



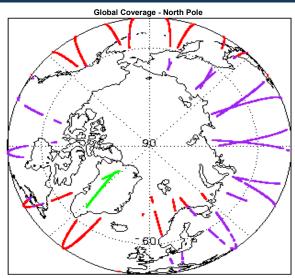
# 1. Overview

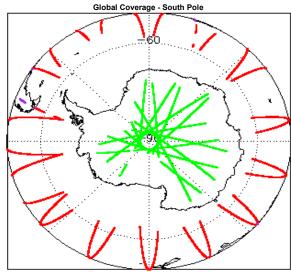
Report Production Date:	03-Jan-2017	
Processor Used:	CryoSat Ice Processor	
Data Used:	L1 and L2 Fast Delivery Marine (FDM)	

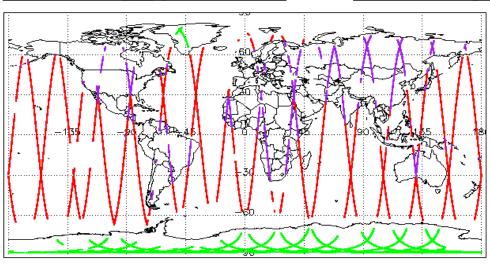
Observation	04-4
Check	Status
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	See Section 4.2, 5.2 and 6.2
Star Tracker Usage Check	See Section 5.3
Calibration Usage Check	Nominal
Auxiliary Data File Usage Check	See Section 5.5 and 6.3
Auxiliary Correction Error Check	See Section 5.6 and 6.4
Measurement Confidence Data Check	See Section 5.7, 6.5, 6.6, 6.7 and 6.8

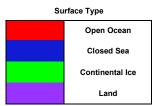
Mission / Instrument News		
31-Dec-2016	None	
01-Jan-2017	None	
02-Jan-2017	Nothing planned	

# 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).

Number of products with errors:

0

#### 4.2 L0 Product Header Analysis

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

Product	Test Failed
CS_OPER_SIR1SAR_0_20170101T031048_20170101T031409_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20170101T024253_20170101T024601_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_020170101T213944_20170101T214210_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020170101T204008_20170101T204116_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020170101T200257_20170101T200500_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020170101T005652_20170101T005715_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020170101T190504_20170101T190740_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_020170101T213944_20170101T214210_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_20170101T010539_20170101T013222_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_1B_20170101T005441_20170101T005448_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_1B_20170101T003956_20170101T004936_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_1B_20170101T002425_20170101T003419_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_1B_20170101T002204_20170101T002229_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_1B_20170101T005716_20170101T010308_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

#### 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.

6

Number of products with errors:

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20170101T013549_20170101T013640_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20170101T031515_20170101T031546_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20170101T063833_20170101T064129_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20170101T230927_20170101T231014_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: 76

Product	AUX File	Comment
All FDM 1B products from 2017/0101111115956 onwards (76 products)	AUXISEAMPS , AUXI SURFPS, AUXIU_WIND, AUXIV_WIND, AUXIWETTRP	Forecast Auxiliary Files missing at the time of processing

## 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: 76

Product	Test Failed	Description
All FDM_1B products from 20170101T115956 onwards (76 products)		Due to missing Forecast Auxiliary Files there is an error with the Dry Tropospheric, Wet Tropospheric and Inverse Barometric Corrections

#### 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_20170101T013549_20170101T013640_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20170101T031515_20170101T031546_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20170101T063833_20170101T064129_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20170101T230927_20170101T231014_C001	Attitude correction missing	The attitude has not been corrected

# 6. Level 2 FDM Data Quality Check

#### 6.1 L2 FDM Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL).

Number of products with errors:

# 6.2 L2 FDM Product Header Analysis

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

Number of products with errors:

6

Product	Test Failed
CS_OFFL_SIR_FDM_220170101T003956_20170101T004936_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_220170101T005441_20170101T005448_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_220170101T002204_20170101T002229_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_220170101T010539_20170101T013222_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_220170101T002425_20170101T003419_C001	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OFFL_SIR_FDM_220170101T005716_20170101T010308_C001	Percentage of processing errors detected greater than minimum acceptable threshold.

