

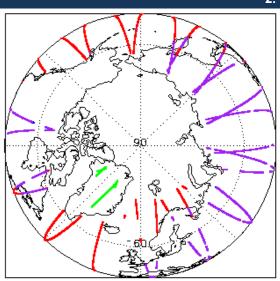
# 1. Overview

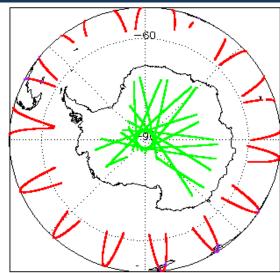
Report Production Date:	17-Nov-2020
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM)  Mode and L0 Data

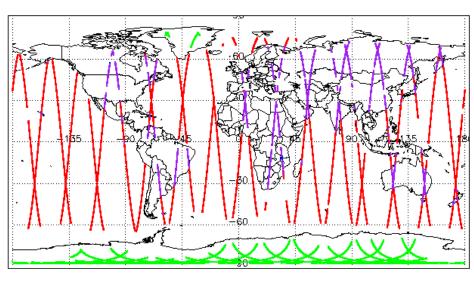
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2, 5.2 and 6.2
Star Tracker Usage Check	See Section 5.3
Calibration Usage Check	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 6.4
Measurement Confidence Data Check	See Section 5.7, 6.5, 6.6, 6.7 and 6.8
QCC Error/ Warning Check	See Section 7.1 and 7.2

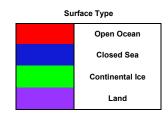
Mission / Ins	trument News
15-Nov-2020	None
16-Nov-2020	None
17-Nov-2020	Nothing planned

# 2. Global Coverage









# 3. Instrument Configuration

The SIRAL instrument configuration for the day of acquisition is provided below.

SIRAL instrument(s) in use:	SIRAL - A
Star Tracker(s) in use:	Star Tracker 1

# 4. Level 0 Data Quality Check

### 4.1 L0 Product Format Check

#### 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.

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Number of products with errors:

Product CS OPER SIR1LRM 0 20201116T073513 20201116T075038 0001.DBL Percentage of processing errors detected greater than minimum acceptable threshold CS\_OPER\_SIR1SAR\_0\_\_20201116T064152\_20201116T064536\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold CS OPER SIR1SAR 0 20201116T072642 20201116T073142 0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold. CS\_OPER\_SIR1SAR\_0\_\_20201116T140643\_20201116T140910\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold. CS\_OPER\_SIR1SAR\_0\_\_20201116T163547\_20201116T163940\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold CS\_OPER\_SIR1SAR\_0\_\_20201116T173404\_20201116T173556\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold. CS\_OPER\_SIR1SAR\_0\_\_20201116T190124\_20201116T190540\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold CS\_OPER\_SIR1SIN\_0\_\_20201116T010223\_20201116T010341\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold. CS\_OPER\_SIR1SIN\_0\_\_20201116T180518\_20201116T180632\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold. CS\_OPER\_SIR2SIN\_0\_\_20201116T045304\_20201116T045619\_0001.HDR Percentage of processing errors detected greater than minimum acceptable threshold.  ${\tt CS\_OPER\_SIR2SIN\_0\_20201116T220326\_20201116T220445\_0001.HDR}$ 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_20201116T021618_20201116T021841_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201116T021841_20201116T022110_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201116T035503_20201116T035623_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201116T035623_20201116T035811_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201116T070522_20201116T071813_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20201116T071813_20201116T071915_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: 3

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20201116T021618_20201116T021841_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20201116T035503_20201116T035623_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20201116T070522_20201116T071813_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:

#### 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.

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20201116T021618_20201116T021841_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20201116T035503_20201116T035623_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20201116T070522_20201116T071813_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_202011116T124023_202011116T130043_C001	IECHO EFFOR TRK ECHO EFFOR	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

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:

Product	Test Failed
CS_OFFL_SIR_FDM_220201116T013512_20201116T013643_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201116T021618_20201116T021841_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T021841_20201116T022110_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201116T035503_20201116T035623_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201116T035623_20201116T035811_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201116T064536_20201116T070451_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T070522_20201116T071813_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201116T071813_20201116T071915_C001.DBL	FOS Predicted Orbit (MPL_ORBPRE) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_220201116T091029_20201116T091035_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T105453_20201116T105531_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T112856_20201116T113333_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T122850_20201116T123535_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T131254_20201116T131304_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T203158_20201116T203202_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T204651_20201116T210341_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T220445_20201116T220508_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.
CS_OFFL_SIR_FDM_220201116T222708_20201116T224255_C001.DBL	Product filename start/stop differs slightly from start/stop validity due to rounding.

