

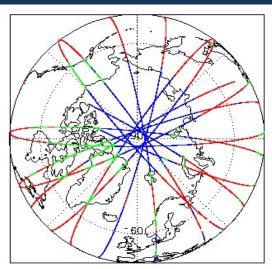
1. Overview

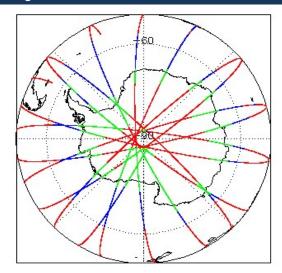
Report Production:	07-Oct-2022	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	

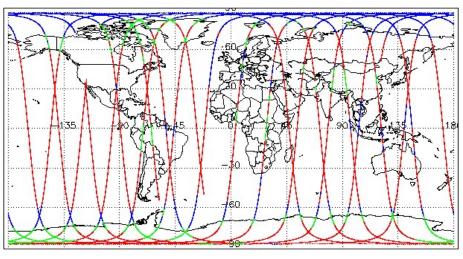
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

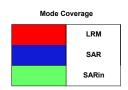
Mission / Instrument News		
01-Oct-2022	None	
02-Oct-2022	SIRAL unavailability from 18:01:48 to 21:31:29 due to an orbit manoeuvre	
03-Oct-2022 Nothing planned		

2. Global Coverage









3. Instrument Configuration

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

SIRAL instrument(s) in use:	SIRAL - A
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4. IOP Level 1B Data Quality Check

4.1 L1B Product Format Check

4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

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

ber of products with errors:

4.4 L1B Auxiliary Correction Error Check

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

Number of products with errors:

4.5 L1B Measurement Confidence Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20221002T020329_20221002T021009_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

4.6 L1B Waveform Group Data Check

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

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20221002T122155_20221002T123640_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20221002T232714_20221002T234225_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T003222_20221002T003534_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T003546_20221002T003757_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T022129_20221002T022205_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T031210_20221002T031353_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T045112_20221002T045252_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T071924_20221002T071941_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T071944_20221002T072022_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T121612_20221002T121718_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T135525_20221002T140111_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20221002T234520_20221002T234735_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T005834_20221002T010650_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T045253_20221002T045548_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T061138_20221002T061428_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T071016_20221002T071759_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T075632_20221002T080048_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T085658_20221002T090018_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T093444_20221002T094141_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T121350_20221002T121611_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T153041_20221002T153545_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20221002T175323_20221002T175758_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:

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20221002T001554_20221002T002849_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_IOPM_2_20221002T054034_20221002T054513_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_20221002T223601_20221002T223700_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_20221002T232714_20221002T234225_C001	Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	#N/A
CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20221002T003546_20221002T003757_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_20221002T013058_20221002T013435_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_20221002T021228_20221002T021620_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_20221002T022129_20221002T022205_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_20221002T031210_20221002T031353_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_20221002T062809_20221002T063123_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_20221002T071924_20221002T071941_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_20221002T071944_20221002T072022_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_20221002T080706_20221002T081023_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and tidal corrections for one or more records
CS_OFFL_SIR_IOPN_2_20221002T094142_20221002T094419_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_20221002T094612_20221002T095207_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_20221002T103659_20221002T103819_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_20221002T111952_20221002T112317_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_20221002T121612_20221002T121718_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_20221002T125915_20221002T130114_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_20221002T143848_20221002T144006_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_20221002T161809_20221002T161929_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_20221002T175759_20221002T180123_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_20221002T220716_20221002T220820_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_20221002T230138_20221002T230339_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_20221002T234520_20221002T234735_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_20221002T003757_20221002T004458_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_20221002T005834_20221002T010650_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_20221002T021620_20221002T022129_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_20221002T035344_20221002T040055_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_20221002T053229_20221002T054001_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_20221002T054914_20221002T055101_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_20221002T071016_20221002T071759_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_20221002T071759_20221002T071923_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_20221002T084953_20221002T085658_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_20221002T085658_20221002T090018_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_20221002T102929_20221002T103548_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_20221002T103548_20221002T103659_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_20221002T111820_20221002T111951_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_20221002T120927_20221002T121125_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_20221002T121137_20221002T121350_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_20221002T121350_20221002T121611_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_20221002T134949_20221002T135525_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_20221002T153041_20221002T153545_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_20221002T170925_20221002T171747_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_20221002T220820_20221002T221544_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_20221002T234736_20221002T235440_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

