



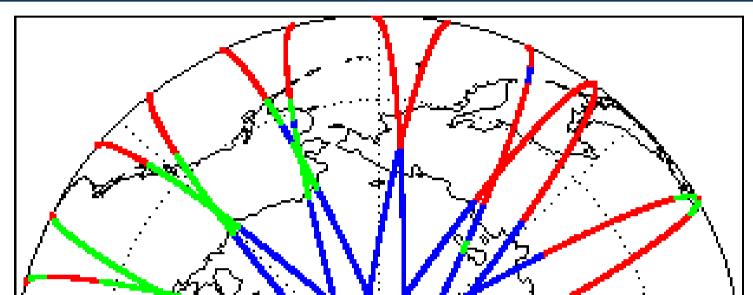
## 1. Overview

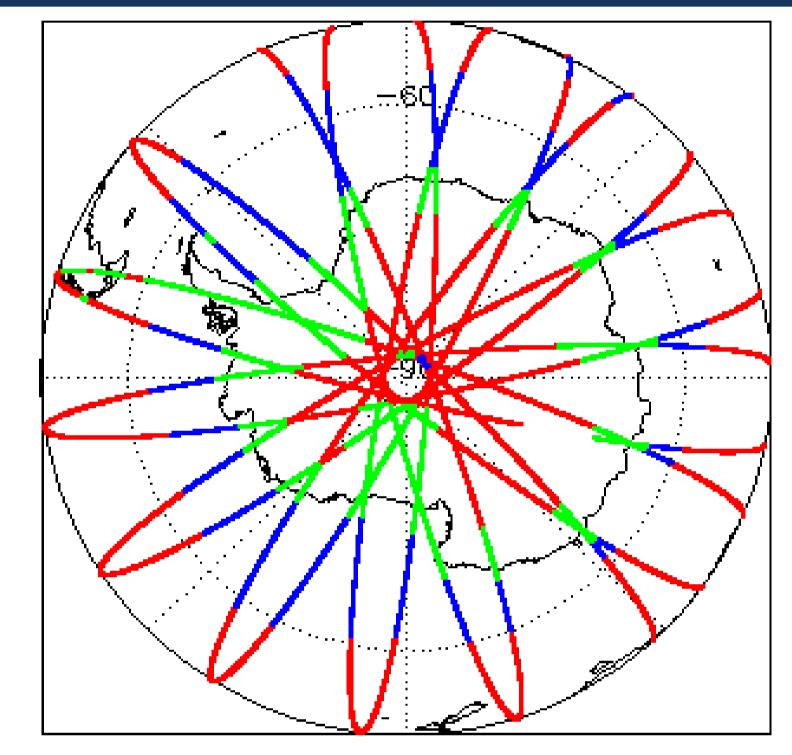
<b>Report Production Date:</b>	30-Sep-2020
Processor Used:	CryoSat Ice Processor
Data Used:	L1B and L2 OFFLINE Data

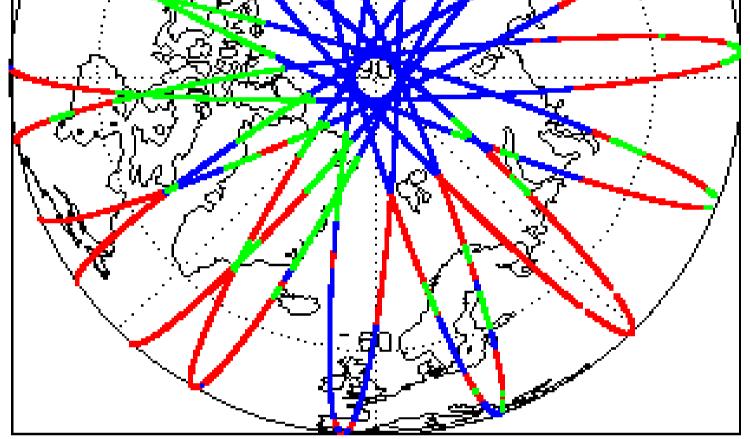
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Star Tracker Usage Check	Nominal
L1B Tracking Flag Check	See Section 4.4
L1B Calibration Usage Check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

