

1. Overview

Report Production:	24-Apr-2023
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

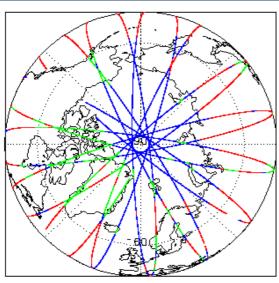
We would love to hear from you!

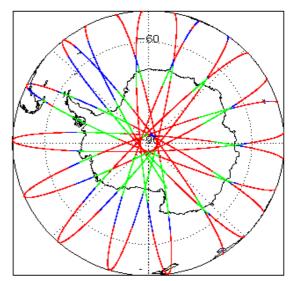
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com

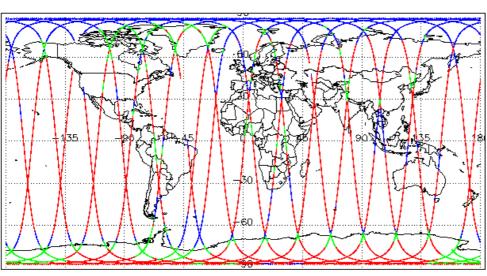
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

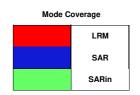
Mission / Instrument News		
20-Apr-2023	None	
21-Apr-2023	None	
22-Apr-2023	Nothing planned	

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

4. IOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

4.2 L1B Product Header Analysis

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

Number of products with errors:

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

4.4 L1B Auxiliary Correction Error Check

4.3 L1B Auxilary Data File Usage 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:

0

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 undate.

Number of products with errors:

 Product
 Test Failed
 Description

 CS_OFFL_SIR_IOPM1B_20230421T213856_20230421T213953_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:

16

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230421T142720_20230421T143956_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230420T235941_20230421T000342_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T005253_20230421T005421_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T031756_20230421T032015_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T054858_20230421T055144_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T082105_20230421T082238_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T130344_20230421T130558_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T144432_20230421T144858_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T203913_20230421T204224_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T213031_20230421T213131_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230421T231342_20230421T231418_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230421T011014_20230421T011216_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230421T032016_20230421T032059_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230421T071754_20230421T072004_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230421T080456_20230421T080542_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230421T211848_20230421T212903_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:

0

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:

