



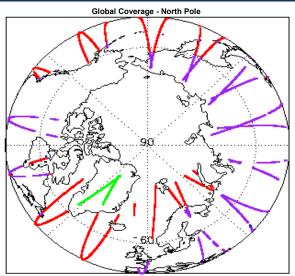
1. Overview

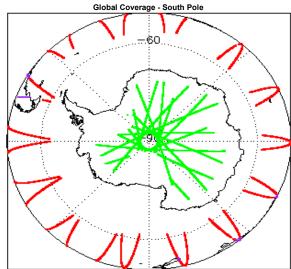
Report Production Date:	24-Oct-2019
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

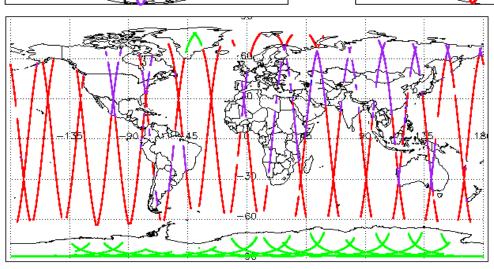
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2, 5.2 and 6.2
Star Tracker Usage Check	See Section 5.3
Calibration Usage Check	Nominal
Auxiliary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

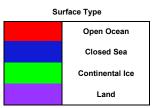
Mission / Instrument News			
22-Oct-2019	None		
23-Oct-2019	None		
24-Oct-2019	Nothing planned		

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_020191023T105051_20191023T112241_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T035703_20191023T035801_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T042834_20191023T043048_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20191023T053552_20191023T053719_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T140444_20191023T140821_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T162409_20191023T162932_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T165207_20191023T165531_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T174102_20191023T174240_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T192931_20191023T193006_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T194218_20191023T194934_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_020191023T234741_20191023T235204_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020191023T103548_20191023T103711_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020191023T133056_20191023T133428_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020191023T195520_20191023T195642_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020191023T204123_20191023T204347_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020191023T021952_20191023T022226_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020191023T112241_20191023T112412_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_20191023T211202_20191023T211805_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20191023T211805_20191023T212020_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20191023T225426_20191023T225525_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20191023T225525_20191023T225546_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:

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20191023T211202_20191023T211805_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20191023T225426_20191023T225525_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_20191023T211202_20191023T211805_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20191023T225426_20191023T225525_C001		The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

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:

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:

4

Product	Test Failed
CS_OFFL_SIR_FDM_220191023T211202_20191023T211805_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220191023T211805_20191023T212020_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220191023T225426_20191023T225525_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220191023T225525_20191023T225546_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:

12

Product	Test Failed	Description
S_OFFL_SIR_FDM_220191023T000613_20191023T003902_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_220191023T014221_20191023T020521_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_220191023T020632_20191023T021747_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220191023T032206_20191023T032224_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_220191023T032340_20191023T033537_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_220191023T034019_20191023T034144_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220191023T034146_20191023T035703_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_220191023T041543_20191023T042834_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_220191023T043048_20191023T044938_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_220191023T051011_20191023T052038_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_220191023T052218_20191023T053552_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220191023T061215_20191023T061425_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_220191023T061549_20191023T062259_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_220191023T062422_20191023T062633_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_220191023T073056_20191023T080420_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220191023T081902_20191023T082004_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_220191023T083016_20191023T085350_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220191023T100511_20191023T102735_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_220191023T105051_20191023T112240_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_220191023T113711_20191023T113801_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_220191023T125301_20191023T130446_C001	Sea State Bias Correction Sea State Bias Correction, Altimetric	There is an error with the Sea State Bias Correction for one or more records There is an error with the Altimetric Wind Second and Sea State Bias.
S_OFFL_SIR_FDM_220191023T140821_20191023T143420_C001	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_220191023T143559_20191023T144249_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 There is an error with the Altimetric Wind Speed and Sea State Bias
S_OFFL_SIR_FDM_220191023T144321_20191023T144328_C001	Sea State Bias Correction, Altimetric Wind Speed Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
S_OFFL_SIR_FDM_220191023T145723_20191023T150418_C001	Wind Speed	Correction for one or more records
S_OFFL_SIR_FDM_220191023T150433_20191023T152844_C001	Sea State Bias Correction Sea State Bias Correction, Altimetric	There is an error with the Sea State Bias Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias.
S_OFFL_SIR_FDM_220191023T155258_20191023T160335_C001	Wind Speed Sea State Bias Correction, Altimetric Sea State Bias Correction, Altimetric	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
S_OFFL_SIR_FDM_220191023T160338_20191023T160433_C001	Wind Speed Sea State Bias Correction, Altimetric Sea State Bias Correction, Altimetric	Correction for one or more records There is an error with the Altimetric Wind Speed and Sea State Bias
S_OFFL_SIR_FDM_220191023T160456_20191023T161415_C001	Wind Speed	Correction for one or more records
S_OFFL_SIR_FDM_220191023T163734_20191023T165207_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_220191023T165938_20191023T171052_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records There is an error with the Altimetric Wind Second and Sea State Bias.
S_OFFL_SIR_FDM_220191023T172720_20191023T174101_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 There is an error with the Altimetric Wind Speed and Sea State Bias
S_OFFL_SIR_FDM_220191023T174339_20191023T174939_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_220191023T182255_20191023T182643_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_220191023T182807_20191023T183346_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_220191023T194054_20191023T194148_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_220191023T204623_20191023T211159_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220191023T212121_20191023T212151_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_220191023T214243_20191023T220801_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220191023T222531_20191023T224957_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_220191023T230105_20191023T230243_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_220191023T231433_20191023T234741_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_220191023T211202_20191023T211805_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220191023T225426_20191023T225525_C001	Echo error, Attitude correction missing	The Echo Rx1 Error flag is set, indicating a degraded raw echo. The attitude

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: 21

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20191023T014221_20191023T020521_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_220191023T032340_20191023T033537_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_220191023T034146_20191023T035703_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_20191023T041543_20191023T042834_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_220191023T043048_20191023T044938_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_20191023T051011_20191023T052038_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_20191023T061549_20191023T062259_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_20191023T062422_20191023T062633_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_20191023T081902_20191023T082004_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_20191023T105051_20191023T112240_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_20191023T113711_20191023T113801_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_220191023T140821_20191023T143420_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_20191023T143559_20191023T144249_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_20191023T155258_20191023T160335_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_20191023T160456_20191023T161415_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_20191023T172720_20191023T174101_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_20191023T174339_20191023T174939_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_20191023T182255_20191023T182643_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_20191023T182807_20191023T183346_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_20191023T194054_20191023T194148_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_20191023T222531_20191023T224957_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:

Test Failed Description Product 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__20191023T014221_20191023T020521_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__20191023T032340_20191023T033537_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__20191023T034146_20191023T035703_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__20191023T041543_20191023T042834_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, indicating the values stored in fields #41, #42, #43 and #44 should be CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20191023T043048_20191023T044938_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__20191023T051011_20191023T052038_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__20191023T061549_20191023T062259_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 20191023T062422 20191023T062633 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 20191023T081902 20191023T082004 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 20191023T105051 20191023T112240 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 20191023T113711 20191023T113801 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__20191023T140821_20191023T143420_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 Squared Averaging Status Flag CS_OFFL_SIR_FDM_2__20191023T143559_20191023T144249_C001 indicating the values stored in fields #41, #42, #43 and #44 should be 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__20191023T155258_20191023T160335_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 Squared Averaging Status Flag CS_OFFL_SIR_FDM_2__20191023T160456_20191023T161415_C001 indicating the values stored in fields #41, #42, #43 and #44 should be 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__20191023T172720_20191023T174101_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__20191023T174339_20191023T174939_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__20191023T182255_20191023T182643_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, indicating the values stored in fields #41, #42, #43 and #44 should be CFI Backscatter Status Flag, SWH CS_OFFL_SIR_FDM_2__20191023T182807_20191023T183346_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 indicating the values stored in fields #41, #42, #43 and #44 should be CS OFFL SIR FDM 2 20191023T194054 20191023T194148 C001 Squared Averaging Status 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 #41, #42, #43 and #44 should be CFI Backscatter Status Flag, SWH CS OFFL SIR FDM 2 20191023T222531 20191023T224957 C001 Squared Averaging Status Flag

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_220191023T000613_20191023T003902_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_220191023T005642_20191023T011254_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_220191023T014221_20191023T020521_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_220191023T020632_20191023T021747_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_220191023T023536_20191023T030114_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_220191023T032340_20191023T033537_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_220191023T034019_20191023T034144_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_220191023T034146_20191023T035703_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_220191023T041543_20191023T042834_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_220191023T043048_20191023T044938_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_220191023T051011_20191023T052038_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_220191023T052218_20191023T053552_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_220191023T060142_20191023T060430_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.

ignored for these records.

CS_OFFL_SIR_FDM_2__20191023T061215_20191023T061425_C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T061549 20191023T062259 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T062422_20191023T062633_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T065319_20191023T065650_C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T073056 20191023T080420 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T081902_20191023T082004_C001 Ocean Retracking Quality Flag ${\tt CS_OFFL_SIR_FDM_2_20191023T083016_20191023T085350_C001}$ Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T100511 20191023T102735 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T105051_20191023T112240_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T113711_20191023T113801_C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T122924 20191023T125015 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T125301_20191023T130446_C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T140821 20191023T143420 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T143559_20191023T144249_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T150433_20191023T152844_C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T155258 20191023T160335 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T160338_20191023T160433_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T160456_20191023T161415_C001 Ocean Retracking Quality Flag Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T172720_20191023T174101_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T174241_20191023T174336_C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T174339 20191023T174939 C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T181607 20191023T181810 C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T182255 20191023T182643 C001 Ocean Retracking Quality Flag CS OFFL SIR FDM 2 20191023T182807 20191023T183346 C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T183439_20191023T185049_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T194054_20191023T194148_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T200736_20191023T203018_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T204623_20191023T211159_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T213840_20191023T214117_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T222531_20191023T224957_C001 Ocean Retracking Quality Flag CS_OFFL_SIR_FDM_2__20191023T230105_20191023T230243_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 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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_	160	112	112	0	0
SIR1SIN_0_	102	102	102	0	0
SIR_FDM_1B	161	160	161	0	0
SIR FDM 2	160	160	160	0	0

7.1 QCC Errors

Number of QCC reports with errors:

0

7.2 QCC Warnings

Number of QCC reports with warnings

1

		Total number of occurrences of each warning								
		1	0	0	0	0	0	0	0	0
Product Type	Product Start Time	QF	-	-	-	-	-	-	-	-
SIR1LRM_0_	20191023T105051	х								_

Test Description Key:				
Abbreviati	on Test name	Details		
QF	QualityFlag	The quality flag should be set to zero.		

7.3 Missing QCC Reports

Number of products with missing QCC reports:

106