

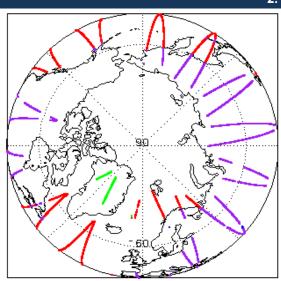
1. Overview

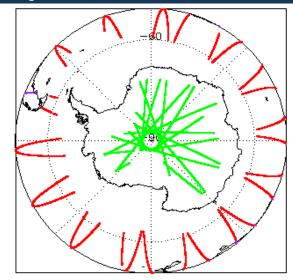
Report Production Date:	02-Jul-2020
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

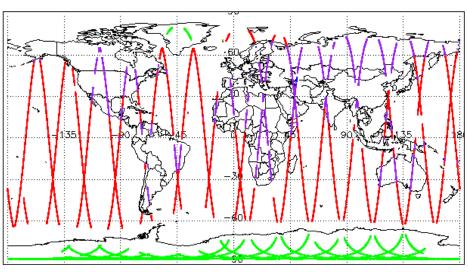
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2, 5.2 and 6.2
Star Tracker Usage Check	See Section 5.3
Calibration Usage Check	Nominal
Auxiliary Data File Usage Check	See Section 5.5 and 6.3
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

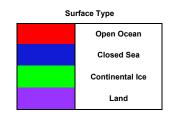
Mission / Instrument News		
30-Jun-2020	None	
01-Jul-2020	None	
02-Jul-2020	Nothing planned	

2. Global Coverage









3. Instrument Configuration

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

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

4. Level 0 Data Quality Check

4.1 L0 Product Format Check

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:

15

Product	Test Failed
CS_OPER_SIR1SAR_020200701T004106_20200701T004426_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200701T044013_20200701T044309_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200701T055920_20200701T060459_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200701T062000_20200701T062614_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200701T104528_20200701T104907_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200701T121747_20200701T122019_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200701T125952_20200701T130739_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T035134_20200701T035410_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T051550_20200701T052509_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20200701T060705_20200701T061103_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T102831_20200701T103206_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T105454_20200701T105610_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T161545_20200701T161727_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T181329_20200701T181632_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200701T195113_20200701T195510_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:

5.2 L1B FDM 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:

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200701T075558_20200701T075639_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200701T075639_20200701T075715_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200701T093311_20200701T093818_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200701T110951_20200701T1111114_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200701T111114_20200701T111229_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.

0

Number of products with errors:

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200701T075558_20200701T075639_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200701T110951_20200701T1111114_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:

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:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20200701T075558_20200701T075639_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200701T110951_20200701T1111114_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).

Number of products with errors:

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:

6.2 L2 FDM Product Header Analysis

Product	Test Failed
CS_OFFL_SIR_FDM_220200701T061357_20200701T062000_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200701T075558_20200701T075639_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200701T075639_20200701T075715_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200701T090138_20200701T092850_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200701T093311_20200701T093818_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200701T110951_20200701T1111114_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200701T111114_20200701T1111229_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).

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.

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:

40

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200701T001134_20200701T002839_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_220200701T004426_20200701T012035_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
S_OFFL_SIR_FDM_220200701T014752_20200701T020527_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
S_OFFL_SIR_FDM_220200701T023959_20200701T024042_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
S_OFFL_SIR_FDM_220200701T024116_20200701T024412_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
S_OFFL_SIR_FDM_220200701T024602_20200701T030034_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
S_OFFL_SIR_FDM_220200701T031306_20200701T033105_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
S_OFFL_SIR_FDM_220200701T033405_20200701T034601_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
S_OFFL_SIR_FDM_220200701T040321_20200701T041831_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
S_OFFL_SIR_FDM_220200701T042033_20200701T042956_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
S_OFFL_SIR_FDM_220200701T045219_20200701T045420_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
S_OFFL_SIR_FDM_220200701T045618_20200701T050917_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
S_OFFL_SIR_FDM_220200701T064936_20200701T070730_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
S_OFFL_SIR_FDM_220200701T072249_20200701T074704_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
S_OFFL_SIR_FDM_220200701T081853_20200701T082059_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
S_OFFL_SIR_FDM_220200701T082102_20200701T084616_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
S_OFFL_SIR_FDM_220200701T090138_20200701T092850_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
S_OFFL_SIR_FDM_220200701T095251_20200701T102452_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
S_OFFL_SIR_FDM_220200701T104040_20200701T104527_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
S_OFFL_SIR_FDM_220200701T111641_20200701T111903_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
S_OFFL_SIR_FDM_220200701T113129_20200701T120438_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
S_OFFL_SIR_FDM_220200701T125605_20200701T125619_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
S_OFFL_SIR_FDM_220200701T130901_20200701T133135_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
S_OFFL_SIR_FDM_220200701T133242_20200701T134306_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
S_OFFL_SIR_FDM_220200701T144615_20200701T150047_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
S_OFFL_SIR_FDM_220200701T150528_20200701T151906_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
S_OFFL_SIR_FDM_220200701T151911_20200701T152238_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
S_OFFL_SIR_FDM_220200701T154103_20200701T155346_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220200701T155600_20200701T161309_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
S_OFFL_SIR_FDM_220200701T163521_20200701T164451_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_220200701T164726_20200701T170129_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_220200701T174100_20200701T174803_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_220200701T182414_20200701T184012_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_220200701T195510_20200701T201946_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_220200701T203453_20200701T210157_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200701T210323_20200701T210643_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_220200701T213217_20200701T215910_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_220200701T221448_20200701T224801_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_220200701T230220_20200701T230314_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_220200701T233140_20200701T233805_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:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200701T075558_20200701T075639_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220200701T110951_20200701T1111114_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:

28

Test Failed Product Description 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 CS OFFL SIR FDM 2 20200701T004426 20200701T012035 C001 CFI Retracked Range Flag ignored for these records The master fail flag is set by the CFI call, for one or more records CS OFFL SIR FDM 2 20200701T014752 20200701T020527 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T023959_20200701T024042_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records, CS_OFFL_SIR_FDM_2__20200701T024602_20200701T030034_C001 indicating the values stored in fields #13, #14, #15 and #16 should be CFI Retracked Range Flag ignored for these records The master fail flag is set by the CFI call, for one or more records, CS OFFL SIR FDM 2 20200701T031306 20200701T033105 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T033405_20200701T034601_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2_20200701T040321_20200701T041831_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T042033_20200701T042956_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records, CS OFFL SIR FDM 2 20200701T045219 20200701T045420 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T045618_20200701T050917_C001 indicating the values stored in fields #13, #14, #15 and #16 should be CFI Retracked Range Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CS_OFFL_SIR_FDM_2__20200701T064936_20200701T070730_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS OFFL SIR FDM 2 20200701T072249 20200701T074704 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T081853_20200701T082059_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records, CS OFFL SIR FDM 2 20200701T082102 20200701T084616 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records The master fail flag is set by the CFI call, for one or more records. CS_OFFL_SIR_FDM_2__20200701T090138_20200701T092850_C001 indicating the values stored in fields #13, #14, #15 and #16 should be CFI Retracked Range Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CS OFFL SIR FDM 2 20200701T111641 20200701T111903 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records, CFI Retracked Range Flag CS_OFFL_SIR_FDM_2_20200701T113129_20200701T120438_C001 indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T130901_20200701T133135_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records, CS_OFFL_SIR_FDM_2_20200701T144615_20200701T150047_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T150528_20200701T151906_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200701T155600_20200701T161309_C001 indicating the values stored in fields #13, #14, #15 and #16 should be CFI Retracked Range Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CS_OFFL_SIR_FDM_2__20200701T163521_20200701T164451_C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records.

CS_OFFL_SIR_FDM_220200701T164726_20200701T170129_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_220200701T174100_20200701T174803_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_20200701T195510_20200701T201946_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_220200701T213217_20200701T215910_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_220200701T221448_20200701T224801_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_220200701T230220_20200701T230314_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:

28

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200701T004426_20200701T012035_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_220200701T014752_20200701T020527_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_220200701T023959_20200701T024042_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_220200701T024602_20200701T030034_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_220200701T031306_20200701T033105_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_220200701T033405_20200701T034601_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_220200701T040321_20200701T041831_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_220200701T042033_20200701T042956_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_220200701T045219_20200701T045420_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_220200701T045618_20200701T050917_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_220200701T064936_20200701T070730_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_220200701T072249_20200701T074704_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_220200701T081853_20200701T082059_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_220200701T082102_20200701T084616_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_220200701T090138_20200701T092850_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_220200701T111641_20200701T111903_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_220200701T113129_20200701T120438_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_220200701T130901_20200701T133135_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_220200701T144615_20200701T150047_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_220200701T150528_20200701T151906_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_220200701T155600_20200701T161309_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_220200701T163521_20200701T164451_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_220200701T164726_20200701T170129_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_220200701T174100_20200701T174803_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_220200701T195510_20200701T201946_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.

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.
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.
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.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200701T004426_20200701T012035_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_20200701T014236_20200701T014656_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_220200701T014752_20200701T020527_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_220200701T022431_20200701T023954_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_220200701T023959_20200701T024042_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_220200701T024602_20200701T030034_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_220200701T031306_20200701T033105_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_220200701T033405_20200701T034601_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_220200701T040321_20200701T041831_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_220200701T042033_20200701T042956_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_220200701T045219_20200701T045420_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_220200701T045618_20200701T050917_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_220200701T054258_20200701T055736_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_220200701T063517_20200701T064933_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_220200701T064936_20200701T070730_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_220200701T072249_20200701T074704_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_220200701T081853_20200701T082059_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_220200701T082102_20200701T084616_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_220200701T090138_20200701T092850_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_220200701T093311_20200701T093818_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_220200701T095251_20200701T102452_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_220200701T111641_20200701T111903_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_220200701T113129_20200701T120438_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_220200701T122020_20200701T123808_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_220200701T124125_20200701T124620_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_220200701T125605_20200701T125619_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_220200701T130901_20200701T133135_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_220200701T140009_20200701T142626_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_220200701T142641_20200701T143349_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_220200701T144615_20200701T150047_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_220200701T150528_20200701T151906_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_220200701T154103_20200701T155346_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_220200701T155600_20200701T161309_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_220200701T163521_20200701T164451_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_220200701T164726_20200701T170129_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_220200701T172815_20200701T172928_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_220200701T174100_20200701T174803_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_220200701T185535_20200701T192028_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_220200701T195510_20200701T201946_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_220200701T203453_20200701T210157_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_220200701T213217_20200701T215910_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.

Ocean Retracking Quality Flag

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

 ${\tt CS_OFFL_SIR_FDM_2_20200701T230220_20200701T230314_C001}$

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_	149	149	149	0	0
SIR1SAR_0_	113	113	113	0	0
SIR1SIN_0_	109	109	109	0	0
SIR2SIN_0_	115	115	115	0	0
SIR_FDM_1B	149	149	2	0	147
SIR FDM 2	147	147	94	53	0

7.1 QCC Errors

Number of QCC reports with errors:

147

Total number of occurrences of each error

Product Type	UVOB	-	-	-	-	-	-	-	-	-	-
SIR_FDM_1B	147										

Test Description Key:					
Abbreviation	Test name	Details			
UVOB	UnitVectorOrBlank_6	The three array elements should form a unit vector (using a scale factor of 10^-6)			

7.2 QCC Warnings

Number of QCC reports with warnings

179

Total number of occurrences of each warning

Product Type MVSIO MVSIOFD RB	SSZO RBSZOFD	RSSBCO	-	-	-	-	-	-
SIR_FDM_2_ 40 44	36 43	16						

Test Description Key:		
Abbreviation	Test name	Details
MVSIO	MissingValueShortIntOcean	The value should not be a 'missing value' for surface type 0 only
MVSIOFD	MissingValueShortIntOceanFD2	The value should not be a 'missing value' for surface type 0 only
RBSZO	RangeBackscatterSigmaZeroOcean	The backscatter sigma zero should be between 700 and 3000 (or missing) for surface type = ocean
RBSZOFD	RangeBackscatterSigmaZeroOceanFD2	The backscatter sigma zero should be between 700 and 3000 (or missing) for surface type = ocean
RSSBCO	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