0

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_20230421T044836_20230421T044906_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_20230421T195940_20230421T200033_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_20230420T235941_20230421T000342_C001	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 Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOPN_2_20230421T004319_20230421T004553_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_20230421T014142_20230421T014419_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_20230421T021820_20230421T022423_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_20230421T031756_20230421T032015_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_20230421T040039_20230421T040225_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_20230421T045728_20230421T050210_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_20230421T054858_20230421T055144_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_20230421T072004_20230421T072352_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_20230421T075911_20230421T080036_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_20230421T081029_20230421T081117_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_20230421T085943_20230421T090258_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_20230421T090810_20230421T090930_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_20230421T095039_20230421T095117_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_20230421T104719_20230421T104829_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_20230421T112624_20230421T112848_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_20230421T112932_20230421T113052_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_20230421T130344_20230421T130558_C001	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 Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT and 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOPN_2_20230421T140254_20230421T140529_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_20230421T144432_20230421T144858_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_20230421T162330_20230421T162721_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_20230421T163228_20230421T163306_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_20230421T172314_20230421T172450_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_20230421T194015_20230421T194135_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_20230421T203223_20230421T203348_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_20230421T203913_20230421T204224_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_20230421T221812_20230421T222133_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_20230421T235249_20230421T235524_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_20230421T013159_20230421T013658_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_20230421T013658_20230421T013831_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_20230421T031149_20230421T031756_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_20230421T045318_20230421T045728_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_20230421T062738_20230421T063810_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_20230421T080037_20230421T080109_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_20230421T081118_20230421T081906_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_20230421T095117_20230421T100200_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_20230421T113052_20230421T113825_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_20230421T131003_20230421T131525_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_20230421T140529_20230421T140738_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_20230421T144859_20230421T145602_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_20230421T162721_20230421T163228_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_20230421T180414_20230421T181306_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_20230421T194338_20230421T195337_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_20230421T195451_20230421T195654_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_20230421T200034_20230421T200221_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_20230421T211848_20230421T212903_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_20230421T212903_20230421T213031_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_20230421T230121_20230421T230802_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_20230421T230802_20230421T231342_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_20230421T213856_20230421T213953_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_20230421T000429_20230421T002340_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_20230421T002355_20230421T003639_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_20230421T004554_20230421T004749_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_20230421T004936_20230421T005253_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_20230421T005437_20230421T011013_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_20230421T011216_20230421T012208_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_20230421T013946_20230421T014141_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_20230421T014420_20230421T014630_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_20230421T014837_20230421T015957_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_20230421T021722_20230421T021820_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_20230421T022423_20230421T022711_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_20230421T022725_20230421T023154_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_20230421T023404_20230421T024842_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_20230421T025021_20230421T025108_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_20230421T032723_20230421T033303_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_20230421T033547_20230421T035952_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_20230421T040225_20230421T041059_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_20230421T041331_20230421T043842_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_20230421T051301_20230421T053832_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_20230421T054153_20230421T054320_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_20230421T054439_20230421T054857_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_20230421T055229_20230421T061825_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_20230421T061938_20230421T062221_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 20230421T064528 20230421T071753 C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been
00_011E_0111_011W_E_2202004E110040260_202004E11071703_0001	Altimeter Range and Backscatter Quality	set for one or more records
