

15/06/2020



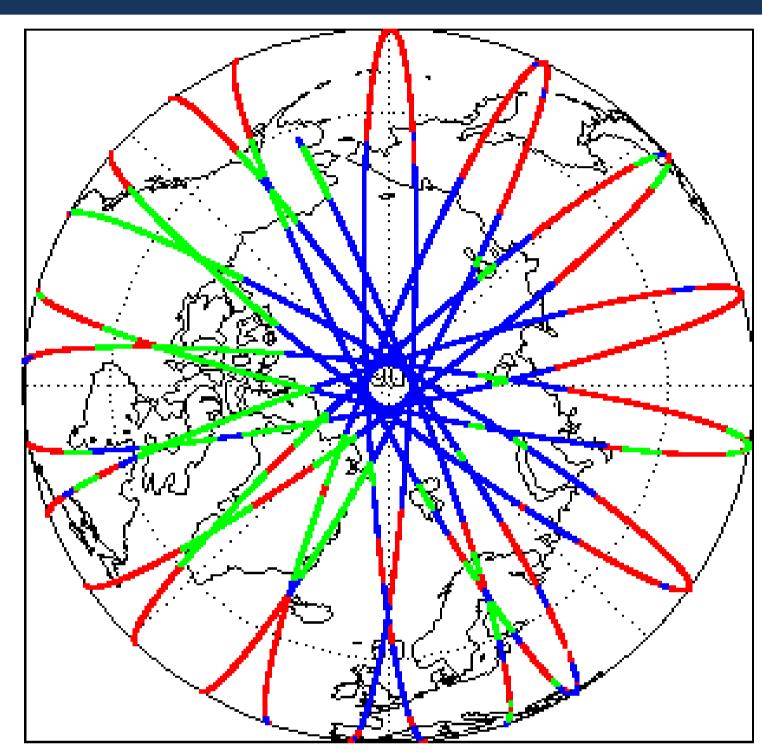
1. Overview

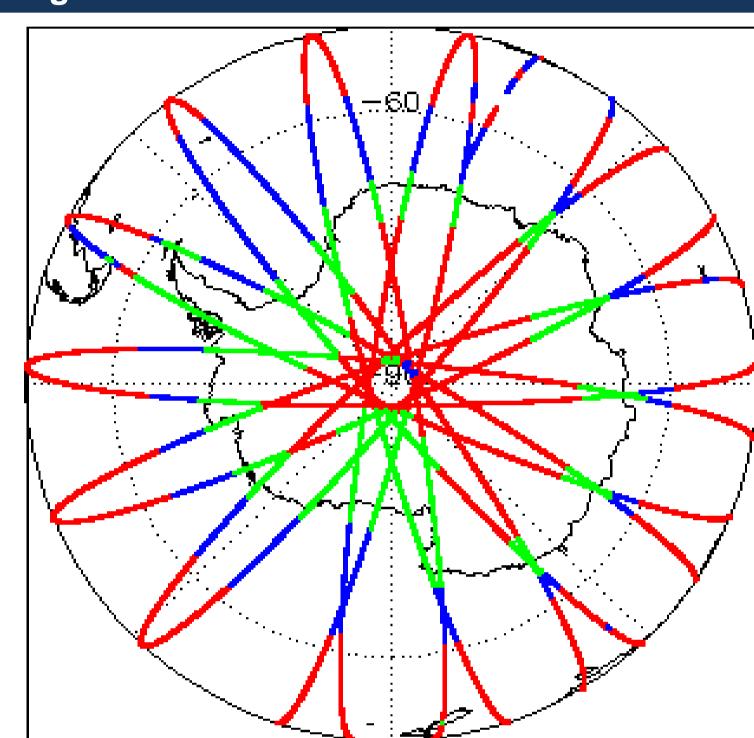
Report Production Date:	15-Jul-2020		
Processor Used:	CryoSat Ice Processor		
Data Used:	L1B and L2 OFFLINE Data		

