

1. Overview

Report Production:	13-Jan-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

We would love to hear from you!

Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com

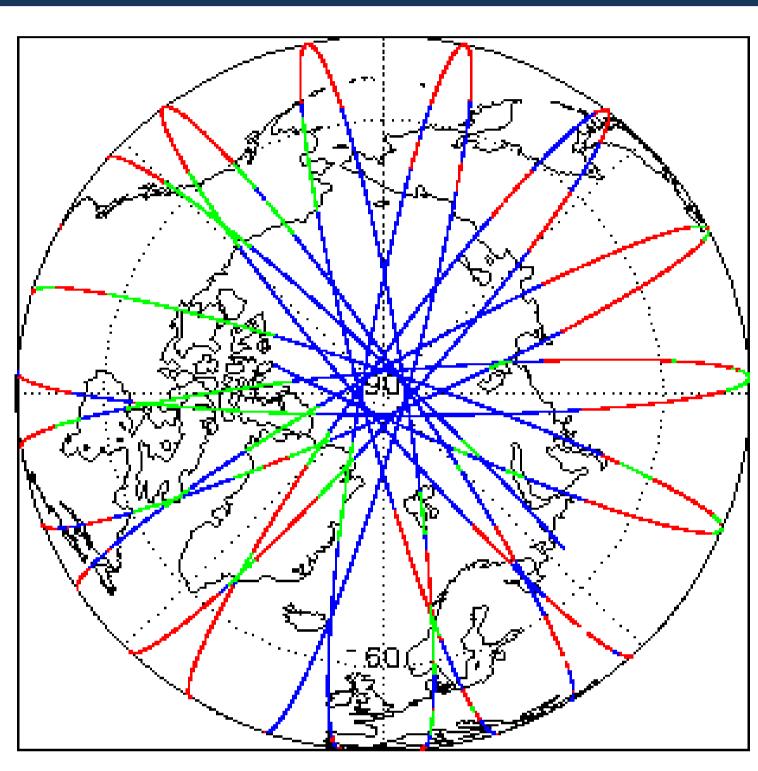
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

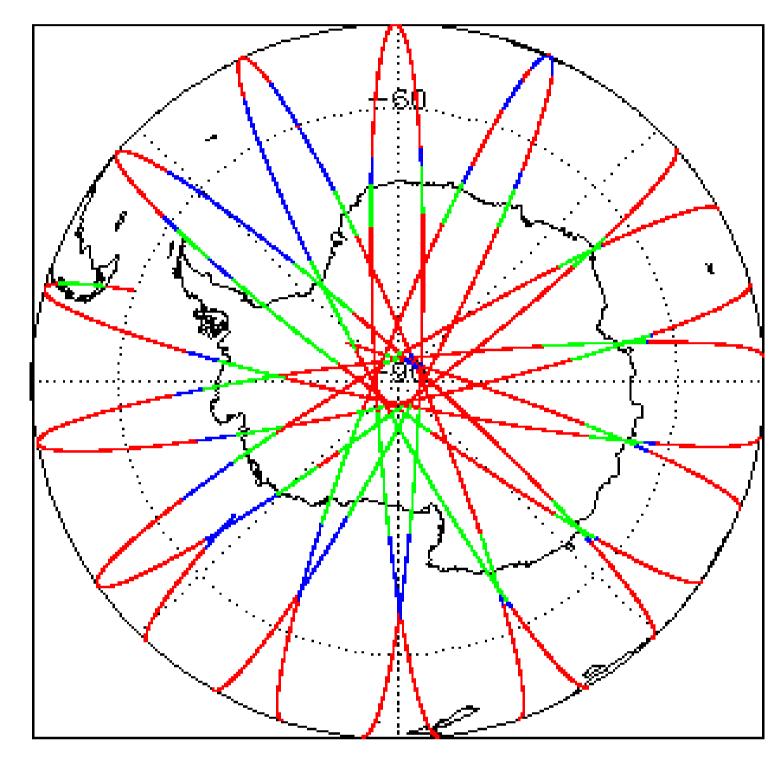
Mission / Instrument News		
09-Jan-2023	None	
10-Jan-2023	None	

