

1. Overview

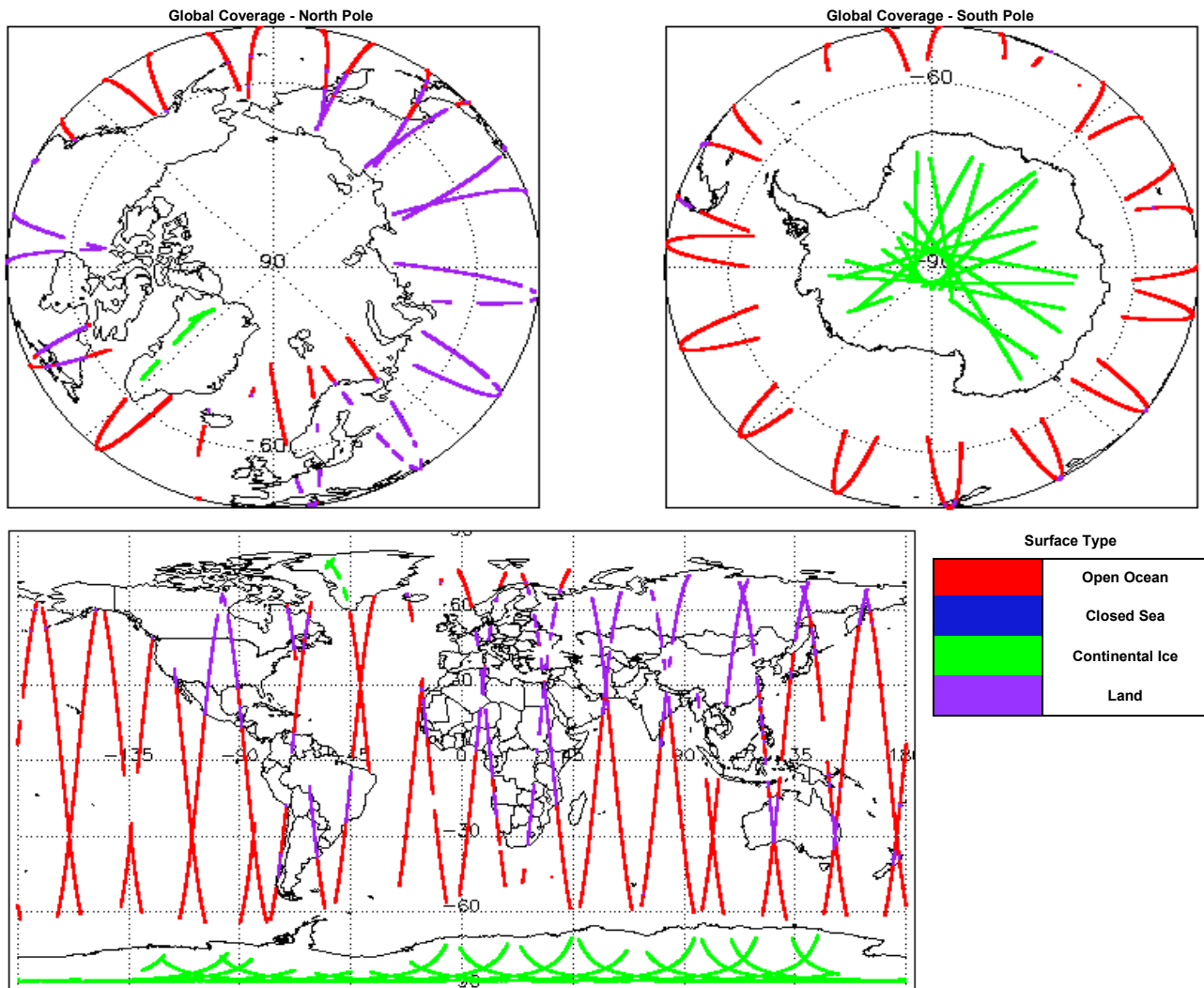
Report Production Date:	16-Nov-2016
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

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

Mission / Instrument News

13-Nov-2016	None
14-Nov-2016	None
15-Nov-2016	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 & 2

4. Level 0 Data Quality Check

4.1 L0 Product Format Check

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

Number of products with errors: 0

4.2 L0 Product Header Analysis

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

Number of products with errors: 12

Product	Test Failed
CS_OPER_SIR1SAR_0_20161114T014912_20161114T015151_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20161114T195705_20161114T200403_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20161114T010119_20161114T010845_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20161114T222123_20161114T222353_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20161114T140616_20161114T141628_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20161114T033129_20161114T033520_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20161114T105819_20161114T110025_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20161114T215247_20161114T215424_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20161114T123455_20161114T123847_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20161114T024917_20161114T025736_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20161114T105949_20161114T110025_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20161114T215247_20161114T215424_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.