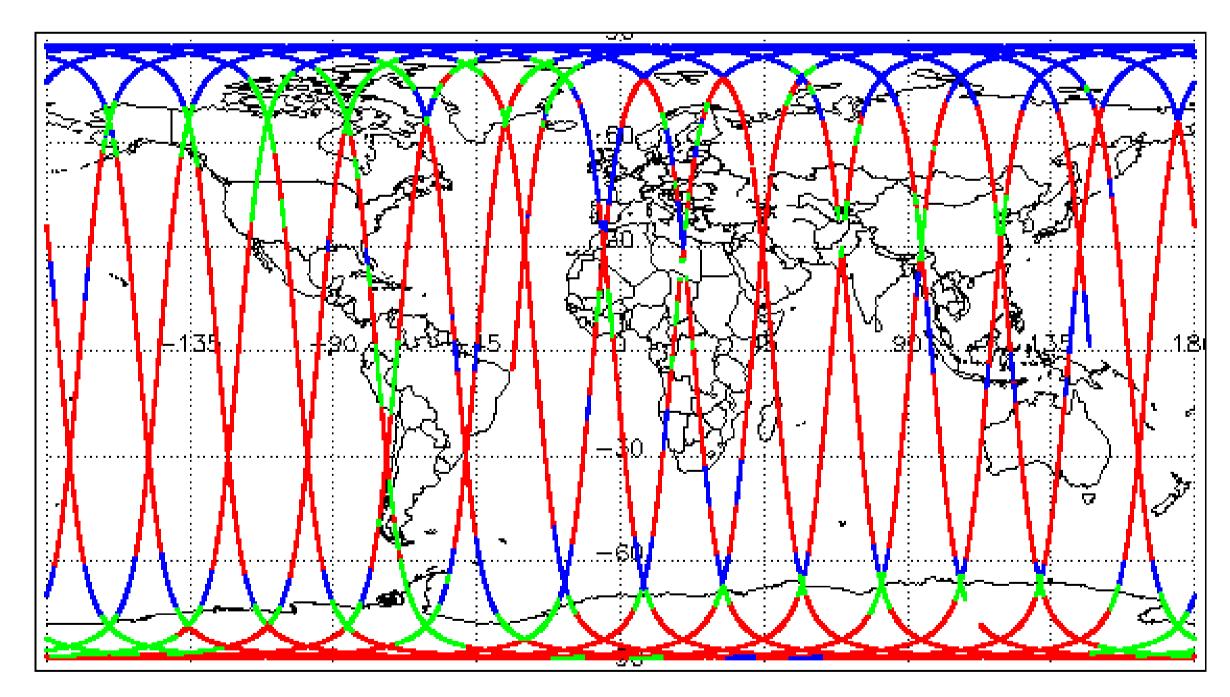
Mission / Instru	iment News
29-Aug-2020	None
30-Aug-2020	None
31-Aug-2020	Nothing planned