### 6.3 L2 FDM Auxiliary Data File Usage Check

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

Number of products with errors:

# 6.4 L2 FDM Auxiliary Correction Error Check

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

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201116T000747_20201116T003154_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_220201116T004157_20201116T004227_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_20201116T014707_20201116T021207_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_220201116T033512_20201116T034128_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_20201116T040204_20201116T040304_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_20201116T041553_20201116T044913_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_20201116T050657_20201116T052241_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_220201116T053845_20201116T053907_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_220201116T055347_20201116T060426_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201116T060546_20201116T062306_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_220201116T062317_20201116T062820_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_220201116T064536_20201116T070451_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_220201116T073513_20201116T075038_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_220201116T075415_20201116T080134_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_220201116T080153_20201116T080737_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_220201116T082627_20201116T083851_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_220201116T084005_20201116T085653_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_220201116T091924_20201116T092950_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_220201116T093153_20201116T094650_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_220201116T100307_20201116T100822_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_220201116T100836_20201116T101328_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_220201116T102042_20201116T103317_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_220201116T103440_20201116T103656_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_220201116T1111114_20201116T112536_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_20201116T114057_20201116T115827_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201116T115831_202011116T120256_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_220201116T120301_20201116T120653_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_220201116T124023_20201116T130043_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201116T130136_20201116T130427_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_220201116T141933_20201116T144338_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_220201116T154556_20201116T154841_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_220201116T155535_20201116T155639_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_220201116T161849_20201116T162016_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_220201116T181826_20201116T185158_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_220201116T185200_20201116T185342_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_20201116T191614_20201116T193909_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220201116T195816_20201116T201319_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_220201116T201941_20201116T202821_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_220201116T202915_20201116T203034_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_220201116T203204_20201116T203301_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_220201116T210555_20201116T212035_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_220201116T213658_20201116T215205_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_220201116T215405_20201116T220326_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_220201116T222708_20201116T224255_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_220201116T231706_20201116T233309_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_220201116T021618_20201116T021841_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220201116T035503_20201116T035623_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220201116T070522_20201116T071813_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220201116T124023_20201116T130043_C001	Echo error	The Echo Rx1 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.

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201116T000747_20201116T003154_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_220201116T014707_20201116T021207_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_220201116T033512_20201116T034128_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_220201116T041553_20201116T044913_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_220201116T060546_20201116T062306_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_220201116T062317_20201116T062820_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_220201116T064536_20201116T070451_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_220201116T073513_20201116T075038_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_220201116T075415_20201116T080134_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_220201116T080153_20201116T080737_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_220201116T082627_20201116T083851_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_220201116T091924_20201116T092950_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_220201116T093153_20201116T094650_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_220201116T100307_20201116T100822_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_20201116T100836_20201116T101328_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_20201116T102042_20201116T103317_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_220201116T103440_20201116T103656_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_220201116T115831_20201116T120256_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_220201116T120301_20201116T120653_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_220201116T141933_20201116T144338_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_220201116T154556_20201116T154841_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_220201116T181826_20201116T185158_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_220201116T185200_20201116T185342_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_20201116T195816_20201116T201319_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_220201116T201941_20201116T202821_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_220201116T202915_20201116T203034_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_20201116T210555_20201116T212035_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_20201116T213658_20201116T215205_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_220201116T215405_20201116T220326_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_220201116T222708_20201116T224255_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.