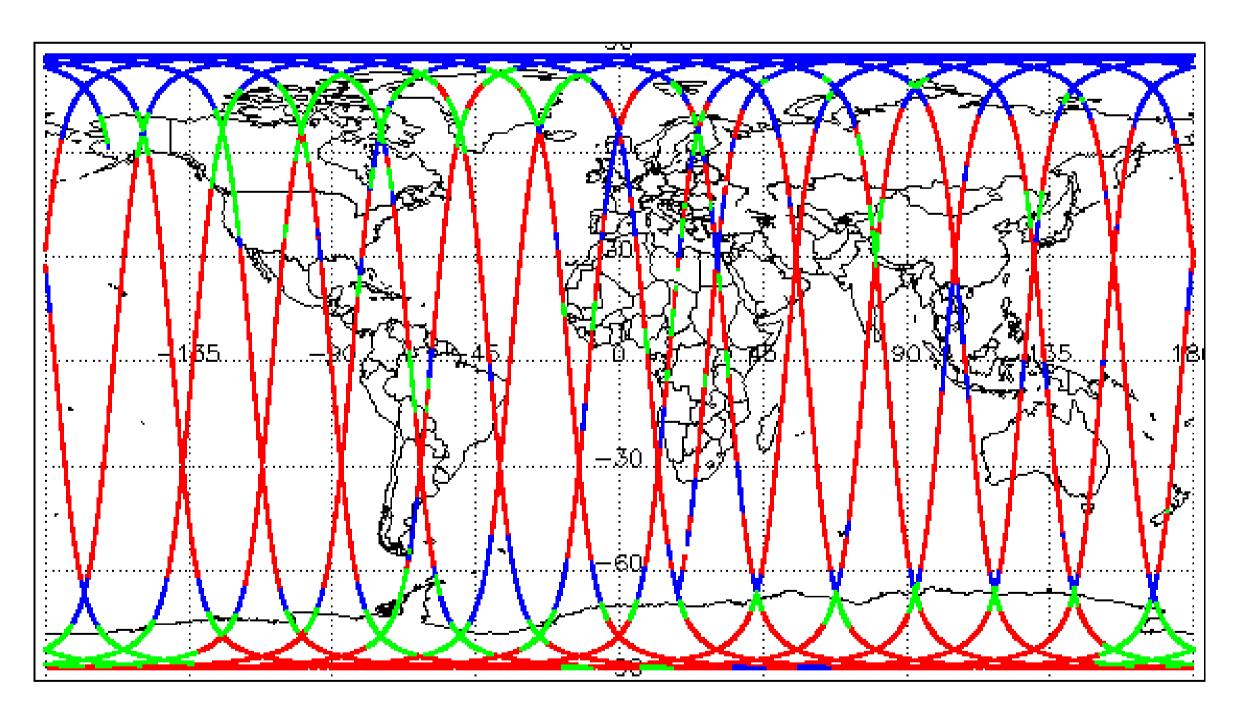
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Star Tracker Usage Check	Nominal
L1B Tracking Flag Check	See Section 4.4
L1B Calibration Usage Check	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

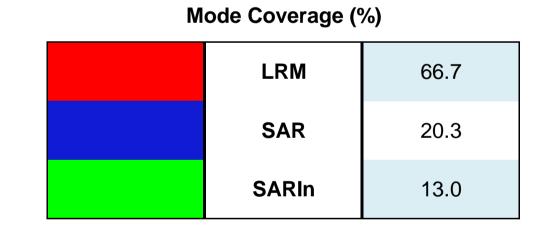
Mission / Instru	lission / Instrument News					
14-Jun-2020	None					
15-Jun-2020	None					
16-Jun-2020	Nothing planned					