# 2. Global Coverage





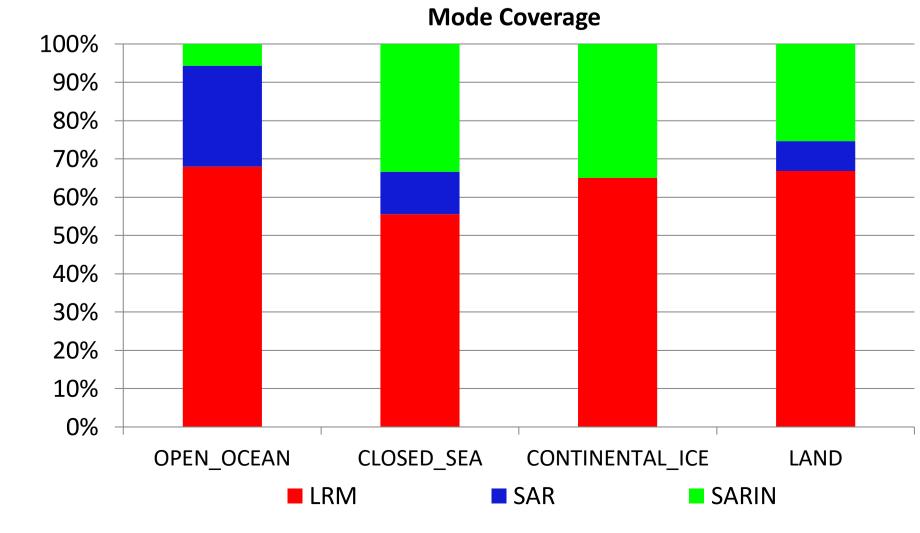


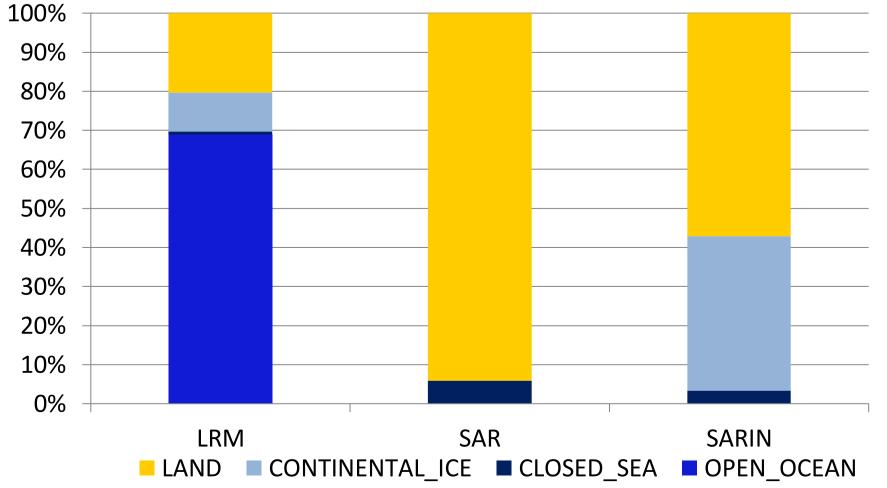




LRM	67.3
SAR	19.7
SARIn	13.0

Surface Type





## **3. Instrument Configuration**

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

SIRAL instrument(s) in use:	SIRAL - A	
	4	4. Level 1B Data Quality Check
4.1 L1B Product Format Che	ck	
Each product, retrieved and unpacked from	n 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 Ana	lysis	
For all products, a series of pre-defined che	ecks 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	
4.3 Star Tracker Usage Chec	k	
Each product is checked in order to ensure	e a valid star tracker file has beer	n used in processing.
Number of products with errors:	0	
4.4 L1B Tracking Flags Chec	k	
CryoSat L1B data includes a tracking flag f	or each measurement record. Th	ne bit value of this flag indicates any problems when set.
Loss of Echo Flag: This flag is currently s	et for some products over land, l	but this is to be expected.

Number of products with errors:

101

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20200830T000339_20200830T001804_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T004956_20200830T010416_D001	Loss of echo	The tracking echo is missing for one or more records