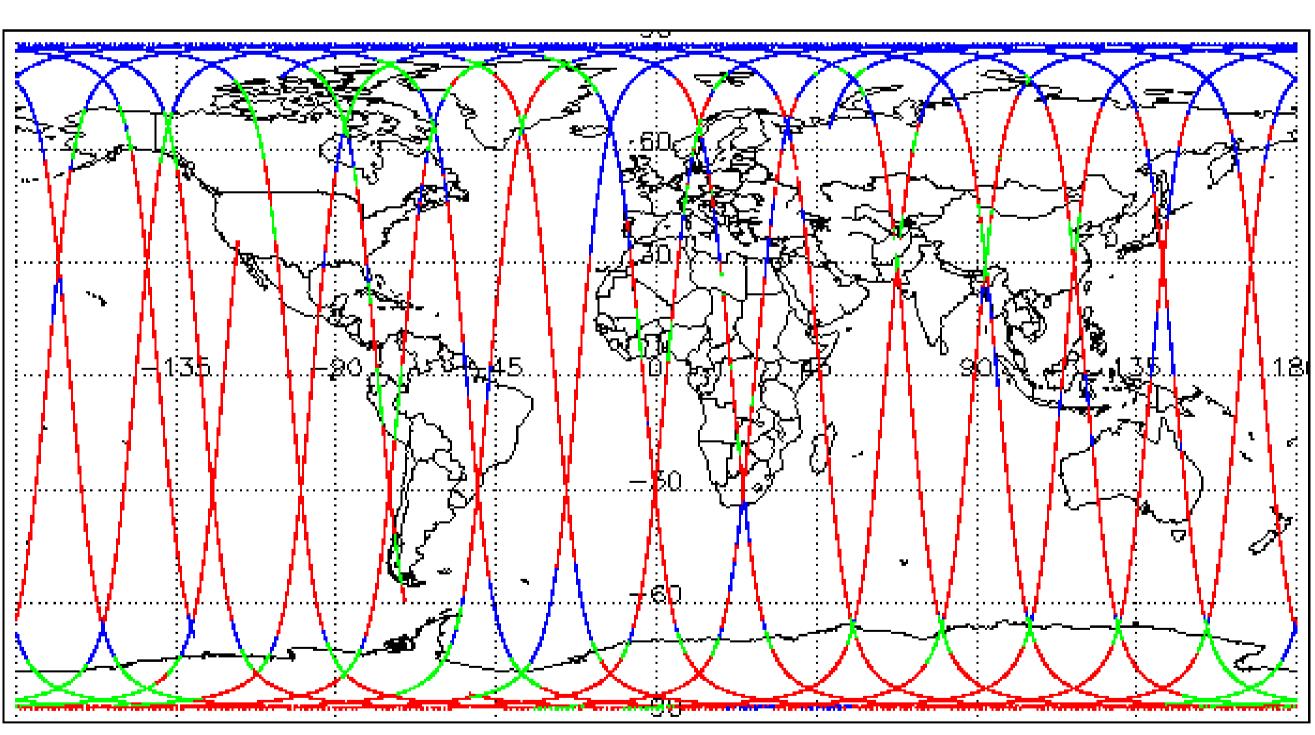
Nothing planned

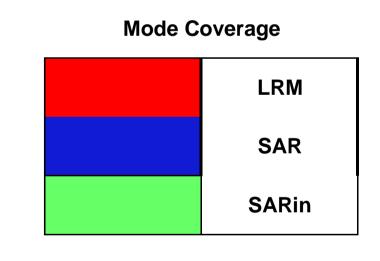
11-Jan-2023

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

4. IOP Level 1B Data Quality Check

4.1 L1B 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 NetCDF product file (.nc).

4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are performed 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:

4.3 L1B 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:

4.4 L1B Auxiliary Correction Error Check

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

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Number of products with errors:

4.5 L1B Measurement Confidence Data Check

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

> Attitude Correction Missing: This flag is currently set in error for IOPR products due to a configuration issue. The attitude correction is actually not missing. This will be resolved in the next SW update.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230110T191112_20230110T192133_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

4.6 L1B Waveform Group Data Check

CryoSat L1B data includes a waveform data flag for each measurement record. The bit value of this flag indicates any problems when set.

Loss of Echo Flag: This flag is currently set for products over land, but this is to be expected. The table provides the full list of products flagged.

Number of products with errors: 19

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230110T011045_20230110T011802_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230110T113610_20230110T120441_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230110T195827_20230110T200633_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T003539_20230110T003654_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T022546_20230110T022657_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T054321_20230110T054441_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T063649_20230110T063745_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T081551_20230110T081739_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T090149_20230110T090658_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T140310_20230110T140641_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T153259_20230110T153540_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T171339_20230110T171442_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T185142_20230110T185319_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230110T234340_20230110T234753_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230110T035235_20230110T035432_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230110T073143_20230110T073246_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230110T171442_20230110T172155_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230110T172422_20230110T172934_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230110T201644_20230110T201805_C001	Loss of Echo	The tracking echo is missing for one or more records

5. OP Level 2 Data Quality Check

5.1 L2 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 NetCDF product file (.nc).

Number of products with errors:

5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed 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:

5.3 L2 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:

5.4 L2 Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767).

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Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this test.

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230110T184507_20230110T184533_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPM_2_20230110T222015_20230110T222101_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T012742_20230110T012903_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T013431_20230110T013744_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T030713_20230110T030827_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T031329_20230110T031647_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230110T044805_20230110T045041_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T045234_20230110T045900_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T054321_20230110T054441_C001		There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T062555_20230110T062938_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T063649_20230110T063745_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T072235_20230110T072341_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T080537_20230110T080734_C001	iviean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T090149_20230110T090658_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230110T094511_20230110T094629_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T112640_20230110T112837_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230110T130423_20230110T130746_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T131311_20230110T131428_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T144324_20230110T144644_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T145203_20230110T145326_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T163041_20230110T163209_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T171339_20230110T171442_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T180759_20230110T181002_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T185319_20230110T185357_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230110T195453_20230110T195826_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20230110T202728_20230110T203229_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T212729_20230110T212938_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T220511_20230110T221053_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230110T234340_20230110T234753_C001		There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T003853_20230110T004626_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOPR_2_20230110T004945_20230110T005203_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T005542_20230110T005728_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T021409_20230110T022420_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T022421_20230110T022546_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T035624_20230110T040319_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T040320_20230110T041811_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T053605_20230110T054208_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T054208_20230110T054320_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T062451_20230110T062555_C001	Mean Sea Surface (1)	There is an error with the MSS height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T065506_20230110T065601_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T071550_20230110T071744_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T071804_20230110T072009_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T072009_20230110T072235_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T073143_20230110T073246_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T085602_20230110T090149_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T103704_20230110T104209_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T120504_20230110T120537_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T135450_20230110T140310_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T153540_20230110T154301_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T171442_20230110T172155_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T185357_20230110T190040_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T203230_20230110T203751_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T221053_20230110T221829_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPR_2_20230110T221829_20230110T222015_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230110T234753_20230110T235533_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

