

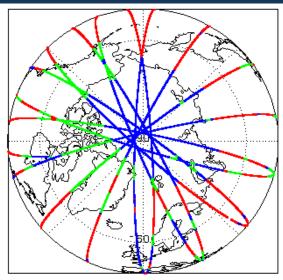
## 1. Overview

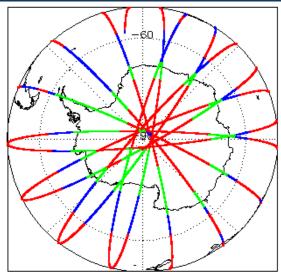
Report Production Date:	25-Aug-2020
Processor Used:	CryoSat Ice Processor
Data Used:	L1B and L2 OFFLINE Data

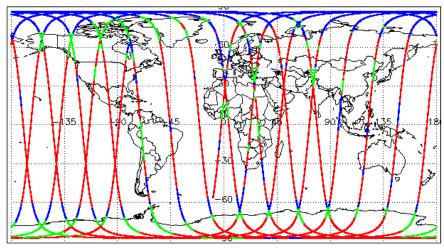
Check	Status		
Server check: science-pds.cryosat.esa.int	Nominal		
Server check: calval-pds.cryosat.esa.int	Nominal		
Product Software Check	Nominal		
Product Format Check	Nominal		
Product Header Analysis	Nominal		
Star Tracker Usage Check	Nominal		
L1B Tracking Flag Check	See Section 4.4		
L1B Calibration Usage Check	Nominal		
L1B & L2 Auxiliary Data File Usage Check	Nominal		
L1B & L2 Auxiliary Correction Error Check	Nominal		
L1B & L2 Measurement Confidence Data Check	See Section 4.8 and 5.5		
QCC Errors/ Warnings	See Section 6.1, 6.2 and 6.3		

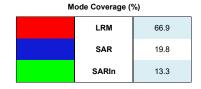
I	flission / Instrument News						
	23-Jul-2020	20 CRYO2ICE Orbit raising activities. SIRAL unavailability from 23/07/2020 22:30:21 UTC to 24/07/2020 05:14:31 UTC					
	24-Jul-2020	CRYO2ICE Orbit raising activities.					
	25-Jul-2020	Nothing planned					

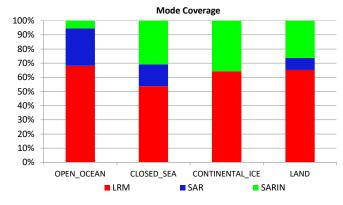
# 2. Global Coverage

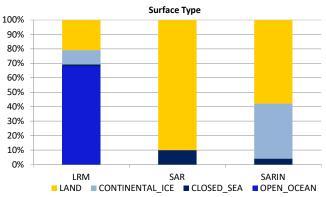












## 3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

## 4. Level 1B Data Quality Check

#### 4.1 L1B Product Format Check

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

Number of products with errors:

0

#### 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:

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#### 4.3 Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing.

Number of products with errors:

## 4.4 L1B Tracking Flags Check

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

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

Number of products with errors:

CS_OFFL_SIR_LRM_1B_20200724T051824_20200724T055005_D001		
	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T055337_20200724T055552_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T055600_20200724T060200_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T060544_20200724T063027_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T063349_20200724T063824_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T065530_20200724T065913_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T070128_20200724T072856_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T074457_20200724T080942_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T080944_20200724T081310_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T081353_20200724T081528_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T081602_20200724T082211_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T083603_20200724T090711_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T093254_20200724T093612_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T093615_20200724T093738_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T094113_20200724T094601_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T095142_20200724T095219_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T095237_20200724T095540_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T112413_20200724T112926_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T113033_20200724T113119_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T113128_20200724T113147_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T115040_20200724T122557_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T123411_20200724T123824_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T132921_20200724T133459_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T134821_20200724T134956_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T134958_20200724T135937_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T142419_20200724T143641_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T150844_20200724T151411_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T151812_20200724T152742_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T152944_20200724T153705_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T160602_20200724T160942_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T161135_20200724T161206_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T161810_20200724T161933_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T161935_20200724T162623_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T162753_20200724T163107_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T164721_20200724T165231_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T165240_20200724T165635_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T165644_20200724T165724_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T165947_20200724T170045_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T172654_20200724T173133_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T173154_20200724T173322_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T173854_20200724T180127_D001	Loss of echo	The tracking echo is missing for one or more records