CS\_OFFL\_SIR\_LRM\_1B\_20200830T011145\_20200830T011350\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T012121\_20200830T013416\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T013806\_20200830T014728\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T014949\_20200830T015744\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T020947\_20200830T022656\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T032121\_20200830T032447\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T032831\_20200830T032915\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T032945\_20200830T032945\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T032949\_20200830T033006\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T033010\_20200830T033021\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T033024\_20200830T033028\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T033030\_20200830T033139\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T033142\_20200830T033659\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T034939\_20200830T035823\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T035855\_20200830T040238\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T040240\_20200830T042500\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T043113\_20200830T043632\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T044121\_20200830T050422\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T050755\_20200830T051506\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053553\_20200830T053555\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053559\_20200830T053606\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053608\_20200830T053613\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053618\_20200830T053624\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053633\_20200830T053655\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053657\_20200830T053714\_D001 CS\_OFFL\_SIR\_LRM\_1B\_20200830T053716\_20200830T053723\_D001

Loss 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_20200830T053734_20200830T060341_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T061959_20200830T064716_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064719_20200830T064723_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064727_20200830T064742_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064744_20200830T064751_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064756_20200830T064751_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064756_20200830T065020_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T08252_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T08255_20200830T08252_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T08255_20200830T08252_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T082255_20200830T082252_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_2
CS_OFFL_SIR_LRM_1B_20200830T064719_20200830T064723_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064727_20200830T064742_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064744_20200830T064751_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064756_20200830T064750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T085750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T08555_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T064727_20200830T064742_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064744_20200830T064751_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064756_20200830T065020_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T064744_20200830T064751_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T064756_20200830T065020_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T085750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T064756_20200830T065020_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T065053_20200830T065750_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T080559_20200830T081529_D001Loss of echoThe tracking echo is missing for one or more recordsCS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001Loss of echoThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T081553_20200830T082052_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T082235_20200830T082326_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T082659_20200830T082704_D001 Loss of echo The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T082706_20200830T082816_D001 Loss of echo The tracking echo is missing for one or more records

CS_OFFL_SIR_LRM_1B_20200830T082828_20200830T082959_D001
CS_OFFL_SIR_LRM_1B_20200830T083242_20200830T083255_D001
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CS_OFFL_SIR_LRM_1B_20200830T202359_20200830T202705_D001
CS_OFFL_SIR_LRM_1B_20200830T202717_20200830T202806_D001
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001
CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001
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CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001

