

**1. Overview**

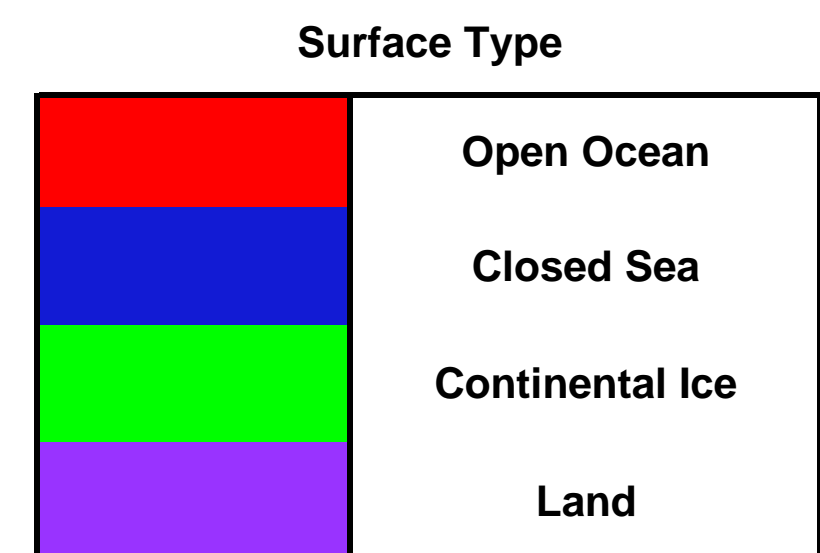
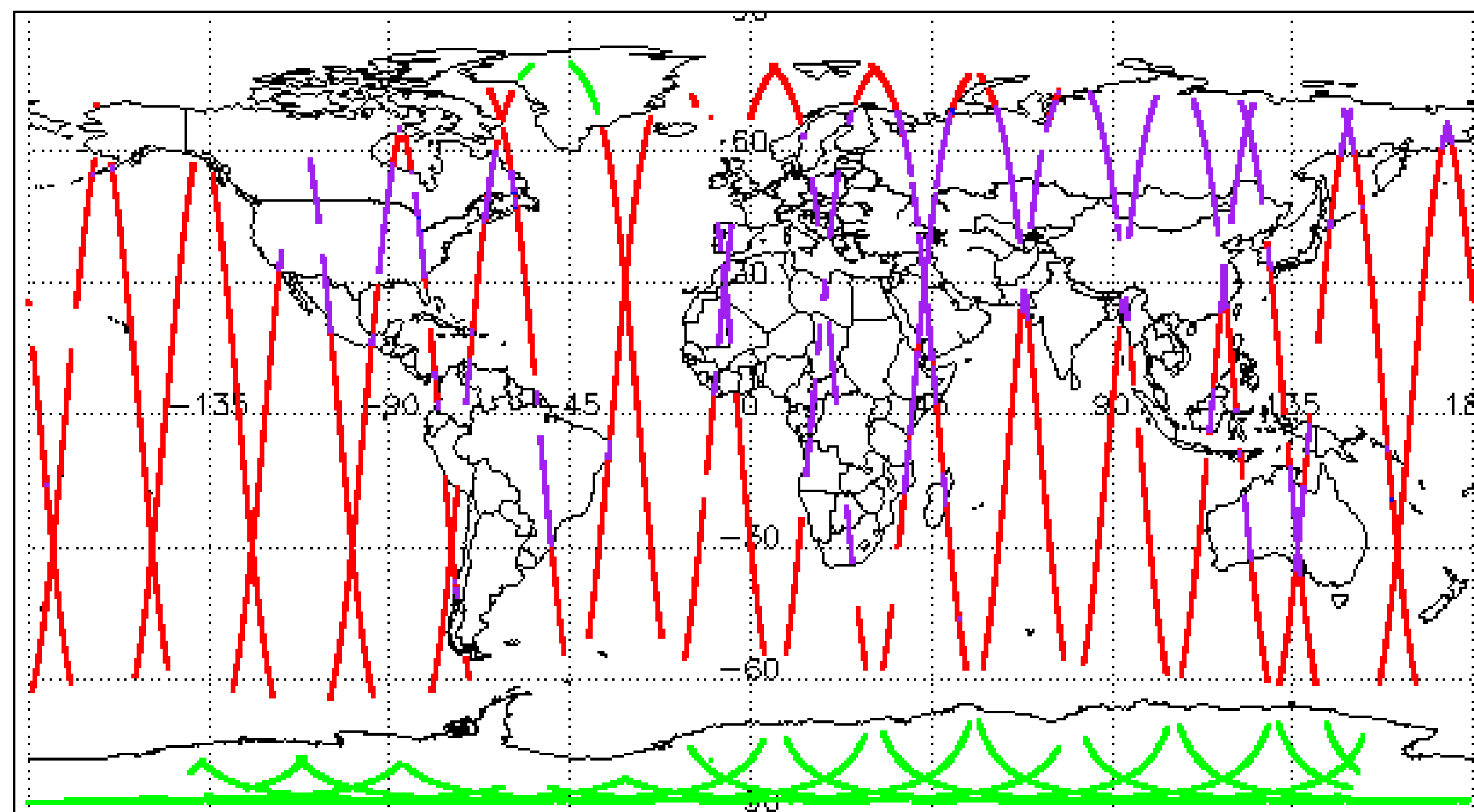