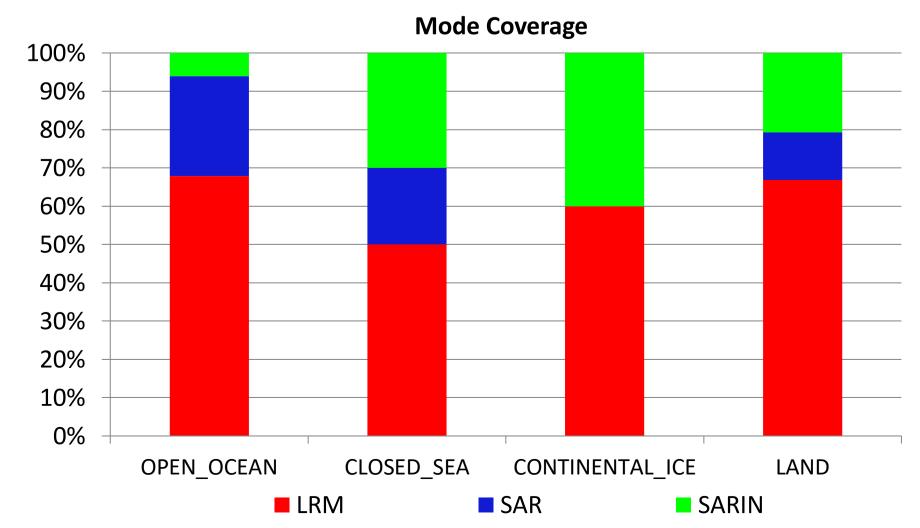
2. Global Coverage

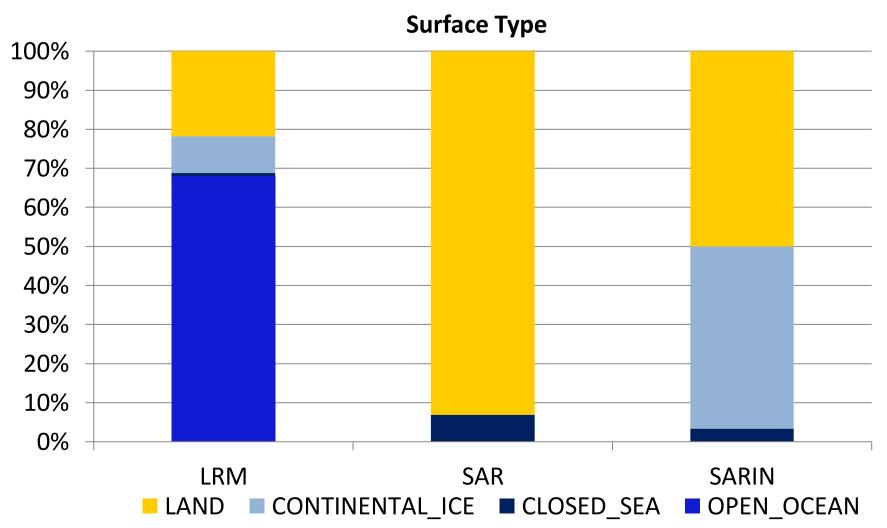












3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

0

4. Level 1B Data Quality Check

4.1 L1B Product Format Check

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

Number of products with errors:

4.2 L1B Product Header Analysis

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

Number of products with errors:

4.3 Star Tracker Usage Check

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

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:

00

0

Product	Test Failed	Description
CS_OFFL_SIR_LRM_1B_20200615T001639_20200615T001930_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T001942_20200615T002047_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T002624_20200615T002800_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T002944_20200615T003244_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T003320_20200615T003503_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T003506_20200615T003509_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T003511_20200615T003543_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T005218_20200615T005730_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T012829_20200615T013859_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T013908_20200615T014010_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T015920_20200615T020108_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T020122_20200615T020224_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T020231_20200615T020635_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T020832_20200615T021438_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T031411_20200615T032007_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T033210_20200615T040410_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T041344_20200615T041539_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T042628_20200615T043804_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T043956_20200615T045045_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T045327_20200615T045941_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T051232_20200615T052847_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T053139_20200615T053313_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T053327_20200615T053416_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T053418_20200615T054030_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T055216_20200615T055458_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T062521_20200615T063120_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T063122_20200615T063247_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T063250_20200615T063945_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T065509_20200615T070052_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T070336_20200615T070616_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T070622_20200615T072656_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T073011_20200615T073851_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T074202_20200615T080612_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T080843_20200615T080926_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T081047_20200615T081502_D001	Loss of echo	The tracking echo is missing for one or more records
S_OFFL_SIR_LRM_1B_20200615T083210_20200615T083603_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T083605_20200615T083723_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T083812_20200615T083851_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T083853_20200615T084133_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T084135_20200615T090553_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T092102_20200615T094607_D001	Loss of echo	The tracking echo is missing for one or more records