5.5 L2 Measurement Confidence Data Check

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20221002T020329_20221002T021009_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20 Hz)

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20221001T235908_20221002T001041_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_20221002T001554_20221002T002849_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_20221002T004458_20221002T004912_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_20221002T010650_20221002T012038_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_20221002T012424_20221002T012907_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_20221002T013700_20221002T015831_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_20221002T015834_20221002T020226_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_20221002T023046_20221002T023049_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_20221002T023057_20221002T023113_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_20221002T023619_20221002T025709_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_20221002T025759_20221002T025931_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_20221002T030443_20221002T030821_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_20221002T031547_20221002T034255_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_20221002T041515_20221002T043905_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_20221002T044241_20221002T044736_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_20221002T045548_20221002T052918_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_20221002T054034_20221002T054513_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_20221002T061428_20221002T061550_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_20221002T062240_20221002T062808_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_20221002T063533_20221002T071016_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_20221002T072022_20221002T072243_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_20221002T074021_20221002T075632_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_20221002T080202_20221002T080706_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_20221002T081404_20221002T084953_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_20221002T090018_20221002T090130_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_20221002T091148_20221002T093443_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_20221002T094419_20221002T094611_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_20221002T095402_20221002T100500_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_20221002T100618_20221002T100822_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_20221002T101514_20221002T102644_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_20221002T103820_20221002T104055_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_20221002T104213_20221002T105929_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_20221002T110131_20221002T111546_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_20221002T112317_20221002T112523_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_20221002T112616_20221002T113025_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_20221002T113306_20221002T114459_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_20221002T114616_20221002T114738_C001		The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPM_2_20221002T114939_20221002T115902_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_20221002T121903_20221002T122049_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_20221002T122155_20221002T123640_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_20221002T124355_20221002T125638_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_20221002T130114_20221002T130928_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_20221002T131249_20221002T132755_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_20221002T140111_20221002T140941_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_20221002T141028_20221002T141348_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_20221002T141401_20221002T143622_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_20221002T144006_20221002T144208_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_20221002T144248_20221002T144800_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
