

QA4EO Daily Report for FDM data:

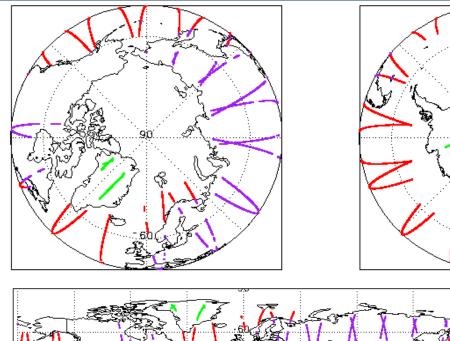
<u>09/12/2020</u>

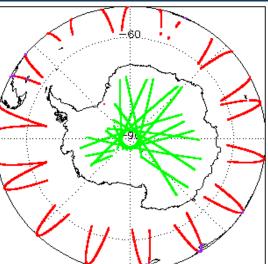
Report Production Date: 10-Dec-2020	10 D 0000	Check	Status
	Server check: science-pds.cryosat.esa.int	Nominal	
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Dete Heed	L1 and L2 Fast Delivery Marine (FDM)	Product Format Check	Nominal
Data Used:	Mode and L0 Data	Product Header Analysis	See Section 4.2, 5.2 and 6.2
	·	Star Tracker Usage Check	See Section 5.3
		Calibration Usage Check	Nominal
		Auxiliary Data File Usage Check	Nominal
		Auxiliary Correction Error Check	See Section 6.4
		Measurement Confidence Data Check	See Section 5.7, 6.5, 6.6, 6.7 and 6.8
		QCC Error/ Warning Check	See Section 7.1 and 7.2

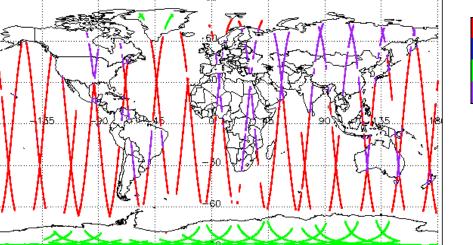
2. Global Coverage

1. Overview

10-Dec-2020 Nothing planned







Surface Type



3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
Star Tracker(s) in use:	Star Tracker 1

4. Level 0 Data Quality Check

4.1 L0 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 binary product file (.DBL).

0

4.2 L0 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 processing chain.

Number of products with errors:	10

Product	Test Failed
CS_OPER_SIR1SAR_020201209T070814_20201209T071453_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020201209T075148_20201209T075711_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020201209T175551_20201209T180441_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020201209T224118_20201209T224233_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020201209T193353_20201209T193508_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020201209T202321_20201209T202455_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020201209T220223_20201209T220410_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020201209T123626_20201209T124622_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020201209T183906_20201209T184532_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020201209T201223_20201209T201610_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.

5. Level 1B FDM Data Quality Check

5.1 L1B FDM 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 binary product file (.DBL). Number of products with errors: 0

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: 6

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20201209T010418_20201209T010711_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201209T010711_20201209T010937_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201209T024334_20201209T024449_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201209T024449_20201209T024639_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201209T055954_20201209T060629_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201209T060629_20201209T060716_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).

5.3 L1B FDM 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: 3

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20201209T010418_20201209T010711_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20201209T024334_20201209T024449_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20201209T055954_20201209T060629_C001	No Star Tracker file used in the processing of this product

5.4 L1B FDM Calibration Usage Check

Each product is checked in order to ensure the necessary calibration files have been used in processing.

