

QA4EO Daily Report for IOP data:

<u>12/04/2023</u>

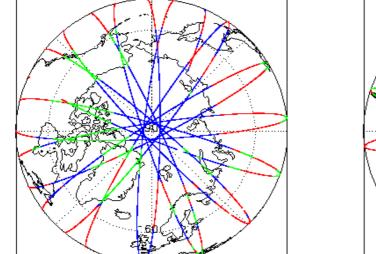
IDEAS-QA4E0

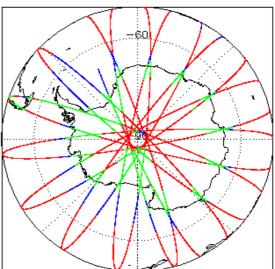
Demont Dreduction.	17 4 2022	Check	L1 & L2	P2P
Report Production:	17-Apr-2023	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used: CrvoSat Ocean Processor		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor useu:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP)	Product Format Check	Nominal	Nominal
L1B, L2 & P2F	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
We would	love to hear from you!	Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
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_gc_team@telespazio.com		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

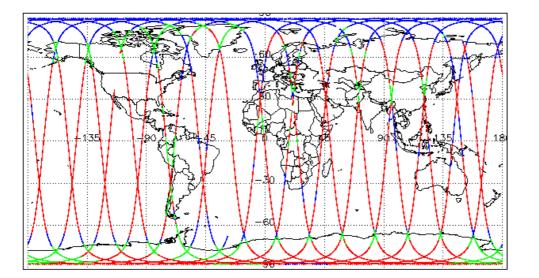
1. Overview

	Mission / Instrument News				
	11-Apr-2023 None				
12-Apr-2023 13-Apr-2023		None			
		Nothing planned			













3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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

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: 0					
4.3 L1B Auxilary Data File Usage Check					
Each product is checked for missing Data Set Descriptors with respect to a pre-de	etermined baseline and also to che	ck the validity of Auxiliary Data Files is correct.			
Number of products with errors: 0					
4.4 L1B Auxiliary Correction Error Check					
CryoSat L1B data includes a correction error flag for each measurement record. T	he bit value of this flag indicates a	ny problems when set.			
Number of products with errors: 0					
4.5 L1B Measurement Confidence Data Check					
CryoSat L1B data includes a measurement confidence flag for each measurement	t record. The bit value of this flag i	ndicates 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: 1					
Product	Test Failed	Description			
CS_OFFL_SIR_IOPM1B_20230412T133036_20230412T134341_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 second s	he bit value of this flag indicates a	ny 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: 18					

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230412T024731_20230412T025846_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230412T085444_20230412T085610_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230412T103643_20230412T103826_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230412T143724_20230412T145159_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230412T152612_20230412T152934_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T000648_20230412T001222_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T023644_20230412T023752_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T031055_20230412T031428_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T064848_20230412T065011_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T090517_20230412T090621_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T122749_20230412T122856_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T132219_20230412T132415_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T150054_20230412T150545_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230412T150551_20230412T150747_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230412T072513_20230412T072719_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230412T103827_20230412T104141_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230412T154650_20230412T155304_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230412T182240_20230412T182424_C001	Loss of Echo	The tracking echo is missing for one or more records

5. IOP 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: 0

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).

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 Corection, 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.

