

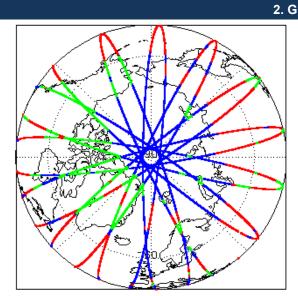
# **QA4EO Daily Report for OFFLINE data:**

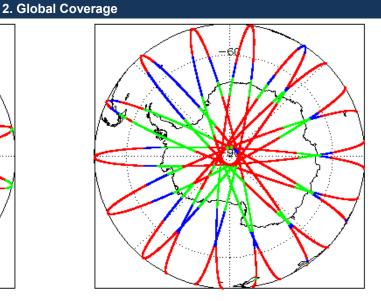
25/05/2020

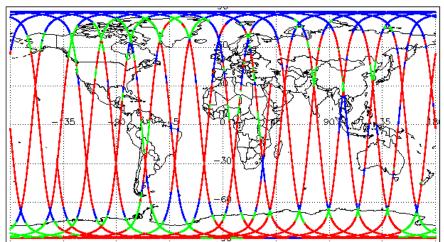
#### Check Status **Report Production Date:** 25-Jun-2020 Server check: science-pds.cryosat.esa.int Nominal Server check: calval-pds.cryosat.esa.int Nominal Processor Used: CryoSat Ice Processor Product Software Check Nominal Product Format Check Nominal Data Used: L1B and L2 OFFLINE Data Product Header Analysis Nominal Star Tracker Usage Check Nominal L1B Tracking Flag Check ee 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

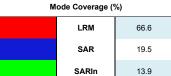
1. Overview

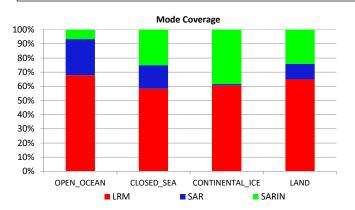
24-May-2020 None 25-May-2020 None	Mission / Instru	iment News
	24-May-2020	None
	25-May-2020	None
26-May-2020 Nothing planned	26-May-2020	Nothing planned

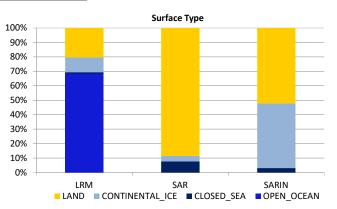












# 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

0

# 4. Level 1B Data Quality Check

# 4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a product file (.DBL).

Number of products with errors:

# 4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors:

#### 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.

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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20200524T235719_20200525T000125_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T000128_20200525T001438_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T003954_20200525T011323_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T013222_20200525T013350_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T013402_20200525T013510_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T013832_20200525T013944_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T014453_20200525T020439_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T025350_20200525T025517_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T031428_20200525T031544_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T031716_20200525T031756_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T031759_20200525T032159_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T032241_20200525T034223_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T035851_20200525T043115_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T043247_20200525T043353_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T043355_20200525T043356_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T043359_20200525T043512_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T050657_20200525T050820_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T050822_20200525T052003_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T052854_20200525T053050_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T053748_20200525T055312_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T055515_20200525T060436_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T060809_20200525T061458_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T063125_20200525T064358_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T064838_20200525T064947_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T064949_20200525T064959_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T065001_20200525T065144_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T065151_20200525T065717_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T074031_20200525T074141_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T074336_20200525T074430_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T074442_20200525T074743_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T074745_20200525T075028_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T075031_20200525T075443_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T081013_20200525T081414_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T081417_20200525T081603_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T081848_20200525T081953_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T081955_20200525T084226_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T084526_20200525T085353_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T085702_20200525T092201_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T092538_20200525T093011_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T094719_20200525T095112_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T095318_20200525T095351_D001	Loss of echo	The tracking echo is missing for one or more records