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20201116T000747_20201116T003154_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_220201116T014707_20201116T021207_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_20201116T033512_20201116T034128_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_20201116T041553_20201116T044913_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_20201116T060546_20201116T062306_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_220201116T062317_20201116T062820_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_220201116T064536_20201116T070451_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_220201116T073513_20201116T075038_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_20201116T075415_20201116T080134_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_20201116T080153_20201116T080737_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_20201116T082627_20201116T083851_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_220201116T091924_20201116T092950_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_220201116T093153_20201116T094650_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_220201116T100307_20201116T100822_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_20201116T103317_C001  CS_OFFL_SIR_FDM_2_20201116T103440_20201116T103656_C001  CS_OFFL_SIR_FDM_2_20201116T103456_C001  CS_OFFL_SIR_FDM_2_20201116T116S31_20201116T10256_C001  CS_OFFL_SIR_FDM_2_20201116T116S31_20201116T120556_C001  CS_OFFL_SIR_FDM_2_20201116T116S31_20201116T120556_C001  CS_OFFL_SIR_FDM_2_20201116T116S31_20201116T120556_C001  CS_OFFL_SIR_FDM_2_20201116T116S31_20201116T120556_C001  CS_OFFL_SIR_FDM_2_20201116T14S33_20201116T120556_C001  CS_OFFL_SIR_FDM_2_20201116T14S33_20201116T14S34_C001  CS_OFFL_SIR_FDM_2_20201116T14S556_20201116T154S41_C001  CS_OFFL_SIR_FDM_2_20201116T15556_20201116T154S156_C001  CS_OFFL_SIR_FDM_2_20201116T15556_20201116T18S342_C001  CS_OFFL_SIR_FDM_2_20201116T15556_20201116T18S342_C001  CS_OFFL_SIR_FDM_2_20201116T15556_20201116T10555_200201116T105033_C001  CS_OFFL_SIR_FDM_2_20201116T1510556_20201116T105033_C001  CS_OFFL_SIR_FDM_2_20201116T1510556_20201116T105033_C001  CS_OFFL_SIR_FDM_2_20201116T105556_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T105556_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T105556_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T105556_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T105556_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T105556_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20355_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T213656_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T210555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20333_C001  CS_OFFL_SIR_FDM_2_20201116T	CS_OFFL_SIR_FDM_220201116T100836_20201116T101328_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.
S.OFFL_SIR_FDM_2_20201116T103440_20201116T103656_C001  CS_OFFL_SIR_FDM_2_20201116T115831_20201116T12055_C001  CS_OFFL_SIR_FDM_2_20201116T120301_20201116T12055_C001  CS_OFFL_SIR_FDM_2_20201116T14933_20201116T144338_C001  CS_OFFL_SIR_FDM_2_20201116T14933_20201116T144338_C001  CS_OFFL_SIR_FDM_2_20201116T154566_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T154566_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T154566_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T154566_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T158500_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T158500_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T158500_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T203319_C001  CS_OFFL_SIR_FDM_2_20201116T203915_20201116T203334_C001  CS_OFFL_SIR_FDM_2_20201116T203915_20201116T203334_C001  CS_OFFL_SIR_FDM_2_20201116T203915_20201116T203334_C001  CS_OFFL_SIR_FDM_2_20201116T203915_20201116T203334_C001  CS_OFFL_SIR_FDM_2_20201116T203915_20201116T203334_C001  CS_OFFL_SIR_FDM_2_20201116T203915_20201116T203335_C001  CS_OFFL_SIR_FDM_2_20201116T203955_20201116T203335_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T20355_C001116T220355_C001  CS_OFFL_SIR_FDM_2_20201116T2055_20201116T20335_C001  CFI Backscatter Status Flag, SWH Squared Avveraging Status Flag SWH Squared Avveraging Status Fla	CS_OFFL_SIR_FDM_2_20201116T102042_20201116T103317_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T120301_20201116T12055_C001  CS_OFFL_SIR_FDM_2_20201116T14933_20201116T144338_C001  CS_OFFL_SIR_FDM_2_20201116T14933_20201116T144338_C001  CS_OFFL_SIR_FDM_2_20201116T141838_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T1548518_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T1201319_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T201341_20201116T20334_C001  CS_OFFL_SIR_FDM_2_20201116T201341_20201116T20334_C001  CS_OFFL_SIR_FDM_2_20201116T201555_20201116T20334_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20335_C001  CS_OFFL_SIR_FDM_2_20201116T213555_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213555_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213555_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag  CFI Backscatte	CS_OFFL_SIR_FDM_220201116T103440_20201116T103656_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T140331_20201116T144338_C001  CS_OFFL_SIR_FDM_2_20201116T144333_20201116T144338_C001  CS_OFFL_SIR_FDM_2_20201116T144556_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T154556_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T154556_20201116T15485158_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T185186_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185434_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T1201319_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T1201319_C001  CS_OFFL_SIR_FDM_2_20201116T201311_C001  CS_OFFL_SIR_FDM_2_20201116T201311_C001  CS_OFFL_SIR_FDM_2_20201116T201311_C001  CS_OFFL_SIR_FDM_2_20201116T201311_C001  CS_OFFL_SIR_FDM_2_20201116T201311_C001  