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In the Debugs of the County of the Debugs of	CS_OFFL_SIR_IOPM_2_20221002T145304_20221002T151556_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Betrescaler County Co. OFFL. SRF. (OFM. 2. 202210021105104.0091 CO. OFFL. SRF. (OFM. 2. 202210021105244.00921105104.0091 CO. OFFL. SRF. (OFM. 2. 202210021105214.0022100211050574.0091 CO. OFFL. SRF. (OFM. 2. 202210021105214.002210021170505.0091 CO. OFFL. SRF. (OFM. 2. 2022100211050574.0091 CO. OFFL. SRF. (OFM. 2. 202210021105214.002210021170505.0091 CO. OFFL. SRF. (OFM. 2. 2022100211050574.0091 CO. OFFL. SRF. (OFM. 2. 2022100211050574.0091 CO. OFFL. SRF. (OFM. 2. 2022100211050574.0091 CO. OFFL. SRF. (OFM. 2. 202210021105059.0091 CO. OFFL. SRF. (OFM. 2. 202210021105	CS_OFFL_SIR_IOPM_2_20221002T152513_20221002T152843_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
GS_OFFL_SRR_IOPML_2_T02710071104802_20210027182314_20210027182314_20210027182314_20210027182314_20210027182314_20210027182314_20210027182315_	CS_OFFL_SIR_IOPM_2_20221002T154749_20221002T154800_C001		
Dean Airmeter Range, SSHA, SWH and Backscoater Quality Flags have been set of the row or more becords CS. OFIT. SIR. IOPM 2. 202210027129149. 202210027122016 CO01 CS. OFIT. SIR. IOPM 2. 202210027122149 202210027122006 CO01 CS. OFIT. SIR. IOPM 2. 202210027122149 202210027122060 CO01 CS. OFIT. SIR. IOPM 2. 202210027122060 CO01 C	CS_OFFL_SIR_IOPM_2_20221002T154802_20221002T161504_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Selected Custily, COOS Alternater Range and Bedescater Qustily Flags have been self to row or more nectors. CS_OFFL_SIR_IOPM_2_202210027179229_202210027179205_0031 CS_OFFL_SIR_IOPM_2_202210027179229_202210027179205_0031 CS_OFFL_SIR_IOPM_2_202210027179239_202210027129315_0031 CS_OFFL_SIR_IOPM_2_202210027129139_202210027129315_0031 CS_OFFL_SIR_IOPM_2_202210027129139_202210027129315_0031 CS_OFFL_SIR_IOPM_2_202210027129139_202210027129315_0031 CS_OFFL_SIR_IOPM_2_202210027129315_202210027129315_0031 CS_OFFL_SIR_IOPM_2_202210027129315_202210027129315_0031 CS_OFFL_SIR_IOPM_2_202210027129315_0031 C	CS_OFFL_SIR_IOPM_2_20221002T162214_20221002T162817_C001		
and Bearscanter Quality Berg and Be	CS_OFFL_SIR_IOPM_2_20221002T163139_20221002T165754_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Basocaster Quality, OCOO Alternater Range and Basckscater Quality Flags have been set for one rome records S. OFFL_SIR_JOPM_2_20221002T22438_20221002T220311_0001 GS_OFFL_SIR_JOPM_2_20221002T224700_20221002T220310_0001 GS_OFFL_SIR_JOPM_2_20221002T224700_20221002T22000_0001 GS_OFFL_SIR_JOPM_2_20221002T224700_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T224700_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223718_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T223000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T230000_0001 GS_OFFL_SIR_JOPM_2_20221002T2300000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20221002T170229_20221002T170925_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscenter Quality. COCG Altimeter Range and Backscenter Quality Flags have been set for one or more records. CS_OFFL_SIR_JOPM_2_20221002T224488_20221002T223008_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223008_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223008_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223599_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223599_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223599_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223599_CO01 CS_OFFL_SIR_JOPM_2_20221002T223449_20221002T223599_CO01 CS_OFFL_SIR_JOPM_2_20221002T223498_20221002T225928_CO01 CS_OFFL_SIR_JOPM_2_20221002T225419_20221002T225939_CO01 CS_OFFL_SIR_JOPM_2_20221002T225419_20221002T225939_CO01 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T225939_202100 CS_OFFL_SIR_JOPM_2_20221002T235939_202100 CS_OFFL_SIR_JOPM_2_20221002T235939_2021002T235939_CO01 CS_OFFL_SIR_JOPM_2_20221002T23597	CS_OFFL_SIR_IOPM_2_20221002T172126_20221002T175322_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Cs_OFFL_SIR_IOPM_2_20221002T223700_20221002T223000_C001 Cs_OFFL_SIR_IOPM_2_20221002T223710_20221002T223590_C001 Cs_OFFL_SIR_IOPM_2_20221002T223716_20221002T223590_C001 Cs_OFFL_SIR_IOPM_2_20221002T223716_20221002T223590_C001 Cs_OFFL_SIR_IOPM_2_20221002T223716_20221002T223590_C001 Cs_OFFL_SIR_IOPM_2_20221002T223716_20221002T225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T223716_20221002T225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T225930_2001 Cs_OFFL_SIR_IOPM_2_20221002T225930_2001 Cs_OFFL_SIR_IOPM_2_20221002T225930_2001 Cs_OFFL_SIR_IOPM_2_20221002T225030_2002T0225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T225030_2002T0225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T225030_2002T0225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T225030_2002T0225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T225030_2002T0225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T225030_2002T0225930_C001 Cs_OFFL_SIR_IOPM_2_20221002T230030_2002T025030_2001 Cs_OFFL_SIR_IOPM_2_20221002T230030_2002T025030_2001 Cs_OFFL_SIR_IOPM_2_20221002T230030_2002T025030_20001 Cs_OFFL_SIR_IOPM_2_20221002T230030_2002T002T03405_C001 Cs_OFFL_SIR_IOPM_2_20221002T230030_2002T002T03405_C001 Cs_OFFL_SIR_IOPM_2_20221002T230030_2002T002T03405_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03334_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03334_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03334_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03334_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03334_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03334_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR_IOPM_2_20221002T030322_20221002T03332_C001 Cs_OFFL_SIR	CS_OFFL_SIR_IOPM_2_20221002T213129_20221002T220311_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
