1. Overview

Report Production Date:	02-Jan-2019
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

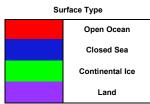| Check	Status
Server check: science-pds.cryosat.esa.int	**Nominal**
Server check: calval-pds.cryosat.esa.int	**Nominal**
Product Software Check	**Nominal**
Product Format Check	**Nominal**
Product Header Analysis	**See Section 4.2**
Star Tracker Usage Check	**See Section 5.3**
Calibration Usage Check	**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	
28-Dec-2018	None
29-Dec-2018	None
30-Dec-2018	Nothing planned

2. Global Coverage

Global Coverage - North Pole

Global Coverage - South Pole

Surface Type	
(red)	Open Ocean
(blue)	Closed Sea
(green)	Continental Ice
(purple)	Land

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).

Number of products with errors: 0

4.2 L0 Product Header Analysis

For all products, a series of pre-defined checks are carried out on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the processing chain.

Number of products with errors: 9

Product	Test Failed
CS_OPER_SIR1SAR_0__20181229T055704_20181229T060132_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20181229T211236_20181229T212037_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20181229T005743_20181229T010519_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20181229T003120_20181229T003658_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20181229T114049_20181229T114318_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20181229T051146_20181229T051702_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20181229T135318_20181229T135456_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20181229T074443_20181229T074719_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20181229T163958_20181229T164406_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: 0

5.3 L1B FDM Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing.

Number of products with errors: 3

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20181229T122558_20181229T122812_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20181229T140431_20181229T140559_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20181229T165457_20181229T172759_C001	No Star Tracker file used in the processing of this product

5.4 L1B FDM Calibration Usage Check

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

Number of products with errors: 0

5.5 L1B FDM Auxilary Data File Usage Check

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

Number of products with errors: 0

5.6 L1B FDM Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 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: 31

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20181228T234039_20181229T000540_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T000805_20181229T001319_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T001325_20181229T001652_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T011014_20181229T011334_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T011408_20181229T011603_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T011607_20181229T011607_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T011613_20181229T011613_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T011616_20181229T011633_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T011638_20181229T013502_C001	Blank block, Block degraded, Echo error, TRK echo error	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T013955_20181229T014432_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T014804_20181229T015352_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T015404_20181229T015554_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T020027_20181229T023307_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T024638_20181229T024734_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T024820_20181229T024848_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T025237_20181229T025359_C001	Blank block, Block degraded	A blank block has been inserted for record padding

CS_OFFL_SIR_FDM_1B_20181229T025442_20181229T025526_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T025847_20181229T025949_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T030132_20181229T030315_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T030459_20181229T030833_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T030855_20181229T032248_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T032733_20181229T033245_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T033911_20181229T040057_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T040342_20181229T041316_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T041448_20181229T041515_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T042433_20181229T042540_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T042644_20181229T042707_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T043433_20181229T043604_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T043718_20181229T044200_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T044246_20181229T044306_C001	Blank block, Block degraded	A blank block has been inserted for record padding
CS_OFFL_SIR_FDM_1B_20181229T044339_20181229T050211_C001	Blank block, Block degraded	A blank block has been inserted for record padding

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: 0

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: 39

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20181228T234039_20181229T000540_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__20181229T003658_20181229T005339_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__20181229T011638_20181229T013502_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__20181229T020027_20181229T023307_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__20181229T030855_20181229T032248_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__20181229T033911_20181229T040057_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__20181229T040342_20181229T041316_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__20181229T042433_20181229T042540_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__20181229T042644_20181229T042707_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__20181229T044339_20181229T050211_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__20181229T051847_20181229T055143_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__20181229T060739_20181229T062642_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__20181229T062701_20181229T063950_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__20181229T065756_20181229T071318_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__20181229T071520_20181229T072500_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__20181229T073141_20181229T073142_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__20181229T075036_20181229T080402_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__20181229T082025_20181229T082124_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__20181229T083729_20181229T085145_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__20181229T093852_20181229T100228_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__20181229T101635_20181229T104150_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__20181229T113012_20181229T114049_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__20181229T115551_20181229T122242_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__20181229T124826_20181229T130356_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__20181229T130926_20181229T131936_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__20181229T133530_20181229T134018_C001	Mean Sea Surface height	There is an error with the Mean Sea Surface Height for one or more records
CS_OFFL_SIR_FDM_2__20181229T142542_20181229T145921_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

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20181229T151544_20181229T153222_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__20181229T160426_20181229T163257_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__20181229T165457_20181229T172759_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__20181229T174607_20181229T175938_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__20181229T180013_20181229T181736_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__20181229T184954_20181229T190650_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__20181229T192826_20181229T193748_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__20181229T193750_20181229T193930_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__20181229T194133_20181229T195631_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__20181229T203015_20181229T204253_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__20181229T212037_20181229T213552_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__20181229T224947_20181229T231501_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: 4

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20181229T011638_20181229T013502_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2__20181229T122558_20181229T122812_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20181229T140431_20181229T140559_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20181229T165457_20181229T172759_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: 21

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20181229T011638_20181229T013502_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__20181229T020027_20181229T023307_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__20181229T030855_20181229T032248_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__20181229T044339_20181229T050211_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__20181229T051847_20181229T055143_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__20181229T060739_20181229T062642_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__20181229T062701_20181229T063950_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__20181229T065756_20181229T071318_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__20181229T071520_20181229T072500_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__20181229T075036_20181229T080402_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__20181229T093852_20181229T100228_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__20181229T101635_20181229T104150_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__20181229T115551_20181229T122242_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__20181229T142542_20181229T145921_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__20181229T151544_20181229T153222_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__20181229T180013_20181229T181736_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__20181229T192826_20181229T193748_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__20181229T193750_20181229T193930_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__20181229T194133_20181229T195631_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__20181229T212037_20181229T213552_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__20181229T224947_20181229T231501_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: 21

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20181229T011638_20181229T013502_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T020027_20181229T023307_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T030855_20181229T032248_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T044339_20181229T050211_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T051847_20181229T055143_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T060739_20181229T062642_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T062701_20181229T063950_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T065756_20181229T071318_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T071520_20181229T072500_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T075036_20181229T080402_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T093852_20181229T100228_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T101635_20181229T104150_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T115551_20181229T122242_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T142542_20181229T145921_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T151544_20181229T153222_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T180013_20181229T181736_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T192826_20181229T193748_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T193750_20181229T193930_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T194133_20181229T195631_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T212037_20181229T213552_C001	CFI Backscatter Status Flag, SWH Squared Averaging Status Flag	The master fail flag is set by the CFI call, for one or more records, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20181229T224947_20181229T231501_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.

Number of products with errors: 32

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20181229T003658_20181229T005339_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T011638_20181229T013502_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T020027_20181229T023307_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T030855_20181229T032248_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T032733_20181229T033245_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T033911_20181229T040057_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T040342_20181229T041316_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T044339_20181229T050211_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T051847_20181229T055143_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T060739_20181229T062642_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T062701_20181229T063950_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.

CS_OFFL_SIR_FDM_2__20181229T065756_20181229T071318_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T071520_20181229T072500_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T075036_20181229T080402_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T093852_20181229T100228_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T101635_20181229T104150_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T111523_20181229T112629_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T115551_20181229T122242_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T130926_20181229T131936_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T142542_20181229T145921_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T151544_20181229T153222_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T160426_20181229T163257_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T165457_20181229T172759_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T180013_20181229T181736_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T183603_20181229T184828_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T192826_20181229T193748_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T193750_20181229T193930_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T194133_20181229T195631_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T203015_20181229T204253_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T212037_20181229T213552_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T214954_20181229T221620_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20181229T224947_20181229T231501_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_	175	175	175	0	0
SIR1SAR_0_	130	130	130	0	0
SIR1SIN_0_	109	109	109	0	0
SIR2SIN_0_	115	115	115	0	0
SIR_FDM_1B	175	175	175	0	0
SIR_FDM_2	172	172	172	0	0

7.1 QCC Errors

Number of QCC reports with errors: 0

7.2 QCC Warnings

Number of QCC reports with warnings   0

7.3 Missing QCC Reports

Number of products with missing QCC reports: 0