

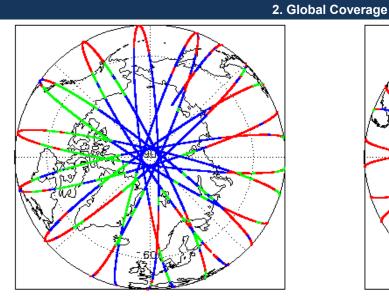
# **QA4EO Daily Report for OFFLINE data:**

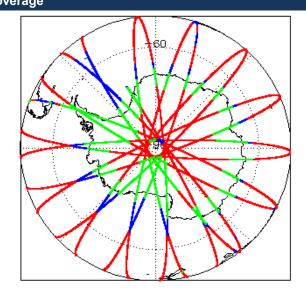
25/04/2021

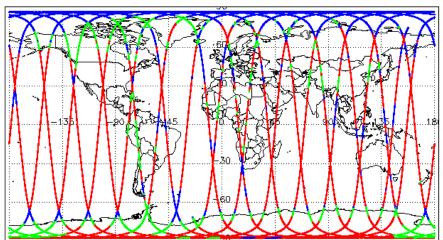
# 1. Overview

Report Production Data	27 May 2021	Check	Status	
Report Production Date:	27-May-2021	Server check: science-pds.cryosat.esa.int	Nominal	
Processor Used:	CriveSet les Bressesser	Server check: calval-pds.cryosat.esa.int	Nominal	
Processor Used.	CryoSat Ice Processor	Product Software Check	Nominal	
Data Used:	L1B and L2 OFFLINE Data	Product Format Check	Nominal	
Data Used:	LIB and L2 OFFLINE Data	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						
24-Apr-2021	None						
25-Apr-2021	None						
26-Apr-2021	Nothing planned						

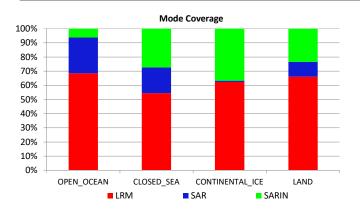


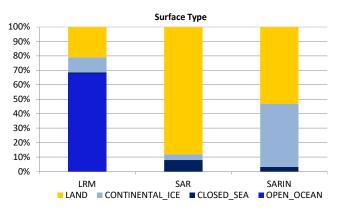




#### Mode Coverage (%)

LRM	67.2
SAR	19.2
SARIn	13.6





## 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. 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. 0

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.

134

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20210425T000110_20210425T000151_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T000153_20210425T000217_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T000220_20210425T000223_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T000225_20210425T000244_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T000246_20210425T000300_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T000303_20210425T000305_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T002019_20210425T003353_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T004517_20210425T004718_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T005553_20210425T010834_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T014024_20210425T014113_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T014116_20210425T014118_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T014125_20210425T014127_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T014130_20210425T014336_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T014340_20210425T014630_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T015012_20210425T015938_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T015940_20210425T015940_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T020219_20210425T021658_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T023647_20210425T023932_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T024319_20210425T024417_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T025003_20210425T025203_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T025205_20210425T025427_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T025550_20210425T030302_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T031909_20210425T032438_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T032449_20210425T032451_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T032454_20210425T032514_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T032518_20210425T032537_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T032539_20210425T032755_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T032758_20210425T032821_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T033125_20210425T033245_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T040349_20210425T040529_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T040947_20210425T043314_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T043318_20210425T043408_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T043411_20210425T043454_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T043458_20210425T043459_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T043502_20210425T043530_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T043533_20210425T044424_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T044546_20210425T044626_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T050136_20210425T050606_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T051003_20210425T053534_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T054249_20210425T054613_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T061814_20210425T062134_D001	Loss of echo	The tracking echo is missing for one or more records