CS_OFFL_SIR_FDM_2_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T20305_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212035_20201116T220326_C001  CFI Backscatter Status Flag SWH Squared Averaging Status Flag SWH Squar	CS_OFFL_SIR_FDM_220201116T115831_202011116T120256_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T14933_20201116T14433B_C001  CS_OFFL_SIR_FDM_2_20201116T154556_20201116T154841_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T185158_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T185158_C001  CS_OFFL_SIR_FDM_2_20201116T18502_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T18520_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T20319_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T20334_C001  CS_OFFL_SIR_FDM_2_20201116T202915_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T202915_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T203036_C001	CS_OFFL_SIR_FDM_220201116T120301_20201116T120653_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T154556_20201116T154556_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T185158_C001  CS_OFFL_SIR_FDM_2_20201116T181826_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T203821_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T20381_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T20381_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T210355_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T212036_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T2120326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212778_20201116T222788_20201116T222278_2001116T222278_2001116T222278_2001116T222278_2001116T222278_2001116T222278_2001116T222278_2001116T222278_2001116T222255_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Statu	CS_OFFL_SIR_FDM_220201116T141933_20201116T144338_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T181826_20201116T18518E_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T185200_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T212036_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T224255_C001  CS_OFFL_SIR_FDM_2_202011	CS_OFFL_SIR_FDM_220201116T154556_20201116T154841_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T185342_C001  CS_OFFL_SIR_FDM_2_20201116T195816_20201116T201319_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T202821_C001  CS_OFFL_SIR_FDM_2_20201116T201941_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215205_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212078_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212078_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212078_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212078_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T212078_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T220708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T220708_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T220708_20201116T2003150704  CS_OFFL_SIR_FDM_2_20201116T200708_20201116T20070	CS_OFFL_SIR_FDM_220201116T181826_20201116T185158_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T201941_20201116T202821_C001  CS_OFFL_SIR_FDM_2_20201116T202915_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T202915_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T20555_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter S	CS_OFFL_SIR_FDM_220201116T185200_20201116T185342_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T201941_20201116T202821_C001  CS_OFFL_SIR_FDM_2_20201116T202915_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T210555_20201116T2103034_C001  CS_OFFL_SIR_FDM_2_20201116T210555_20201116T210305_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T210326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T210326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag  SWH Squared Averaging Status Flag  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, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.  CFI Backscatter Status Flag  CFI Backscatter Status Flag  CFI Backscatter Status Flag  SWH	CS_OFFL_SIR_FDM_220201116T195816_20201116T201319_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T202915_20201116T203034_C001  CS_OFFL_SIR_FDM_2_20201116T210555_20201116T212035_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag  CFI Back	CS_OFFL_SIR_FDM_220201116T201941_202011116T202821_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T210555_20201116T212035_C001  CFI Backscatter Status Flag Squared Averaging Status Flag Squared Averaging Status Flag Indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.  CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag Squared Averaging Status Flag CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag 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, 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, 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, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.	CS_OFFL_SIR_FDM_220201116T202915_20201116T203034_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T213658_20201116T215205_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  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, indicating the values stored in fields #41, #42, #43 and #44 should be ignored for these records.	CS_OFFL_SIR_FDM_220201116T210555_202011116T212035_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T215405_20201116T220326_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CS_OFFL_SIR_FDM_2_20201116T222708_20201116T224255_C001  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag, SWH Squared Averaging Status Flag  CFI Backscatter Status Flag  C	CS_OFFL_SIR_FDM_220201116T213658_20201116T215205_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
CS_OFFL_SIR_FDM_2_20201116T222708_20201116T224255_C001	CS_OFFL_SIR_FDM_220201116T215405_202011116T220326_C001		indicating the values stored in fields #41, #42, #43 and #44 should be
	CS_OFFL_SIR_FDM_220201116T222708_20201116T224255_C001		indicating the values stored in fields #41, #42, #43 and #44 should be