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Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230412T142519_20230412T143545_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_IOPM_2_20230412T173412_20230412T173513_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_20230412T000216_20230412T000451_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_20230412T000648_20230412T001222_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_20230412T005737_20230412T010235_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_20230412T014114_20230412T014356_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_20230412T023644_20230412T023752_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_20230412T031055_20230412T031428_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_20230412T041601_20230412T042156_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_IOPN_2_20230412T050848_20230412T051114_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_20230412T055615_20230412T060019_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_20230412T063820_20230412T064002_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_20230412T081830_20230412T082200_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_20230412T095742_20230412T100103_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_20230412T104807_20230412T104950_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_20230412T114517_20230412T114626_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_20230412T122749_20230412T122856_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_20230412T132219_20230412T132415_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_20230412T140555_20230412T140811_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_20230412T150054_20230412T150545_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_20230412T163132_20230412T163430_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_20230412T164058_20230412T164346_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_20230412T172403_20230412T172513_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_20230412T190947_20230412T191022_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_20230412T191137_20230412T191255_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_20230412T203742_20230412T203908_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_20230412T213716_20230412T214021_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_20230412T231020_20230412T231328_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_20230412T231618_20230412T231959_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_20230412T005203_20230412T005626_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_20230412T005626_20230412T005737_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_20230412T013612_20230412T014114_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_20230412T023004_20230412T023224_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_20230412T023225_20230412T023644_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_20230412T040926_20230412T041601_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_20230412T055121_20230412T055615_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_20230412T072756_20230412T073815_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_20230412T090821_20230412T091707_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_20230412T104950_20230412T105716_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_20230412T122856_20230412T123613_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_20230412T134341_20230412T134555_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_IOPR_2_20230412T140812_20230412T141453_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_20230412T154650_20230412T155304_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_20230412T172514_20230412T173411_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_IOPR_2_20230412T190207_20230412T190947_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_20230412T204137_20230412T204807_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_20230412T204807_20230412T205104_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_20230412T222005_20230412T222708_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_20230412T222708_20230412T222920_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.

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Product Test Failed	Descri	ription
CS_OFFL_SIR_IOPM_2_20230412T133036_20230412T134341_C001 Power scali	ng error There is records	e is an error in the scaling of the L1B waveform for one or more ds

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.

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> OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230412T000451_20230412T000648_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_20230412T001355_20230412T002758_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_20230412T002919_20230412T003107_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_20230412T003548_20230412T004303_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_20230412T010259_20230412T012029_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_20230412T012205_20230412T013612_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_20230412T014356_20230412T014559_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_20230412T014701_20230412T015101_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_20230412T015250_20230412T020759_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_20230412T021017_20230412T021940_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_20230412T023753_20230412T023855_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_20230412T024731_20230412T025846_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_20230412T030454_20230412T031055_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_20230412T031428_20230412T031856_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_20230412T032200_20230412T033004_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_20230412T033222_20230412T034729_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_20230412T042415_20230412T045806_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_20230412T050319_20230412T050848_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_20230412T051133_20230412T053634_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_20230412T060834_20230412T063636_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_20230412T064250_20230412T064735_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_20230412T064753_20230412T064848_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_20230412T065016_20230412T071938_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_20230412T074220_20230412T081548_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_20230412T082200_20230412T082730_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_20230412T082912_20230412T083518_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_20230412T090621_20230412T090821_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_20230412T092125_20230412T095510_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_20230412T100103_20230412T100617_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_20230412T100823_20230412T102756_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_20230412T105946_20230412T112013_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_20230412T112015_20230412T113326_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_20230412T113645_20230412T114104_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_20230412T114802_20230412T122334_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_20230412T124321_20230412T125042_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_20230412T125638_20230412T125909_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_20230412T130022_20230412T131255_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_20230412T131446_20230412T132003_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_20230412T132010_20230412T132016_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_20230412T132022_20230412T132219_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_20230412T133036_20230412T134341_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_20230412T134555_20230412T135821_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_20230412T142519_20230412T143545_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_20230412T143724_20230412T145159_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_20230412T145413_20230412T145916_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_20230412T150747_20230412T150845_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_20230412T151526_20230412T151953_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_20230412T152612_20230412T152934_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_20230412T153057_20230412T153806_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_20230412T160946_20230412T163103_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_20230412T163431_20230412T163833_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_20230412T164452_20230412T170821_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_20230412T174643_20230412T181055_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_20230412T181222_20230412T181748_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_20230412T181754_20230412T182119_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_20230412T182424_20230412T185712_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_20230412T191430_20230412T191803_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_20230412T192054_20230412T194147_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_20230412T194414_20230412T195032_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_20230412T195224_20230412T200027_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_20230412T200340_20230412T203742_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_20230412T205104_20230412T205203_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_20230412T212032_20230412T212038_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_20230412T212050_20230412T212951_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_20230412T213200_20230412T213716_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_20230412T214312_20230412T220527_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_20230412T220813_20230412T221736_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_20230412T222920_20230412T223348_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_20230412T223734_20230412T223755_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_20230412T224831_20230412T225422_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_20230412T225610_20230412T230844_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_20230412T231329_20230412T231618_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_20230412T232257_20230412T234933_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_20230412T235113_20230412T235600_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_20230412T235739_20230412T235747_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_20230412T122444_20230412T122501_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_20230412T172403_20230412T172513_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_20230412T231618_20230412T231959_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_20230412T004303_20230412T004704_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_20230412T013612_20230412T014114_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_20230412T040926_20230412T041601_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_20230412T104950_20230412T105716_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_20230412T222005_20230412T222708_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_20230412T232104_20230412T232257_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