And Backscatter Quality COGO Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPM_2_20221002T223448_20221002T223559_C001 CS_OFFL_SIR_IOPM_2_20221002T223718_20221002T225137_C001 CS_OFFL_SIR_IOPM_2_20221002T223718_20221002T225137_C001 CS_OFFL_SIR_IOPM_2_20221002T223718_20221002T225137_C001 CS_OFFL_SIR_IOPM_2_20221002T225102T225137_C001 CS_OFFL_SIR_IOPM_2_20221002T225102T225137_C001 CS_OFFL_SIR_IOPM_2_20221002T225410_20221002T225939_C001 CS_OFFL_SIR_IOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_IOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T225939_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T234255_C001 CS_OFFL_SIR_IOPM_2_20221002T234937_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T0323274_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T0323274_20221002T03354_C001 CS_OFFL_SIR_IOPM_2_20221002T032327_20221002T03354_C001 CS_OFFL_SIR_IOPM_2_20221002T032228_2020100703354_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003354_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003354_C001 CS_OFFL_SIR_IOPM_2_20221002T002202_202002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_202002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003324_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003324_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003324_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003324_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20202T003324_C001 CS_OFFL_SIR_IOPM_2_2	CS_OFFL_SIR_IOPM_2_20221002T220438_20221002T220715_C001		
Backscatter Quality CS_OFFL_SIR_JOPM_2_20221002T22518_20221002T225137_C001 CS_OFFL_SIR_JOPM_2_20221002T22518_20221002T225926_C001 CS_OFFL_SIR_JOPM_2_20221002T225933_20221002T225926_C001 CS_OFFL_SIR_JOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_JOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_JOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_JOPM_2_20221002T230388_20221002T225939_C001 CS_OFFL_SIR_JOPM_2_20221002T23714_20221002T232207_C001 CS_OFFL_SIR_JOPM_2_20221002T23714_20221002T232207_C001 CS_OFFL_SIR_JOPM_2_20221002T23714_20221002T234425_C001 CS_OFFL_SIR_JOPM_2_20221002T23714_20221002T234454_C001 CS_OFFL_SIR_JOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_JOPM_2_20221002T032322_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T032322_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03339_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T0339_C001 CCCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or no records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or no records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or no records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or no records CS_OFFL_SIR_JOPM_2_20221002T03229_20221002T0339_C001 CCCCG Altimeter Range,	CS_OFFL_SIR_IOPM_2_20221002T221700_20221002T223008_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been expense and Eachscatter Quality Flags have been expense of one or more records. CS_OFFL_SIR_JOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_JOPM_2_20221002T230938_20221002T232909_C001 CS_OFFL_SIR_JOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_JOPM_2_20221002T232714_20221002T232207_C001 CS_OFFL_SIR_JOPM_2_20221002T232714_20221002T23425_C001 CS_OFFL_SIR_JOPM_2_20221002T232714_20221002T23425_C001 CS_OFFL_SIR_JOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_JOPM_2_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T032320_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T032320_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03334_C001 CS_OFFL_SIR_JOPM_2_20221002T03222_20_2002T03	CS_OFFL_SIR_IOPM_2_20221002T223449_20221002T223559_C001		