CS OFFL SIR LRM 1B 20200525T095353 20200525T095355 D001 CS OFFL SIR LRM 1B 20200525T095359 20200525T095441 D001 CS OFFL SIR LRM 1B 20200525T095444 20200525T095459 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T095501\_20200525T095516\_D001 CS OFFL SIR LRM 1B 20200525T095518 20200525T095530 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T095532\_20200525T102113\_D001 CS OFFL SIR LRM 1B 20200525T103551 20200525T110050 D001 CS OFFL SIR LRM 1B 20200525T110052 20200525T110056 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T110059 20200525T110205 D001 CS OFFL SIR LRM 1B 20200525T110208 20200525T110250 D001 CS OFFL SIR LRM 1B 20200525T110253 20200525T110500 D001 CS OFFL SIR LRM 1B 20200525T110548 20200525T110711 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T110745\_20200525T111030\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T122515\_20200525T122923\_D001 CS OFFL SIR LRM 1B 20200525T123257 20200525T123313 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T123452\_20200525T124040\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T124329\_20200525T124401\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T124419\_20200525T124459\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T124501\_20200525T124504\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T124506\_20200525T124729\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T130547\_20200525T133924\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T141533\_20200525T142120\_D001 CS OFFL SIR LRM 1B 20200525T142240 20200525T142258 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T142309\_20200525T142326\_D001 CS OFFL SIR LRM 1B 20200525T142331 20200525T142447 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T151317\_20200525T151808\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T152559\_20200525T153013\_D001 CS OFFL SIR LRM 1B 20200525T162110 20200525T162249 D001 CS OFFL SIR LRM 1B 20200525T164009 20200525T164229 D001 CS OFFL SIR LRM 1B 20200525T164234 20200525T164236 D001 CS OFFL SIR LRM 1B 20200525T164240 20200525T164936 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T164938\_20200525T165042\_D001 CS OFFL SIR LRM 1B 20200525T171601 20200525T172824 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T180017\_20200525T180553\_D001 CS OFFL SIR LRM 1B 20200525T180942 20200525T181928 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T182130\_20200525T182842\_D001 CS OFFL SIR LRM 1B 20200525T185808 20200525T190134 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T190136\_20200525T190138\_D001 CS\_OFEL\_SIR\_LRM\_1B\_20200525T190141\_20200525T190149\_D001 CS OFFL SIR LRM 1B 20200525T190151 20200525T190155 D001 CS OFFL SIR LRM 1B 20200525T190158 20200525T190217 D001 CS OFFL SIR LRM 1B 20200525T190220 20200525T190302 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T190324\_20200525T190349\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T190951\_20200525T191830\_D001 CS OFFL SIR LRM 1B 20200525T191935 20200525T192249 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T193855\_20200525T194401\_D001 CS OFFL SIR LRM 1B 20200525T194435 20200525T194453 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T194455\_20200525T194945\_D001 CS OFFL SIR LRM 1B 20200525T195125 20200525T195231 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T202340\_20200525T202501\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T202956\_20200525T205241\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T205246\_20200525T205250\_D001 CS OFFL SIR LRM 1B 20200525T205252 20200525T205631 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T205736\_20200525T210409 D001 CS OFFL SIR LRM 1B 20200525T210532 20200525T210618 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T211829\_20200525T212130\_D001 CS OFFL SIR LRM 1B 20200525T212146 20200525T212522 D001 CS OFFL SIR LRM 1B 20200525T212524 20200525T212528 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T212929\_20200525T215447\_D001 CS OFFL SIR LRM 1B 20200525T223755 20200525T223823 D001 CS OFFL SIR LRM 1B 20200525T223948 20200525T224033 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T225851\_20200525T230430\_D001 CS OFFL SIR LRM 1B 20200525T230442 20200525T230711 D001 CS\_OFFL\_SIR\_LRM\_1B\_20200525T230713\_20200525T230717\_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_20200525T230722_20200525T231252_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T231255_20200525T233456_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200525T234136_20200525T234507_D001	Loss of echo	The tracking echo is missing for one or more records

5 L1B Calibration Usage Check							
ach product is checked in order to ensure that the necessary calibration files have been used in processing.							
Number of products with errors: 0							
I.6 L1B Auxilary Data File Usage Check							
ach 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.