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.

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Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20230412T000216_20230412T000451_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_20230412T000648_20230412T001222_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_20230412T014559_20230412T014701_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_20230412T021940_20230412T022216_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_20230412T023644_20230412T023752_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_20230412T023855_20230412T024011_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_20230412T025906_20230412T030454_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_20230412T031055_20230412T031428_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_20230412T031944_20230412T032200_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_20230412T035709_20230412T040046_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_20230412T041601_20230412T042156_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_20230412T050247_20230412T050319_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_20230412T050848_20230412T051114_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_20230412T055615_20230412T060019_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_20230412T063820_20230412T064002_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_20230412T064106_20230412T064250_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_20230412T064848_20230412T065011_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_20230412T091707_20230412T091901_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_20230412T095742_20230412T100103_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_20230412T102756_20230412T103122_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_20230412T104807_20230412T104950_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_20230412T114517_20230412T114626_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_20230412T132219_20230412T132415_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_20230412T140555_20230412T140811_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_20230412T142202_20230412T142519_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_20230412T145224_20230412T145413_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_20230412T150054_20230412T150545_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_20230412T151238_20230412T151526_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_20230412T151953_20230412T152455_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_20230412T152934_20230412T153056_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_20230412T153807_20230412T153929_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_20230412T154138_20230412T154650_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_20230412T160240_20230412T160626_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_20230412T163132_20230412T163430_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_20230412T164058_20230412T164346_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_20230412T171929_20230412T172051_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_20230412T174115_20230412T174313_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_20230412T185712_20230412T190207_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_20230412T191137_20230412T191255_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_20230412T195100_20230412T195224_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, OPTL_BIR_IOPN_2_202304127203742_20230412720300_C001 COOS Admitter Range Cuality PLNL, COOS Deductation Cuality PLNL, COOS Descuality PLNL, COOS Descuality PLNL, COOS Deductation Cuality PLNL, COOS Descuality PLNL, COOS Defuctation Cuality PLNL, COOS Descuality PLNL, C
Dev CPUC SIN, UPIN 2. 202304127120534, 202304127120530, 2001 DCOCD Badocaster Guality The COCD Range and Badscaster Guality Flags have been set for corres records CS_OFFL_SIR_JOPN 2. 202304127120534, 202304127120539, 2001 CCOC Almeter Range Duality FLML, The COCD Range and Badscaster Guality Flags have been set for corres records The COCD Range and Badscaster Guality Flags have been set for corres records CS_OFFL_SIR_JOPN 2. 202304127121025, 202304127121025, CO01 CCOC Almeter Range Cuality FLML, The COCD Range and Badscaster Guality Flags have been set for corres records CS_OFFL_SIR_JOPN 2. 202304127121025, 202304127121025, CO01 CCOC Almeter Range Cuality FLML, The COCD Range and Badscaster Guality Flags have been set for corres records CS_OFFL_SIR_JOPN 2. 202304127121025, 20230412721025, 20230412721025, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 202304127210250, 20230412704704, 2001 CCOCD Almeter Range Cuality FLML, The COCD Range and Badscaster Guality Flags have been set for cores CS_OFFL_SIR_JOPR 2. 2023041272104070, 202304127004704, 2001 CCOCD Almeter Range Cuality FLML, The COCD Range and Badscaster Guality Flags have been set for cores CS_OFFL_SIR_JOPR 2. 202304127004704, 2001 CCOCD Almeter Range Cuality FLML, The COCD Almeter Range Cuality FLML, The COCD Range and Badscaster Guality Flags have been set for core or
