

1. Overview

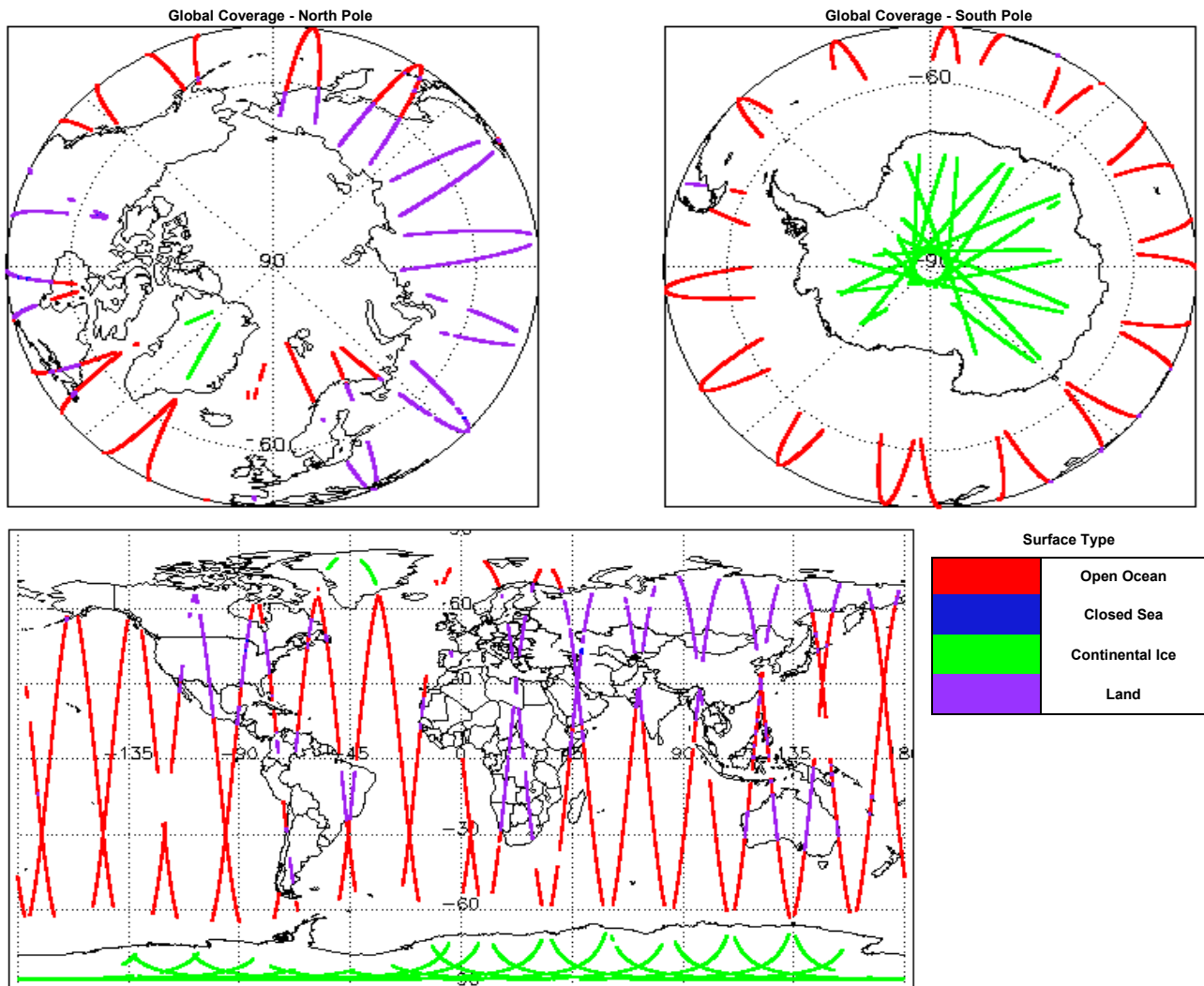
Report Production Date:	15-Nov-2017
Processor Used:	CryoSat Ice Processor
Data Used:	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

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-2017	None
14-Nov-2017	None
15-Nov-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 & 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: 21

Product	Test Failed
CS_OPER_SIR1SAR_0_20171114T123146_20171114T123610_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T173703_20171114T174313_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T105928_20171114T110722_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T223816_20171114T224057_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T155824_20171114T160531_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T000714_20171114T001134_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T231622_20171114T232037_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0_20171114T141910_20171114T142625_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T060620_20171114T061212_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T151230_20171114T151423_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T015705_20171114T020237_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T183051_20171114T183351_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T072652_20171114T073056_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T192523_20171114T192645_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T044923_20171114T050503_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T150315_20171114T150455_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0_20171114T182136_20171114T182429_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20171114T165102_20171114T165450_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20171114T155607_20171114T155824_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20171114T065904_20171114T070128_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0_20171114T191144_20171114T191526_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: 2

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20171114T073623_20171114T073633_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20171114T105003_20171114T105120_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: 2

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20171114T073623_20171114T073633_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20171114T105003_20171114T105120_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: 34

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20171114T002500_20171114T010015_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T011055_20171114T011135_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__20171114T012242_20171114T012703_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__20171114T012758_20171114T014534_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__20171114T020438_20171114T022126_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__20171114T022607_20171114T023902_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T034319_20171114T035834_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__20171114T040036_20171114T041000_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__20171114T043242_20171114T044902_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__20171114T061239_20171114T061321_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__20171114T061336_20171114T064716_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__20171114T070309_20171114T072652_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T075913_20171114T081004_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__20171114T084220_20171114T090907_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__20171114T091653_20171114T091912_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__20171114T093244_20171114T100401_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T102134_20171114T102531_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__20171114T105641_20171114T105928_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__20171114T111129_20171114T114419_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__20171114T124758_20171114T132303_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__20171114T140648_20171114T141400_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T142859_20171114T144053_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__20171114T144700_20171114T150244_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__20171114T153605_20171114T155306_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__20171114T161528_20171114T162554_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__20171114T170639_20171114T170949_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__20171114T172106_20171114T172817_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__20171114T175626_20171114T180206_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__20171114T183553_20171114T190039_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T193532_20171114T195920_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__20171114T215557_20171114T222757_C001	Sea State Bias Correction	There is an error with the Sea State Bias Correction for one or more records
CS_OFFL_SIR_FDM_2__20171114T224229_20171114T224320_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__20171114T230125_20171114T231043_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__20171114T233412_20171114T235532_C001	Sea State Bias Correction, Altimetric Wind Speed	There is an error with the Altimetric Wind Speed and Sea State Bias Correction for one or more records

6.5 L2 FDM Measurement Confidence Data Check

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

Number of products with errors: 2

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20171114T073623_20171114T073633_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20171114T105003_20171114T105120_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: 22

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20171114T012242_20171114T012703_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__20171114T012758_20171114T014534_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__20171114T215557_20171114T222757_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__20171114T224229_20171114T224320_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__20171114T233412_20171114T235532_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	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR1LRM_0_	156	156	156	0	0
SIR1SAR_0_	106	106	106	0	0
SIR1SIN_0_	97	97	97	0	0
SIR2SIN_0_	101	101	101	0	0
SIR_FDM_1B	156	156	156	0	0
SIR_FDM_2	153	153	153	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