OFFL_SIR_LRM_1B_20200526T235850_20200527T000033_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T000036_20200527T000039_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T000042_20200527T000101_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T000104_20200527T000157_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T000222_20200527T001218_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T012604_20200527T012619_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T013000_20200527T013121_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T013132_20200527T013240_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T013902_20200527T014348_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T014352_20200527T020210_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T025118_20200527T025119_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T025121_20200527T025123_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T025125_20200527T025251_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T031449_20200527T031929_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T032008_20200527T033837_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T043020_20200527T043154_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T043156_20200527T043158_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T043200_20200527T043245_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T050431_20200527T051746_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T052627_20200527T052824_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T053522_20200527T055046_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T060534_20200527T061232_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T062855_20200527T064131_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064656_20200527T064907_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064910_20200527T064911_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064914_20200527T064919_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064924_20200527T064928_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064933_20200527T064934_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064939_20200527T064939_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064944_20200527T064950_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064952_20200527T064953_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T064956_20200527T065016_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T065018_20200527T065602_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T073804_20200527T073910_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T074139_20200527T074150_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T074221_20200527T074801_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T074805_20200527T075213_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T080748_20200527T081459_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T081559_20200527T084000_D001	Loss of echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_LRM_1B_20200527T084300_20200527T084516_D001	Loss of echo	The tracking echo is missing for one or more records		

CS_OFFL_SIR_LRM_1B_20200527T085442_20200527T091945_D001	Loss of echo	The tracking echo is missing for one or more records
CS OFFL SIR LRM 1B 20200527T092310 20200527T092744 D001	Loss of echo	The tracking echo is missing for one or more records
CS OFFL SIR LRM 1B 20200527T094246 20200527T094330 D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T094453_20200527T094840_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T095052_20200527T095137_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T095141_20200527T095142_D001	Loss of echo	•
		The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T095144_20200527T101847_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T103323_20200527T110030_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T110034_20200527T110231_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T110316_20200527T110447_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T110521_20200527T110800_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T122231_20200527T122656_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T123130_20200527T123816_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T124102_20200527T124136_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T124153_20200527T124245_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T124247_20200527T124452_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T141328_20200527T141851_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T142002_20200527T142034_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T142044_20200527T142104_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T142117_20200527T142217_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T144221_20200527T151540_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T152332_20200527T152745_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T161839_20200527T162025_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T163743_20200527T163924_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T163926_20200527T163937_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T163942_20200527T163948_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T163950_20200527T163953_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T163956_20200527T164820_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T171336_20200527T172557_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T175752_20200527T180324_D001	Loss of echo	The tracking echo is missing for one or more records
CS OFFL SIR LRM 1B 20200527T180732 20200527T181702 D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T181905_20200527T182621_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T185534_20200527T185904_D001	Loss of echo	The tracking echo is missing for one or more records
CS OFFL SIR LRM 1B 20200527T185906 20200527T185929 D001	Loss of echo	The tracking echo is missing for one or more records
CS OFFL SIR LRM 1B 20200527T185931 20200527T185940 D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T190052_20200527T190122_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T190725_20200527T190858_D001	Loss of echo	The tracking echo is missing for one or more records
CS OFFL SIR LRM 1B 20200527T190901 20200527T191133 D001		
	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T191138_20200527T191539_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T191708_20200527T192023_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T193630_20200527T194143_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T194204_20200527T194238_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T194241_20200527T194359_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T194402_20200527T194412_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T194414_20200527T194659_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T194903_20200527T195005_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T202113_20200527T202238_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T202729_20200527T205015_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T205018_20200527T205035_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T205037_20200527T210143_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T211606_20200527T211858_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T211914_20200527T212257_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T212654_20200527T215223_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T215543_20200527T215952_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T223528_20200527T223818_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T225626_20200527T230153_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T230214_20200527T230439_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T230443_20200527T230526_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T230528_20200527T233230_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200527T233909_20200527T234240_D001	Loss of echo	The tracking echo is missing for one or more records

4.6 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:

4.7 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:

4.8 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_20200527T013132_20200527T013240_D001		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.