0

3

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_20200525T063125_20200525T064358_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
CS_OFFL_SIR_LRM_1B_20200525T064838_20200525T064947_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
CS_OFFL_SIR_LRM_1B_20200525T094719_20200525T095112_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:

### 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.

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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_220200525T000128_20200525T001438_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_220200525T003954_20200525T011323_D001		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_220200525T012637_20200525T012732_D001		There is a height and backscatter error for Retracker 2 for one or more records

DescriptionIndex (Final Status)Index (Final Status)Index on registion behavious for Minuke 2 for our or real status in the intervention of the Minuke 2 for our or real status interventionCI, CFR, UR, LRA 2, 20000000000000000000000000000000000	CS_OFFL_SIR_LRM_220200525T014453_20200525T020439_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
CUMPORT     Control     Control       CUMPORT     Control     Cont	CS_OFFL_SIR_LRM_220200525T021901_20200525T024052_D001		
Part Proc.     Description     Description     Person       Dis Geria, Sei Link 2.     20000000110 20000001110 200000112420.0001     Person Proc.     Perso.     Perso.     Person	CS_OFFL_SIR_LRM_220200525T024115_20200525T025305_D001		5
CPUT_UPUT_UPUTUTESTING_DUNCESTIN	CS_OFFL_SIR_LRM_220200525T030446_20200525T030701_D001		
Dir Dir Ling Und Zummann Under Lingensein zuberstein zum Anstein Zum Anstein Zum Zum Anstein Zum	CS_OFFL_SIR_LRM_220200525T031716_20200525T031756_D001		
Cite Control District (20000001100001)   Cite District (20000001100001)   District District (200000011000001)   District District (2000000000000000000000000000000000000	CS_OFFL_SIR_LRM_220200525T032241_20200525T034223_D001		
CB_QPH_UBN_UM_2_00000011144300_0000001144100_0000 Burtace Model Unevaluates No DEM or Bigs Mode was used for the bacterian of one or more records   CB_QPH_UBN_2_000000114470_0000001144100_000000 Burtace Model Unevaluates No DEM or Bigs Mode was used for the bacterian of one or more records   CB_QPH_UBN_2_000000114470_0000001104000_00000 Burtace Model Unevaluates No DEM or Bigs Mode was used for the bacterian of one or more records   CB_QPH_UBN_2_0000001114470_0000001104000_00000 Burtace Model Unevaluates No DEM or Bigs Mode was used for the bacterian of one or more records   CB_QPH_UBN_2_0000001114470_00000011040000 Burtace Model Unevaluates No DEM or Bigs Mode was used for the bacterian of one or more records   CB_QPH_UBN_2_0000000111440000000000000000000000000	CS_OFFL_SIR_LRM_220200525T035851_20200525T043115_D001	Error (Retracker 2), Surface model	
OS, OFT, SRL LRN 2, 20203257194733, 2020525709584, D001     High Throw (Reincher 2), Hagh Entry (Rescars 7)     Does is beingt and backbackter over for Reincoler 2 and a high entry for Reincalar 3 for ere or minimic control.       CG, OFT, SRL LRN 2, 20203257194743, 20205257109582, D001     High Throw (Reincaler 2), Haskbacker Control (Reincaler 2), Control	CS_0FFL_SIR_LRM_220200525T043355_20200525T043356_D001		No DEM or Slope Model was used for the location of one or more records
C5 DFL_SFL_BR_LEM_2_00000371044733_20003257106004_001 Pellessier 3) Bedessier Error (Pellessier 3) No 15M or Bige Medel was used for the basten of one or more records (Pellessier 3) Bedessier Error (Pellessier 3)   CB_OPH_SR_IEM_200000071074491_00000071074490_0001 Sardare Medel Unaustable (Pellessier 3) No 15M or Bige Medel was used for the basten of one or more records (Pellessier 3)   CB_OPH_SR_IEM_2000000071074491_00000071074490_000101 Sardare Medel Unaustable (Pellessier 3) No 15M or Bige Medel was used for the basten of one or more records (Pellessier 3)   CB_OPH_SR_IEM_2000000071074491_00000071074491_00000071074090_00101 Heigh Error (Perlessier 3) No 15M or Bige Medel was used for the basten of one or more records (Pellessier 3)   C	CS_0FFL_SIR_LRM_220200525T043359_20200525T043512_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CPT_UBL_UBL	CS_OFFL_SIR_LRM_220200525T044733_20200525T050624_D001	(Retracker 3), Backscatter Error	
CPFU_SPL_C	CS_OFFL_SIR_LRM_2_20200525T050822_20200525T052003_D001		
C5_OFTL_SIR_LERU_2_2000053T060155_2000055T060158_0001   Infeature 7: Infeature	CS_OFFL_SIR_LRM_2_20200525T053748_20200525T055312_D001		
