

1. Overview

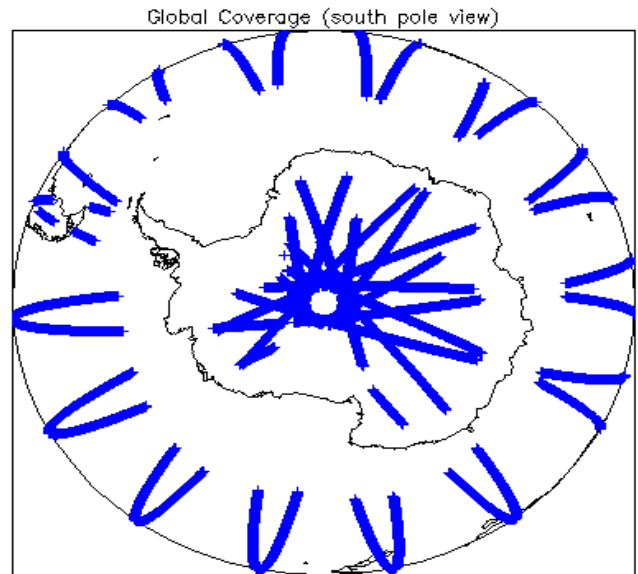
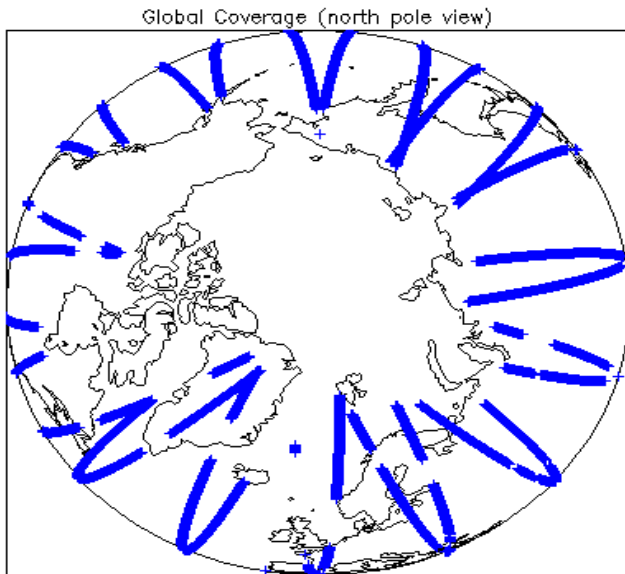
Report Production Date:	16-Jun-2015
Data Used:	L1 and L2 Fast Delivery Marine Mode (FDM), and CAL Data

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	Nominal
Auxiliary Data File Usage	See Section 5.3 and 6.3
Correction Error Flags	See Sections 5.4 and 6.4
Measurement Confidence Flags	See Sections 5.5, 6.5, 6.6 and 6.8

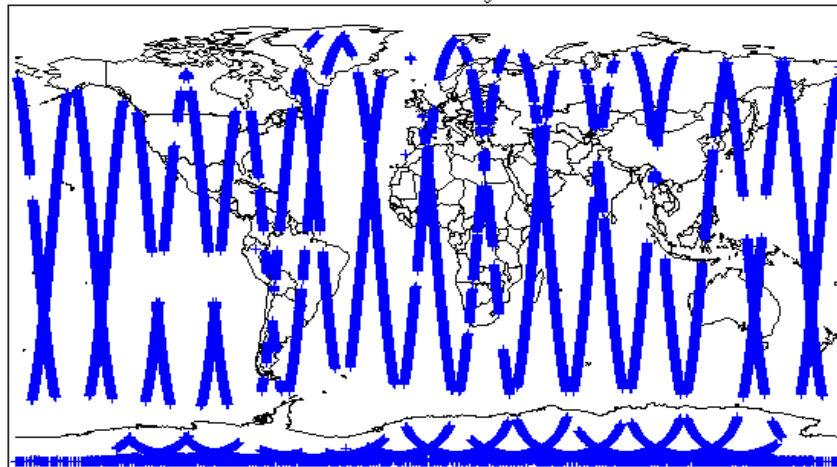
Mission / Instrument News

14-Jun-2015	None
15-Jun-2015	None
16-Jun-2015	Nothing planned

2. Global Coverage



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 1B Calibration Data Quality Check

4.1 L1 CAL 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 L1 CAL 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: 0

4.3 L1 CAL Auxiliary Data File Usage Check

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

Number of products with errors: 0

4.4 L1 CAL Measurement Confidence Flags

CryoSat Cal1 and Cal2 data includes a measurement confidence flag word (field 11) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors: 0

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 Auxiliary Data File Usage Check

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

Number of products with errors: 56

Product	AUX File	Comment
All FDM_1B products up to 20150615T095300 (56 products)	CS_OPER_AUXIIONGIM_20150615T000000_20150615T235959_0001	Missing Forecast Auxiliary File: CS_OPER_AUXIIONGIM

5.4 L1B FDM Correction Error Flags

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: 56

Product	Test Failed	Description
All FDM_1B products up to 20150615T095300 (56 products)	GIM Ionospheric Correction	Due to a missing Forecast Auxiliary File, there was an error with the Ionospheric correction.