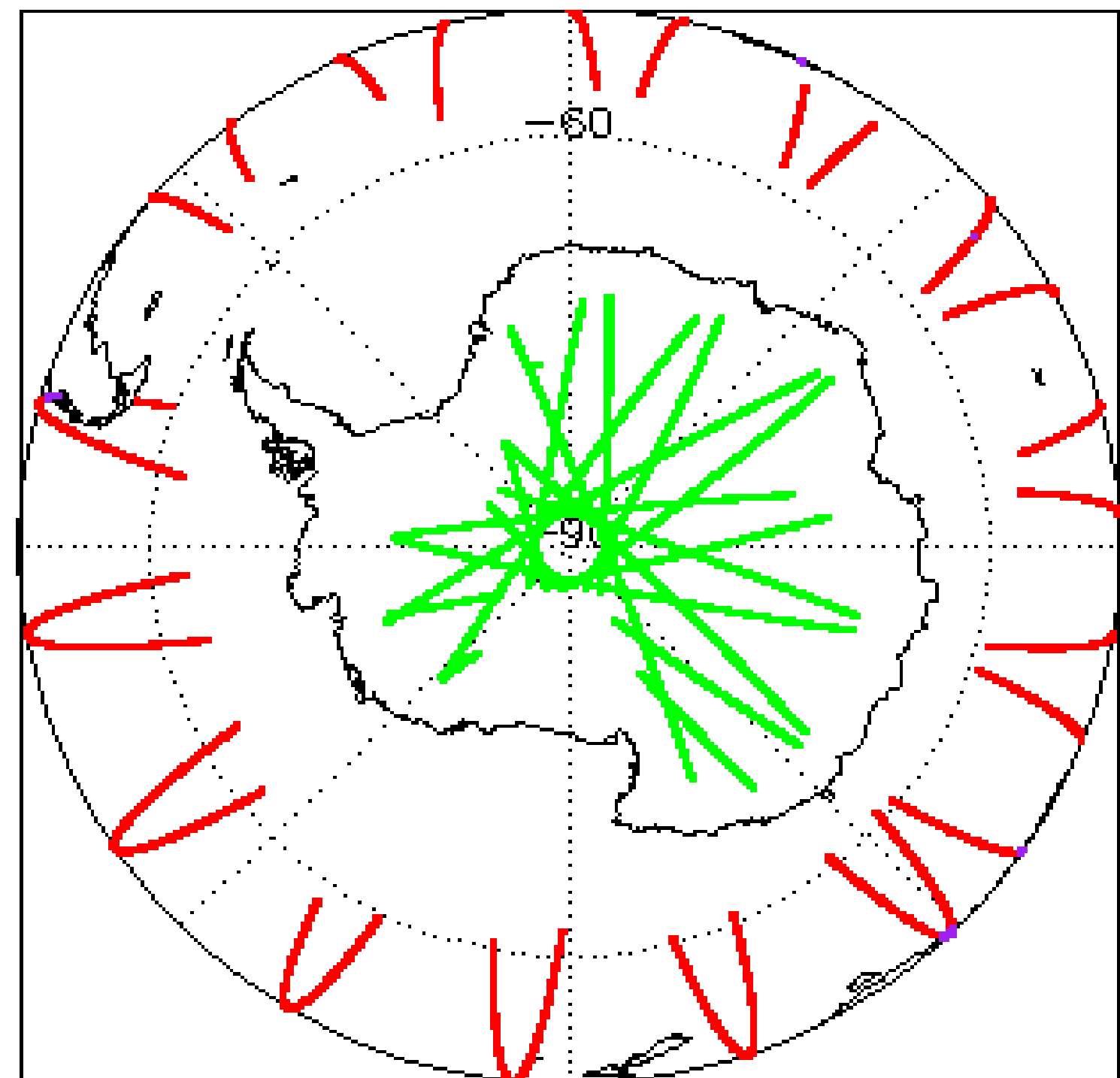
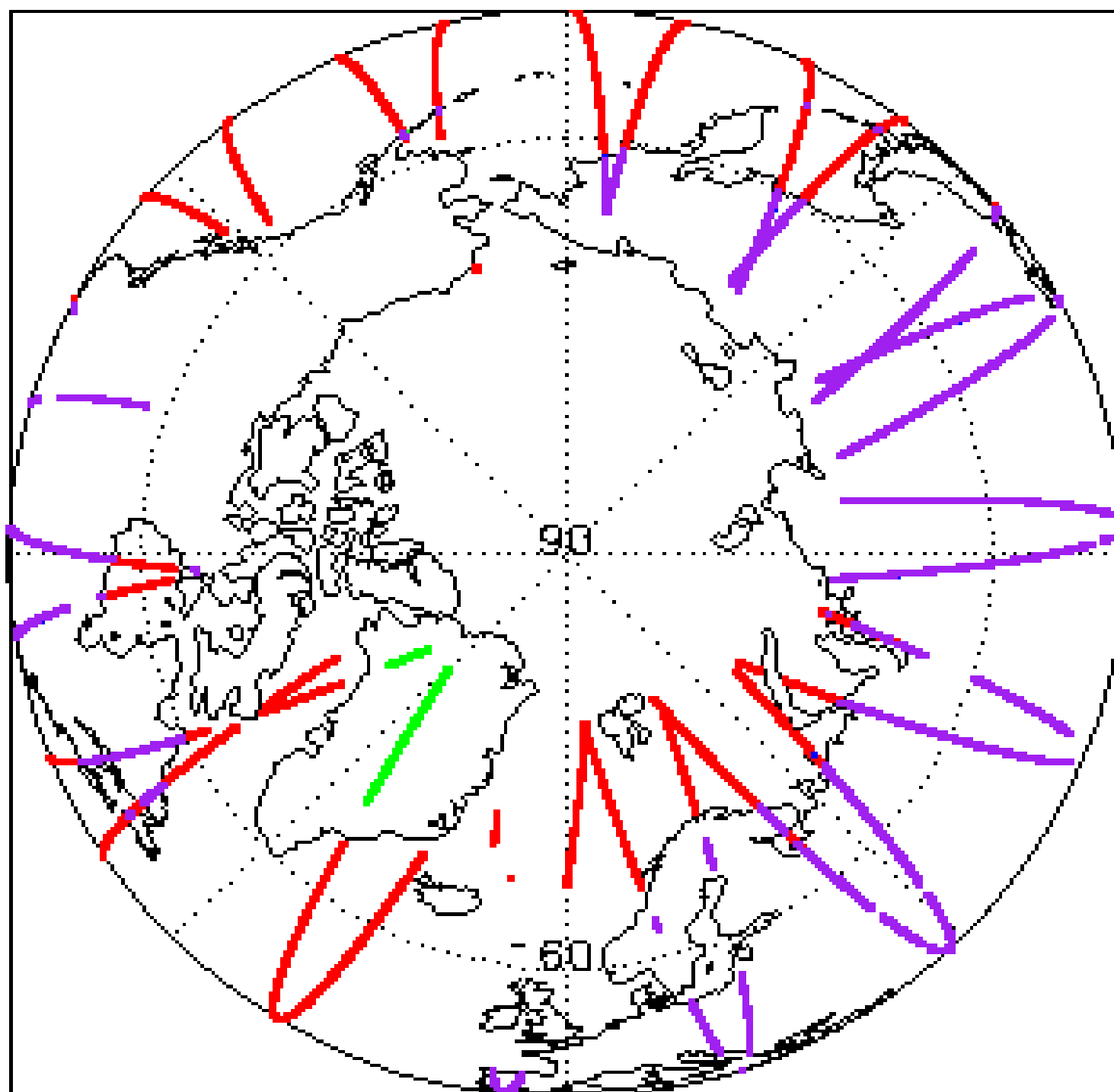
<b>Report Production Date:</b>	28-Sep-2020
<b>Processor Used:</b>	CryoSat Ice Processor
<b>Data Used:</b>	L1 and L2 Fast Delivery Marine (FDM) Mode and L0 Data