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CS_OFFL_SIR_LRM_1B_20200615T094610_20200615T094620_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T094622_20200615T095006_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T095040_20200615T095535_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T110855_20200615T111551_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T111746_20200615T112242_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T112705_20200615T112757_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T112933_20200615T113252_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T113521_20200615T113551_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T125841_20200615T130615_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T130811_20200615T130924_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T134138_20200615T135732_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T135735_20200615T140242_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T150620_20200615T150943_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T150945_20200615T151419_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T152510_20200615T153512_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T153515_20200615T154155_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T155000_20200615T155220_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T160046_20200615T161314_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T164505_20200615T164837_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T164840_20200615T165057_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T165441_20200615T170413_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T170617_20200615T172053_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T173730_20200615T174833_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T174836_20200615T175000_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T175441_20200615T175636_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T175638_20200615T180631_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T180713_20200615T180737_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T182349_20200615T182803_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T182901_20200615T182913_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T182916_20200615T182926_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_20200615T182929_20200615T183721_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T190830_20200615T190944_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T191535_20200615T194112_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T194246_20200615T194307_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T194329_20200615T194857_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T200231_20200615T200940_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T200943_20200615T200958_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T201453_20200615T203523_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T214335_20200615T215332_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T215334_20200615T215422_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T215424_20200615T221851_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T222627_20200615T222956_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T232101_20200615T232340_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T232426_20200615T232645_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T232718_20200615T232804_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T232951_20200615T233059_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T233341_20200615T234215_D001	Loss of echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_LRM_1B_20200615T234257_20200615T235023_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.

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_20200615T101331_20200615T104429_D001	Echo error, TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

5. Level 2 Data Quality Check

5.1 L2 Product Format Check

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

Number of products with errors:

5.2 L2 Product Header Analysis

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

Number of products with errors: 0

5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

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: 57

Product	Test Failed	Description
CS_OFFL_SIR_LRM_220200615T003833_20200615T004813_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_220200615T010411_20200615T012543_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_220200615T012829_20200615T013859_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_220200615T014934_20200615T015239_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_220200615T020832_20200615T021438_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_220200615T021626_20200615T022656_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_220200615T024352_20200615T031355_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_220200615T031411_20200615T032007_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_220200615T033210_20200615T040410_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_220200615T042628_20200615T043804_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_220200615T043956_20200615T045045_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_220200615T051232_20200615T052847_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_220200615T054511_20200615T054608_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records