5.5 L1B FDM Measurement Confidence Flags

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

Attitude Correction Missing: In Baseline-C all FDM products are missing Attitude Correction as star tracker data are not available in time for processing. This is a known issue and will be fixed in future releases.

Number of products with errors: 18

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20150615T015446_20150615T020954_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T021524_20150615T022645_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T023000_20150615T023212_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T023228_20150615T023816_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T024159_20150615T030021_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T030100_20150615T030625_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T031004_20150615T031448_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T031505_20150615T031554_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T032947_20150615T033027_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T033150_20150615T033507_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T033747_20150615T034907_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T035438_20150615T040530_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T040923_20150615T041037_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T041209_20150615T041633_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T042050_20150615T044842_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T044845_20150615T044920_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T044957_20150615T045145_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20150615T062857_20150615T063023_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 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 wrt a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct.

Number of products with errors: 56

Product	AUX File	Comment
All FDM_2 products up to 20150615T095300 (56 products)	CS_OPER_AUXIIONGIM_20150615T000000_20150615T235959_0001	Missing Forecast Auxiliary File: CS_OPER_AUXIIONGIM

6.4 L2 FDM Correction Error Flags

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: 56

Product	Test Failed	Description
All FDM_2 products up to 20150615T095300 (56 products)	GIM Ionospheric Correction	Due to a missing Forecast Auxiliary File, there was an error with the Ionospheric correction.

6.5 L2 FDM Measurement Confidence Flags

CryoSat L2 data includes a quality flag word (field 8) for each 20-Hz measurement record. The bit value of this flag is an assessment of the measurement quality by the processing chain.

Attitude Correction Missing: In Baseline-C all FDM products are missing Attitude Correction as star tracker data are not available in time for processing. This is a known issue and will be fixed in future releases.

Number of products with errors: 18

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20150615T015446_20150615T020954_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T021524_20150615T022645_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T023000_20150615T023212_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T023228_20150615T023816_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T024159_20150615T030021_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T030100_20150615T030625_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T031004_20150615T031448_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T031505_20150615T031554_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T032947_20150615T033027_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T033150_20150615T033507_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T033747_20150615T034907_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T035438_20150615T040530_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T040923_20150615T041037_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T041209_20150615T041633_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T042050_20150615T044842_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T044845_20150615T044920_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T044957_20150615T045145_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2__20150615T062857_20150615T063023_C001	Attitude correction missing	The attitude has not been corrected

6.6 L2 FDM Range Measurement Flags

Each product is checked to detect range measurements flagged by the processing chain as missing or containing errors.

Number of products with errors: 5

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20150615T021524_20150615T022645_C001	OCOG Retracked Range Flag	The master fail flag is set by the OCOG call, for one or more records, indicating the values stored in fields #18, #19, #20 and #21 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20150615T081512_20150615T081532_C001	OCOG Retracked Range Flag	The master fail flag is set by the OCOG call, for one or more records, indicating the values stored in fields #18, #19, #20 and #21 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20150615T102440_20150615T104149_C001	OCOG Retracked Range Flag	The master fail flag is set by the OCOG call, for one or more records, indicating the values stored in fields #18, #19, #20 and #21 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20150615T173400_20150615T180714_C001	OCOG Retracked Range Flag	The master fail flag is set by the OCOG call, for one or more records, indicating the values stored in fields #18, #19, #20 and #21 should be ignored for these records.
CS_OFFL_SIR_FDM_2__20150615T195827_20150615T200252_C001	OCOG Retracked Range Flag	The master fail flag is set by the OCOG call, for one or more records, indicating the values stored in fields #18, #19, #20 and #21 should be ignored for these records.

6.7 L2 FDM SWH and Backscatter Measurement Flags

Each product is checked to detect parameters related to SWH and sigma0 that are flagged by the processing chain as missing or containing errors.

Number of products with errors: 0

6.8 L2 FDM Geophysical Measurement Flags

Each product is checked to detect geophysical measurements flagged by the processing chain as missing or containing errors.

Number of products with errors: 7

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2__20150615T021524_20150615T022645_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__20150615T081512_20150615T081532_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__20150615T091922_20150615T094525_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__20150615T102440_20150615T104149_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__20150615T115426_20150615T120402_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__20150615T173400_20150615T180714_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__20150615T195827_20150615T200252_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 Check

The QCC is a CryoSat facility that 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	136	0	0	0	0
SIR_FDM_2	135	0	0	0	0

7.1 QCC Errors

Number of QCC reports with errors: 0

7.2 Missing QCC Reports

Number of products with missing QCC reports: All