5.5 L2 Measurement Confidence Data Check

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230110T191112_20230110T192133_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more
C3_OFFL_3IK_IOFIWI_Z_202301101191112_202301101192133_C001	Fower scaling error	records

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20 Hz)

CryoSat L2 data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

- > Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags: These flags are currently set for some records over ocean.
- > OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

89

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230110T000136_20230110T003538_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T004823_20230110T004945_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T012051_20230110T012214_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T012413_20230110T012703_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T012904_20230110T013430_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T014024_20230110T020412_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T020518_20230110T021408_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T024638_20230110T030619_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T030827_20230110T031329_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T031933_20230110T035234_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T041812_20230110T044107_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T045918_20230110T051128_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T051154_20230110T051509_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T052137_20230110T053010_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T053556_20230110T053604_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T054903_20230110T060543_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T060754_20230110T062225_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T063834_20230110T065100_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T065148_20230110T065400_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T065601_20230110T070523_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T073347_20230110T074315_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T075010_20230110T080440_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T080734_20230110T081551_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

DO CHELER LIPINE 2 2020 (CHESTER LIPIDE HIS CORD CHESTER LIPIDE HIS CORD CHESTER LIPIDE LIPIDE LIPIDE LIPIDE HIS CORD CHESTER LIPIDE	CS_OFFL_SIR_IOPM_2_20230110T081808_20230110T083438_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
Column C	CS_OFFL_SIR_IOPM_2_20230110T083720_20230110T083931_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
### COLOR Allines Register (Augs) COLOR Allines Register (Bases) And COLOR Allines Reg	CS_OFFL_SIR_IOPM_2_20230110T085026_20230110T085447_C001		l.
Control Cont	CS_OFFL_SIR_IOPM_2_20230110T091651_20230110T094400_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Deep Light CHP 2 2000110**10391 2000110**10393 CCC Object All read Support Charge Cha	CS_OFFL_SIR_IOPM_2_20230110T094912_20230110T095419_C001		l.
Section of the Company of the Comp	CS_OFFL_SIR_IOPM_2_20230110T095708_20230110T102228_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_OPM_2_202001107119512_0200110711958_0001 CS_OFFL_SIR_OPM_2_20200110711958_0001 CS_OFFL_SIR_OPM_2_2020011071197_0001 CS_	CS_OFFL_SIR_IOPM_2_20230110T102515_20230110T103129_C001		
Beabacter Coasily CS OFFL SIR (CPM 2 202001107112029 2020110713049 C001 CS OFFL SIR (CPM 2 20200110713049 C001) CS OFFL SIR (CPM 2 20200110714059 C002) CS O	CS_OFFL_SIR_IOPM_2_20230110T105413_20230110T112150_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sociation Coulty CS_OFFL_SR_JOPM_2_20230110T119510_20220110T12041_Coult Ocean Antmorte Renga, SSHA_SVY- and Sociation Coulty Cool Altreder Renga and Selected	CS_OFFL_SIR_IOPM_2_20230110T112554_20230110T112639_C001		
and fluid-screener Quality, QCCC GS_OFFI_SIR_JOPPI_2_202301107121298_202301107121426_CO11 CS_OFFI_SIR_JOPPI_2_202301107121298_202301107121426_CO11 CS_OFFI_SIR_JOPPI_2_20230110712978_20230110713130_CO11 CS_OFFI_SIR_JOPPI_2_202301107130748_20230110713130_CO11 CS_OFFI_SIR_JOPPI_2_202301107130748_20230110713130_CO11 CS_OFFI_SIR_JOPPI_2_202301107130748_202301107130748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107130748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_20230110714078_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_20230110714078_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_20230110714078_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_20230110714078_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_20230110714078_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_202301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_CO2301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_CO2301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_CO2301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_CO2301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_CO2301107140748_CO11 CS_OFFI_SIR_JOPPI_2_202301107140748_CO23011071407	CS_OFFL_SIR_IOPM_2_20230110T112837_20230110T113439_C001		
and backscater Quality. OCOG Altimeter Range and Sackscater Quality. Flags have been altimeter Range. SIRL, SIXH and Backscater Quality. SIXH and Backscater Qual	CS_OFFL_SIR_IOPM_2_20230110T113610_20230110T120441_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Althreef Range and Backscatter Quality (CS) GFEL SIR I/OPM 2 20230110T130748 20230110T131310 C001 CS OFFL SIR I/OPM 2 20230110T140726 20230110T14050 C001 CS OFFL SIR I/OPM 2 20230110T14050 20230110T14050 C001 CS OFFL SIR I/OPM 2 20230110T16064 20230110T160641 C001 CS OFFL SIR I/OPM 2 20230110T16064 20230110T160641 C001 CS OFFL SIR I/OPM 2 20230110T16064 20230110T16064 C001 CS OFFL SIR I/OPM 2 20230110T16064 20230110T160641 C001 CS OFFL SIR I/OPM 2 20230110T16064 20230110T160641 C001 CS OFFL SIR I/OPM 2 20230110T16064 20230110T160641 C001 CS OFFL SIR I/OPM 2 20230110T160684 20230110T160641 C001 CS OFFL SIR I/OPM 2 202	CS_OFFL_SIR_IOPM_2_20230110T121236_20230110T121425_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