 Number of products with errors:
 0

5.5 L1B FDM Auxilary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 0

5.6 L1B FDM 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:

5.7 L1B FDM 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.

 Number of products with errors:
 3

 Product
 Test Failed
 Description

 CS_OFFL_SIR_FDM_1B_20201209T010418_20201209T010711_C001
 Attitude correction missing
 The attitude has not been corrected

Product Test Failed Description CS_OFFL_SIR_FDM_1B_20201209T010418_20201209T010711_C001 Attitude correction missing The attitude has not been corrected CS_OFFL_SIR_FDM_1B_20201209T024334_20201209T024449_C001 Attitude correction missing The attitude has not been corrected CS_OFFL_SIR_FDM_1B_20201209T055954_20201209T060629_C001 Attitude correction missing The attitude has not been corrected

6. Level 2 FDM Data Quality Check

6.1 L2 FDM 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 binary product file (.DBL).

6.2 L2 FDM Product Header Analysis

0

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: 17

Product	Test Failed
CS_OFFL_SIR_FDM_220201209T010146_20201209T010231_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T010418_20201209T010711_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201209T010711_20201209T010937_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201209T024334_20201209T024449_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T024449_20201209T024639_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T055954_20201209T060629_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201209T060629_20201209T060716_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201209T074931_20201209T075043_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201209T075929_20201209T075946_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T090847_20201209T092040_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T134851_20201209T142207_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T143434_20201209T143639_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T144749_20201209T145630_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T183713_20201209T183906_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T191944_20201209T192001_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_2_20201209T192221_20201209T192227_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201209T222350_20201209T222601_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.

6.3 L2 FDM 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. 0

Number of products with errors:

6.4 L2 FDM Auxiliary Correction Error Check

Each product is checked to detect auxiliary corrections flagged by the ground-station processing chain as missing or containing errors.

Number of products with errors: 39		
Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201208T235210_20201209T001942_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T003437_20201209T010141_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T022251_20201209T022953_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T035543_20201209T041105_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T044319_20201209T045254_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T045540_20201209T051711_C001	Sea State Bias Correction, Mean Sea Surface height, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed, the Sea State Bias Correction and the Mean Sea Surface Height for one or more records
CS_OFFL_SIR_FDM_220201209T052455_20201209T052906_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T053348_20201209T055316_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T055954_20201209T060629_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T060629_20201209T060716_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T060731_20201209T060739_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T062841_20201209T065629_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T071453_20201209T072719_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T072821_20201209T074516_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T075902_20201209T075924_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T080855_20201209T081818_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T082021_20201209T083526_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T085138_20201209T090407_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T090847_20201209T092040_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T112900_20201209T114936_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T120814_20201209T123558_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T134851_20201209T142207_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T144459_20201209T144507_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T145710_20201209T150433_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T151045_20201209T151102_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records

CS_OFFL_SIR_FDM_220201209T152739_20201209T155017_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T161337_20201209T161615_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T163307_20201209T165003_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T170628_20201209T173950_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T180441_20201209T182738_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T185814_20201209T190127_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T190807_20201209T191644_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T193535_20201209T195212_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T195424_20201209T200858_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T203808_20201209T204031_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T204232_20201209T205153_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T211916_20201209T212940_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T213638_20201209T215039_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201209T220501_20201209T222114_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records

6.5 L2 FDM Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag (field 8) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

 Number of products with errors:
 3

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201209T010418_20201209T010711_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220201209T024334_20201209T024449_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220201209T055954_20201209T060629_C001	Attitude correction missing	The attitude has not been corrected

6.6 L2 FDM Range Measurement Check

CryoSat L2 data includes a CFI (field 17) and OCOG (field 22) Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set. Number of products with errors: 20

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201208T235210_20201209T001942_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T003437_20201209T010141_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T022251_20201209T022953_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T035543_20201209T041105_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T044319_20201209T045254_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T045540_20201209T051711_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T062841_20201209T065629_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T071453_20201209T072719_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T080855_20201209T081818_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T082021_20201209T083526_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T085138_20201209T090407_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T090847_20201209T092040_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T112900_20201209T114936_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T134851_20201209T142207_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T170628_20201209T173950_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T185814_20201209T190127_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T190807_20201209T191644_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T195424_20201209T200858_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.