Backscatter Quality CS_OFFL_SIR_IOPM_2_20221002T225933_20221002T225939_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T234225_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T23425_C001 CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03334_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_IOPM_2_20221002T030222_20221002T030322_C0021002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030222_20221002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030222_20221002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030324_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030334_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030320_C001 CS_OFFL_SIR_IOPM_2_20221002T030322_20221002T030320_C001 CS_OFFL_SIR_IOPM_2_20221002T030320_C001 CS_OFFL_SIR_IOPM_2_20221002T0300703202_C001 CS_OFFL_SIR_IOPM_2_20221002T030070300703007030070300703007030070	CS_OFFL_SIR_IOPM_2_20221002T223718_20221002T225137_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T232207_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T234225_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T234225_C001 CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T002T02205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T002T0020205_C001 CS_OFFL_SIR_IOPM_2_20221002T0002T00000000000000000000000	CS_OFFL_SIR_IOPM_2_20221002T225410_20221002T225926_C001		
and Backscatter Quality Flags have been set for one or more records S_OFFL_SIR_IOPM_2_20221002T232714_20221002T234225_C001 CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T234225_C001 CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T003534_C001 CS_OFFL_SIR_IOPM_2_20221002T022129_20221002T002505_C001 CS_OFFL_SIR_IOPM_2_20221002T022129_20221002T02205_C001 CS_OFFL_SIR_IOPM_2_20221002T020212205_C001 CS_OFFL_SIR_IOPM_2_20221002T020205_C001 CS_OFFL_SIR_IOPM_2_20221002T020205_C002T0020309_C001 CS_OFFL_SIR_IOPM_2_20221002T020206_20221002T020329_C001 CS_OFFL_SIR_IOPM_2_20221002T020206_20221002T020329_C001 CS_OFFL_SIR_IOPM_2_20221002T020206_20221002T020329_C001 CS_OFFL_SIR_IOPR_2_20221002T020206_20221002T020329_C001 CCOMPAITMENT AND ADDRESS AND	CS_OFFL_SIR_IOPM_2_20221002T225933_20221002T225939_C001		
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001 CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T03534_C001 CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPN_2_20221002T00202020_C001 CS_OFFL_SIR_IOPN_2_20221002T00202020_C001 CS_OFFL_SIR_IOPN_2_20221002T00202020_C001 CS_OFFL_SIR_IOPN_2_20221002T0020000000000000000000000000	CS_OFFL_SIR_IOPM_2_20221002T230938_20221002T232207_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20221002T03222_20221002T003534_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001 CS_OFFL_SIR_IOPN_2_20221002T022129_20221002T022205_C001 CS_OFFL_SIR_IOPN_2_20221002T022129_20221002T022205_C001 CS_OFFL_SIR_IOPN_2_20221002T0202102T02205_C001 CS_OFFL_SIR_IOPN_2_20221002T0202102T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T020205_C001 CS_OFFL_SIR_IOPR_2_20221002T020205_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001	CS_OFFL_SIR_IOPM_2_20221002T232714_20221002T234225_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T022205_C001 and Backscatter Quality SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20221002T022129_20221002T022205_C001 CS_OFFL_SIR_IOPN_2_20221002T0202102T020205_C001 CS_OFFL_SIR_IOPN_2_20221002T080706_20221002T081023_C001 CS_OFFL_SIR_IOPN_2_20221002T080706_20221002T081023_C001 CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T020329_C001 CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T020329_C001 CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 And Backscatter Quality oCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T020329_C001 CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T095402_C001 The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20221002T234307_20221002T234454_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20221002T080706_20221002T081023_C001 CS_OFFL_SIR_IOPR_2_20221002T02026_20221002T020329_C001 CS_OFFL_SIR_IOPR_2_20221002T02026_20221002T020329_C001 And Backscatter Quality, OCOG 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_20221002T020226_20221002T020329_C001 CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T095402_C001 CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 And Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPN_2_20221002T080706_20221002T081023_C001 and Backscatter Quality, OCOG Altimeter Range and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T020329_C001 OCOG Altimeter Range Quality, OCOG Backscatter Quality The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPN_2_20221002T022129_20221002T022205_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Backscatter Quality for one or more records Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPN_2_20221002T080706_20221002T081023_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001 and Backscatter Quality, OCOG Altimeter and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPR_2_20221002T020226_20221002T020329_C001		
	CS_OFFL_SIR_IOPR_2_20221002T095208_20221002T095402_C001	and Backscatter Quality, OCOG Altimeter	and the OCOG Altimeter Range and Backscatter Quality Flags have been