ES_OFFL_SIR_IOPM_2_20230110T131611_20230110T132103_C001 CS_OFFL_SIR_IOPM_2_20230110T131611_20230110T132103_C001 CS_OFFL_SIR_IOPM_2_20230110T135126_20230110T135450_C001 CS_OFFL_SIR_IOPM_2_20230110T135126_20230110T14550_C001 CS_OFFL_SIR_IOPM_2_20230110T140752_20230110T14050_C001 CS_OFFL_SIR_IOPM_2_20230110T140755_20230110T14050_C001 CS_OFFL_SIR_IOPM_2_20230110T140755_20230110T145203_C001 CS_OFFL_SIR_IOPM_2_20230110T140755_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CCS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C001 CCS_OFFL_SIR_IOPM_2_20230110T162169_20230110T163041_C	CS_OFFL_SIR_IOPM_2_20230110T122743_20230110T130128_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality (CCG) Altimeter Range (CCG) Alti	CS_OFFL_SIR_IOPM_2_20230110T130746_20230110T131310_C001		·
and the OCOG Altimeter Range and Backscatter Quality Flags have been altimeter Range (SFL SIR JOPM 2 20230110T140726 20230110T141550 CO01 CS OFFL SIR JOPM 2 20230110T141835 20230110T144050 CO01 CS OFFL SIR JOPM 2 20230110T141835 20230110T144500 CO01 CS OFFL SIR JOPM 2 20230110T144755 20230110T145203 CO01 CS OFFL SIR JOPM 2 20230110T14505 20230110T14500 CO01 CS OFFL SIR JOPM 2 20230110T14506 20230110T150844 CO01 CS OFFL SIR JOPM 2 20230110T150854 20230110T150844 CO01 CS OFFL SIR JOPM 2 20230110T150854 20230110T151338 CO01 CS OFFL SIR JOPM 2 20230110T150854 20230110T161931 CO01 CS OFFL SIR JOPM 2 20230110T164008 20230110T161931 CO01 CS OFFL SIR JOPM 2 20230110T16259 20230110T162649 CO01 CS OFFL SIR JOPM 2 20230110T162709 20230110T163041 CO01 CS OFFL SIR JOPM 2 20230110T163749 20230110T1770917 CO01 CS OFFL SIR JOPM 2 2023	CS_OFFL_SIR_IOPM_2_20230110T131511_20230110T132103_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, CCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range Quality Flags have been Altimeter Range Altimeter Range Quality Flags have been Altimeter Range Rang	CS_OFFL_SIR_IOPM_2_20230110T135126_20230110T135450_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
S_OFFL_SIR_IOPM_2_20230110T144835_20230110T144050_C001 Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Set for one or more records CS_OFFL_SIR_IOPM_2_20230110T145405_20230110T145203_C001 CS_OFFL_SIR_IOPM_2_20230110T145405_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T151338_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T151338_C001 CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T151338_C001 CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T15259_20230110T162549_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T1776375_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T1763749_20230110T17763749_20230110T17763749_20230110T17763749_20230110T17776375_20230110T177777775_20100000000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230110T140726_20230110T141550_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20230110T145405_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T145405_20230110T150844_C001 CS_OFFL_SIR_IOPM_2_20230110T160854_20230110T151338_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T161338_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T161338_C001 CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161331_C001 CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162159_20230110T162649_C001 CS_OFFL_SIR_IOPM_2_20230110T162159_20230110T162649_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T1770917_C001 CS_OFFL_	CS_OFFL_SIR_IOPM_2_20230110T141835_20230110T144050_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality SHA, SWH and Backscatter Quality COG Altimeter Range and Backscatter Quality Set for one or more records CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T151338_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T151338_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162159_20230110T162649_C001 CS_OFFL_SIR_IOPM_2_20230110T162159_20230110T162649_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 COGG Altimeter Range Quality, OCOG Backscatter Quality SHA SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 COGG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 COGG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 COGG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230110T144755_20230110T145203_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161931_C001 CS_OFFL_SIR_IOPM_2_20230110T162649_C001 CS_OFFL_SIR_IOPM_2_20230110T162159_20230110T162649_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL	CS_OFFL_SIR_IOPM_2_20230110T145405_20230110T150844_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161931_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Backscatter Quality Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T171035_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_I	CS_OFFL_SIR_IOPM_2_20230110T150854_20230110T151338_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20230110T162799_20230110T163041_C001 Backscatter Quality CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 CS_OFFL_SIR_IOPM_2_20230110T171035_20230110T171112_C001 CS_OFFL_SIR_IOPM_2_20230110T171035_20230110T171112_C001 CS_OFFL_SIR_IOPM_2_20230110T171035_20230110T171112_C001 CS_OFFL_SIR_IOPM_2_20230110T171035_20230110T171112_C001	CS_OFFL_SIR_IOPM_2_20230110T154608_20230110T161931_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set OCOG Altimeter Range and Backscatter Quality, OCOG The OCOG Altimeter Range and Backscatter Quality Flags have been set	CS_OFFL_SIR_IOPM_2_20230110T162159_20230110T162649_C001		
CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range and Backscatter Quality Flags have been set occurred by the ocog Altimeter Range	CS_OFFL_SIR_IOPM_2_20230110T162709_20230110T163041_C001		
CS OFFE SIR IOPM 2 202301101171035 202301101171112 C001	CS_OFFL_SIR_IOPM_2_20230110T163749_20230110T170917_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPM_2_20230110T171035_20230110T171112_C001		, ,