CS_OFFL_SRLEAM_2_0000525103125_000052510438_0001   (Potender 2)   Interface a height and backscatter error for Relaxed a flor open more records     CS_OFFL_SRLEAM_2_0000525107442_00005251074743_0001   Surface Model Unavailable   No DEM or Stope Model was used for the location of one or more records     CS_OFFL_SRLEAM_2_0000525107442_00005251074743_0001   Surface Model Unavailable   No DEM or Stope Model was used for the location of one or more records     CS_OFFL_SRLEAM_2_00005251074743_00005251074743_0001   Surface Model Unavailable   No DEM or Stope Model was used for the location of one or more records     CS_OFFL_SRLEAM_2_00005251074749_00005251094745_0001   Finite for (Refracker 2)   No DEM or Stope Model was used for the location of one or more records     CS_OFFL_SRLEAM_2_00005251094147_00005251094749_0000   Finite for (Refracker 2)   No DEM or Stope Model was used for the location of one or more records     CS_OFFL_SRLEAM_2_00005251094147_00005251094226_0001   Finite for (Refracker 2)   Excercite   There is a height and backscatter error for Refracker 2 for one or more records     CS_OFFL_SRLEAM_2_00005251094228_0001   Finite for (Refracker 2)   Backscatter   There is a height and backscatter error for Refracker 2 for one or more records     CS_OFFL_SRLEAM_2_00005251094228_0001   Finite for (Refracker 2)   Backscatter   There is a height and backscatter error for Refracker 2 for one or more records     CS_OFFL_SRLEAM_2_0000525109514_0000551	CS_OFFL_SIR_LRM_2_20200525T055515_20200525T060436_D001	(Retracker 3), Backscatter Error	
CS_OFF_SIR_LRM_2_20200025T074442_2020025T07443_2020052T075028_D001     Surface Model Unavailable     No DEM or Skipe Model was used for the location of one or more records       CS_OFF_SIR_LRM_2_20200025T07445_2020052T075028_D001     Surface Model Unavailable     No DEM or Skipe Model was used for the location of one or more records       CS_OFF_SIR_LRM_2_20200025T08164_20200052T08160_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_20200025T08164_202000525T08125_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_20200025T08164_202000525T08125_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_20200025T08166_202000525T08126_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_202000525T08126_20200525T08220_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_20200525T08250_00025T08220_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_20200525T08250_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for one or more records       CS_OFF_SIR_LRM_2_20200525T10200_D001     Height Error (Retracker 2)     Backscatter error for Retracker 2 for	CS_OFFL_SIR_LRM_220200525T063125_20200525T064358_D001	(Retracker 3), Backscatter Error	
CB_OFFL_SRLEM_2_0020052510/14/5_2020052510/5028_0001     Surface Model Unavailable     No DEM or Slope Model was used for the location of one or more records       CB_OFFL_SRLEM_2_020052510810417_20200525108103_0001     Height Error (Retracker 2). Backscatter Error (Retracker 2). Backscatter Error (Retracker 2). Backscatter Error (Retracker 2). Backscatter     There is a height and backscatter error for Retracker 2 for one or more records       CB_OFFL_SRLEM_2_02000525108105_0200525108105_0001     Height Error (Retracker 2). Backscatter     There is a height and backscatter error for Retracker 2 for one or more records       CB_OFFL_SRLEM_2_02000525108105_0200525108200_0001     Height Error (Retracker 2). Backscatter Error (Retracker 2). Backs	CS_OFFL_SIR_LRM_2_20200525T074336_20200525T074430_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
City OFFL_SIR_LRM_2_20200525T081641_20200525T081603_D001     Encor (Retracker 2)     Backscatter     There is a height and backscatter error for Retracker 2 for one or more       CS_OFFL_SIR_LRM_2_20200525T081644_20200525T081635_D001     Height Error (Retracker 2)     Backscatter     There is a height and backscatter error for Retracker 2 for one or more       CS_OFFL_SIR_LRM_2_20200525T081642_0200525T081635_D001     Height Error (Retracker 2)     Backscatter     There is a height and backscatter error for Retracker 2 for one or more       CS_OFFL_SIR_LRM_2_20200525T081642_0200525T08163_D001     Height Error (Retracker 2)     Backscatter     There is a height and backscatter error for Retracker 2 for one or more       CS_OFFL_SIR_LRM_2_20200525T081642_02000525T082201_D001     Height Error (Retracker 2)     Backscatter     There is a height and backscatter error for Retracker 2 for one or more       CS_OFFL_SIR_LRM_2_20200525T08134_20200525T093211_D001     Height Error (Retracker 2), Height Error     There is a height and backscatter error for Retracker 2 and a height error (Retracker 2)       CS_OFFL_SIR_LRM_2_20200525T103561_20200525T102113_D001     Height Error (Retracker 2), Backscatter     There is a height and backscatter error for Retracker 2 for one or more errords       CS_OFFL_SIR_LRM_2_20200525T102005_D001     Height Error (Retracker 2), Backscatter     There is a height and backscatter error for Retracker 2 for one or more errords       CS_OFFL_SIR_LRM_2_20200525T103057_2020	CS_OFFL_SIR_LRM_220200525T074442_20200525T074743_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
Des_OPFL_SIR_LRM_2_a020002570081081.001417_202000257108126_D001   Enror (Retracker 2)   records     CS_OPFL_SIR_LRM_2_a02000257008106_202000257081063_D001   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 for one or more     CS_OPFL_SIR_LRM_2_a02000257081085_D0010   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 for one or more     CS_OPFL_SIR_LRM_2_a02000257081085_D0010   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 for one or more     CS_OPFL_SIR_LRM_2_a02000257081095_D0200025708221_D001   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 for one or more     CS_OPFL_SIR_LRM_2_a02000257085702_20200025709221_D001   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 and a height enror     CS_OPFL_SIR_LRM_2_a02000257109551_020002571092211_D001   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 and a height enror     CS_OPFL_SIR_LRM_2_a020002571102651_02000257110260_D001   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 for one or more     CS_OPFL_SIR_LRM_2_a02000257110260_D001   Height Enror (Retracker 2), Backscatter   There is a height and backscatter enror for Retracker 2 for one or more     CS_OPFL_SIR_LRM_2_a02000525110260_D001 <td< td=""><td>CS_OFFL_SIR_LRM_220200525T074745_20200525T075028_D001</td><td>Surface Model Unavailable</td><td>No DEM or Slope Model was used for the location of one or more records</td></td<>	CS_OFFL_SIR_LRM_220200525T074745_20200525T075028_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
