

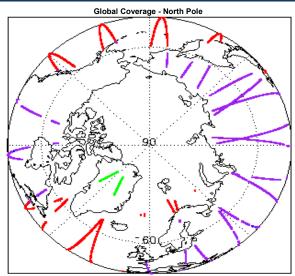
1. Overview

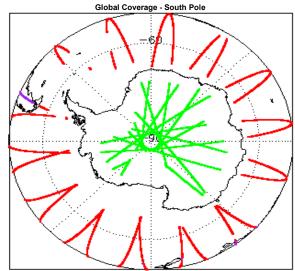
Report Production Date:	06-Feb-2020
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

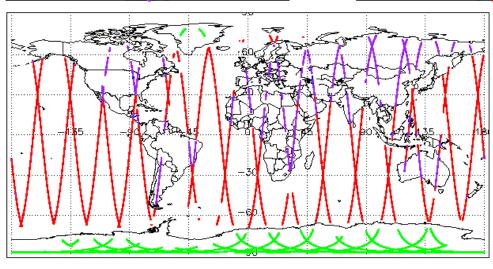
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2, 5.2 and 6.2
Star Tracker Usage Check	See Section 5.3
Calibration Usage Check	Nominal
Auxiliary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

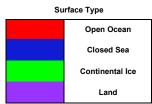
Mission / Instrument News		
04-Feb-2020	None	
05-Feb-2020	None	
06-Feb-2020	Nothing planned	

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

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).

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:

Product	Test Failed
CS_OPER_SIR1LRM_020200205T092210_20200205T092420_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20200205T051023_20200205T051712_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200205T053701_20200205T053726_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20200205T070738_20200205T071058_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200205T082754_20200205T083508_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200205T083508_20200205T083924_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200205T105258_20200205T105856_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20200205T195716_20200205T195839_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200205T224512_20200205T224841_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020200205T110831_20200205T111008_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020200205T010906_20200205T011359_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_20200205T150406_20200205T150413_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T150413_20200205T150448_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T164024_20200205T164030_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T164030_20200205T164300_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T181659_20200205T181830_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T181830_20200205T181948_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T213339_20200205T214105_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200205T214105_20200205T214109_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: 4

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200205T150406_20200205T150413_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200205T164024_20200205T164030_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200205T181659_20200205T181830_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200205T213339_20200205T214105_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:

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_20200205T142838_20200205T145450_C001	IECHO EFFOR TRK ECHO EFFOR	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_FDM_1B_20200205T150406_20200205T150413_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200205T164024_20200205T164030_C001	Attitude correction missing	The attitude has not been corrected

CS_OFFL_SIR_FDM_1B_20200205T181659_20200205T181830_C001

Attitude correction missing

The attitude has not been corrected

CS_OFFL_SIR_FDM_1B_20200205T213339_20200205T214105_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:

0

6.2 L2 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:

8

Product	Test Failed
CS_OFFL_SIR_FDM_220200205T150406_20200205T150413_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T150413_20200205T150448_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T164024_20200205T164030_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T164030_20200205T164300_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T181659_20200205T181830_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T181830_20200205T181948_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T213339_20200205T214105_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200205T214105_20200205T214109_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:

0

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:

27

Product	Test Failed	Description
CS OFFL SIR FDM 2 20200204T235406 20200205T000536 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
	Wind Speed Sea State Bias Correction, Altimetric	Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T002839_20200205T004356_C001	Wind Speed	Correction for one or more records
CS OFFL SIR FDM 2 20200205T004536 20200205T010015 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
00_0.1	Wind Speed	Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T011503_20200205T013505_C001	Sea State Bias Correction, Altimetric Wind Speed	Correction for one or more records
CS OFFL SIR FDM 2 20200205T013509 20200205T013743 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
00_011E_011C1	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T013905_20200205T014730_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 2 20200205T021642 20200205T024002 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_2202002051021042_202002051024002_C001	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T025243_20200205T032048_C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
00 0551 010 5014 0 0000005500	Wind Speed	There is an error with the Sea State Bias Correction for one or more
CS_OFFL_SIR_FDM_220200205T035244_20200205T041910_C001	Sea State Bias Correction	records
CS OFFL SIR FDM 2 20200205T052924 20200205T053701 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
	Wind Speed Sea State Bias Correction, Altimetric	Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T070632_20200205T070737_C001	Wind Speed	Correction for one or more records
CS OFFL SIR FDM 2 20200205T071855 20200205T073842 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
00_01	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T075035_20200205T082534_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
CC OFFI CID FDM 2 20200205T005540 20200205T004244 C004	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T085510_20200205T091244_C001	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T091537_20200205T091731_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
	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T093114_20200205T100054_C001	Wind Speed	Correction for one or more records
CS OFFL SIR FDM 2 20200205T102014 20200205T103846 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
	Wind Speed Sea State Bias Correction, Altimetric	Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T103935_20200205T105258_C001	Wind Speed	Correction for one or more records
CS OFFL SIR FDM 2 20200205T112751 20200205T113713 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
50_011	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T120512_20200205T121635_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 2 20200205T134252 20200205T141540 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
C3_OFFL_3IR_FDIM_2202002031134232_202002031141340_C001	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T142838_20200205T145450_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
OO OFFI OID FDM 0 0000000FT450555 0000000FT455405 0004	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T152555_20200205T155425_C001	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T160726_20200205T163449_C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
	Wind Speed Sea State Bias Correction, Altimetric	Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
CS_OFFL_SIR_FDM_220200205T170028_20200205T173331_C001	Wind Speed	Correction for one or more records
CS OFFL SIR FDM 2 20200205T174627 20200205T175248 C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
55_5 2_5 5 <u>2202002001114021_202002001110240_</u> 0001	Wind Speed	Correction for one or more records
CS_OFFL_SIR_FDM_220200205T182404_20200205T182516_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
OC OFFI CID FDM 2 2000000FT402020 2000000FT404040 C004	·	There is an error with the Sea State Bias Correction for one or more
CS_OFFL_SIR_FDM_220200205T183838_20200205T191312_C001	Sea State Bias Correction	records
CS_OFFL_SIR_FDM_220200205T201713_20200205T205105_C001	Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias
	Wind Speed	Correction for one or more records

CS_OFFL_SIR_FDM_220200205T213339_20200205T214105_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200205T221247_20200205T221444_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_220200205T221446_20200205T222403_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_220200205T224841_20200205T230102_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_220200205T231733_20200205T231939_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200205T233410_20200205T233627_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_220200205T234236_20200205T235207_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_220200205T235409_20200206T000130_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_220200205T142838_20200205T145450_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_220200205T150406_20200205T150413_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220200205T164024_20200205T164030_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220200205T181659_20200205T181830_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220200205T213339_20200205T214105_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:

Product Test Failed Description The master fail flag is set by the CFI call, for one or more records CS OFFL SIR FDM 2 20200204T235406 20200205T000536 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 20200205T002839 20200205T004356 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__20200205T011503_20200205T013505_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__20200205T013509_20200205T013743_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__20200205T013905_20200205T014730_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__20200205T021642_20200205T024002_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, indicating the values stored in fields #13, #14, #15 and #16 should be CS_OFFL_SIR_FDM_2__20200205T025243_20200205T032048_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__20200205T052924_20200205T053701_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 20200205T070632 20200205T070737 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 20200205T071855 20200205T073842 C001 CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ianored for these records The master fail flag is set by the CFI call, for one or more record CS_OFFL_SIR_FDM_2__20200205T075035_20200205T082534_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, ${\tt CS_OFFL_SIR_FDM_2_20200205T085510_20200205T091244_C001}$ CFI Retracked Range Flag indicating the values stored in fields #13, #14, #15 and #16 should be ianored for these records. The master fail flag is set by the CFI call, for one or more records CS_OFFL_SIR_FDM_2__20200205T093114_20200205T100054_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__20200205T102014_20200205T103846_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__20200205T112751_20200205T113713_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, indicating the values stored in fields #13, #14, #15 and #16 should be CS_OFFL_SIR_FDM_2__20200205T120512_20200205T121635_C001 CFI Retracked Range Flag ignored for these records 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 20200205T134252 20200205T141540 C001 CFI Retracked Range Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records 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 record indicating the values stored in fields #13, #14, #15 and #16 should be ignored for these records. 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 CS_OFFL_SIR_FDM_2__20200205T201713_20200205T205105_C001 CFI Retracked Range Flag ignored for these records. 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__20200205T221247_20200205T221444_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__20200205T221446_20200205T222403_C001 indicating the values stored in fields #13, #14, #15 and #16 should be CFI Retracked Range Flag ignored for these records

CS_OFFL_SIR_FDM_220200205T224841_20200205T230102_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_220200205T234236_20200205T235207_C001		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_220200205T235409_20200206T000130_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:

25

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20200204T235406_20200205T000536_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_220200205T002839_20200205T004356_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_220200205T011503_20200205T013505_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_220200205T013509_20200205T013743_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_220200205T013905_20200205T014730_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_220200205T021642_20200205T024002_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_220200205T025243_20200205T032048_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_220200205T052924_20200205T053701_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_220200205T070632_20200205T070737_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_220200205T071855_20200205T073842_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_220200205T075035_20200205T082534_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_220200205T085510_20200205T091244_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_220200205T093114_20200205T100054_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_220200205T102014_20200205T103846_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_220200205T112751_20200205T113713_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_220200205T120512_20200205T121635_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_220200205T134252_20200205T141540_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_220200205T152555_20200205T155425_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_220200205T160726_20200205T163449_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_220200205T201713_20200205T205105_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_220200205T221247_20200205T221444_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_220200205T221446_20200205T222403_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_220200205T224841_20200205T230102_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_220200205T234236_20200205T235207_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_220200205T235409_20200206T000130_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.

40

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200204T235406_20200205T000536_C001		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_220200205T002839_20200205T004356_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_220200205T004536_20200205T010015_C001		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_20200205T011503_20200205T013505_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T013509_20200205T013743_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T013905_20200205T014730_C001	Ocean Retracking Quality Flag	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.
CS_OFFL_SIR_FDM_220200205T021642_20200205T024002_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_220200205T025243_20200205T032048_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_220200205T034245_20200205T034419_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_220200205T035244_20200205T041910_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_220200205T043224_20200205T050641_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_220200205T052924_20200205T053701_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_220200205T055234_20200205T055857_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_220200205T061146_20200205T064529_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_220200205T070632_20200205T070737_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_220200205T071855_20200205T073842_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_220200205T075035_20200205T082534_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_220200205T084953_20200205T085429_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_220200205T085510_20200205T091244_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_220200205T093114_20200205T100054_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_220200205T102014_20200205T103846_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_220200205T103935_20200205T105258_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_220200205T111008_20200205T112550_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_220200205T112751_20200205T113713_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_220200205T120512_20200205T121635_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_220200205T134252_20200205T141540_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_220200205T142838_20200205T145450_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_220200205T150413_20200205T150448_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_220200205T152555_20200205T155425_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_220200205T160726_20200205T163449_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. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T170028_20200205T173331_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T183838_20200205T191312_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T201713_20200205T205105_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T210445_20200205T213316_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_220200205T215851_20200205T215923_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_2_20200205T221247_20200205T221444_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_2_20200205T221446_20200205T222403_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_2_20200205T224841_20200205T230102_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean
CS_OFFL_SIR_FDM_2_20200205T234236_20200205T235207_C001	Ocean Retracking Quality Flag	Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_220200205T235409_20200206T000130_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_	161	161	160	1	0
SIR1SAR_0_	112	112	112	0	0
SIR1SIN_0_	102	102	102	0	0
SIR2SIN_0_	103	103	103	0	0
SIR_FDM_1B	161	161	4	0	157
SIR_FDM_2	161	161	109	52	0

7.1 QCC Errors

7.2 QCC Warnings	
Number of QCC reports with warnings	56
7.3 Missing QCC Reports	
Number of products with missing QCC reports:	0