CS_OFFL_SIR_IOPM_2_20230110T172935_20230110T173631_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T174112_20230110T174159_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T174202_20230110T175845_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T180035_20230110T180548_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T180608_20230110T180620_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T181554_20230110T182928_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T183308_20230110T184332_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T190556_20230110T190615_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T191112_20230110T192133_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T192313_20230110T193740_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T194000_20230110T194500_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T194507_20230110T194518_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T194525_20230110T194534_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T194539_20230110T194640_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T195334_20230110T195453_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T195827_20230110T200633_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T201033_20230110T201521_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T203859_20230110T204239_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T205412_20230110T211710_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T212033_20230110T212418_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T213033_20230110T215818_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T223104_20230110T225639_C001	•	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T225816_20230110T230333_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T230340_20230110T230706_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20230110T231039_20230110T234339_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T003735_20230110T003852_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_IOPN_2_20230110T013431_20230110T013744_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T062555_20230110T062938_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T084236_20230110T084623_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T145203_20230110T145326_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T193812_20230110T193959_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T220511_20230110T221053_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T230706_20230110T230829_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T004638_20230110T004822_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T053032_20230110T053035_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T053254_20230110T053303_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T091548_20230110T091650_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T154446_20230110T154448_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T203810_20230110T203859_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

L2 Quality Flags (20 Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below. The table provides the full list of products flagged.

- > Ocean Altimeter Range, SSHA, SWH and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over sea ice.
- > OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20230110T003735_20230110T003852_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T011002_20230110T011045_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T012742_20230110T012903_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T022914_20230110T022920_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T023405_20230110T023556_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T024355_20230110T024638_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T045234_20230110T045900_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T054321_20230110T054441_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T063649_20230110T063745_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_IOPN_2_20230110T072235_20230110T072341_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T072707_20230110T072859_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T074454_20230110T075009_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T080537_20230110T080734_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T081551_20230110T081739_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T084236_20230110T084623_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T090149_20230110T090658_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T095419_20230110T095702_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T103501_20230110T103532_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T103644_20230110T103704_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T113439_20230110T113609_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T151338_20230110T151703_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T153259_20230110T153540_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T161958_20230110T162158_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T170931_20230110T171035_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T171339_20230110T171442_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T175857_20230110T180034_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T184834_20230110T184936_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T185142_20230110T185319_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T190830_20230110T191111_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T195453_20230110T195826_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T200633_20230110T201033_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T202728_20230110T203229_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T204336_20230110T204339_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T204834_20230110T205234_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230110T215917_20230110T220130_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records