## 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:

75

Product	AUX File	Comment
	AUXISEAMPS , AUXI SURFPS, AUXIU_WIND, AUXIV_WIND, AUXIWETTRP	Forecast Auxiliary Files missing at the time of processing

## 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:

Product	Test Failed	Description
All FDM_2 products from 20170101T115956 onwards (75 products)	Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction, U-Wind and V- Wind Components	Due to missing Forecast Auxiliary Files at the time of processing there is an error with the Meteo Corrections
CS_OFFL_SIR_FDM_220170101T010539_20170101T013222_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_220170101T014207_20170101T014311_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220170101T015546_20170101T022931_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_220170101T031915_20170101T032150_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_220170101T033520_20170101T034427_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220170101T034713_20170101T040853_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_220170101T042530_20170101T043544_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220170101T051445_20170101T054755_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_220170101T060622_20170101T063648_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_220170101T065651_20170101T071000_C001	Sea State Bias Correction, Mean Sea Surface height, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed, the Sea State Bias Correction and the Mean Sea Surface Height for one or more records
CS_OFFL_SIR_FDM_220170101T071147_20170101T072703_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_220170101T080018_20170101T081235_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_220170101T083455_20170101T084510_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_220170101T084726_20170101T085008_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_220170101T092021_20170101T094355_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_220170101T094413_20170101T095343_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_220170101T115956_20170101T122425_C001	Sea State Bias Correction, Mean Sea Surface height, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed, the Sea State Bias Correction and the Mean Sea Surface Height for one or more records
CS_OFFL_SIR_FDM_220170101T125545_20170101T131307_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220170101T133547_20170101T134553_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_220170101T152020_20170101T154130_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_220170101T155748_20170101T163151_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_220170101T165606_20170101T171856_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_220170101T173741_20170101T180820_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_220170101T182631_20170101T184443_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_220170101T191639_20170101T193200_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_220170101T193402_20170101T194325_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_220170101T200545_20170101T200802_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_220170101T200916_20170101T202247_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_220170101T203845_20170101T204007_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_220170101T205623_20170101T211105_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_220170101T214907_20170101T222112_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_220170101T233206_20170101T234327_C001		There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records

## 6.5 L2 FDM Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag (field 8) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

1

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220170101T013549_20170101T013640_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220170101T031515_20170101T031546_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220170101T063833_20170101T064129_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_220170101T230927_20170101T231014_C001	Attitude correction missing	The attitude has not been corrected

# 6.6 L2 FDM Range Measurement Check

CryoSat L2 data includes a CFI (field 17) and OCOG (field 22) Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_FDM_220170101T010539_20170101T013222_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_220170101T015546_20170101T022931_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_220170101T034713_20170101T040853_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_220170101T051445_20170101T054755_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_220170101T060622_20170101T063648_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_220170101T065651_20170101T071000_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_220170101T071147_20170101T072703_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_220170101T080018_20170101T081235_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_220170101T083455_20170101T084510_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_220170101T084726_20170101T085008_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_220170101T092021_20170101T094355_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_220170101T094413_20170101T095343_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_220170101T115956_20170101T122425_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_220170101T133547_20170101T134553_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_220170101T152020_20170101T154130_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_220170101T155748_20170101T163151_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_220170101T165606_20170101T171856_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_220170101T173741_20170101T180820_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_220170101T191639_20170101T193200_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_220170101T193402_20170101T194325_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_220170101T200916_20170101T202247_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_220170101T203845_20170101T204007_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_220170101T205623_20170101T211105_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_220170101T214907_20170101T222112_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_220170101T233206_20170101T234327_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\_\_20170101T010539\_20170101T013222\_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\_\_20170101T015546\_20170101T022931\_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\_\_20170101T034713\_20170101T040853\_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\_\_20170101T051445\_20170101T054755\_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\_\_20170101T060622\_20170101T063648\_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\_\_20170101T065651\_20170101T071000\_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\_\_20170101T071147\_20170101T072703\_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 20170101T080018 20170101T081235 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\_\_20170101T083455\_20170101T084510\_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 20170101T084726 20170101T085008 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\_\_20170101T092021\_20170101T094355\_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\_\_20170101T094413\_20170101T095343\_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\_\_20170101T115956\_20170101T122425\_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\_\_20170101T133547\_20170101T134553\_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\_\_20170101T152020\_20170101T154130\_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\_\_20170101T155748\_20170101T163151\_C001 indicating the values stored in fields #41, #42, #43 and #44 should be Squared Averaging Status Flag ignored for these records. The master fail flag is set by the CFI call, for one or more records CFI Backscatter Status Flag, SWH indicating the values stored in fields #41, #42, #43 and #44 should be CS\_OFFL\_SIR\_FDM\_2\_\_20170101T165606\_20170101T171856\_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\_\_20170101T173741\_20170101T180820\_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\_\_20170101T191639\_20170101T193200\_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 20170101T193402 20170101T194325 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 20170101T200916 20170101T202247 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 20170101T203845 20170101T204007 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 20170101T205623 20170101T211105 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\_\_20170101T214907\_20170101T222112\_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