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CS_OFFL_SIR_JOPR_2_202304127210022_202304127210025_0001 COOG Backacater Guality CS_OFFL_SIR_JOPR_2_202304127210052_202304127210026_0001 COOG Backacater Guality CS_OFFL_SIR_JOPR_2_202304127210054_202304127210056_0001 COOG Backacater Guality CS_OFFL_SIR_JOPR_2_202304127210054_202304127210056_0001 COOG Backacater Guality CS_OFFL_SIR_JOPR_2_202304127210054_202304127210056_0001 COOG Altimeter Range Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127210054_20230412721055_0001 COOG Altimeter Range Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412721055_0001 COOG Altimeter Range Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412720450_102004127204531_C001 COOG Altimeter Range Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127004707_2001 CS_OFFL_SIR_JOPR_2_202304127004707_200112704704_C001 Altimeter Range SSHA_SWH are Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127004707_2002304127004704_C001 Altimeter Range SSHA_SWH are Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127004707_2002304127004704_C001 COOG Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127004707_2002304127004704_C001 Altimeter Range SSHA_SWH are Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127004707_2002304127004704_C001 COOG Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_202304127004707_2002304127004704_C001 Altimeter Range SSHA_SWH are Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412700503_20230412700508_C001 COCOA Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412700503_20230412700508_C001 Altimeter Range SSHA_SWH are Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412703503_20230412700508_C001 Altimeter Range SSHA_SWH are Backacater Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412703503_20230412700508_C001 Altimeter Range SSHA_SWH are Backacater Quality
OPE_OPT_Call OPT_Call
OPEC_SIN_DEPL_2_AD234121210000_2001 OCCOG Backscatter Quality more records OCCOG Backscatter Quality The Ocean Atimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for or more records OCCOG Backscatter Quality The OCCOG Range and Backscatter Quality Flags have been set for or more records OCCOG Atimeter Range Quality PLRM, The OCCOG Range and Backscatter Quality Flags have been set for or more records OCCOG Atimeter Range Quality PLRM, The OCCOG Range and Backscatter Quality Flags have been set for or more records OCCOG Backscatter Quality PLRM, The OCCOG Range and Backscatter Quality Flags have been set for or more records OCCOG Backscatter Quality PLRM, The OCCOG Range and Backscatter Quality PLRM, OCCOG Backscatter Quality PLRM, The OCCOG Range and Backscatter Quality Flags have been set for or more records CS_OFFL_SIR_JOPR_2_20230412T004707_20230412T004746_C001 OCCGA Banteer Range, SSHA, SWH and Backscatter Quality PLRM, CS_OFFL_SIR_JOPR_2_20230412T005203_20230412T005737_C001 OCCEAn Atimeter Range, SSHA, SWH and Backscatter Quality Flags have been records CS_OFFL_SIR_JOPR_2_20230412T005203_20230412T005737_C001 OCECAN Atimeter Range, SSHA, SWH and Backscatter Quality Flags have bet for one or more records CS_OFFL_SIR_JOPR_2_20230412T03504_20230412T023644_C001 OCECAN Atimeter Range, SSHA, SWH and Backscatter Quality Flags have bet for one or more records <