District Clinic Clinic APP AT EXCENTION 2019 (1970 DISTRICT CLINIC State Sept. 29.19 Fig. District Clinic APP AT EXCENTION 2019 (1970 DISTRICT CLINIC State Sept. 29.19 Fig. District Clinic APP AT EXCENTION 2019 (1970 DISTRICT CLINIC State Sept. 2019 Fig. District Clinic APP AT EXCENTION 2019 (1970 DISTRICT CLINIC State Sept. 2019 Fig. District Clinic APP AT EXCENTION 2019 (1970 DISTRICT CLINIC State Sept. 2019 Fig. District Clinic APP AT EXCENTION 2019 (1970 DISTRICT CLINIC State Sept. 2019	CS_OFFL_SIR_IOPN_2_20230110T220511_20230110T221053_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
Compage Comp	CS_OFFL_SIR_IOPN_2_20230110T223014_20230110T223103_C001		
Bod President Code President Supplement Resident (1997) Bod	CS_OFFL_SIR_IOPN_2_20230110T234340_20230110T234753_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Col. OFF. SIR IONR 2 MOSC STOCK STOCK SIR IONR 2 MOSC STOCK SIR IONR 2 M	CS_OFFL_SIR_IOPN_2_20230110T235533_20230110T235608_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Col. OFFL S. DOP 2_00001101010743. ADDITION OF STATE Col. OFFL S. DOP 2_000011010744. Col.	CS_OFFL_SIR_IOPR_2_20230110T003853_20230110T004626_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
23. OFFL S R JOPPL 2 02200113102216 202201 OTES262 COD	CS_OFFL_SIR_IOPR_2_20230110T005838_20230110T010121_C001		
25. OFFL. SIR. LOPR. 2. 20200110702249 2. 20200110702345 C. DOI 26. OFFL. SIR. LOPR. 2. 20200110702249 2. 20200110702345 C. DOI 26. OFFL. SIR. LOPR. 2. 20200110702249 2. 20200110702345 C. DOI 26. OFFL. SIR. LOPR. 2. 20200110702249 2. 20200110702345 C. DOI 26. OFFL. SIR. LOPR. 2. 20200110702249 2. 20200110702345 C. DOI 27. OFFL. SIR. LOPR. 2. 20220110702345 2. 20200110702345 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702345 2. 20200110702345 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702345 2. 2020011070235 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702345 2. 2020011070235 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702342 2. 2020011070235 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702341 2. 2020011070235 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702341 2. 2020011070235 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702352 2. 2020011070235 C. DOI 28. OFFL. SIR. LOPR. 2. 20220110702352 2. 2020011070235 C. DOI 29. OFFL. SIR. LOPR. 2. 20220110702352 2. 2020011070235 C. DOI 20. OFFL. SIR. LOPR. 2. 20220110702410 C. 2020011070235 C. DOI 20. OFFL. SIR. LOPR. 2. 20220110702410 C. 2020011070235 C. DOI 20. OFFL. SIR. LOPR. 2. 20220110702410 C. 2020011070235 C. DOI 20. OFFL. SIR. LOPR. 2. 2022011070240 C. DOI 20. OFFL. SIR	CS_OFFL_SIR_IOPR_2_20230110T012703_20230110T012742_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OPT_SIR_OPT_2.2020110703214_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_20201107123147_CD1 CS_OPT_SIR_OPT_2.2020110703215_2020110712312_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110712312_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110712312_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110712312_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110712312_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110712312_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110712323_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110713233_CD1 CS_OPT_SIR_OPT_2.2020110703213_2020110	CS_OFFL_SIR_IOPR_2_20230110T021409_20230110T022420_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Company	CS_OFFL_SIR_IOPR_2_20230110T022421_20230110T022546_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCCO Statisticates Quality PLBM,	CS_OFFL_SIR_IOPR_2_20230110T023151_20230110T023342_C001		
and Backscater Quality PLRN. COOR Affects R (10PR 2 20220110704107 20220110704408, COO1 Sept. SR (10PR 2 20220110704107 20220110704408, COO1 CS_OFFL_SR_(10PR 2 20220110704107 20220110704408, COO1 CS_OFFL_SR_(10PR 2 20220110704107 20220110704408, COO1 CS_OFFL_SR_(10PR 2 202201107053131 20220110705334 COO1 CS_OFFL_SR_(10PR 2 20220110705344 COO1 CS_OFFL_SR_(10PR 2 20220110705344 COO1 CS_OFFL_SR_(10PR 2 20220110705304 COO1 CS_OFFL_SR_(10PR 2 20220110705400 CO020011070545 COO1 CS_OFFL_SR_(10PR 2 20220110705400 CO02001107054 COO1 CS_OFFL_	CS_OFFL_SIR_IOPR_2_20230110T035235_20230110T035432_C001		
CS_OFFL_SIR_IOPR_2_20230110T04107_20230110T04406_C001 Allercord Range and Backscarter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20230110T054324_20230110T05432_C001 CS_OFFL_SIR_IOPR_2_20230110T054202_20230110T05432_C001 CS_OFFL_SIR_IOPR_2_20230110T054202_20230110T05432_C001 CS_OFFL_SIR_IOPR_2_20230110T054202_20230110T05432_C001 CS_OFFL_SIR_IOPR_2_20230110T054002_20230110T07440_C001 CS_OFFL_SIR_IOPR_2_20230110T072002_20230110T072706_C001 CS_OFFL_SIR_IOPR_2_20230110T072002_20230110T072706_C001 CS_OFFL_SIR_IOPR_2_20230110T072002_20230110T072706_C001 CS_OFFL_SIR_IOPR_2_20230110T072002_20230110T072004_C001 CS_OFFL_SIR_IOPR_2_20230110T072004_C00230110T072004_C001 CS_OFFL_SIR_IOPR_2_20230110T072004_C00230110T072004_C001 CS_OFFL_SIR_IOPR_2_20230110T004000_20230110T004010_C001 CS_OFFL_SIR_IOPR_2_20230110	CS_OFFL_SIR_IOPR_2_20230110T035624_20230110T040319_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS_OFFL_SIR_IOPR_2_20230110T054311_20230110T053234_C001 and Backscatter Quality PLRM, OCOS Altments Range and Backscatter Quality Plags have been set for one or	CS_OFFL_SIR_IOPR_2_20230110T044107_20230110T044805_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, COCG Altmeter Range and Backscatter Quality PLRM CS_OFFL_SIR_IOPR_2_20230110T080544_20230110T080753_C001 CS_OFFL_SIR_IOPR_2_20230110T080544_20230110T071744 C001 CS_OFFL_SIR_IOPR_2_20230110T071550_20230110T071744 C001 CS_OFFL_SIR_IOPR_2_20230110T071550_20230110T071744 C001 CS_OFFL_SIR_IOPR_2_20230110T072009_20230110T072235_C001 CS_OFFL_SIR_IOPR_2_20230110T072009_20230110T072235_C001 CS_OFFL_SIR_IOPR_2_20230110T072009_20230110T072235_C001 CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072235_C001 CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072235_C001 CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072706_C001 CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072706_C001 CS_OFFL_SIR_IOPR_2_20230110T072500_20230110T072954 C001 CS_OFFL_SIR_IOPR_2_20230110T083831_20230110T084137_C001 CS_OFFL_SIR_IOPR_2_20230110T088831_20230110T084137_C001 CS_OFFL_SIR_IOPR_2_20230110T088831_20230110T089542_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T089554_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T086400_20230110T086500_C001 CS_OFFL_SIR_IOPR_2_20230110T	