LS_OFFL_SIR_LRM_2_20200525T081961_20200525T081963_D001   Enror (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T081965_20200525T081963_D001   Height Enror (Retracker 2)   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T081965_20200525T084228_D001   Height Enror (Retracker 2)   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T081295_00200525T084228_D001   Height Enror (Retracker 2)   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T083134_20200525T082211_D001   Retracker 2)   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2). Error is a height and backscatter error for Retracker 2 and a height error (Retracker 2). Height Error (Retracker 2). Error is a height and backscatter error for Retracker 2 and a height error (Retracker 2). Error (Ret	CS_OFFL_SIR_LRM_220200525T081417_20200525T081603_D001		
US_OFFL_SIR_LRM_2_20200525106149_20200525108426_D001   Error (Retracker 2)   recods     CS_OFFL_SIR_LRM_2_202005251085702_20200525108426_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_202005251085702_202005251082201_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525108231_D001   Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 2), Eackscatter   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2), Eackscatter Error (Retr	CS_OFFL_SIR_LRM_2_20200525T081654_20200525T081725_D001		5
CS_OFFL_SIR_LRM_2_20200525T092201_D001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T09201_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 on one or more records     CS_OFFL_SIR_LRM_2_20200525T093134_20200525T093211_D001   Height Error (Retracker 2)   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2)     CS_OFFL_SIR_LRM_2_20200525T095532_20200525T102113_D001   Retracker 2)   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2)     CS_OFFL_SIR_LRM_2_20200525T109551_20200525T1102113_D001   Retracker 2)   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2)     CS_OFFL_SIR_LRM_2_20200525T1109561_20200525T1102103_D001   Height Error (Retracker 2)   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T112807_20200525T112803_D001   Height Error (Retracker 2)   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T112807_20200525T112823_D001   Height Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T145407_20200525T141228_D001   Height Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T144461_20200525T1451306_D001   Height Error (Retracker 2), Backscatter error for Retracker 2 for one or more re	CS_OFFL_SIR_LRM_220200525T081848_20200525T081953_D001		
LS_OFFL_SIR_LRM_2_20200525T093134_20200525T093211_D001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T093134_20200525T093211_D001   Height Error (Retracker 2)   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2)     CS_OFFL_SIR_LRM_2_20200525T1093512_20200525T100551_20200525T10050_D001   Height Error (Retracker 2)   There is a height and backscatter error for Retracker 2 and a height error (Retracker 2)     CS_OFFL_SIR_LRM_2_20200525T110050_D001   Height Error (Retracker 2)   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T112507_20200525T112009_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_20200525T112507_20200525T1125035_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_20200525T113507_20200525T1130324_D001   Height Error (Retracker 2), Backscatter Error (Retrack	CS_OFFL_SIR_LRM_220200525T081955_20200525T084226_D001		
CS_OFFL_SIR_LRM_2_20200525T093134_20200525T093211_D001   (Retracker 3), Backscatter Error (Retracker 2), and Dackscatter error for Retracker 2, and a height error (Retracker 3), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T112607_20200525T126039_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T125032_0200525T125039_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T130547_20200525T141228_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T151306_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T151305_D000525T151808_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Bac	CS_OFFL_SIR_LRM_220200525T085702_20200525T092201_D001		•
CS_OFFL_SIR_LRM_2_20200525T095532_20200525T102113_D001   (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error for Retracker 2 for one or more	CS_OFFL_SIR_LRM_2_20200525T093134_20200525T093211_D001	(Retracker 3), Backscatter Error	
Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T112807_20200525T120009_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T125132_20200525T125235_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T130547_20200525T133924_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T135407_20200525T141228_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T13407_20200525T141228_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T144451_20200525T151306_D001   Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 or one or more records     CS_OFFL_SIR_LRM_2_20200525T151317_20200525T151808_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 and a height error (Retracker 3), Backscatter     CS_OFFL_SIR_LRM_2_20200525T1513357_20200525T150835_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_	CS_OFFL_SIR_LRM_220200525T095532_20200525T102113_D001	(Retracker 3), Backscatter Error	
CS_OFFL_SIR_LRM_2_20200525T125132_20200525T125235_D001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T125132_20200525T125235_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T130547_20200525T133924_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T135407_20200525T141228_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T144451_20200525T151306_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T151317_20200525T151306_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T151317_20200525T151808_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 and a height error (Retracker 3), Backscatter error for Retracker 2 and a height error (Retracker 2), Backscatter     CS_OFFL_SIR_LRM_2_20200525T163357_20200525T155938_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backsca	CS_OFFL_SIR_LRM_2_20200525T103551_20200525T110050_D001		
CS_OFFL_SIR_LRM_2_20200525T130547_20200525T133924_D001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T130547_20200525T133924_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T135407_20200525T141228_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T144451_20200525T151306_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T151306_D001   Height Error (Retracker 2), Backscatter Error for Retracker 3 for one or more records     CS_OFFL_SIR_LRM_2_20200525T1513357_20200525T151808_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T163357_20200525T155938_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160409_2020525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160403_20200525T160835_D001   Height Error (Retracker 2), Backscatter	CS_OFFL_SIR_LRM_220200525T112807_20200525T120009_D001		
CS_OFFL_SIR_LRM_2_20200525T135407_20200525T141228_D001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T135407_20200525T141228_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T144451_20200525T151306_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T151317_20200525T151306_D001   Height Error (Retracker 2), Backscatter error for Retracker 2 and a height error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 and a height error (Retracker 2), Backscatter 2)     CS_OFFL_SIR_LRM_2_20200525T153357_20200525T155938_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160433_20200525T160835_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T1626442_0_001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more recor	CS_0FFL_SIR_LRM_2_20200525T125132_20200525T125235_D001		
CS_OFFL_SIR_LRM_2_20200525T151300_2001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T151306_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 2), Backscatter Error for Retracker 3 for one or more records     CS_OFFL_SIR_LRM_2_20200525T153357_20200525T155938_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T162423_20200525T162649_D001   Height Error (Retracker 2), Backscatter Error for Retracker 2 for one or more records	CS_OFFL_SIR_LRM_220200525T130547_20200525T133924_D001		
CS_OFFL_SIR_LRM_2_2020525T144451_20200525T151306_D001   Error (Retracker 2)   records     CS_OFFL_SIR_LRM_2_20200525T151317_20200525T151808_D001   Height Error (Retracker 2), Height Error (Retracker 2), Bight Error (Retracker 3), Backscatter Error (Retracker 2), Bight Error (Retracker 2), Error (Retracker 2), Backscatter Error (Retracker 2), Error (Retracker 2), Backscatter Error for Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracke	CS_OFFL_SIR_LRM_220200525T135407_20200525T141228_D001		
CS_OFFL_SIR_LRM_2_20200525T151317_20200525T151808_D001   (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_20200525T153357_20200525T155938_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T162423_20200525T162649_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more	CS_OFFL_SIR_LRM_220200525T144451_20200525T151306_D001		
CS_OFFL_SIR_LRM_2_20200525T153357_20200525T155938_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T160109_20200525T160835_D001   Height Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more records     CS_OFFL_SIR_LRM_2_20200525T162423_20200525T162649_D001   Height Error (Retracker 2), Backscatter   There is a height and backscatter error for Retracker 2 for one or more	CS_OFFL_SIR_LRM_220200525T151317_20200525T151808_D001	(Retracker 3), Backscatter Error	
CS_OFFL_SIR_LRM_2_20200525T162423_20200525T162649_D001 Error (Retracker 2), Backscatter There is a height and backscatter error for Retracker 2 for one or more	CS_OFFL_SIR_LRM_220200525T153357_20200525T155938_D001		
	CS_OFFL_SIR_LRM_220200525T160109_20200525T160835_D001		
	CS_OFFL_SIR_LRM_220200525T162423_20200525T162649_D001		