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.

	Altimeter Range Quality PLRM,	
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20221002T003222_20221002T003534_C001 and Back	er 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_OFFI_SIR_IOPN_2_20221002T003546_20221002T003757_C001and Back	er 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_OFFI_SIR_IOPN_2_20221002T012207_20221002T012424_C001and Back	er 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_20221002T021228_20221002T021620_C001 and Back	er Pange 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_20221002T030214_20221002T030443_C001 and Back	er Pange 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_20221002T031210_20221002T031353_C001and Back	er 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
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20221002T045112_20221002T045252_C001and Back	Representation Octob	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
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIK_IOPIN_2_202210021060352_202210021060449_C001	Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS OFFI SIR IORN 2 20221002T062900 20221002T062122 C001 and Back	er 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
	9 9 1	The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS OFFI SIR IORN 2 20221002T080048 20221002T080202 C001 and Back	er 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
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
		The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS OFFI SIR IORN 2 20221002T111640 20221002T111920 C001 and Back	er 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 OFFI SIR IORN 2 20221002T113025 20221002T113201 C001 and Back	er 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
		The OCOG Range and Backscatter Quality Flags have been set for one or more records

CS_OFFL_SIR_IOPN_2_20221002T121808_20221002T121903_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_20221002T123832_20221002T124355_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_20221002T125915_20221002T130114_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_20221002T130928_20221002T131116_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_20221002T133616_20221002T134003_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_20221002T135525_20221002T140111_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_20221002T144800_20221002T145039_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_20221002T152843_20221002T152913_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_20221002T161809_20221002T161929_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_20221002T162818_20221002T162943_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_20221002T171747_20221002T172126_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_20221002T225234_20221002T225410_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_20221002T230138_20221002T230339_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_20221002T003757_20221002T004458_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_20221002T005834_20221002T010650_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_20221002T012038_20221002T012207_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_20221002T021620_20221002T022129_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_20221002T022205_20221002T022348_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_20221002T023029_20221002T023046_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_20221002T025931_20221002T030213_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_20221002T031353_20221002T031546_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_20221002T035344_20221002T040055_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_20221002T043906_20221002T044114_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_20221002T045253_20221002T045548_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_20221002T053032_20221002T053112_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_20221002T053229_20221002T054001_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_20221002T054514_20221002T054537_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_20221002T054914_20221002T055101_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_20221002T055216_20221002T055404_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_20221002T061551_20221002T062119_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_20221002T063124_20221002T063532_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_20221002T071016_20221002T071759_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_20221002T071759_20221002T071923_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_20221002T072501_20221002T072719_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_20221002T075633_20221002T080048_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_20221002T081023_20221002T081404_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_20221002T084953_20221002T085658_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_20221002T085658_20221002T090018_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_20221002T093444_20221002T094141_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_20221002T102929_20221002T103548_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_20221002T103548_20221002T103659_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_20221002T105930_20221002T110125_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_20221002T111820_20221002T111951_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_20221002T113202_20221002T113306_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_20221002T120927_20221002T121125_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_20221002T121350_20221002T121611_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_20221002T132755_20221002T133020_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_20221002T134949_20221002T135525_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_20221002T140942_20221002T141028_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_20221002T143622_20221002T143848_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_20221002T145039_20221002T145303_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_20221002T153041_20221002T153545_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_20221002T161504_20221002T161809_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_20221002T162944_20221002T163138_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_20221002T170925_20221002T171747_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_20221002T175323_20221002T175758_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_20221002T220820_20221002T221544_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_20221002T230339_20221002T230938_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_20221002T232307_20221002T232519_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_20221002T234736_20221002T235440_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

L2 Quality Flags (1 Hz & 1 Hz PLRM)

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

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

Number of products with errors:

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20 Hz)

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

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

Number of products with errors: 66

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 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. The number of products with this error flag set is given below.