CS OFFL SIR LRM 1B 20210425T063918 20210425T064419 D001 CS OFFL SIR LRM 1B 20210425T064511 20210425T064658 D001 CS OFFL SIR LRM 1B 20210425T064701 20210425T065312 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T065314\_20210425T071532\_D001 CS OFFL SIR LRM 1B 20210425T071712 20210425T072521 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T072833\_20210425T080251\_D001 CS OFFL SIR LRM 1B 20210425T081714 20210425T081758 D001 CS OFFL SIR LRM 1B 20210425T082030 20210425T082421 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T082438 20210425T082512 D001 CS OFFL SIR LRM 1B 20210425T083056 20210425T083551 D001 CS OFFL SIR LRM 1B 20210425T083610 20210425T084056 D001 CS OFFL SIR LRM 1B 20210425T084202 20210425T084417 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T085652\_20210425T090211\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T094436\_20210425T094437\_D001 CS OFFL SIR LRM 1B 20210425T094439 20210425T094445 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T100221\_20210425T100335\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T100340\_20210425T100358\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T100408\_20210425T100445\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T100600\_20210425T101100\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T103752\_20210425T104112\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T104719\_20210425T105306\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T105315\_20210425T111539\_D001 CS OFFL SIR LRM 1B 20210425T111607 20210425T112031 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T112242\_20210425T112244\_D001 CS OFFL SIR LRM 1B 20210425T112247 20210425T112251 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T112253\_20210425T112302\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T112307\_20210425T112318\_D001 CS OFFL SIR LRM 1B 20210425T112321 20210425T112327 D001 CS OFFL SIR LRM 1B 20210425T112330 20210425T112333 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T112336\_20210425T112438\_D001 CS OFFL SIR LRM 1B 20210425T121826 20210425T122019 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T123343\_20210425T124036\_D001 CS OFFL SIR LRM 1B 20210425T124230 20210425T124441 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T124759\_20210425T125518\_D001 CS OFFL SIR LRM 1B 20210425T125755 20210425T125840 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T125925\_20210425T125943\_D001 CS OFFL SIR LRM 1B 20210425T125946 20210425T130005 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T130008\_20210425T130019\_D001 CS\_OFEL\_SIR\_LRM\_1B\_20210425T130024\_20210425T130034\_D001 CS OFFL SIR LRM 1B 20210425T130037 20210425T130214 D001 CS OFFL SIR LRM 1B 20210425T130216 20210425T130228 D001 CS OFFL SIR LRM 1B 20210425T130230 20210425T130234 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T130239\_20210425T130241\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T130243\_20210425T130304\_D001 CS OFFL SIR LRM 1B 20210425T130306 20210425T130312 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T130318\_20210425T130321\_D001 CS OFFL SIR LRM 1B 20210425T130327 20210425T130329 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T130331\_20210425T130411\_D001 CS OFFL SIR LRM 1B 20210425T133540 20210425T133840 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T133946\_20210425T135124\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T135711\_20210425T135935\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T141337\_20210425T142110\_D001 CS OFFL SIR LRM 1B 20210425T142250 20210425T143802 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T143804\_20210425T143814 D001 CS OFFL SIR LRM 1B 20210425T143846 20210425T143858 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T143900\_20210425T143903\_D001 CS OFFL SIR LRM 1B 20210425T143905 20210425T144435 D001 CS OFFL SIR LRM 1B 20210425T145944 20210425T150258 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T150817\_20210425T151305\_D001 CS OFFL SIR LRM 1B 20210425T160908 20210425T160938 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T161551\_20210425T161559\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T161601\_20210425T161914\_D001 CS OFFL SIR LRM 1B 20210425T161932 20210425T162047 D001 CS\_OFFL\_SIR\_LRM\_1B\_20210425T163655\_20210425T171115\_D001

Loss of echo l oss of echo Loss of echo l oss of echo Loss of echo l oss of echo Loss of echo l oss of echo Loss of echo

The tracking echo is missing for one or more records The tracking echo is missing for one or more records

CS_OFFL_SIR_LRM_1B_20210425T172452_20210425T175103_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T175105_20210425T175123_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T175125_20210425T175159_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T175201_20210425T175223_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T175226_20210425T175414_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T175521_20210425T175823_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T175823_20210425T180028_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T181942_20210425T182130_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T190349_20210425T192445_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T192511_20210425T192517_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T192519_20210425T192701_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T192705_20210425T192729_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T192733_20210425T192907_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T192910_20210425T192955_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T192958_20210425T193039_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T193150_20210425T193301_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T193446_20210425T193540_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T194015_20210425T194056_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T205359_20210425T205927_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T205954_20210425T210306_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T210324_20210425T210635_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T210818_20210425T211008_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T211027_20210425T211105_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T214621_20210425T220840_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T223640_20210425T224357_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T224439_20210425T224915_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T231118_20210425T231203_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T231205_20210425T231215_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20210425T235451_20210425T235732_D001	Loss of echo	The tracking echo is missing for one or more records

### 4.5 L1B Calibration Usage Check

Each product is checked in order to ensure that the necessary calibration files have been used in processing Number of products with errors: 0

1

#### 4.6 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:
 0

### 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.

#### 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\_20210425T025550\_20210425T030302\_D001
 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. 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:
 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.