# 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.

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220201116T000747_20201116T003154_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_220201116T004157_202011116T004227_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_220201116T010603_20201116T013103_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_220201116T014707_20201116T021207_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_220201116T023856_20201116T030901_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_220201116T033512_20201116T034128_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_220201116T041553_20201116T044913_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_220201116T052440_20201116T053153_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_220201116T055347_20201116T060426_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_220201116T060546_20201116T062306_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_220201116T062317_20201116T062820_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_220201116T064536_20201116T070451_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_220201116T073249_20201116T073510_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_220201116T073513_20201116T075038_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_220201116T075415_20201116T080134_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_220201116T080153_20201116T080737_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_220201116T082627_20201116T083851_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_220201116T084005_20201116T085653_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_220201116T091924_20201116T092950_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_220201116T093153_20201116T094650_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_220201116T100307_20201116T100822_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_220201116T100836_20201116T101328_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_220201116T102042_20201116T103317_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.

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CS_OFFL_SIR_FDM_220201116T103440_20201116T103656_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_220201116T114057_202011116T115827_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_220201116T115831_20201116T120256_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_220201116T120301_20201116T120653_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_220201116T124023_20201116T130043_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_220201116T141933_20201116T144338_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_220201116T150102_20201116T153339_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_220201116T154556_20201116T154841_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_220201116T155535_20201116T155639_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_220201116T163940_20201116T170038_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_220201116T174435_20201116T180106_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_220201116T181826_20201116T185158_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_220201116T185200_20201116T185342_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_220201116T191614_202011116T193909_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_220201116T195816_20201116T201319_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_220201116T201941_202011116T202821_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_220201116T202915_20201116T203034_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_220201116T204651_20201116T210341_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_220201116T210555_20201116T212035_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_220201116T213658_20201116T215205_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_220201116T215405_20201116T220326_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_220201116T222708_20201116T224255_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_220201116T224801_20201116T230133_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_220201116T231706_20201116T233309_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_220201116T233525_20201116T233736_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_	189	189	188	1	0
SIR1SAR_0_	123	123	123	0	0
SIR1SIN_0_	102	102	102	0	0
SIR2SIN_0_	106	106	106	0	0
SIR_FDM_1B	189	189	3	0	186
SIR_FDM_2	184	184	123	61	0

## 7.1 QCC Errors

Number of QCC reports with errors:

186

Total number of occurrences of each error

				_	_	UVOB	Product Type
SIR_FDM_1B						186	SIR_FDM_1B

Test Description Key:		
Abbreviation	Test name	Details
UVOB	UnitVectorOrBlank_6	The three array elements should form a unit vector (using a scale factor of 10^-6)

# 7.2 QCC Warnings

Number of QCC reports with warnings

194

Total number of occurrences of each warning

<b>Product Type</b>	MVSIO	MVSIOFD	QF	RBSZO	RBSZOFD	RSSBCO	-	-	-	-	-
SIR1LRM_0_	0	0	1	0	0	0					
SIR_FDM_2_	45	50	0	38	49	11					
0											

Test Description Key:						
Abbreviation	Test name	Details				
MVSIO	MissingValueShortIntOcean	The value should not be a 'missing value' for surface type 0 only				
MVSIOFD	MissingValueShortIntOceanFD2	The value should not be a 'missing value' for surface type 0 only				
QF	QualityFlag	This quality flag should be 0				
RBSZO	RangeBackscatterSigmaZeroOcean	The backscatter sigma zero should be between 700 and 3000 (or missing) for surface type = ocean				
RBSZOFD	RangeBackscatterSigmaZeroOceanFD2	The backscatter sigma zero should be between 700 and 3000 (or missing) for surface type = ocean				
RSSBCO	RangeSeaStateBiasCorrectionOcean	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				

# 7.3 Missing QCC Reports