5. Level 1B FDM Data Quality Check

5.1 L1B FDM Product Format Check

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

Number of products with errors: 0

5.2 L1B FDM Product Header Analysis

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

Number of products with errors: 0

5.3 L1B FDM Star Tracker Usage Check

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

Number of products with errors: 29

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20161114T023205_20161114T023707_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T041331_20161114T041434_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T055240_20161114T055358_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T073430_20161114T073541_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T073541_20161114T073633_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T073724_20161114T073729_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T074956_20161114T075035_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T075038_20161114T075308_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T075312_20161114T075325_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T075329_20161114T075339_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T075342_20161114T081607_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T081610_20161114T082533_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T082758_20161114T083326_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T083332_20161114T083338_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T083345_20161114T083615_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T085726_20161114T091443_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T091610_20161114T091725_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T091829_20161114T092019_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T092828_20161114T092901_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T092906_20161114T092945_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T142709_20161114T143236_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T143342_20161114T143540_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T143542_20161114T143734_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T143737_20161114T143815_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T143817_20161114T150137_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T150506_20161114T151004_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T151011_20161114T151339_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T151847_20161114T152815_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20161114T153350_20161114T155138_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 Auxiliary Data File Usage Check

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

Number of products with errors: 0

5.6 L1B FDM Auxiliary Correction Error Check

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

Number of products with errors:

0

5.7 L1B FDM Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 18) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

31

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20161114T023205_20161114T023707_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T041331_20161114T041434_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T055240_20161114T055358_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T073430_20161114T073541_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T073541_20161114T073633_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T073724_20161114T073729_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T074956_20161114T075035_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T075038_20161114T075308_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T075312_20161114T075325_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T075329_20161114T075339_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T075342_20161114T081607_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T081610_20161114T082533_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T082758_20161114T083326_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T083332_20161114T083338_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T083345_20161114T083615_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T085726_20161114T091443_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T091610_20161114T091725_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T091829_20161114T092019_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T092828_20161114T092901_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T092906_20161114T092945_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T122508_20161114T123248_C001	Echo error, TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_FDM_1B_20161114T125938_20161114T132051_C001	Echo error, TRK echo error	The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo
CS_OFFL_SIR_FDM_1B_20161114T142709_20161114T143236_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T143342_20161114T143540_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T143542_20161114T143734_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T143737_20161114T143815_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T143817_20161114T150137_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T150506_20161114T151004_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T151011_20161114T151339_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T151847_20161114T152815_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20161114T153350_20161114T155138_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:

0

6.2 L2 FDM Product Header Analysis

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

Number of products with errors:

0

6.3 L2 FDM Auxiliary Data File Usage Check

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

Number of products with errors:

0

6.4 L2 FDM Auxiliary Correction Error Check

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

Number of products with errors:

41

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20161113T234714_20161114T001020_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_20161114T082758_20161114T083326_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T083332_20161114T083338_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T083345_20161114T083615_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T085726_20161114T091443_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T091610_20161114T091725_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T091829_20161114T092019_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T092828_20161114T092901_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T092906_20161114T092945_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T122508_20161114T123248_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20161114T125938_20161114T132051_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20161114T142709_20161114T143236_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T143342_20161114T143540_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T143542_20161114T143734_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T143737_20161114T143815_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T143817_20161114T150137_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T150506_20161114T151004_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T151011_20161114T151339_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T151847_20161114T152815_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20161114T153350_20161114T155138_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: 30

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20161114T002540_20161114T004850_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_20161114T020517_20161114T022925_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_20161114T025736_20161114T031221_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_20161114T034434_20161114T035844_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_20161114T035847_20161114T040905_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_20161114T042014_20161114T042114_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_20161114T043345_20161114T050723_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_20161114T053818_20161114T054530_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_20161114T062516_20161114T064631_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_20161114T071536_20161114T072754_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_20161114T073724_20161114T073729_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_20161114T075038_20161114T075308_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_20161114T075342_20161114T081607_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_20161114T093220_20161114T093356_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_20161114T104851_20161114T105439_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_20161114T115908_20161114T122505_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_20161114T125938_20161114T132051_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_20161114T143817_20161114T150137_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_20161114T161616_20161114T161753_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_20161114T165752_20161114T173117_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_20161114T183624_20161114T191215_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_20161114T201605_20161114T203253_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__20161114T203734_20161114T204956_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T212350_20161114T213804_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T215449_20161114T221000_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T221201_20161114T222123_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T224422_20161114T230049_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T230630_20161114T231429_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T231549_20161114T231914_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.
CS_OFFL_SIR_FDM_2__20161114T233444_20161114T234932_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
SIR_FDM_1B	0	161	161	0	0
SIR_FDM_2	0	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