GS_OFFL_SIR_IOPN_2_202304127213035_02304127213020_C001 and Backscatter Quality PLRM. CCCQ Attemeter Range and Backscatter Quality PLRM. math bio COCG Allimeter Range and Backscatter Quality PLRM. CS_OFFL_SIR_IOPN_2_202304127224611_002304127224831_C001 CCCGA Allimeter Range Quality PLRM. The OCCGA Range and Backscatter Quality Flags have been set for once records CS_OFFL_SIR_IOPR_2_202304127004303_202304127004704_C001 Altimeter Range ANG Backscatter Quality FLRM. The OCCGA Range and Backscatter Quality Flags have been set for once records CS_OFFL_SIR_IOPR_2_202304127004707_202304127004745_C001 CCCGA Altimeter Range ANG Backscatter Quality FLRM. The OCCGA Range and Backscatter Quality Flags have been set for once records CS_OFFL_SIR_IOPR_2_202304127004707_202304127004745_C001 CCCGA Altimeter Range. SNA, SWH and Backscatter Quality FLRM. The OCCGA Range and Backscatter Quality FLRM. CS_OFFL_SIR_IOPR_2_202304127005626_202304127005737_C001 Altimeter Range. SNA, SWH and Backscatter Quality FLRM. The OCCGA Range and Backscatter Quality FLRM. CS_OFFL_SIR_IOPR_2_202304127013612_202304127005737_C001 Altimeter Range. SNA, SWH and Backscatter Quality FLRM. The OCGA Range and Backscatter Quality FLRM. CS_OFFL_SIR_IOPR_2_202304127013612_202304127014114_C001 Occean Altimeter Range. SNA, SWH and Backscatter Quality FLRM. The OCGA Range and Backscatter Quality FLRM. CS_OFFL_SIR_IOPR_2_202304127013612_202304127014114_C001 Occean Altimeter Range. SNA, SWH and Backscatter Quality FLR
CS_OFFL_SIR_IOPR_2_202304121024303_202304121004704_0001 OCCG Backscatter Quality more records CS_OFFL_SIR_IOPR_2_202304121004303_202304121004704_0001 add Backscatter Quality PLM, OCCG Attimeter Range and Backscatter Quality PLM, OCCG Attimeter Range and Backscatter Quality FLM, OCCG Attimeter Range and Backscatter Quality FLM, OCCG Attimeter Range SHA, SWH and Backscatter Quality FLM, OCCG Backscatter Quality PLM, OCCG Attimeter Range SHA, SWH and Backscatter Quality FLM, OCCG Backscatter Quality PLM, OCCG Attimeter Range and Backscatter Quality FLM, OCCG
CS_OFFL_SIR_IOPR_2_20230412T004303_20230412T004704_C001 and Backscatter Quality PLRM, COCO Altimeter Range and Backscatter Quality PLRM, CS_OFFL_SIR_IOPR_2_20230412T004707_20230412T004745_C001 OCCG Altimeter Range Quality PLRM, COCG Backscatter Quality PLRM, COCG Backscatter Quality PLRM, COCG Backscatter Quality PLRM, COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have bene set for on one records CS_OFFL_SIR_IOPR_2_20230412T005203_20230412T005626_C001 OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, COCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, COCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T005626_20230412T005626_20230412T005737_C001 The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T013612_20230412T014114_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T013612_20230412T0123224_C001 Ceean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCCG Altimeter Range and Backscatter Quality PLRM, OCC
CS_OFFL_SIR_IOPR_2_202304121005203_202304121005626_C001 OCOG Backscatter Quality The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_202304121005626_202304121005626_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_202304121005626_202304121005737_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412103612_202304121005737_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412103612_202304121014114_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412102304_202304121023224_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412102324_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412102324_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412102324_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412102324_202304121023644_C001 Decan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T005203_20230412T005626_C001 and Backscatter Quality PLRM. OCCG Attimeter Range and Backscatter Quality FLRM. OCCG Attimeter Range and Ba
CS_OFFL_SIR_IOPR_2_20230412T005626_20230412T005737_C001 and Backscatter Quality PLEM, OCOG Altimeter Range and Backscatter Quality Flags have b pLRM and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T013612_20230412T014114_C001 and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T023004_20230412T023224_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T023225_20230412T023644_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T0230412T0230412T023644_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024730_C001 OCCGA Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024012_20230412T024730_C001 OCCGA Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The OCOG Altimeter Ra
CS_OFFL_SIR_IOPR_2_20230412T013612_20230412T014114_C001 and Backscatter Quality PLRM, OCCG The Ocean Attimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T023004_20230412T023224_C001 Cean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T023225_20230412T023224_C001 Cean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T023225_20230412T023644_C001 Cean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Cean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Cean Attimeter Range and Backscatter Quality PLRM, OCCG Attimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Ocean Attimeter Range and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCCGA Attimeter Range Quality PLRM, OCCGA CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCCGA Attimeter Range Quality PLRM, OCCGA CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCCGA Attimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records CS_OFFL_SIR_IOPR_2_20230412T02