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	Nominal
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 6.4
Measurement Confidence Data Check	See Section 5.7, 6.5, 6.6, 6.7 and 6.8
QCC Error/ Warning Check	See Section 7.1 and 7.2

**Mission / Instrument News**

25-Sep-2020	None
26-Sep-2020	None
27-Sep-2020	Nothing planned

**2. Global Coverage**



**3. Instrument Configuration**

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

<b>SIRAL instrument(s) in use:</b>	SIRAL - A
<b>Star Tracker(s) in use:</b>	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.

**Number of products with errors:** 15

Product	Test Failed
CS_OPER_SIR1LRM_0__20200926T173434_20200926T174320_0001.DBL	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20200926T022254_20200926T022836_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20200926T203214_20200926T203941_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SAR_0__20200926T204445_20200926T205137_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T040856_20200926T042044_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T072955_20200926T073331_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T135413_20200926T135918_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T171021_20200926T171439_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T212314_20200926T212618_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T221954_20200926T222346_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR1SIN_0__20200926T230329_20200926T230603_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20200926T085949_20200926T090227_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20200926T121829_20200926T122045_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20200926T141519_20200926T141919_0001.HDR	Percentage of processing errors detected greater than minimum acceptable threshold.
CS_OPER_SIR2SIN_0__20200926T234259_20200926T234544_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:** 8

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200926T035232_20200926T035819_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T035819_20200926T040151_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T053233_20200926T053505_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T053505_20200926T053505_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T071316_20200926T071341_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T071341_20200926T071442_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T103724_20200926T103751_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_1B_20200926T103751_20200926T104026_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).

### 5.3 L1B FDM Star Tracker Usage Check

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

**Number of products with errors:** 5

Product	Test Failed
CS_OFFL_SIR_FDM_1B_20200926T035232_20200926T035819_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200926T053233_20200926T053505_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200926T053505_20200926T053505_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200926T071316_20200926T071341_C001	No Star Tracker file used in the processing of this product
CS_OFFL_SIR_FDM_1B_20200926T103724_20200926T103751_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:** 11

Product	Test Failed	Description
CS_OFFL_SIR_FDM_1B_20200926T023420_20200926T024244_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_20200926T035232_20200926T035819_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200926T053233_20200926T053505_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200926T053505_20200926T053505_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200926T071316_20200926T071341_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200926T103724_20200926T103751_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_1B_20200926T104854_20200926T110318_C001	Block degraded, Echo error, TRK echo error	Data block degraded and not processed
CS_OFFL_SIR_FDM_1B_20200926T152831_20200926T153202_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_20200926T154912_20200926T155356_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_20200926T220628_20200926T221213_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_20200926T234544_20200926T235200_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

## 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:** 8

Product	Test Failed
CS_OFFL_SIR_FDM_2_20200926T035232_20200926T035819_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T035819_20200926T040151_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T053233_20200926T053505_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T071316_20200926T071341_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T071341_20200926T071442_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T103724_20200926T103751_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T103751_20200926T104026_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).
CS_OFFL_SIR_FDM_2_20200926T191834_20200926T192016_C001.DBL	FOS Predicted Orbit (MPL_ORBPRES) used instead of the DORIS Navigator Orbit (DOR_NAV).

### 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:** 39

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20200926T000614_20200926T001748_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_20200926T002314_20200926T003210_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_20200926T005522_20200926T011141_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_20200926T011701_20200926T012948_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_20200926T014559_20200926T020113_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_20200926T020406_20200926T020617_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_20200926T023420_20200926T024244_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_20200926T032611_20200926T034909_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_20200926T050447_20200926T053100_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_20200926T053539_20200926T054235_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_20200926T064406_20200926T064749_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_20200926T071817_20200926T072149_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_20200926T073331_20200926T074238_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_20200926T074522_20200926T080642_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_20200926T091024_20200926T094528_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_20200926T104854_20200926T110318_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_20200926T110759_20200926T112445_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_20200926T120014_20200926T121529_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_20200926T123758_20200926T124650_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_20200926T124652_20200926T124820_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_20200926T132537_20200926T133302_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_20200926T133719_20200926T134208_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_20200926T134452_20200926T135039_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_20200926T145834_20200926T152138_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_20200926T154522_20200926T154749_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_20200926T155755_20200926T162129_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_20200926T163743_20200926T171021_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_20200926T172336_20200926T172505_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_20200926T172515_20200926T173036_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_20200926T173434_20200926T174320_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_20200926T174323_20200926T175258_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_20200926T181844_20200926T185015_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_20200926T195706_20200926T201800_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_20200926T202046_20200926T203213_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_20200926T210844_20200926T211841_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_20200926T213620_20200926T220623_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_20200926T222358_20200926T225632_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_20200926T231841_20200926T233024_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_20200926T233227_20200926T234259_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:** 10