### PRINCIPLES 1942 20000 FTROCOL_20001770 00 00 00 00 00 00 00 00 00 00 00 00	CS_OFFL_SIR_LRM_220200615T061810_20200615T062053_D001	Height Error (Retracker 2), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 for one or more records
OUT IL SALINA 2 AND ENTREMANDA 2000 CONTROLLED IN THE SALINA CONTROLLED	CS_OFFL_SIR_LRM_220200615T062521_20200615T063120_D001		
So CPT SRI 1194 2 20094 STRT 1992 PART STREAM PRODUCT PLANS OF THE PRODU	CS_OFFL_SIR_LRM_220200615T063250_20200615T063945_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
Fig. (First Memory 2). According to a beginning and substantial control of process of a significant of a beginning to a beginning to a beginning to a significant of a beginning to a begi	CS_OFFL_SIR_LRM_220200615T065509_20200615T070052_D001	· · · · · · · · · · · · · · · · · · ·	
Co CPPL SIR LEND 3 20000050111000 20000 5110000 20000 1000000 20000 1000000 20000 1000000 20000 10000000 20000 10000000 20000 100000000	CS_OFFL_SIR_LRM_220200615T070336_20200615T070616_D001	,	
Fig. Therapes 7; So OF Bit 1990 9 200006 9701999 920006 970190 920006 97019 92019 920006 97019	CS_OFFL_SIR_LRM_220200615T070622_20200615T072656_D001	· · · · · · · · · · · · · · · · · · ·	
Services 1 Head 2 2000000 STOCK 200000 STOCK	CS_OFFL_SIR_LRM_220200615T074202_20200615T080612_D001	, ,	
Eq. OPEL SR LEW 2 - 20200015110003 - 202	CS_OFFL_SIR_LRM_220200615T081625_20200615T081708_D001	· · · · · · · · · · · · · · · · · · ·	
Page 18 May 2 200009 57115016 200001511510 DOT 18 May 18 M	CS_OFFL_SIR_LRM_220200615T084135_20200615T090553_D001	, ,	
Relation 2. Description Part 2. Description Relation 2. Description Relation 2. Description Relation 2. Description	CS_OFFL_SIR_LRM_220200615T092102_20200615T094607_D001	· · · · · · · · · · · · · · · · · · ·	
Entry (President 2) accounts 11 (2016) of 11 (2016) of 11 (2014) of 11 (2016) of 11 (2014) of 11	CS_OFFL_SIR_LRM_220200615T101331_20200615T104429_D001	(Retracker 3), Backscatter Error	
CS_OFFL_SIR_LBM_2_200009157130142 22000915713041 DOD CS_OFFL_SIR_LBM_2_200009157131314 22000915713040 DOD CS_OFFL_SIR_LBM_2_200009157131314 22000915713040 DOD CS_OFFL_SIR_LBM_2_200009157131314 22000915713040 DOD CS_OFFL_SIR_LBM_2_20000915713130 20000915713040 DOD CS_OFFL_SIR_LBM_2_20000915713130 2000091571300 DOD CS_OFFL_SIR_LBM_2_20000915713130 2000091571300 DOD CS_OFFL_SIR_LBM_2_20000915713130 2000091571300 DOD CS_OFFL_SIR_LBM_2_200009157130 2000091571300 DOD CS_OFFL_SIR_LBM_2_200009157130 2000091571300 DOD CS_OFFL_SIR_LBM_2_200009157130 2000091571300 DOD CS_OFFL_SIR_LBM_2_200009157130 200009157130 2000091571300 DOD CS_OFFL_SIR_LBM_2_200009157130 200009157130	CS_OFFL_SIR_LRM_220200615T110855_20200615T111551_D001	· · · · · · · · · · · · · · · · · · ·	
Entry (Restable 2). Bedosates and the sign of the sign	CS_OFFL_SIR_LRM_220200615T115018_20200615T122348_D001	(Retracker 3), Backscatter Error	
Erri (Retroder 2) accords Erri (Retroder 2) acc	CS_OFFL_SIR_LRM_220200615T124132_20200615T125702_D001		
Error (Retracker 2). Backscatter Form (Retracker 2). Backscatt	CS_OFFL_SIR_LRM_220200615T131314_20200615T131411_D001	, , , , , , , , , , , , , , , , , , , ,	
Error (Retracker 2). Surface model unvailable) CS. OFFL_SIR_LRM_2_20200615T134198_20200615T135732_D001 Height Error (Retracker 2). Backscatter Error (Retracker 2).	CS_OFFL_SIR_LRM_220200615T131529_20200615T131659_D001	Error (Retracker 2)	
Error (Retracker 2) CS OFFL SIR LRM 2 20200615T14938_20200615T140242 D001 Height Error (Retracker 2). Backscatter Error (Retracker	CS_OFFL_SIR_LRM_220200615T132805_20200615T133852_D001	Error (Retracker 2), Surface model	
Emri (Retracker 2) packscatter error for Retracker 2 for one or more records CS_OFFL_SIR_LRM_2_20200615T14388_20200615T14426_D001 Height Error (Retracker 2). Backscatter Error (Retracker 2). Backsc	CS_OFFL_SIR_LRM_220200615T134138_20200615T135732_D001	, , , , , , , , , , , , , , , , , , , ,	
Error (Retracker 2) records CS_OFFL_SIR_LRM_2_20200615T143950_20200615T144426_D001 Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 3) In one or more records CS_OFFL_SIR_LRM_2_20200615T165441_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T170417_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T170417_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615	CS_OFFL_SIR_LRM_220200615T135735_20200615T140242_D001	, , , , , , , , , , , , , , , , , , , ,	