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_220200526T235850_20200527T000033_D001	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_220200527T003729_20200527T011105_D001	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_220200527T012412_20200527T012508_D001	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_220200527T014352_20200527T020210_D001	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_220200527T021632_20200527T025038_D001	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_220200527T031449_20200527T031929_D001	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_220200527T032008_20200527T033837_D001	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_220200527T035626_20200527T042848_D001	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_220200527T043020_20200527T043154_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200527T044509_20200527T050349_D001	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_220200527T050431_20200527T051746_D001	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_220200527T053522_20200527T055046_D001	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_220200527T055247_20200527T060209_D001	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_220200527T062421_20200527T062646_D001	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_220200527T062855_20200527T064131_D001	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_220200527T074221_20200527T074801_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200527T080748_20200527T081459_D001	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_220200527T081559_20200527T084000_D001	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_220200527T085442_20200527T091945_D001	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_220200527T092907_20200527T092944_D001	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_220200527T095144_20200527T101847_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20200527T103323_20200527T110030_D001	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_220200527T112531_20200527T115742_D001	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_220200527T124903_20200527T125012_D001	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_220200527T130328_20200527T133700_D001	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_20200527T135142_20200527T141009_D001	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_220200527T144221_20200527T151540_D001	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_20200527T153137_20200527T155712_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20200527T155803_20200527T160607_D001	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_220200527T162450_20200527T163302_D001	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_220200527T163743_20200527T163924_D001	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_220200527T163956_20200527T164820_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20200527T171336_20200527T172557_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20200527T172750_20200527T173627_D001	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_220200527T173754_20200527T174505_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20200527T180732_20200527T181702_D001	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_20200527T181905_20200527T182621_D001	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_220200527T184929_20200527T185232_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_2_20200527T185931_20200527T185940_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20200527T190052_20200527T190122_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20200527T190901_20200527T191133_D001	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_220200527T191138_20200527T191539_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records

	1	
	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_220200527T194204_20200527T194238_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200527T194414_20200527T194659_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200527T202729_20200527T205015_D001	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
	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_220200527T211606_20200527T211858_D001	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
	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 Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
	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_220200527T230214_20200527T230439_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200527T230528_20200527T233230_D001	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
	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 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	161	161	161	0	0
SIR_SAR_1B	104	104	104	0	0
SIR_SIN_1B	103	103	103	0	0
SIR_LRM_2	161	161	157	4	0
SIR_SAR_2	103	104	104	0	0
SIR_SIN_2	104	103	101	2	0
SIR_GDR_2	14	14	0	0	14

6.1 QCC Errors

Number of products with QCC errors:

14

Product Type MPHDUTNCDF MPHXPFNCDF MPHXVFNCDF MPHYPFNCDF MPHXVFNCDF MPHXVFNCDF STRUCTURESIZ

SIR_GDR_2_ I	4 14 14	14 14 14 14 14				
Test Description Key:						
Abbreviation	Test name	Details				
MPHDUTNCDF	MPH_Delta_UT1_NetCDF	Delta_UT1 mismatch				
MPHXPFNCDF	MPH_X_Position_Float_v2_NetCDF	X_Position mismatch (DBL float (GDR), rounded to 100)				
MPHXVFNCDF	MPH_X_Velocity_Float_v2_NetCDF	X_Velocity mismatch (DBL float (GDR), rounded to 1)				
MPHYPFNCDF	MPH_Y_Position_Float_v2_NetCDF	Y_Position mismatch (DBL float (GDR), rounded to 100)				
MPHYVFNCDF	MPH_Y_Velocity_Float_v2_NetCDF	Y_Velocity mismatch (DBL float (GDR), rounded to 1)				
MPHZPFNCDF	MPH_Z_Position_Float_v2_NetCDF	Z_Position mismatch (DBL float (GDR), rounded to 100)				
MPHZVFNCDF	MPH_Z_Velocity_Float_v2_NetCDF	Z_Velocity mismatch (DBL float (GDR), rounded to 1)				
STRUCTURESIZEANDF	STRUCTURE_SIZE_AND_READ	Under investigation.				

6.2 QCC Warnings

Number of QCC reports with warnings

б

Total number of occurrences of each warning

Product Type	AXDME	AXSMMEOCI	-	-	-	-	-
SIR_LRM_2_	0	4					
SIR_SIN_2_	2	0					

Test Description Key:		
Abbreviation	Test name	Details
AXDME	AttributeXrefDemMustExist	The xref_dem attribute is mandatory in SIN products over continental ice
AXSMMEOCI	AttributeXrefSlopeModelMustExistOverContinentalIce	The xref_slope_model is mandatory in LRM products over continental ice

6.2 Missing QCC Reports

Number of products with missing QCC reports:

0