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20200926T023420_20200926T024244_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20200926T035232_20200926T035819_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20200926T053233_20200926T053505_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20200926T071316_20200926T071341_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20200926T103724_20200926T103751_C001	Attitude correction missing	The attitude has not been corrected
CS_OFFL_SIR_FDM_2_20200926T104854_20200926T110318_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20200926T152831_20200926T153202_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20200926T154912_20200926T155356_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20200926T220628_20200926T221213_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo
CS_OFFL_SIR_FDM_2_20200926T234544_20200926T235200_C001	Echo error	The Echo Rx1 Error flag is set, indicating a degraded raw echo

## 6.6 L2 FDM Range Measurement Check

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

**Number of products with errors:** 31

Product	Test Failed	Description
CS_OFFL_SIR_FDM_2_20200926T002314_20200926T003210_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_20200926T005522_20200926T011141_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_20200926T014559_20200926T020113_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_20200926T023420_20200926T024244_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_20200926T032611_20200926T034909_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_20200926T050447_20200926T053100_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_20200926T053539_20200926T054235_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_20200926T053539_20200926T054235_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_20200926T055434_20200926T062633_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_20200926T071817_20200926T072149_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_20200926T073331_20200926T074238_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_20200926T074522_20200926T080642_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_20200926T091024_20200926T094528_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_20200926T100436_20200926T103619_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_20200926T104854_20200926T110318_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_20200926T110759_20200926T112445_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_20200926T114244_20200926T115532_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_20200926T120014_20200926T121529_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_20200926T123758_20200926T124650_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_20200926T124652_20200926T124820_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_20200926T132537_20200926T133302_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_20200926T133719_20200926T134208_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_20200926T134452_20200926T135039_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_20200926T135202_20200926T135412_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_20200926T142100_20200926T144155_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_20200926T145834_20200926T152138_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_20200926T154522_20200926T154749_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_20200926T155755_20200926T162129_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_20200926T163743_20200926T171021_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_20200926T172515_20200926T173036_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_20200926T173434_20200926T174320_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_20200926T174323_20200926T175258_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_20200926T181844_20200926T185015_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_20200926T193039_20200926T193905_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_20200926T195706_20200926T201800_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_20200926T202046_20200926T203213_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_20200926T210049_20200926T210656_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_20200926T213620_20200926T220623_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_20200926T220628_20200926T221213_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_20200926T222358_20200926T225632_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_20200926T231533_20200926T231838_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_20200926T231841_20200926T233024_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_20200926T233227_20200926T234259_C001	Ocean Retracking Quality Flag	The Ocean Retracking Quality Flag is set indicating the CFI Ocean Retracker was not successfully executed for one or more records.

## 7. QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors
SIR1LRM_0_	167	167	167	0	0
SIR1SAR_0_	100	100	100	0	0
SIR1SIN_0_	101	101	101	0	0
SIR2SIN_0_	107	107	107	0	0
SIR_FDM_1B	167	167	5	0	162
SIR_FDM_2	161	161	105	56	0

### 7.1 QCC Errors

Number of QCC reports with errors: 162

Total number of occurrences of each error

Product Type	UVOB	-	-	-	-	-	-	-	-	-
SIR_FDM_1B	162									

#### Test Description Key:

Abbreviation	Test name	Details
UVOB	UnitVectorOrBlank_6	The three array elements should form a unit vector (using a scale factor of 10 <sup>-6</sup> )

## 7.2 QCC Warnings

Number of QCC reports with warnings 183

Total number of occurrences of each warning

Product Type	MVSIO	MVSIOFD	RBSZO	RBSZOFD	RSSBCO	-	-	-	-	-	-
SIR_FDM_2_	39	48	37	44	15						

### Test Description Key:

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

## 7.3 Missing QCC Reports

Number of products with missing QCC reports: 0