Error (Retracker 2) records CS_OFFL_SIR_LRM_2_20200615T144528 20200615T150943_D001	CS_OFFL_SIR_LRM_220200615T141938_20200615T143912_D001	· · · · · · · · · · · · · · · · · · ·	
Error (Retracker 2) records CS_OFFL_SIR_LRM_2_20200615T150943_D001	CS_OFFL_SIR_LRM_220200615T143950_20200615T144426_D001	, , , , , , , , , , , , , , , , , , , ,	
Error (Retracker 2) records CS_OFFL_SIR_LRM_2_20200615T150945_20200615T151419_D001	CS_OFFL_SIR_LRM_220200615T144528_20200615T145338_D001	· · · · · · · · · · · · · · · · · · ·	
CS_OFFL_SIR_LRM_2_20200615T150945_20200615T164149_D001 (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker	CS_OFFL_SIR_LRM_220200615T150620_20200615T150943_D001	Error (Retracker 2)	
Error (Retracker 2) records CS_OFFL_SIR_LRM_2_20200615T152510_20200615T153512_D001 (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Err	CS_OFFL_SIR_LRM_220200615T150945_20200615T151419_D001	(Retracker 3), Backscatter Error	
CS_OFFL_SIR_LRM_2_20200615T152510_20200615T153512_D001 (Retracker 3), Backscatter Error (Retracker 2) for Retracker 3 for one or more records Height Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backscatter Error (Retrack	CS_OFFL_SIR_LRM_220200615T151424_20200615T152503_D001	Error (Retracker 2)	
Error (Retracker 2) CS_OFFL_SIR_LRM_2_20200615T160046_20200615T161314_D001 Error (Retracker 2), Backscatter Error (Retracker 3), B	CS_OFFL_SIR_LRM_220200615T152510_20200615T153512_D001	(Retracker 3), Backscatter Error	
Error (Retracker 2) CS_OFFL_SIR_LRM_2_20200615T161417_20200615T163113_D001 Error (Retracker 2), Backscatter Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 2) CS_OFFL_SIR_LRM_2_20200615T165441_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T170617_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T170617_20200615T172053_D001 CS_OFFL_SIR_LRM_2_20200615T170617_20200615T172053_D001 CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 CS_OFFL_SIR_LRM_2_20200615T175638_20200615T174833_D001 Error (Retracker 2), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatt	CS_OFFL_SIR_LRM_220200615T153515_20200615T154155_D001	· · · · · · · · · · · · · · · · · · ·	
Error (Retracker 2) CS_OFFL_SIR_LRM_2_20200615T165441_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T165441_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T170617_20200615T170413_D001 CS_OFFL_SIR_LRM_2_20200615T170617_20200615T172053_D001 CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 CS_OFFL_SIR_LRM_2_20200615T175638_20200615T180631_D001 Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retrac	CS_OFFL_SIR_LRM_220200615T160046_20200615T161314_D001	· · · · · · · · · · · · · · · · · · ·	
CS_OFFL_SIR_LRM_2_20200615T165441_20200615T170413_D001 (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Backscatter Error (Retracker 3), Backs	CS_OFFL_SIR_LRM_220200615T161417_20200615T163113_D001	Error (Retracker 2)	
CS_OFFL_SIR_LRM_2_20200615T170617_20200615T172053_D001 (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 3), Backscatte	CS_OFFL_SIR_LRM_220200615T165441_20200615T170413_D001	(Retracker 3), Backscatter Error (Retracker 2)	for Retracker 3 for one or more records
CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 CS_OFFL_SIR_LRM_2_20200615T173730_20200615T174833_D001 (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2), 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 There is a height and backscatter error for Retracker 2 for one or more records	CS_OFFL_SIR_LRM_220200615T170617_20200615T172053_D001	(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_2202006151175638_202006151180631_D001	CS_OFFL_SIR_LRM_220200615T173730_20200615T174833_D001	(Retracker 3), Backscatter Error	
CS_OFFL_SIR_LRM_2_20200615T180901_20200615T181021_D001 Surface Model Unavailable No DEM or Slope Model was used for the location of one or more records	CS_OFFL_SIR_LRM_220200615T175638_20200615T180631_D001	, ,	
	CS_OFFL_SIR_LRM_220200615T180901_20200615T181021_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records