CS_OFFL_SIR_LRM_1B_20200830T082828_20200830T082959_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T083242_20200830T083255_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T084851_20200830T085811_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T095910_20200830T100410_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T100433_20200830T100617_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T102530_20200830T110036_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T120346_20200830T121832_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T122314_20200830T122431_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T122433_20200830T122526_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T122639_20200830T124009_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T125813_20200830T131131_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T131345_20200830T131531_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T131539_20200830T133055_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T134307_20200830T135010_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T135310_20200830T140056_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T140058_20200830T140202_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T140204_20200830T140312_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T140315_20200830T140335_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T143825_20200830T143922_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T144155_20200830T144801_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T145234_20200830T145253_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T145255_20200830T145256_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T145300_20200830T145724_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T150007_20200830T150555_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T152106_20200830T152126_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T152147_20200830T152537_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T152541_20200830T152831_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T152833_20200830T152915_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T152918_20200830T153029_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T153429_20200830T153519_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T153521_20200830T153531_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T160644_20200830T160915_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T161355_20200830T164007_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T164011_20200830T164117_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T164320_20200830T164718_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T164840_20200830T164849_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T170211_20200830T170303_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T170426_20200830T170907_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T174544_20200830T174910_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T184037_20200830T184550_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T184624_20200830T184834_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T184837_20200830T184906_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T184908_20200830T185019_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T185021_20200830T190852_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T192018_20200830T192816_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T202019_20200830T202103_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T202359_20200830T202705_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T202717_20200830T202806_D001	Loss of echo	The tracking echo is missing for one or more records
	Loss 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_20200830T203349_20200830T203531_D001		
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001	Loss 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_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001	Loss of echo Loss of echo Loss of echo	The tracking echo is missing for one or more recordsThe tracking echo is missing for one or more recordsThe tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001	Loss of echo Loss of echo Loss 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 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_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001	<ul> <li>Loss of echo</li> </ul>	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_20200830T202717_20200830T202806_D001 CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220833_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220945_D001 CS_OFFL_SIR_LRM_1B_20200830T220948_20200830T220945_D001	<ul> <li>Loss of echo</li> </ul>	<ul> <li>The tracking echo is missing for one or more records</li> <li>The tracking echo is missing for one or more records</li> <li>The tracking echo is missing for one or more records</li> <li>The tracking echo is missing for one or more records</li> <li>The tracking echo is missing for one or more records</li> <li>The tracking echo is missing for one or more records</li> <li>The tracking echo is missing for one or more records</li> </ul>
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220833_D001 CS_OFFL_SIR_LRM_1B_20200830T22095_20200830T220945_D001 CS_OFFL_SIR_LRM_1B_20200830T220948_20200830T220951_D001	<ul> <li>Loss of echo</li> </ul>	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 The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220833_D001 CS_OFFL_SIR_LRM_1B_20200830T220952_20200830T220945_D001 CS_OFFL_SIR_LRM_1B_20200830T220948_20200830T220945_D001 CS_OFFL_SIR_LRM_1B_20200830T220948_20200830T220951_D001	<ul> <li>Loss of echo</li> </ul>	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 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_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220833_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220945_D001 CS_OFFL_SIR_LRM_1B_20200830T220948_20200830T220945_D001 CS_OFFL_SIR_LRM_1B_20200830T220948_20200830T220951_D001 CS_OFFL_SIR_LRM_1B_20200830T220953_20200830T221405_D001 CS_OFFL_SIR_LRM_1B_20200830T221608_20200830T222212_D001	<ul> <li>Loss of echo</li> </ul>	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 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 The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200830T203349_20200830T203531_D001 CS_OFFL_SIR_LRM_1B_20200830T203716_20200830T203835_D001 CS_OFFL_SIR_LRM_1B_20200830T203838_20200830T203954_D001 CS_OFFL_SIR_LRM_1B_20200830T204042_20200830T204407_D001 CS_OFFL_SIR_LRM_1B_20200830T213602_20200830T214736_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220833_D001 CS_OFFL_SIR_LRM_1B_20200830T220652_20200830T220945_D001	<ul> <li>Loss of echo</li> </ul>	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 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

4.5 L1B Calibration Usage Check		
Each product is checked in order to ensure that the necessary calibration files have	been used in processing.	
Number of products with errors: 0		
4.6 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre-dete	ermined baseline and also to check the v	alidity of Auxiliary Data Files is correct.
Number of products with errors: 0		
4.7 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag (field 54) for each measurement re	ecord. 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 meas	urement record. The bit value of this flag	g indicates any problems when set.
Currently, there are several common error flags raised in the Level 1B product below, followed by a table of any additional issues arising from this test.	ets which are expected due to operation	onal mode or surface type. All common flags are summarised in the list
Block Degraded Flag: This flag is currently set for a number of individual records g	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, indi	icating that the ADC correction application	on is deactivated, but this is in line with the current configuration.
Number of products with errors: 4		
Product	Test Failed	Description

CS_OFFL_SIR_LRM_1B_20200830T134307_20200830T135010_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_20200830T170426_20200830T170907_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_20200830T232151_20200830T232747_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**

ach product, retneved and unpacked from	n the science server, is checked to ensure it consists of both an XML header file (.HDR) and a product file (.DBL).
lumber of products with errors:	0
5.2 L2 Product Header Analy	sis
For all products, a series of pre-defined che	ecks 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 Usa	age 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 E	rror Check
	Fror Check