CS_OFFL_SIR_IOPR_2_20230412T023004_20230412T023224_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Interfer Range and Backscatter Quality PLRM CS_OFFL_SIR_IOPR_2_20230412T023225_20230412T023644_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024644_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have be and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Ocean Altimeter Range And Backscatter Quality PLRM, OCGG Altimeter Range and Backscatter Quality Flags have be set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for on more records CS_OFFL_SIR_IOPR_2_20230412T034730_20230412T035517_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCGG Altimeter Range and Backscatter Quality Flags have be and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T023225_20230412T023644_C001 and Backscatter Quality PLRM, OCOG The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Cean Altimeter Range, SSHA, SWH The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 Cean Altimeter Range and Backscatter Quality PLRM, OCOG The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCOG Altimeter Range Quality PLRM, OCOG The OCOG Range and Backscatter Quality Flags have been set for on CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCOG Altimeter Range, SSHA, SWH The OCOG Range and Backscatter Quality Flags have been set for on CS_OFFL_SIR_IOPR_2_20230412T034730_20230412T035517_C001 Ocean Altimeter Range, SSHA, SWH The OCOG Range and Backscatter Quality Flags have been set for on CS_OFFL_SIR_IOPR_2_20230412T034730_20230412T035517_C001 Ocean Altimeter Range, SSHA, SWH The OCOG Range and Backscatter Quality Flags have be Network Ocean Altimeter Range, SSHA, SWH The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be Network Ocean Altimeter Range, SSHA, SWH The OCEAN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be Network Ocean Altimeter Range, SSHA, SWH The OCEAN A
CS_OFFL_SIR_IOPR_2_20230412T024011_20230412T024444_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be set for one or more records CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for or more records CS_OFFL_SIR_IOPR_2_20230412T024552_20230412T024730_C001 OCOG Altimeter Range, SSHA, SWH and Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for or more records CS_OFFL_SIR_IOPR_2_20230412T034730_20230412T035517_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have be pLRM The OCCean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_IOPR_2_202304121024532_202304121024730_C001 OCOG Backscatter Quality more records CS_OFFL_SIR_IOPR_2_20230412T034730_20230412T035517_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 have b set for one or more records Ocean Altimeter Range, SSHA, SWH Ocean Altimeter Range, SSHA, SWH The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T034730_20230412T035517_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records Ocean Altimeter Range, SSHA, SWH
CS_OFFL_SIR_IOPR_2_20230412T040926_20230412T041601_C001 Altimeter Range and Backscatter Quality PLRM, OCOG PLRM
CS_OFFL_SIR_IOPR_2_20230412T042156_20230412T042415_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. OCOG PLRM The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range and Backscatter Quality Flags have b set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T054715_20230412T054930_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have b est for one or more records
CS_OFFL_SIR_IOPR_2_20230412T055121_20230412T055615_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flam And Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T072756_20230412T073815_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM. OCOG Altimeter Range and Backscatter Quality PLRM. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have be set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T081548_20230412T081830_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 have be set for one or more records
CS_OFFL_SIR_IOPR_2_20230412T090156_20230412T090508_C001 OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality PLRM, OC
CS_OFFL_SIR_IOPR_2_20230412T090821_20230412T091707_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have b set for one or more records