CS_OFFL_SIR_LRM_220200615T182929_20200615T183721_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200615T184537_20200615T185958_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_220200615T191535_20200615T194112_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_220200615T195021_20200615T195113_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200615T201453_20200615T203523_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_220200615T205417_20200615T212132_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_220200615T214335_20200615T215332_D001	Surface Model Unavailable	No DEM or Slope Model was used for the location of one or more records
CS_OFFL_SIR_LRM_220200615T215424_20200615T221851_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_220200615T223415_20200615T230759_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_220200615T232101_20200615T232340_D001	Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2)	There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records

6. QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_LRM_1B	154	154	154	0	0
SIR_SAR_1B	116	116	116	0	0
SIR_SIN_1B	103	103	103	0	0
SIR_LRM_2	154	154	149	5	0
SIR_SAR_2	103	116	116	0	0
SIR_SIN_2	116	103	103	0	0
SIR_GDR_2	14	14	0	0	14

6.1 QCC Errors

Number of products with QCC errors:

MPHXPFNCDF

MPH_Z_Velocity_Float_v2_NetCDF

Product Type MPHDUTNCDF

14

MPHYPFNCDF

MPHXVFNCDF

7										
SIR_GDR_2_	14	14	14	14	14	14	14	-		
Test Description 	Key:									
Abbreviation	Test na	ime		Details						
MPHDUTNCDF	MPH_De	elta_UT1_NetCDF		Delta_UT1 mismat	ch					
MPHXPFNCDF	MPH_X_	_Position_Float_v2_	_NetCDF	X_Position misma	_Position mismatch (DBL float (GDR), rounded to 100)					
MPHXVFNCDF	MPH_X_	_Velocity_Float_v2_	NetCDF	X_Velocity mismat	ch (DBL float (GDF	R), rounded to 1)				
MPHYPFNCDF	MPH_Y_	_Position_Float_v2_	NetCDF	Y_Position mismat	ch (DBL float (GDF	R), rounded to 100)				
MPHYVFNCDF	MPH_Y_	_Velocity_Float_v2_	NetCDF	Y_Velocity mismat	ch (DBL float (GDF	R), rounded to 1)				
MPHZPFNCDF	MPH_Z_	Position_Float_v2_	NetCDF	Z_Position mismat	ch (DBL float (GDF	R), rounded to 100)				

MPHZPFNCDF

MPHZVFNCDF

MPHYVFNCDF

Z_Velocity mismatch (DBL float (GDR), rounded to 1)

6.2 QCC Warnings

MPHZVFNCDF

Number of QCC reports with warnings

Total number of occurrences of each warning

SIR_GDR_2_ 1 SIR_LRM_2_ 5	Product Type	AXSMMEOCI	-	-	-	-	-	-
SIR_LRM_2_ 5	SIR_GDR_2_	1						
	SIR_LRM_2_	5						

Test Description Key:		
Abbreviation	Test name	Details
AXSMMEOCI	AttributeXrefSlopeModelMustExistOverContinentalIce	The xref_slope_model is mandatory in LRM products over continental ice

6.2 Missing QCC Reports

Number of products with missing QCC reports:

0