### 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:

58

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220200830T000339_20200830T001804_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
	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_220200830T004956_20200830T010416_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 OFFE STR FRM 2 202008301012121 202008301013416 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_220200830T013537_20200830T013605_D001	ILRATISCIAL 31 RECESSION FULL	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_220200830T013806_20200830T014728_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_220200830T020947_20200830T022656_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_220200830T023229_20200830T024106_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_220200830T032121_20200830T032447_D001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220200830T034939_20200830T035823_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_220200830T035855_20200830T040238_D001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220200830T040240_20200830T042500_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_220200830T044121_20200830T050422_D001	ILRATIACKAR 31 BACKSCATTAR FILD	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_220200830T053734_20200830T060341_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_220200830T061959_20200830T064716_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_220200830T064744_20200830T064751_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200830T065053_20200830T065750_D001	I Refracker 3) Backscatter Error	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_220200830T070957_20200830T074147_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_220200830T075904_20200830T080308_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_220200830T083400_20200830T083659_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_220200830T084851_20200830T085811_D001	Tellor (Refracker 2) Surrace model	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_220200830T090037_20200830T092155_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_220200830T093939_20200830T095544_D001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220200830T102530_20200830T110036_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_220200830T111955_20200830T115137_D001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220200830T120346_20200830T121832_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200830T122314_20200830T122431_D001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220200830T122639_20200830T124009_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_220200830T125813_20200830T131131_D001		There is a height and backscatter error for Retracker 2 for one or more records
CS_OFFL_SIR_LRM_220200830T131345_20200830T131531_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_220200830T131539_20200830T133055_D001	ILRATIACKAR 31 BACKSCATTAR FILM	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records
	Lleight Error (Detrocker 2) Lleight Error	There is a height and backscatter error for Retracker 2, a height error for
CS_OFFL_SIR_LRM_220200830T135310_20200830T140056_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	Retracker 3 and no DEM or Slope Model was used for the location of one

CS_OFFL_SIR_LRM_220200830T140315_20200830T140335_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_220200830T140515_20200830T141901_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_220200830T144155_20200830T144801_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_220200830T145234_20200830T145253_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200830T145300_20200830T145724_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_220200830T145847_20200830T145900_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_220200830T150007_20200830T150555_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_220200830T150718_20200830T150922_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_220200830T152541_20200830T152831_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200830T153714_20200830T155721_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_220200830T161355_20200830T164007_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_220200830T171318_20200830T173659_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_220200830T175257_20200830T182521_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_220200830T183848_20200830T183951_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_220200830T184037_20200830T184550_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_220200830T185021_20200830T190852_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_220200830T193355_20200830T200523_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_220200830T204702_20200830T205412_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_220200830T211212_20200830T213317_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_220200830T213602_20200830T214736_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Surface model unavailable	There is a height and backscatter error for Retracker 2 , a height error for Retracker 3 and no DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200830T221608_20200830T222212_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_220200830T222400_20200830T223407_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_220200830T225140_20200830T232043_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_220200830T232151_20200830T232747_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_220200830T234006_20200830T234715_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_220200830T234717_20200831T001145_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
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## 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	164	164	164	0	0
SIR_SAR_1B	96	96	96	0	0
SIR_SIN_1B	106	106	106	0	0
SIR_LRM_2	164	164	161	3	0
SIR_SAR_2	106	96	96	0	0
SIR_SIN_2	96	106	104	2	0
SIR_GDR_2	14	14	0	0	14

### 6.1 QCC Errors

Number of products with QCC errors:

14

Product Type	MPHDUTNCDF	MPHXPFNCDF	MPHXVFNCDF	MPHYPFNCDF	MPHYVFNCDF	MPHZPFNCDF	MPHZVFNCDF	-	-	-	-
SIR_GDR_2_	14	14	14	14	14	14	14	-			

Test Description Key:	est 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)					

### 6.2 QCC Warnings

Number of QCC reports with warnings

6

1

Total number of occurrences of each warning

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Product Type	AXDME	AXSMMEOCI	-	-	-	-	-
SIR_GDR_2_	0	1					
SIR_LRM_2_	0	3					

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:

#### Product name

CS\_OFFL\_SIR\_GDR\_2\_20200830T230822\_20200831T004737\_D002