CS_OFFL_SIR_IOPR_2_20230110T053131_20230110T053234_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20230110T071550_20230110T071744_C001 OCOG Altimeter Range Quality PLRM. OCOG Backscatter Quality OCean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T0843931_20230110T094197_C001 CS_OFFL_SIR_IOPR_2_20230110T086602_20230110T090149_C001 CS_OFFL_SIR_IOPR_2_20230110T086602_20230110T090149_C001 Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T090149_20230110T090984_C001 CS_OFFL_SIR_IOPR_2_20230110T090149_20230110T090984_C001 Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T09410_20230110T094510_C001 Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T09410_20230110T094510_C001 Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T09410_20230110T094510_C001 Altimeter	CS_OFFL_SIR_IOPR_2_20230110T054208_20230110T054320_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20230110T072295_C001 CS_OFFL_SIR_IOPR_2_20230110T072295_C001 CS_OFFL_SIR_IOPR_2_20230110T072295_C001 CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072706_C001 CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072954_C001 CS_OFFL_SIR_IOPR_2_20230110T072900_20230110T072954_C001 CS_OFFL_SIR_IOPR_2_20230110T093931_20230110T092954_C001 CS_OFFL_SIR_IOPR_2_20230110T093931_20230110T094400_20230110T094400_20230110T09954_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090954_C001 CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 All interter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 All interter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T121236_C00	CS_OFFL_SIR_IOPR_2_20230110T060544_20230110T060753_C001		
CS_OFFL_SIR_IOPR_2_20230110T07209_20230110T072235_C001 And Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T083931_20230110T084137_C001 CS_OFFL_SIR_IOPR_2_20230110T086602_20230110T090149_C001 Altimeter Range and Backscatter Quality Flags, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and Backs	CS_OFFL_SIR_IOPR_2_20230110T071550_20230110T071744_C001		
and Backscatter Quality PLRM, COG Altimeter Range and Backscatter Quality PLRM and Backscatter Quality	CS_OFFL_SIR_IOPR_2_20230110T072009_20230110T072235_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Altimeter Range and Backscatter Quality PLRM. OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T083931_20230110T084137_C001 CS_OFFL_SIR_IOPR_2_20230110T085602_20230110T090149_C001 CS_OFFL_SIR_IOPR_2_20230110T085602_20230110T090149_C001 CS_OFFL_SIR_IOPR_2_20230110T085602_20230110T090149_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T09054_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T09054_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T09054_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090554_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090554_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090554_C001 CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 CS_OFFL_SIR_IOPR_2_20230110T19056_20230110T19121236_C001 CS_OFFL_SIR_IOPR_2_20230110T19121256_2001 CS_OFFL_SIR_IOPR_2_20230110T1211256_200230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T1211256_20030110T122412_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_2023011	CS_OFFL_SIR_IOPR_2_20230110T072519_20230110T072706_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20230110T085602_20230110T090149_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090149_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090954_C001 CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090954_C001 CS_OFFL_SIR_IOPR_2_20230110T0904400_20230110T094510_C001 CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001 OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG	CS_OFFL_SIR_IOPR_2_20230110T072900_20230110T072954_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090954_C001 CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001 And Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001	CS_OFFL_SIR_IOPR_2_20230110T083931_20230110T084137_C001		
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001 CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001 CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Al	CS_OFFL_SIR_IOPR_2_20230110T085602_20230110T090149_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	
and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Qua	CS_OFFL_SIR_IOPR_2_20230110T090713_20230110T090954_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range and Backscatter Quality PLRM ocog and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backs	CS_OFFL_SIR_IOPR_2_20230110T094400_20230110T094510_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001 and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Plags Altimeter Range and Backscatter Quality Set for one or more records	CS_OFFL_SIR_IOPR_2_20230110T121056_20230110T121236_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPR_2_20230110T121425_20230110T122412_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPR_2_20230110T130128_20230110T130423_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T134753_20230110T135019_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T135450_20230110T140310_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T144751_20230110T144754_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T152713_20230110T153259_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T153540_20230110T154301_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T154311_20230110T154324_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T171442_20230110T172155_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T172422_20230110T172934_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T182929_20230110T183019_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T183021_20230110T183308_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T184533_20230110T184833_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T185357_20230110T190040_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T201644_20230110T201805_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T202515_20230110T202728_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T203230_20230110T203751_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T203810_20230110T203859_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T221053_20230110T221829_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T221829_20230110T222015_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T230830_20230110T231038_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPR_2_20230110T234753_20230110T235533_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