CS_OFFL_SIR_LRM_1B_20200724T18048_20200724T181238_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T182952_20200724T182932_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T182952_20200724T190220_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T191053_20200724T1911418_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T191053_20200724T1911418_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201555_20200724T20119_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201555_20200724T201519_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201552_20200724T201519_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201526_20200724T201536_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201526_20200724T205324_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214388_20200724T214205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215588_20200724T215380_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T212558_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T212018_D000724T22018_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T2002_20200724T22035_D001  Loss of echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more record	CS_OFFL_SIR_LRM_1B_20200724T180130_20200724T180146_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_18_2020724T182952_2020724T19022_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_2020724T191053_20200724T19148_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_2020724T200556_20200724T201219_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_2020724T201255_20200724T201519_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_2020724T201255_20200724T201519_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_2020724T201524_20200724T201526_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T201528_20200724T201526_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T204952_20200724T204154_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T214838_20200724T214623_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T21002_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T220012_20200724T230856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_18_20200724T230312_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for o	CS_OFFL_SIR_LRM_1B_20200724T180148_20200724T181228_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_18_20200724T183729_20200724T191418_D001  CS_OFFL_SIR_LRM_18_20200724T191053_20200724T191418_D001  CS_OFFL_SIR_LRM_18_20200724T200556_20200724T201219_D001  CS_OFFL_SIR_LRM_18_20200724T201255_20200724T201519_D001  CS_OFFL_SIR_LRM_18_20200724T201525_20200724T201519_D001  CS_OFFL_SIR_LRM_18_20200724T201526_D001  CS_OFFL_SIR_LRM_18_20200724T201528_20200724T201526_D001  CS_OFFL_SIR_LRM_18_20200724T201528_20200724T201526_D001  CS_OFFL_SIR_LRM_18_20200724T201528_20200724T201526_D001  CS_OFFL_SIR_LRM_18_20200724T204528_20200724T204154_D001  CS_OFFL_SIR_LRM_18_20200724T204528_20200724T205324_D001  CS_OFFL_SIR_LRM_18_20200724T214338_20200724T214623_D001  CS_OFFL_SIR_LRM_18_20200724T214815_20200724T215205_D001  CS_OFFL_SIR_LRM_18_20200724T214815_20200724T215205_D001  CS_OFFL_SIR_LRM_18_20200724T215306_20200724T215308_D001  CS_OFFL_SIR_LRM_18_20200724T215558_20200724T220351_D001  CS_OFFL_SIR_LRM_18_20200724T2154558_20200724T220351_D001  CS_OFFL_SIR_LRM_18_20200724T220415_20200724T220351_D001  CS_OFFL_SIR_LRM_18_20200724T220415_20200724T221348_D001  CS_OFFL_SIR_LRM_18_20200724T220415_20200724T221348_D001  CS_OFFL_SIR_LRM_18_20200724T221012_20200724T221348_D001  CS_OFFL_SIR_LRM_18_20200724T220112_20200724T221348_D001  CS_OFFL_SIR_LRM_18_20200724T220112_20200724T221348_D001  CS_OFFL_SIR_LRM_18_20200724T220412_20200724T221348_D001  CS_OFFL_SIR_LRM_18_20200724T230112_20200724T233021_D001  CS_OFFL_SIR_LRM_18_20200724T230305_20200724T233025_D001  CS_OFFL_SIR_LRM_18_20200724T23305_20200724T233025_D001  CS_OFFL_SIR_LRM_18_20200724T23305_20200724T233205_D001  CS_OFFL_SIR_LRM_18_20200724T23308_20200724T233205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OFFL_SIR_LRM_18_20200724T233208_20200724T2332205_D001  CS_OF	CS_OFFL_SIR_LRM_1B_20200724T182648_20200724T182932_D001	Loss of echo	The tracking echo is missing for one or more records
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CS_OFFL_SIR_LRM_1B_20200724T201255_20200724T201219_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201255_20200724T201519_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201524_20200724T201526_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201528_20200724T204154_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T204952_20200724T204154_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T204952_20200724T205324_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T214623_D001  Loss of echo  The tracking echo is missing for one or more records  The tracking echo is missing for one	CS_OFFL_SIR_LRM_1B_20200724T183729_20200724T190220_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T201525_20200724T201526_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T201524_20200724T201526_D001  Loss of echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  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_20200724T204952_20200724T205324_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T214623_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215305_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220456_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T233021_D001  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_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  The tracking echo is missing for one or more records  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_20200724T191053_20200724T191418_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T201524_20200724T201526_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T20452_20200724T205324_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T204952_20200724T205324_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T214623_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233021_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  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_20200724T233208_20200724T233220_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T200556_20200724T201219_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T201528_20200724T204154_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T214623_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T214623_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220356_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T2330112_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  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_20200724T233208_D000724T233205_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T201255_20200724T201519_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T204952_20200724T205324_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233204_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T201524_20200724T201526_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230247_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T201528_20200724T204154_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T214815_20200724T215205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T231012_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T232947_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233205_D001  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_20200724T204952_20200724T205324_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T215306_20200724T215308_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T2332947_20200724T233201_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  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_20200724T233208_20200724T233220_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T214338_20200724T214623_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T232947_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233208_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  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_20200724T233208_20200724T233220_D001  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_20200724T214815_20200724T215205_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T220415_20200724T220856_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233247_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233220_D001  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_20200724T215306_20200724T215308_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T221002_20200724T221348_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T2332947_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  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_20200724T233208_20200724T233220_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T215858_20200724T220351_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T2332947_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233208_20200724T233220_D001  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_20200724T220415_20200724T220856_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T232947_20200724T233021_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233205_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233208_20200724T233220_D001  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_20200724T221002_20200724T221348_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001  Loss of echo  The tracking echo is missing for one or more records  CS_OFFL_SIR_LRM_1B_20200724T233208_20200724T233220_D001  Loss of echo  The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T230112_20200724T231245_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T233208_20200724T233220_D001 Loss of echo The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T232947_20200724T233021_D001	Loss of echo	The tracking echo is missing for one or more records
	CS_OFFL_SIR_LRM_1B_20200724T233035_20200724T233205_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200724T233348_20200724T233905_D001 Loss of echo The tracking echo is missing for one or more records	CS_OFFL_SIR_LRM_1B_20200724T233208_20200724T233220_D001	Loss of echo	The tracking echo is missing for one or more records
	CS_OFFL_SIR_LRM_1B_20200724T233348_20200724T233905_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:

#### 4.6 L1B Auxilary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors:

#### 4.7 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 0

#### 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 20200724T132921 20200724T133459 D001	Echo error. TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set,
C3_011	Lond endi, Titt ecilo endi	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:

#### 5.3 L2 Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors:

#### 5.4 L2 Auxiliary Correction Error Check

CryoSat L2 data includes a correction error flag (field 30) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

#### 5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 2 products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Freeboard error: This flag is correctly set in all L2 SAR products that are not discriminated as sea-ice, and for which freeboard cannot be calculated.

Height and Backscatter errors: These flags are currently set for products over land, but this is to be expected. Retracker 1 Height and Backscatter error flags are also set for products over sea-ice, but this is to be expected.

Peakiness error: This flag is currently set for products over sea-ice, but this is to be expected.

SARIn X-Track Angle Error: This flag is set when the difference between the computed surface elevation and the DEM is >50 m. The DEM is only available over Greenland and Antarctica and as a result this flag is set for L2 SARIn products in all other locations as expected.

SSHA interpolation error: This flag is currently set for a number of SAR products occurring at surface type boundaries, but this is to be expected.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220200724T051824_20200724T055005_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_220200724T060544_20200724T063027_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_20200724T063942_20200724T064019_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_220200724T070128_20200724T072856_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_220200724T074457_20200724T080942_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_220200724T081602_20200724T082211_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_220200724T083603_20200724T090711_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_220200724T095942_20200724T100132_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_220200724T101412_20200724T104705_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_220200724T110420_20200724T112057_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_220200724T113857_20200724T113936_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_20200724T114005_20200724T114015_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_220200724T115040_20200724T122557_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_220200724T124311_20200724T130855_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_20200724T130918_20200724T131711_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_220200724T132921_20200724T133459_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_220200724T133512_20200724T134341_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_20200724T134821_20200724T134956_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_220200724T134958_20200724T135937_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_220200724T142419_20200724T143641_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_220200724T143842_20200724T145605_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_20200724T151812_20200724T152742_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_220200724T152944_20200724T153705_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_220200724T161135_20200724T161206_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records

CS_OFFL_SIR_LRM_220200724T161935_20200724T162623_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_220200724T162753_20200724T163107_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_220200724T165240_20200724T165635_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200724T165644_20200724T165724_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200724T170751_20200724T172311_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_220200724T173854_20200724T180127_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_220200724T180148_20200724T181228_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_220200724T183729_20200724T190220_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_220200724T191753_20200724T194419_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_220200724T194619_20200724T194913_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_220200724T200556_20200724T201219_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_220200724T201528_20200724T204154_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_220200724T205811_20200724T213111_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_220200724T214338_20200724T214623_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_220200724T223718_20200724T225826_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_220200724T230112_20200724T231245_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200724T232218_20200724T232630_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_220200724T234228_20200724T234716_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records

# 6. QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_LRM_1B	111	111	111	0	0
SIR_SAR_1B	87	87	87	0	0
SIR_SIN_1B	85	85	85	0	0
SIR_LRM_2	111	111	108	3	0
SIR_SAR_2	85	87	87	0	0
SIR_SIN_2	87	85	83	2	0
SIR GDR 2	12	12	0	0	12

## 6.1 QCC Errors

Number of products with QCC errors:

Product Type	MPHDUTNCDF	MPHXPFNCDF	MPHXVFNCDF	MPHYPFNCDF	MPHYVFNCDF	MPHZPFNCDF	MPHZVFNCDF	STRUCTURESIZ EANDREAD	-	-
SIR_GDR_2_	12	12	12	12	12	12	12	12		
0										

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

6.2 QCC Warnings

Number of QCC reports with warnings

5

Total number of occurrences of each warning

Product Type	AXDME	AXSMMEOCI	-	-	-	-	-
SIR_LRM_2_	0	3					
SIR_SIN_2_	2	0					

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

## 6.2 Missing QCC Reports

Number of products with missing QCC reports: