



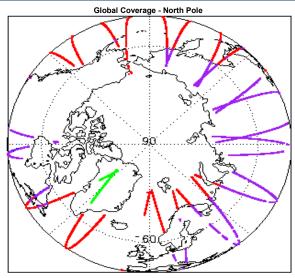
1. Overview

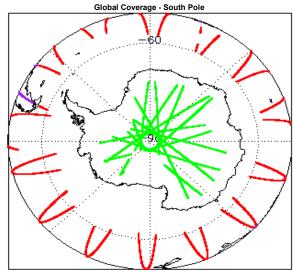
Report Production Date:	22-Jul-2019
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

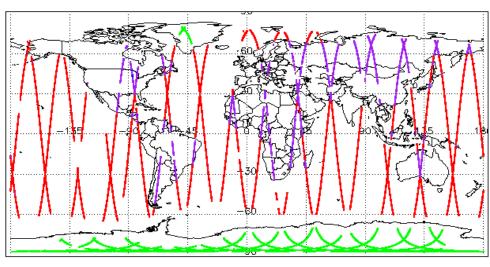
<u></u>	
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2, 5.2 and 6.2
Star Tracker Usage Check	See Section 5.3
Calibration Usage Check	Nominal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

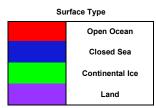
Mission / Instrument News		
20-Jul-2019	None	
21-Jul-2019	None	
22-Jul-2019	Nothing planned	

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_SIR1SAR_020190721T014928_20190721T015443_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0 20190721T173513 20190721T173819 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_20190721T014323_20190721T014626_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T045924_20190721T045954_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T045900_20190721T045924_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T032026_20190721T032040_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T031930_20190721T032026_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T013958_20190721T014323_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T082436_20190721T082600_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20190721T082233_20190721T082436_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_20190721T013958_20190721T014323_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20190721T031930_20190721T032026_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20190721T045900_20190721T045924_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20190721T082233_20190721T082436_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.

0

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_20190721T000047_20190721T000702_C001	Echo error, TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_FDM_1B_20190721T013958_20190721T014323_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20190721T031244_20190721T031724_C001	Echo error, TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_FDM_1B_20190721T031930_20190721T032026_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20190721T045900_20190721T045924_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20190721T082233_20190721T082436_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20190721T094401_20190721T095922_C001	Echo error, TRK echo error	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).

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_220190721T014323_20190721T014626_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T045924_20190721T045954_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T045900_20190721T045924_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T032026_20190721T032040_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T031930_20190721T032026_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T013958_20190721T014323_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T082436_20190721T082600_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220190721T082233_20190721T082436_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).

6.3 L2 FDM Auxiliary Data File Usage Check

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

Number of products with errors:

0

6.4 L2 FDM Auxiliary Correction Error Check

Each product is checked to detect auxiliary corrections flagged by the ground-station processing chain as missing or containing errors.

Number of products with errors:

36

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220190721T011232_20190721T013537_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_220190721T014323_20190721T014626_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_220190721T020808_20190721T021803_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_220190721T022341_20190721T023333_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220190721T032413_20190721T032540_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_220190721T032544_20190721T032720_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_220190721T033938_20190721T041242_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_220190721T043203_20190721T043326_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_220190721T051552_20190721T051554_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_220190721T051726_20190721T051823_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_2_20190721T051847_20190721T052811_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_220190721T062907_20190721T063349_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220190721T065546_20190721T073055_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_220190721T075007_20190721T082107_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_220190721T083415_20190721T085518_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_220190721T092742_20190721T093742_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_220190721T094401_20190721T095922_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_220190721T101306_20190721T103352_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bia: Correction for one or more records
S_OFFL_SIR_FDM_220190721T110522_20190721T112456_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bia Correction for one or more records
S_OFFL_SIR_FDM_220190721T112502_20190721T112738_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_220190721T112901_20190721T113718_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_220190721T120637_20190721T122733_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_220190721T133247_20190721T133417_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_220190721T142326_20190721T143350_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_220190721T151919_20190721T152657_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_220190721T154229_20190721T154653_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_220190721T160343_20190721T163608_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_220190721T174206_20190721T181751_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_220190721T182732_20190721T182934_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_220190721T184506_20190721T190244_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_220190721T192147_20190721T195747_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_220190721T202931_20190721T204252_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220190721T210047_20190721T211545_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
S_OFFL_SIR_FDM_220190721T211747_20190721T212709_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_220190721T214915_20190721T220631_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_220190721T233248_20190722T000429_C001	Sea State Bias Correction	There is an error with the 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_220190721T000047_20190721T000702_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_220190721T013958_20190721T014323_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220190721T031244_20190721T031724_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_220190721T031930_20190721T032026_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220190721T045900_20190721T045924_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220190721T082233_20190721T082436_C001	Attitude correction missing	The attitude has not been corrected
CS OFFI SIR FDM 2 20100721T004401 20100721T005022 C001	Echo error	The Echo Ry1 Error flag is set, indicating a degraded raw echo

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:

23

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220190721T011232_20190721T013537_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_220190721T032413_20190721T032540_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_220190721T033938_20190721T041242_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_220190721T065546_20190721T073055_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_220190721T075007_20190721T082107_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_220190721T083415_20190721T085518_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_220190721T092742_20190721T093742_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_220190721T094401_20190721T095922_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_220190721T101306_20190721T103352_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_220190721T110522_20190721T112456_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_220190721T112502_20190721T112738_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_220190721T112901_20190721T113718_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_220190721T120637_20190721T122733_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_220190721T133247_20190721T133417_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_220190721T142326_20190721T143350_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_220190721T151919_20190721T152657_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_220190721T160343_20190721T163608_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_220190721T174206_20190721T181751_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_220190721T182732_20190721T182934_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_220190721T184506_20190721T190244_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_220190721T192147_20190721T195747_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_220190721T211747_20190721T212709_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_220190721T214915_20190721T220631_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_20190721T011232_20190721T013537_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__20190721T032413_20190721T032540_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__20190721T033938_20190721T041242_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__20190721T065546_20190721T073055_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__20190721T075007_20190721T082107_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__20190721T083415_20190721T085518_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__20190721T092742_20190721T093742_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 20190721T094401 20190721T095922 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 20190721T101306 20190721T103352 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 20190721T110522 20190721T112456 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 20190721T112502 20190721T112738 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__20190721T112901_20190721T113718_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__20190721T120637_20190721T122733_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__20190721T133247_20190721T133417_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__20190721T142326_20190721T143350_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__20190721T151919_20190721T152657_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__20190721T160343_20190721T163608_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__20190721T174206_20190721T181751_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__20190721T182732_20190721T182934_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 20190721T184506 20190721T190244 C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records.

6.8 L2 FDM Ocean Retracking Quality Check

CS OFFL SIR FDM 2 20190721T192147 20190721T195747 C001

CS OFFL SIR FDM 2 20190721T211747 20190721T212709 C001

CS OFFL SIR FDM 2 20190721T214915 20190721T220631 C001

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_220190721T002901_20190721T005521_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_220190721T011232_20190721T013537_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_220190721T014323_20190721T014626_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_220190721T020808_20190721T021803_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_220190721T024945_20190721T031241_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_220190721T032413_20190721T032540_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_220190721T033938_20190721T041242_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_220190721T050305_20190721T050659_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_220190721T051847_20190721T052811_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_220190721T062115_20190721T062723_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.

CFI Backscatter Status Flag, SWH

CFI Backscatter Status Flag, SWH

CFI Backscatter Status Flag, SWH

Squared Averaging Status Flag

Squared Averaging Status Flag

Squared Averaging Status Flag

The master fail flag is set by the CFI call, for one or more records

The master fail flag is set by the CFI call, for one or more records

ignored for these records.

ignored for these records

ignored for these records.

indicating the values stored in fields #41, #42, #43 and #44 should be

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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

CS_OFFL_SIR_FDM_220190721T062907_20190721T063349_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_220190721T065546_20190721T073055_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_220190721T075007_20190721T082107_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_220190721T083415_20190721T085518_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_220190721T085530_20190721T091033_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_220190721T092742_20190721T093742_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_220190721T094401_20190721T095922_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_220190721T101306_20190721T103352_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_220190721T110522_20190721T112456_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_220190721T112502_20190721T112738_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_220190721T112901_20190721T113718_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_220190721T120637_20190721T122733_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_220190721T133247_20190721T133417_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_220190721T142326_20190721T143350_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_220190721T143928_20190721T145635_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_220190721T150921_20190721T151603_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_220190721T151919_20190721T152657_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_220190721T160343_20190721T163608_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_220190721T164836_20190721T165010_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_220190721T170851_20190721T172505_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_220190721T174206_20190721T181751_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_220190721T182732_20190721T182934_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_220190721T184506_20190721T190244_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_220190721T192147_20190721T195747_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_220190721T200946_20190721T202844_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_220190721T202931_20190721T204252_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_220190721T210047_20190721T211545_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_20190721T211747_20190721T212709_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_220190721T214915_20190721T220631_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_220190721T233248_20190722T000429_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_	139	139	139	0	0
SIR1SAR_0_	138	101	101	0	0
SIR1SIN_0_	111	111	111	0	0
SIR_FDM_1B	139	138	139	0	0
SIR_FDM_2	138	138	138	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:

115