CS\_OFFL\_SIR\_LRM\_2\_\_20210425T064701\_20210425T065312\_D001

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: 73 Product Test Failed Description Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20210425T000527\_20210425T000604\_D001 Error (Retracker 2) ecords Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 and no DEM or CS\_OFFL\_SIR\_LRM\_2\_\_20210425T000624\_20210425T000740\_D001 Error (Retracker 2), Surface model Slope Model was used for the location of one or more records unavailable Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS OFFL SIR LRM 2 20210425T000752 20210425T001538 D001 Error (Retracker 2) records Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS\_OFFL\_SIR\_LRM\_2\_\_20210425T002019\_20210425T003353\_D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2) Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20210425T005553\_20210425T010834\_D001 Error (Retracker 2) records Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS OFFL SIR LRM 2 20210425T011048 20210425T012255 D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2) Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS\_OFFL\_SIR\_LRM\_2\_\_20210425T015012\_20210425T015938\_D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2) Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20210425T020219\_20210425T021658\_D001 Error (Retracker 2) 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\_\_20210425T023241\_20210425T023338\_D001 Error (Retracker 2) ecords Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20210425T024319\_20210425T024417\_D001 Error (Retracker 2) records CS\_OFFL\_SIR\_LRM\_2\_\_20210425T025003\_20210425T025203\_D001 Surface Model Unavailable No DEM or Slope Model was used for the location of 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 20210425T025205 20210425T025427 D001 Error (Retracker 2) records Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error CS\_OFFL\_SIR\_LRM\_2\_\_20210425T025550\_20210425T030302\_D001 (Retracker 3), Backscatter Error for Retracker 3 for one or more records (Retracker 2) CS OFFL SIR LRM 2 20210425T032758 20210425T032821 D001 Surface Model Unavailable No DEM or Slope Model was used for the location of 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 20210425T033616 20210425T033653 D001 Error (Retracker 2) ecords Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS OFFL SIR LRM 2 20210425T033908 20210425T035556 D001 Error (Retracker 2) 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 20210425T040947 20210425T043314 D001 Error (Retracker 2) 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 20210425T051003 20210425T053534 D001 Error (Retracker 2) ecords Height Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more CS\_OFFL\_SIR\_LRM\_2\_\_20210425T054912\_20210425T061649\_D001 Error (Retracker 2) ecords Height Error (Retracker 2), Height Error There is a height and backscatter error for Retracker 2 and a height error (Retracker 3), Backscatter Error CS\_OFFL\_SIR\_LRM\_2\_\_20210425T061814\_20210425T062134\_D001 for Retracker 3 for one or more records (Retracker 2)

Height Error (Retracker 2), Backscatter

records

Error (Retracker 2)

There is a height and backscatter error for Retracker 2 for one or more

CS_OFFL_SIR_LRM_220210425T065314_20210425T071532_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_220210425T072833_20210425T080251_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220210425T080253_20210425T080255_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220210425T081611_20210425T081705_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_220210425T082438_20210425T082512_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_220210425T090800_20210425T093021_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_220210425T093307_20210425T094220_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220210425T095440_20210425T095843_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_220210425T100408_20210425T100445_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_220210425T101432_20210425T101917_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_220210425T102104_20210425T103344_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_220210425T104719_20210425T105306_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_220210425T105315_20210425T111539_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_220210425T111607_20210425T112031_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_220210425T113638_20210425T113648_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_220210425T113638_20210425T113648_D001 CS_OFFL_SIR_LRM_220210425T113734_20210425T114435_D001	(Retracker 3), Backscatter Error	
	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220210425T113734_20210425T114435_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	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
CS_OFFL_SIR_LRM_220210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_220210425T114458_20210425T120852_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error
CS_OFFL_SIR_LRM_220210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_220210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001	(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 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_2_20210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001	(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 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_2_20210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001 CS_OFFL_SIR_LRM_2_20210425T130318_20210425T130321_D001 CS_OFFL_SIR_LRM_2_20210425T130331_20210425T130411_D001	(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 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records 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 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
CS_OFFL_SIR_LRM_2_20210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001 CS_OFFL_SIR_LRM_2_20210425T130318_20210425T130321_D001 CS_OFFL_SIR_LRM_2_20210425T130331_20210425T130411_D001 CS_OFFL_SIR_LRM_2_20210425T132100_20210425T133132_D001	(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 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable 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), Backscatter Error (Retracker 3), Backscatter Error	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records No DEM or Slope Model was used for the location of one or more 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 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
CS_OFFL_SIR_LRM_2_20210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001 CS_OFFL_SIR_LRM_2_20210425T130318_20210425T130321_D001 CS_OFFL_SIR_LRM_2_20210425T130331_20210425T130411_D001 CS_OFFL_SIR_LRM_2_20210425T132100_20210425T133132_D001 CS_OFFL_SIR_LRM_2_20210425T133946_20210425T135124_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 2) Height Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records 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 and a height error for Retracker 3 for one or more 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 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 for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_2_20210425T113734_20210425T114435_D001 CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001 CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001 CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001 CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001 CS_OFFL_SIR_LRM_2_20210425T130318_20210425T130321_D001 CS_OFFL_SIR_LRM_2_20210425T130331_20210425T130411_D001 CS_OFFL_SIR_LRM_2_20210425T132100_20210425T133132_D001 CS_OFFL_SIR_LRM_2_20210425T133946_20210425T135124_D001 CS_OFFL_SIR_LRM_2_20210425T133946_20210425T135124_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 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 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 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter e
CS_OFFL_SIR_LRM_2_20210425T113734_20210425T114435_D001         CS_OFFL_SIR_LRM_2_20210425T114458_20210425T120852_D001         CS_OFFL_SIR_LRM_2_20210425T123343_20210425T124036_D001         CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124036_D001         CS_OFFL_SIR_LRM_2_20210425T124230_20210425T124441_D001         CS_OFFL_SIR_LRM_2_20210425T124759_20210425T125518_D001         CS_OFFL_SIR_LRM_2_20210425T130318_20210425T130321_D001         CS_OFFL_SIR_LRM_2_20210425T130331_20210425T130411_D001         CS_OFFL_SIR_LRM_2_20210425T132100_20210425T133132_D001         CS_OFFL_SIR_LRM_2_20210425T133946_20210425T135124_D001         CS_OFFL_SIR_LRM_2_20210425T141337_20210425T142110_D001         CS_OFFL_SIR_LRM_2_20210425T141337_20210425T143802_D001	(Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3), Backscatter 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)	for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more 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 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 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