CS_OFFL_SIR_IOPM_2_20230421T072353_20230421T072938_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_20230421T073104_20230421T073719_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_20230421T082238_20230421T085652_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_20230421T090258_20230421T090810_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_20230421T091012_20230421T092920_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_20230421T100200_20230421T102955_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_20230421T103006_20230421T103523_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_20230421T104306_20230421T104718_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_20230421T104933_20230421T111706_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_20230421T111816_20230421T112458_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_20230421T112458_20230421T112544_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_20230421T114212_20230421T115848_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_20230421T120834_20230421T121450_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_20230421T121636_20230421T122159_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_20230421T123306_20230421T124531_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_20230421T125902_20230421T130343_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_20230421T131725_20230421T131743_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_20230421T132525_20230421T133633_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_20230421T134038_20230421T135357_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_20230421T135604_20230421T140058_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_20230421T140104_20230421T140111_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_20230421T140135_20230421T140253_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_20230421T140941_20230421T141414_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_20230421T142720_20230421T143956_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_20230421T150637_20230421T150638_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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Description Property 2000 Allered Property 200	CS_OFFL_SIR_IOPM_2_20230421T150824_20230421T150939_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
Col. CHE, SIR. ICPM 2_202042111959_20001 Col. CHE, SIR. ICPM 2_202042111959_20001 Col. CHE, SIR. ICPM 2_202042111959_20001 Col. CHE, SIR. ICPM 2_202042111959_20001111959_20001 Col. CHE, SIR. ICPM 2_202042111959_200012117059_20001 Col. CHE, SIR. ICPM 2_202042117059_20001217059_200012	CS_OFFL_SIR_IOPM_2_20230421T151748_20230421T153257_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
So. OFFL. SRI. ICPM 2. 20008421119050. 12009421110709 CIDID COS. OFFL. SRI ICPM 2. 20008421119070 382934211171090 CIDID COS. OFFL. SRI ICPM 2. 20008421119070 38293421119000 CIDID COS. OFFL. SRI ICPM 2. 20008421119070 SEEDIAL TITLE CIDID COS. OFFL. SRI ICPM	CS_OFFL_SIR_IOPM_2_20230421T153539_20230421T154013_C001		
SO OFFL SIR IOPM 2 2020421117938 2020421117928 C001 OCS OFFL SIR IOPM 2 2020421117938 20204211179218 C001 OCS OFFL SIR IOPM 2 2020421117938 20204211179318 C001 OCS OFFL SIR IOPM 2 2020421117939 2020421118935 C001 OCS OFFL SIR IOPM 2 202042111893 C	CS_OFFL_SIR_IOPM_2_20230421T154631_20230421T161323_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CR. OFFL SIR OFFL 2 #2200421119040, 2020421119019, COID CR. OFFL SIR OFFL 2 #2200421119044, 2020421119019, COID CR. OFFL SIR OFFL 2 #2200421119019, 2020421120190, COID CR. OFFL SIR OFFL 2 #2200421119019, 2020421120191, COID CR. OFFL SIR OFFL 2 #2200421119019, COID CR. OFFL SIR OFFL 2 #2200421119019, COID CR. OFFL SIR OFFL 2 #2200421119019, COID CR. OFFL SIR OFFL 2 #2200421110019, 2020421120191, COID CR. OFFL SIR OFFL 2 #22004211100	CS_OFFL_SIR_IOPM_2_20230421T164656_20230421T170719_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
De GARLES IN JOHN 2 2020421111939 2000942111939 CODI DE CODE Altereder Rango Justin, CODI Altereder Rango Justin, CODI DE CODE Altereder Rango Justin, CODI Altereder Rango Justi	CS_OFFL_SIR_IOPM_2_20230421T170750_20230421T171225_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sedectife Gualty Co. OFFL. SIR. JOPM 2, 20204211172516, 20204211182516, 20204211122516, 2020421122516,	CS_OFFL_SIR_IOPM_2_20230421T171538_20230421T171928_C001		
and Backscatter Custly, COCG. Alternative Range and Backscatter Custly and the COCGA Alternative Range SNA, SWH and Backscatter Custly and the Cocga Alternative Range and Backscatter Custly Range and Backscatter Custly Range and Backscatter Custly Range and Backscatter Custly Range Range Range and Backscatter Custly Range	CS_OFFL_SIR_IOPM_2_20230421T171949_20230421T172314_C001		
and the COGO Alterneter Plange and Backscatter Caulity Flags have been and the Cogo Alterneter Plange and Backscatter Caulity Flags have been and the Cogo Alterneter Plange and Backscatter Caulity Flags have been and the Cogo Alterneter Plange and Backscatter Caulity Flags have been and the Cogo Alterneter Plange and Backscatter Caulity Flags have been set to one or more records. CS_OFFL_SIR_OPM_2_20230421T18554_20230421T185416_C001 CS_OFFL_SIR_OPM_2_20230421T18554_20230421T185416_C001 CS_OFFL_SIR_OPM_2_20230421T18554_20230421T185416_C001 CS_OFFL_SIR_OPM_2_20230421T18554_20230421T36516_C001 CS_OFFL_SIR_OPM_2_20230421T30556_20230421T30516_C001 CS_OFFL_SIR_OPM_2_20230421T30556_20230421T20516_C001 CS_OFFL_SIR_OPM_2_20230421T30556_20230421T20516_C001 CS_OFFL_SIR_OPM_2_20230421T20556_20230421T20516_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20516_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_20230421T20565_C001 CS_OFFL_SIR_OPM_2_20230421T20565_202304	CS_OFFL_SIR_IOPM_2_20230421T172546_20230421T175310_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_JOPM_2_20230421T18534_20230421T18544_20001 CS_OFFL_SIR_JOPM_2_20230421T18534_20230421T19548_0001 CS_OFFL_SIR_JOPM_2_20230421T18534_20230421T196218_0001 CS_OFFL_SIR_JOPM_2_20230421T196356_20230421T196218_0001 CS_OFFL_SIR_JOPM_2_20230421T196356_20230421T196218_0001 CS_OFFL_SIR_JOPM_2_20230421T196356_20230421T08516_000000000000000000000000000000000000	CS_OFFL_SIR_IOPM_2_20230421T182420_20230421T183755_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_JOPM_2_20230421T196548_20230421T19018_C001 CS_OFFL_SIR_JOPM_2_20230421T190596_20230421T19018_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202516_20230421T20867_C001 CS_OFFL_SIR_JOPM_2_20230421T202857_20230421T203149_C001 CS_OFFL_SIR_JOPM_2_20230421T20348_20230421T203149_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203140_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203160_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203060_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20300_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203500_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203500_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203500_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203500_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T203500_C001 CS_OFFL_SIR_JOPM_2_20230421T203505_20230421T20350	CS_OFFL_SIR_IOPM_2_20230421T183757_20230421T185220_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backcaater Quality CS_OFFL_SIR_IOPM_2_20230421T190588_20230421T194015_0001 