L2 Quality Flags (1 Hz & 1 Hz PLRM)

Currently, there are several common flags raised in the Level 2 products, which are summarised below.

> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected. The number of products with this error flag set is given below.

Number of products with errors: 196

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20 Hz)

CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.

> Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.

Number of products with errors:

59

L2 Retracking Flags (20 Hz PLRM)

Number of products with errors:

6. IOP L2 Pole-to-Pole Data Quality Check

6.1 P2P 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 NetCDF product file (.nc).

Number of products with errors:

6.2 P2P Product Header Analysis

For all products, a series of pre-defined checks are performed 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:

6.3 P2P 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:

6.4 P2P Auxiliary Correction Error Check

For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767).

0

151

0

0

Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below, followed by a table highlighting any additional issues which may arise from this check.

- > ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.
- > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.
- > Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected.
- > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220230109T235413_20230110T004350_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T004350_20230110T013327_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T013327_20230110T022305_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T022305_20230110T031242_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T031242_20230110T040219_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230110T040219_20230110T045156_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T045156_20230110T054134_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T054134_20230110T063111_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220230110T063111_20230110T072049_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T072049_20230110T081026_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T081026_20230110T090003_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T090003_20230110T094941_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230110T094941_20230110T103918_C001	` '	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T103918_20230110T112855_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230110T112855_20230110T121833_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T121833_20230110T130810_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T130810_20230110T135747_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

CS_OFFL_SIR_IOP_220230110T135747_20230110T144725_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T144725_20230110T153702_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230110T153702_20230110T162639_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T162639_20230110T171617_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T171617_20230110T180554_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T180554_20230110T185531_C001	11100 N3C11 1012 C3CCCCCCCCCCCCCC	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230110T185531_20230110T194508_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T194508_20230110T203446_C001		There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), and tidal corrections for one or more records
CS_OFFL_SIR_IOP_220230110T203446_20230110T212423_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T212423_20230110T221401_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T221401_20230110T230338_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220230110T230338_20230110T235315_C001	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_220230110T235315_20230111T004253_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

6.5 P2P Measurement Confidence Data Check

CryoSat P2P data includes a measurement confidence flag for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

ProductTest FailedDescriptionCS_OFFL_SIR_IOP_2_20230110T185531_20230110T194508_C001Power scaling errorThere is an error in the scaling of the L1B waveform for one or more records

6.6 P2P Measurement Quality Flag Check

P2P Quality Flags (20 Hz)

CryoSat P2P data includes Quality Flags for each 20 Hz, 20 Hz PLRM and 1 Hz measurement record, copied from the corresponding L2 products.

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected. The number of P2P products affected is given below.

Number of products with errors: 29

P2P Quality Flags (20 Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected. The number of P2P products affected is given below.

Number of products with errors: 29

P2P Quality Flags (1 Hz & 1 Hz PLRM)

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the number of L2 products affected. The number of P2P products affected is given below.

Number of products with errors: 30

6.8 P2P Ocean Retracking Quality Check

P2P Retracking Flags (20 Hz)

Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.

> Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors: 29

P2P Retracking Flags PLRM

CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz PLRM measurement record. The bit value of this flag indicates any problems when set.

> Ocean Retracking Quality Flag (PLRM): This flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.

Number of products with errors:

30

7. IOP 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
SIR_IOPM1B	183	183	2	181	0
SIR_IOPR1B	142	96	1	95	0
SIR_IOPN1B	96	142	0	142	0
SIR_IOPM_2	183	183	131	52	0
SIR_IOPR_2	142	96	30	65	1
SIR_IOPN_2	96	142	59	83	0
SIR_IOP_P2P	29	29	0	28	1

7.1 QCC Errors

Number of QCC reports with errors:

10

Total	numbe	r of occ	currence	es of e	each erro	r

Product Type	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_IOPN_2	1	1	1	1	1	1					
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOP_2_	1	1	1	1							

Test Description Key:					
Abbreviation	Test name	Details			
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7			
RL	RangeLatitude_6	Latitude should be between -90E6 and 90E6			
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7			
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7			
RL	RangeLongitude_6	Longitude should be between -180E6 and 180E6			
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7			

7.2 QCC Warnings

Number of QCC reports with warnings

2204

Total number of occurrences of each warning

Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_IOPM1B	181	0	0	0	0	0	0
SIR_IOPM_2	0	0	39	42	1	40	0
SIR_IOPN1B	94	0	0	0	0	0	0
SIR_IOPN_2	0	1	15	35	7	29	27
SIR_IOPR1B	136	0	0	0	0	0	0
SIR IOPR 2	0	0	25	45	0	26	18

Product Type	RBSZOPOEPNCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCD	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	34	34	0	0	0	0	23
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	21	0	0	26	0	32	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	8	0	50	0	58	0	0

	Product Type	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF
	SIR_IOPM1B	0	0	0	0	0	0	0
	SIR_IOPM_2	0	0	4	24	0	4	33
	SIR_IOPN1B	0	0	0	0	0	0	0
	SIR_IOPN_2	0	30	11	48	50	24	30
	SIR_IOPR1B	0	0	0	0	0	0	0
	SIR IOPR 2	51	0	5	59	37	15	27

Product Type	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_IOPM1B	0	0	0	1	0	0	0
SIR_IOPM_2	0	2	0	1	0	0	0
SIR_IOPN1B	0	0	0	0	0	46	1
SIR_IOPN_2	32	15	1	0	2	0	0
SIR_IOPR1B	0	0	0	0	0	142	8
SIR_IOPR_2	49	3	0	0	1	0	0

Produc	t Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
SIR_IC)P_2_	16	28	29	8	27	18	27

Product Type	RPEPOPFDPLRMSINNCDI	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOP_2_	118	78	25	16	29	18	24
					•		

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-	-
SIR_IOP_2_	28	18	15	29			

Test Description Key:							
Abbreviation	Test name	Details					
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter					
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)					
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only					
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					

RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports:

0