CS_OFFL_SIR_LRM_220210425T150420_20210425T150654_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_220210425T150817_20210425T151305_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_220210425T151537_20210425T153210_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_220210425T154557_20210425T160824_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_220210425T163655_20210425T171115_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_220210425T172452_20210425T175103_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220210425T181942_20210425T182130_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_220210425T182255_20210425T185024_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_220210425T190349_20210425T192445_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_220210425T192733_20210425T192907_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_220210425T192958_20210425T193039_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220210425T194015_20210425T194056_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_220210425T194117_20210425T194216_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_220210425T195443_20210425T202926_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_220210425T204726_20210425T205004_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_220210425T210818_20210425T211008_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_220210425T211027_20210425T211105_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_220210425T211812_20210425T212215_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_220210425T213457_20210425T214335_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_220210425T214621_20210425T220840_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_220210425T222148_20210425T223452_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_220210425T223640_20210425T224357_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_220210425T224439_20210425T224915_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_220210425T231503_20210425T234711_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
	OCC Report Analysis	

# 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	203	203	203	0	0
SIR_SAR_1B	143	143	143	0	0
SIR_SIN_1B	111	111	111	0	0
SIR_LRM_2	203	203	198	5	0
SIR_SAR_2	111	143	143	0	0
SIR_SIN_2	143	111	108	3	0
SIR_GDR_2	14	14	0	0	14

## 6.1 QCC Errors

## Number of products with QCC errors:

14

8

0

Product Type	MPHDUTNCDF	MPHXPFNCDF	MPHXVFNCDF	MPHYPFNCDF	MPHYVFNCDF	MPHZPFNCDF	MPHZVFNCDF	STRUCTURESIZ EANDREAD	-	-	-
SIR_GDR_2_	14	14	14	14	14	14	14	14			
Test Description	n Key:										
Abbreviation	Test na	me		Details							
MPHDUTNCDF	PHDUTNCDF MPH_Delta_UT1_NetCDF			Delta_UT1 mismatch							
MPHXPFNCDF	MPH_X_	Position_Float_v2_	NetCDF	X_Position mismatch (DBL float (GDR), rounded to 100)							
MPHXVFNCDF	NCDF MPH_X_Velocity_Float_v2_NetCDF			X_Velocity mismatch (DBL float (GDR), rounded to 1)							
MPHYPFNCDF	IPHYPFNCDF MPH_Y_Position_Float_v2_NetCDF			Y_Position mismat	ch (DBL float (GDF	R), 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)								
STRUCTURESIZEANDRSTRUCTURE SIZE AND READ				Under investigation	۱.						

## 6.2 QCC Warnings

## Number of QCC reports with warnings

		Total number of occurrences of each warning							
Product Type	AXDME	AXSMMEOCI	-	-	-	-	-		
SIR_LRM_2_	0	5							
SIR_SIN_2_	3	0							
		·							
Test Description Key	<i>r</i> :								
Abbreviation	Test name			Details					
AXDME	AttributeXrefDem	MustExist		The xref_dem attribute is mandatory in SIN products over continental ice					
AXSMMEOCI	AttributeXrefSlop	eModelMustExistOverContinentalIce		The xref_slope_model is mandatory in LRM products over continental ice					
l	I								
6.2 Missing OC	°C Ponorte								

### 6.2 Missing QCC Reports

Number of products with missing QCC reports: