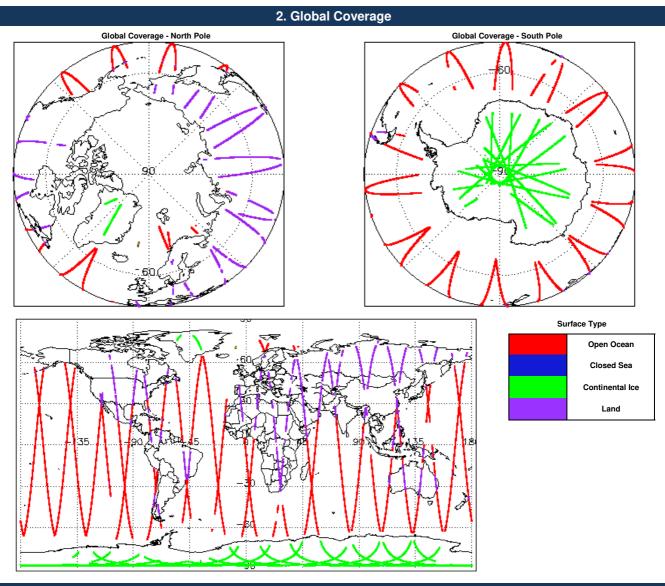


QA4EO Daily Report for FDM data:

<u>13/04/2020</u>

1. Overview				
Depart Draduction Date:	14 Apr 2020	Check	Status	
Report Production Date:	14-Apr-2020 -	Server check: science-pds.cryosat.esa.int	Nominal	
	Oran October Discourses	Server check: calval-pds.cryosat.esa.int	Nominal	
Processor Used:	CryoSat Ice Processor	Product Software Check	Nominal	
	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data	Product Format Check	Nominal	
Data Used:		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 12-Apr-2020 None 13-Apr-2020 None 14-Apr-2020 Nothing planned



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.

7

Number of products with errors:

Product	Test Failed
CS_OPER_SIR1LRM_020200413T025833_20200413T030405_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1LRM_020200413T103928_20200413T111319_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1LRM_020200413T185832_20200413T190549_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1LRM_020200413T191513_20200413T192803_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1LRM_020200413T204025_20200413T205050_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200413T184405_20200413T185121_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020200413T185359_20200413T185832_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

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: 4

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200413T001942_20200413T001950_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200413T151547_20200413T151620_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200413T151620_20200413T151708_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200413T184010_20200413T184258_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:
 1

Number of products with errors.

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200413T151547_20200413T151620_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

0

1

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:
0

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

CS_OFFL_SIR_FDM_1B_20200413T151547_20200413T151620_C001

Attitude correction missing

Test Failed

The attitude has not been corrected

Description

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:

Product	Test Failed
CS_OFFL_SIR_FDM_220200413T001942_20200413T001950_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200413T022659_20200413T022759_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220200413T151547_20200413T151620_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200413T151620_20200413T151708_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200413T171245_20200413T171331_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220200413T184010_20200413T184258_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220200413T222133_20200413T222151_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220200413T222153_20200413T222235_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220200413T235140_20200413T235619_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.

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: 37

0

9

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200413T004713_20200413T011654_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T013035_20200413T020508_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T022946_20200413T023123_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_220200413T030952_20200413T034331_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_220200413T035706_20200413T035821_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T044857_20200413T052258_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_220200413T053659_20200413T053722_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_220200413T054738_20200413T055214_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_220200413T055254_20200413T061034_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_220200413T062913_20200413T064256_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_220200413T064417_20200413T064626_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_220200413T065107_20200413T065821_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T080215_20200413T080617_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_220200413T080806_20200413T082256_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_220200413T082534_20200413T083457_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_220200413T090242_20200413T091359_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_220200413T092004_20200413T092538_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_220200413T092540_20200413T092731_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_220200413T092932_20200413T093410_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_220200413T094737_20200413T100254_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_220200413T103928_20200413T111319_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_220200413T122414_20200413T125147_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_220200413T130525_20200413T133327_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T135728_20200413T143058_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_220200413T153635_20200413T161020_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_220200413T171245_20200413T171331_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_220200413T171456_20200413T174834_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_220200413T180313_20200413T183843_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_220200413T185832_20200413T190549_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_220200413T191513_20200413T192803_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_220200413T200104_20200413T201330_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2_20200413T204025_20200413T205050_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_220200413T205230_20200413T210704_C001		There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2_20200413T213017_20200413T213503_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T214130_20200413T214442_C001		There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2_20200413T214605_20200413T215314_C001		There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220200413T222451_20200413T224610_C001		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: 1

Product Test	est Failed	Description
CS_OFFL_SIR_FDM_220200413T151547_20200413T151620_C001 Attitu	titude 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. 24

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200413T022946_20200413T023123_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_220200413T044857_20200413T052258_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_220200413T054738_20200413T055214_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_220200413T055254_20200413T061034_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_220200413T062913_20200413T064256_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_220200413T064417_20200413T064626_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_220200413T080806_20200413T082256_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_220200413T082534_20200413T083457_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_220200413T090242_20200413T091359_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_220200413T092004_20200413T092538_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_220200413T092540_20200413T092731_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_220200413T094737_20200413T100254_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_220200413T103928_20200413T111319_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_220200413T122414_20200413T125147_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_220200413T135728_20200413T143058_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_220200413T153635_20200413T161020_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_220200413T171456_20200413T174834_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_220200413T180313_20200413T183843_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_220200413T191513_20200413T192803_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_220200413T204025_20200413T205050_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_220200413T205230_20200413T210704_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_220200413T214130_20200413T214442_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_220200413T214605_20200413T215314_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_220200413T222451_20200413T224610_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.

er of products with errors: 24 Product Description The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T022946 20200413T023123 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records The master fail flag is set by the CFI call, for one or more records, CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T044857_20200413T052258_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T054738_20200413T055214_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T055254 20200413T061034 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CEL Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T062913 20200413T064256 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ianored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T064417_20200413T064626_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ianored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS_OFFL_SIR_EDM_2_20200413T080806_20200413T082256_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T082534_20200413T083457_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH indicating the values stored in fields #41, #42, #43 and #44 should be CS_OFFL_SIR_FDM_2__20200413T090242_20200413T091359_C001 Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T092004 20200413T092538 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CEI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T092540_20200413T092731_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ianored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T094737_20200413T100254_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T103928 20200413T111319 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records. CFI Backscatter Status Flag, SWH indicating the values stored in fields #41, #42, #43 and #44 should be CS_OFFL_SIR_FDM_2__20200413T122414_20200413T125147_C001 Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T135728 20200413T143058 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T153635 20200413T161020 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T171456_20200413T174834_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T180313_20200413T183843_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T191513 20200413T192803 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CEL Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T204025 20200413T205050 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ianored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH indicating the values stored in fields #41, #42, #43 and #44 should be CS OFFL SIR FDM 2 20200413T205230 20200413T210704 C001 Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20200413T214130 20200413T214442 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20200413T214605_20200413T215314_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records, CFI Backscatter Status Flag, SWH indicating the values stored in fields #41, #42, #43 and #44 should be CS_OFFL_SIR_FDM_2__20200413T222451_20200413T224610_C001 Squared Averaging Status Flag 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: 40

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220200412T235036_20200413T001939_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_220200413T004713_20200413T011654_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_220200413T013035_20200413T020508_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_220200413T022946_20200413T023123_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_220200413T030952_20200413T034331_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_220200413T041626_20200413T043548_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_220200413T044857_20200413T052258_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_220200413T054738_20200413T055214_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_220200413T055254_20200413T061034_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_220200413T062913_20200413T064256_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_220200413T064417_20200413T064626_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_220200413T065107_20200413T065821_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_220200413T073720_20200413T075130_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_220200413T080806_20200413T082256_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_220200413T082534_20200413T083457_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_220200413T090242_20200413T091359_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_220200413T092004_20200413T092538_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_220200413T092540_20200413T092731_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_220200413T092932_20200413T093410_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_220200413T094737_20200413T100254_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_220200413T103928_20200413T111319_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_220200413T112646_20200413T115149_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_220200413T122414_20200413T125147_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_220200413T130525_20200413T133327_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_220200413T135728_20200413T143058_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_220200413T153635_20200413T161020_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_220200413T171245_20200413T171331_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_220200413T171456_20200413T174834_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_220200413T180313_20200413T183843_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_220200413T185832_20200413T190549_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_220200413T191031_20200413T191358_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_220200413T191513_20200413T192803_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_220200413T194542_20200413T195850_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_220200413T200104_20200413T201330_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_220200413T204025_20200413T205050_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_220200413T205230_20200413T210704_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_220200413T213017_20200413T213503_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_220200413T214130_20200413T214442_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_220200413T214605_20200413T215314_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_220200413T222451_20200413T224610_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_	164	164	159	5	0
SIR1SAR_0_	111	111	111	0	0
SIR1SIN_0_	105	105	105	0	0
SIR2SIN_0_	108	108	108	0	0
SIR_FDM_1B	164	164	1	0	163
SIR_FDM_2	160	160	108	52	0

7.1 QCC Errors

Number of QCC reports with errors:	163
7.2 QCC Warnings	
Number of QCC reports with warnings	64
7.3 Missing QCC Reports	
Number of products with missing QCC reports:	0