	Height Error (Retracker 2), Backscatter	There is a height and backscatter error for Retracker 2 for one or more
CS_OFFL_SIR_LRM_220200525T162741_20200525T163603_D001	Error (Retracker 2)	records
CS_OFFL_SIR_LRM_220200525T164009_20200525T164229_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_220200525T164240_20200525T164936_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_20200525T171601_20200525T172824_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_20200525T173006_20200525T173853_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_220200525T174020_20200525T174708_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_20200525T180017_20200525T180553_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200525T180942_20200525T181928_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_220200525T182130_20200525T182842_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_20200525T190951_20200525T191830_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_220200525T191935_20200525T192249_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_220200525T194435_20200525T194453_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200525T194455_20200525T194945_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200525T200007_20200525T201530_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_20200525T202956_20200525T205241_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_220200525T205252_20200525T205631_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_220200525T212929_20200525T215447_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_220200525T220920_20200525T223559_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_220200525T223948_20200525T224033_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_220200525T225851_20200525T230430_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200525T230722_20200525T231252_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_220200525T231255_20200525T233456_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

# 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	171	171	171	0	0
SIR_SAR_1B	105	105	105	0	0
SIR_SIN_1B	106	106	106	0	0
SIR_LRM_2	171	171	167	4	0
SIR_SAR_2	106	105	105	0	0
SIR_SIN_2	105	106	104	2	0
SIR_GDR_2	14	14	0	0	14

# 6.1 QCC Errors

Number of products with QCC errors:

14

SIR GDR 2 14 14 14 14 14 14 14 14 14 14	Product Type	MPHDUTNCDF	MPHXPFNCDF	MPHXVFNCDF	MPHYPFNCDF	MPHYVFNCDF	MPHZPFNCDF	MPHZVFNCDF	STRUCTURESIZ	-	-	-
	SIR_GDR_2_	14	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.

Number of QCC reports with warnings 6

Total number of occurrences of each warning

I otal number of occurrences of each warning										
Product Type AXDME AXSMMEOCI										
SIR_LRM_2_ 0 4 4										
SIR_SIN_2_	2 0 0									
Test Description Key:	1									
Abbreviation	Test name			Details						
AXDME AttributeXrefDemMustExist The xref_dem attribute is mandatory in SIN products over continental ice										
AXSMMEOCI	MMEOCI AttributeXrefSlopeModelMustExistOverContinentalIce The xref_slope_model is mandatory in LRM products over continental ice									
6.2 Missing QCC Reports										
	•									
Number of products v	with missing QCC r	eports: 0								