#### 6.8 L2 FDM Ocean Retracking Quality Check

CS\_OFFL\_SIR\_FDM\_2\_\_20170101T233206\_20170101T234327\_C001

CS\_OFFL\_SIR\_FDM\_2\_\_20170101T043732\_20170101T045007\_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.

Toet Failed

Squared Averaging Status Flag

Ocean Retracking Quality Flag

Number of products with errors:

Fioudit	rest raileu	Description
CS_OFFL_SIR_FDM_220170101T010539_20170101T013222_C001		The Ocean Retracking Quality Fla Retracker was not successfully e.
CS_OFFL_SIR_FDM_220170101T014207_20170101T014311_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Fla Retracker was not successfully ex
CS_OFFL_SIR_FDM_220170101T015546_20170101T022931_C001		The Ocean Retracking Quality Fla Retracker was not successfully ex
CS_OFFL_SIR_FDM_220170101T025227_20170101T025350_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Fla Retracker was not successfully ex
CS_OFFL_SIR_FDM_220170101T031915_20170101T032150_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Fla Retracker was not successfully ex
CS_OFFL_SIR_FDM_220170101T034713_20170101T040853_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Fla

# escription he Ocean Retracking Quality Flag is set indicating the CFI Ocean etracker was not successfully executed for one or more records. he Ocean Retracking Quality Flag is set indicating the CFI Ocean etracker was not successfully executed for one or more records. he Ocean Retracking Quality Flag is set indicating the CFI Ocean

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

ignored for these records.

Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records. The Ocean Retracking Quality Flag is set indicating the CFI Ocean

The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.

The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.

CS_OFFL_SIR_FDM_220170101T051445_20170101T054755_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T060622_20170101T063648_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T065651_20170101T071000_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T071147_20170101T072703_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T074347_20170101T075358_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T080018_20170101T081235_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T083455_20170101T084510_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T084726_20170101T085008_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T092021_20170101T094355_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T094413_20170101T095343_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T102150_20170101T104515_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T105932_20170101T112806_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T115956_20170101T122425_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T133536_20170101T133542_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T133547_20170101T134553_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T141913_20170101T145205_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T151702_20170101T151836_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T152020_20170101T154130_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T155748_20170101T163151_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T165606_20170101T171856_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T173741_20170101T180820_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T182631_20170101T184443_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T184547_20170101T185923_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T191639_20170101T193200_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T193402_20170101T194325_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T200916_20170101T202247_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T203845_20170101T204007_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T205623_20170101T211105_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T214907_20170101T222112_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T223602_20170101T230043_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
CS_OFFL_SIR_FDM_220170101T233206_20170101T234327_C001	Ocean Retracking Quality Flag	The Ocean Retracking Qualit Retracker was not successfu
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lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully executed for one or more records. lity Flag is set indicating the CFI Ocean fully 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_	160	160	160	0	0
SIR1SAR_0_	127	127	127	0	0
SIR1SIN_0_	111	111	111	0	0
SIR2SIN_0_	117	117	117	0	0
SIR_FDM_1B	160	160	160	0	0
SIR_FDM_2	160	160	160	0	0

#### 7.1 QCC Errors

Number of QCC reports with errors:

0

#### 7.2 QCC Warnings

Number of QCC reports with warnings

0

## 7.3 Missing QCC Reports

Number of products with missing QCC reports:

0