CS_OFFL_SIR_IOPR_2_20230412T103827_20230412T104141_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_20230412T104141_20230412T104807_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_20230412T104950_20230412T105716_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_20230412T105718_20230412T105726_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_20230412T122856_20230412T123613_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_20230412T123826_20230412T123836_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_20230412T125909_20230412T130022_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_20230412T135821_20230412T140045_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_20230412T140112_20230412T140555_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_20230412T140812_20230412T141453_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_20230412T141457_20230412T141512_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_20230412T150950_20230412T151037_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_20230412T153929_20230412T154137_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_20230412T154650_20230412T155304_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_20230412T172514_20230412T173411_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_20230412T190207_20230412T190947_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_20230412T191255_20230412T191430_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_20230412T200139_20230412T200340_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_20230412T203908_20230412T203944_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_20230412T204137_20230412T204807_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_20230412T204807_20230412T205104_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_20230412T205506_20230412T205555_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_20230412T214021_20230412T214311_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_20230412T221736_20230412T221917_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_20230412T221951_20230412T222003_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_20230412T222005_20230412T222708_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_20230412T222708_20230412T222920_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_20230412T232000_20230412T232033_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,		
> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for	products over sea ice, which is to be expected	d. The number of products with this error flag set is given below.
Number of products with errors: 195		
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 measu	rement record. The bit value of this flag indicate	ates any problems when set.
> Ocean Retracking Quality Flag: This flag is currently set for products over la	and and sea ice, but this is to be expected. The	ne number of products with this error flag set is given below.
Number of products with errors: 65		
L2 Retracking Flags (20 Hz PLRM)		
CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz PLRM	measurement record. The bit value of this fla	g indicates any problems when set.
> Ocean Retracking Quality Flag (PLRM): This flag is currently set for product given below.	ts IOPR and IOPN products over sea ice, but	this is to be expected. The number of products with this error flag set is
Number of products with errors: 138		
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 en	nsure it consists of both an XML header file (.l	HDR) and a NetCDF product file (.nc).
Number of products with errors: 0		
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 a	nd/or errors raised by the ground-segment processing chain.
Number of products with errors: 0		
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 shock the va	lidity of Auvilian/ Data Filos is correct
Number of products with errors: 0		
·		
6.4 P2P Auxiliary Correction Error Check		
For all products, the auxiliary corrections within the Geophysical Group are chee	cked for the default error value (32767).	
Currently, there are some common auxiliary correction errors raised in the followed by a table highlighting any additional issues which may arise from the source of the s		to surface type. All common flags are summarised in the list below,
> ECMWF Meteo Corrections: Currently the following corrections are not comp Correction and the U-Wind and V-Wind components of the ECMWF model wind 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 expect	ed.
> Mean Sea Surface: The error value is currently set for products over land and	d sea ice, but this is to be expected.	
> Mean Dynamic Topography: The error value is currently set for products ov	er land and sea ice, but this is to be expected	
> Altimetric Wind Speed Error: The error value is currently set for products on	ver land and sea ice, but this is to be expected	J.
Number of products with errors: 30		
Product	Test Failed	Description
CS_OFFL_SIR_IOP_220230411T231628_20230412T000606_C002	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_220230412T000606_20230412T005543_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_2_20230412T005543_20230412T014521_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_220230412T014521_20230412T023457_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_220230412T023457_20230412T032436_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_220230412T032436_20230412T041412_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_220230412T041412_20230412T050351_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_2_20230412T050351_20230412T055327_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_220230412T055327_20230412T064305_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_2__20230412T064305_20230412T073242_C001