CS_OFFL_SIR_FDM_220201209T204232_20201209T205153_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T211916_20201209T212940_C001	CFI Retracked Range Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.

6.7 L2 FDM SWH and Backscatter Measurement Check

CryoSat L2 data includes a SWH-Squared Averaging Status flag (field 39) and an CFI (field 45) and OCOG (field 51) Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 20		
Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201208T235210_20201209T001942_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T003437_20201209T010141_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T022251_20201209T022953_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T035543_20201209T041105_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T044319_20201209T045254_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T045540_20201209T051711_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T062841_20201209T065629_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T071453_20201209T072719_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T080855_20201209T081818_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T082021_20201209T083526_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T085138_20201209T090407_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T090847_20201209T092040_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T112900_20201209T114936_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T134851_20201209T142207_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T170628_20201209T173950_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T185814_20201209T190127_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T190807_20201209T191644_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T195424_20201209T200858_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2_20201209T204232_20201209T205153_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_220201209T211916_20201209T212940_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.

6.8 L2 FDM Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag (field 66) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

38

Number of products with errors:

Test Failed	Description
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
	Ocean Retracking Quality Flag Ocean Retracking Quality Flag

CS_OFFL_SIR_FDM_220201209T062841_20201209T065629_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T071453_20201209T072719_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T080855_20201209T081818_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T082021_20201209T083526_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T085138_20201209T090407_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T090847_20201209T092040_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T095943_20201209T101443_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T102850_20201209T105519_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T112900_20201209T114936_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T120814_20201209T123558_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T130103_20201209T133252_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T134851_20201209T142207_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T143434_20201209T143639_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T144459_20201209T144507_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220201209T152739_20201209T155017_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T161337_20201209T161615_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T163307_20201209T165003_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T170628_20201209T173950_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T185814_20201209T190127_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T190807_20201209T191644_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T193535_20201209T195212_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T195424_20201209T200858_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T202512_20201209T203731_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T203808_20201209T204031_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T204232_20201209T205153_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T211916_20201209T212940_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T220501_20201209T222114_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2_20201209T230320_20201209T232945_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.

7. 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	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors
SIR1LRM_0_	187	187	187	0	0
SIR1SAR_0_	134	134	134	0	0
SIR1SIN_0_	95	95	95	0	0
SIR2SIN_0_	99	99	99	0	0
SIR_FDM_1B	187	187	3	0	184
SIR_FDM_2	183	183	130	53	0

7.1 QCC Errors

Number of QCC	reports with er	rors:	184								
					Total number	of occurrences	of each error				
Product Type	UVOB	VOB							-	-	-
SIR_FDM_1B	184										
Test Description	Fest Description Key:										
Abbreviation Test name Details											
UVOB	UnitVecto	orOrBlank_6		The three array ele	he three array elements should form a unit vector (using a scale factor of 10^-6)						

7.2 QCC Warnings

Number of QCC	reports with w	varnings	173								
Total number of occurrences of each warning											
Product Type	MVSIO	MVSIOFD	RBSZO	RBSZOFD	RSSBCO	-	-	-	-	-	-
SIR_FDM_2_	39	41	37	46	10						
0											
0											
Test Description	Key:										
Abbreviation	Test na	Test name Details									
MVSIO	Missing\	MissingValueShortIntOcean The value should not be a 'missing value' for surface type 0 only									
MVSIOFD	Missing\	MissingValueShortIntOceanFD2 The value should not be a 'missing value' for surface type 0 only									
RBSZO	RangeBa	ackscatterSigmaZe	roOcean	The backscatter sigma zero should be between 700 and 3000 (or missing) for surface type = ocean							
RBSZOFD	RangeBa	ackscatterSigmaZe	roOceanFD2	The backscatter sigma zero should be between 700 and 3000 (or missing) for surface type = ocean							
RSSBCO	RangeS	RangeSeaStateBiasCorrectionOcean The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean									

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0