Number of products with errors:

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

6.1 P2P Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a NetCDF product file (.nc).

Number of products with errors:

6.2 P2P Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain.

Number of products with errors:

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors: 0

6.4 P2P Auxiliary Correction Error Check

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20221001T235010_20221002T003948_C002	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_20221002T003948_20221002T012924_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_20221002T012924_20221002T021903_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_20221002T021903_20221002T030839_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_20221002T030839_20221002T035817_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_20221002T035817_20221002T044754_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_20221002T044754_20221002T053732_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_20221002T053732_20221002T062709_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_20221002T062709_20221002T071647_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_20221002T071647_20221002T080623_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_20221002T080623_20221002T085601_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_2_20221002T085601_20221002T094538_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_20221002T094538_20221002T103516_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_20221002T103516_20221002T112453_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_20221002T112453_20221002T121431_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_20221002T121431_20221002T130407_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_2_20221002T130407_20221002T135346_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_20221002T135346_20221002T144322_C002	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_20221002T144322_20221002T153300_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_20221002T153300_20221002T162237_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_2_20221002T162237_20221002T171215_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_20221002T171215_20221002T180152_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_20221002T212021_20221002T220959_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_20221002T220959_20221002T225935_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_20221002T225935_20221002T234914_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_2_20221002T234914_20221003T003850_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

6.5 P2P Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220221002T012924_20221002T021903_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

P2P Quality Flags (20 Hz)

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

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

Number of products with errors:

P2P Quality Flags (20 Hz PLRM)

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

Number of products with errors:

P2P Quality Flags (1 Hz & 1 Hz PLRM)

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

Number of products with errors:

26

25

26

6.8 P2P Ocean Retracking Quality Check

P2P Retracking Flags (20 Hz)

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

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

Number of products with errors:

23

26

P2P Retracking Flags PLRM

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

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

Number of products with errors:

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	140	140	3	137	0
SIR_IOPR1B	78	79	1	78	0
SIR_IOPN1B	79	78	0	78	0
SIR_IOPM_2	140	140	95	45	0
SIR_IOPR_2	78	79	29	50	0
SIR_IOPN_2	79	78	21	57	0
SIR IOP P2P	25	24	0	24	0

7.1 QCC Errors

Number of QCC reports with errors:

0

7.2 QCC Warnings

Number of QCC reports with warnings

1743

Total number of occurrences of each warning

	Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	RBSZOPOEPNCDF
Г	SIR_IOPM1B	137	0	0	0	0	0	0
	SIR_IOPM_2	0	37	33	1	34	0	28
	SIR_IOPN1B	76	0	0	0	0	0	0
	SIR_IOPN_2	0	12	21	5	21	23	14
	SIR_IOPR1B	75	0	0	0	0	0	0
	SIR_IOPR_2	0	29	32	0	26	24	14

Product Type	RDTCONCDF	RMSSGHOPONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	1	2	29	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	1	0	0	0	0	17	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	0	2	0	33	0	36

Product Type	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	27	0	0	5	31	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	22	0	0	19	15	32	38
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	0	31	0	0	51	39

Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	8	36	0	5	0	0	0
SIR_IOPN1B	0	0	0	0	0	39	1
SIR_IOPN_2	24	21	20	11	1	0	0
SIR_IOPR1B	0	0	0	0	0	78	2
SIR_IOPR_2	9	32	36	1	2	0	0

Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	RBSZOPOEPNCDF
SIR_IOP_2_	15	24	24	5	24	14	24

SIR_IOP_2_ 1 3 15 24 18 13 24	Product Type	RDTCONCDF	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF
		1	3	15	24	18	13	24

Product Type	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-
SIR_IOP_2_	17	21	24	17	13	24	

Fest Description Key:					
Abbreviation	Test name	Details			
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter			
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			
RDTCONCDF	RangeDryTroposphericCorrectionOceanNetCDF	The Dry tropospheric correction should be between -2500mm and -1900mm (or missing) for surface type = ocean NetCDF			
RMSSGHOPONCDF	RangeMSSGeoidHeightOPOceanNetCDF	The MSS/geoid height should be between -106000mm and 88000mm (or missing) for surface type = ocean - NetCDF			
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 at 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			
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:

L1B and L2 Product name

uct name

P2P Product name
CS_OFFL_SIR_IOP_2__20221002T021903_20221002T030839_C001