There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) Mean Sea Surface (1), Mean Dynamic Topography (1)

CS_OFFL_SIR_IOP_220230412T073242_20230412T082220_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_220230412T082220_20230412T091156_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_220230412T091156_20230412T100135_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_2_20230412T100135_20230412T105111_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_220230412T105111_20230412T114049_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_2_20230412T114049_20230412T123026_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_220230412T123026_20230412T132004_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_220230412T132004_20230412T140940_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_220230412T140940_20230412T145919_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_220230412T145919_20230412T154855_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_220230412T154855_20230412T163833_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_220230412T163833_20230412T172810_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_220230412T172810_20230412T181748_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_220230412T181748_20230412T190724_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_220230412T190724_20230412T195703_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_220230412T195703_20230412T204639_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_220230412T204639_20230412T213618_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_220230412T213618_20230412T222554_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 2 20230412T222554 20230412T231532 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)
05_0FFL_3In_10F_2202304121222334_202304121231332_0001		

6.5 P2P Measurement Confidence Data Check

CryoSat P2P data includes a measurement confidence flag fo	r each 20-Hz measure	ement record. The bit value of this flag ind	icates any problems when set.
Number of products with errors: 1			
Product		Test Failed	Description
CS_OFFL_SIR_IOP_220230412T132004_20230412T1409	940_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
6.6 P2P Measurement Quality Flag Check	<u>í</u>		
P2P Quality Flags (20 Hz)			
CryoSat P2P data includes Quality Flags for each 20 Hz, 20 H	Iz PLRM and 1 Hz me	asurement record, copied from the corres	ponding L2 products.
Since the P2P Quality Flags are copied directly from the L below.	2 Quality Flags, plea	ase see Section 5.6 for the full list of p	oducts affected. The number of P2P products affected is given
Number of products with errors: 29			
P2P Quality Flags (20 Hz PLRM)			
Since the P2P Quality Flags are copied directly from the L below.	2 Quality Flags, plea	ase see Section 5.6 for the full list of p	oducts affected. The number of P2P products affected is given
Number of products with errors: 30			
P2P Quality Flags (1 Hz & 1 Hz PLRM)			
Since the P2P Quality Flags are copied directly from the L below.	2 Quality Flags, plea	ase see Section 5.6 for the number of L	2 products affected. The number of P2P products affected is given
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 (fie	eld 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 current	ntly set for products IC	OPR 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.

30

15

Number of products with errors:

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	4	179	0
SIR_IOPR1B	125	101	3	98	0
SIR_IOPN1B	101	125	0	125	0
SIR_IOPM_2	183	183	130	53	0
SIR_IOPR_2	125	101	35	65	1
SIR_IOPN_2	101	125	46	77	2
SIR_IOP_P2P	29	29	0	26	3

7.1 QCC Errors

Number of QCC reports with errors:

	Total number of occurrences of each error										
Product Type	RLOBOPNCDF	RL	RL	RLOBOPNCDF	RL	RL	-	-	-	-	-
SIR_IOPN_2	1	0	1	1	0	1					
SIR_IOPR_2	2	1	2	2	1	2					
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOP_2_	3	3	3	3							

Test Description Key:	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

nber of QCC repo	rts with warnings	2138							
Total number of occurrences of each warning									
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC		
SIR_IOPM1B	179	0	0	0	0	0	0		
SIR_IOPM_2	0	0	44	43	0	41	0		
SIR_IOPN1B	97	0	0	0	0	0	0		
SIR IOPN 2	0	1	9	34	2	24	30		
SIR IOPR1B	122	0	0	0	0	0	0		
SIR IOPR 2	0	2	21	43	2	26	25		

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	34	1	33	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	18	0	0	0	18	0	32
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	12	0	0	42	0	49	0

Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	24	0	0	4	34	0	4
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	26	13	44	55	24
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	41	0	4	60	30	13
	*	·					
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNC	DF RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF

SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	37	0	3	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	52	2
SIR_IOPN_2	26	30	10	1	1	0	0
SIR_IOPR1B	0	0	0	0	0	125	11
SIR_IOPR_2	32	46	4	0	6	0	0

				-			
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF
SIR_IOP_2_	17	28	28	4	29	19	28
Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNC	DIRPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOP_2_	1	17	25	22	15	29	19
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
SIR_IOP_2_	22	29	18	13	29		
Product Type	-	•	•	-	•	-	-
SIR IOP 2							

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
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
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_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