CS_OFFL_SIR_IOPM_2_20230421T202516_20230421T194015_0001 CS_OFFL_SIR_IOPM_2_20230421T202516_20230421T202657_CO01 CS_OFFL_SIR_IOPM_2_20230421T202516_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T20348_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T203143_0001 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T20010 CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T20010 CS_OFFL_SIR_IOPM_2_20230421T203405_20230421T20010 CS_OFFL_SIR_IOPM_2_20230421T203405_20230421T20010 CS_OFFL_SIR_IOPM_2_20230421T203148_0001 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T210010 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T211002_00030421T210010 CS_OFFL_SIR_IOPM_2_20230421T210010 CS_OFFL_SIR_IOPM_2_20230421T210010 CS_OFFL_SIR_IOPM_2_20230421T210010 CS_OFFL_SIR_IOPM_2_20230421T210010 CS_OFFL_SIR_IOPM_2_20230421T221002_0001 CS_OFFL_SIR_IOPM_2_20230421T221002_0001 CS_OFFL_SIR_IOPM_2_20230421T221002_0001 CS_OFFL_SIR_IOPM_2_20230421T220010 CS_OFFL_SIR_IOPM_2_20230421T230010 CS_OFFL_SIR_IOPM_2_20230421T23000 CS_OFFL_SIR_IOPM_2_20230421T23000 CS_OFFL	CS_OFFL_SIR_IOPM_2_20230421T185354_20230421T185842_C001		
and Backscatter Quality Flags have been although Flags have been althou	CS_OFFL_SIR_IOPM_2_20230421T185848_20230421T190218_C001		
and the OCOG Altimeter Range and Backscatter Quality Flags have been at Manufacture Range and Backscatter Quality Flags have been at Manufacture Range and Backscatter Quality Range	CS_OFFL_SIR_IOPM_2_20230421T190536_20230421T194015_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Response R	CS_OFFL_SIR_IOPM_2_20230421T202516_20230421T202657_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality CS_OFFL_SIR_IOPM_2_20230421T204505_20230421T210716_C001 CS_OFFL_SIR_IOPM_2_20230421T21002_20230421T210716_C001 CS_OFFL_SIR_IOPM_2_20230421T211002_20230421T211848_C001 CS_OFFL_SIR_IOPM_2_20230421T211002_20230421T211848_C001 CS_OFFL_SIR_IOPM_2_20230421T213156_20230421T23500_C001 CS_OFFL_SIR_IOPM_2_20230421T21318_20230421T21500_C001 CS_OFFL_SIR_IOPM_2_20230421T21518_20230421T21500_C001 CS_OFFL_SIR_IOPM_2_20230421T21518_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T222314_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222314_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222314_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222314_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222314_20230421T23500_C001 CS_OFFL_SIR_IOPM_2_20230421T223204_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T223204_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T23555_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T23555_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T23555_20230421T235717_C001 CCCARA Nitmeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T223204_20230421T235717_C001 CCCARA Nitmeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T232204_20230421T235717_C001 CCCARA Nitmeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T23555_20230421T235717_C001 CCCARA Nitmeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCARA Nitmeter Range and Backscatter Quality Flags have been set for one or more records CCCARA Nitmeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCCARA Nitmeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCCARA Nitmeter Range, SSHA, SWH and Backs	CS_OFFL_SIR_IOPM_2_20230421T202857_20230421T203143_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and the OCOG Altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range. SHA, SWH and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T232204_20230421T23550_C001 CS_OFFL_SIR_IOPM_2_20230421T235255_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 COCGA Altimeter Range Quality, OCOGAItimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CCCGA Altimeter Range Quality, OCOGAItimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CCCGA Altimeter Range Quality, OCOGAItimeter Range and Backscatter Quality Flags have been set for one or more records CCCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCGA Altimeter Range Quality, OCOGAITIMETER Range And Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230421T203348_20230421T203912_C001		
and Backscatter Quality CCG Altimeter Range and Backscatter Quality Flags have been Altimeter Range Range Rang	CS_OFFL_SIR_IOPM_2_20230421T204505_20230421T210716_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality CS_OFFL_SIR_IOPM_2_20230421T215118_20230421T221052_C001 CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T232204_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144_C001 and Backscatter Quality and Backscatter Quality set on one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CCEAN 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 Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPM_2_20230421T211002_20230421T211848_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 CS_OFFL_SIR_IOPM_2_20230421T232204_20230421T23550_C001 CS_OFFL_SIR_IOPM_2_20230421T2325525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T055144_C001 CS_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144_C001 CS_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144	CS_OFFL_SIR_IOPM_2_20230421T213156_20230421T213500_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and 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 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 Ocean Altimeter Range, SSHA, SWH 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 OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records 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 OCOG Altimeter Range, SSHA, SWH 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 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	CS_OFFL_SIR_IOPM_2_20230421T215118_20230421T221052_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20230421T222412_20230421T225700_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records Cs_OFFL_SIR_IOPM_2_20230421T232204_20230421T234550_C001 Cs_OFFL_SIR_IOPM_2_20230421T235252_20230421T235717_C001 Cs_OFFL_SIR_IOPM_2_20230421T23525_20230421T235717_C001 Cs_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 Cs_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144_C001 Cs_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144_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_IOPM_2_20230421T054858_20230421T055144_C001 Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records Cs_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144_C001 Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimet	CS_OFFL_SIR_IOPM_2_20230421T221314_20230421T221811_C001		
CS_OFFL_SIR_IOPM_2_20230421T232204_20230421T234550_C001 and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001 CS_OFFL_SIR_IOPM_2_20230421T05525_20230421T055144_C001 And Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality, OCOG Backscatter Quality Coean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPM_2_20230421T054858_20230421T055144_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_20230421T222412_20230421T225700_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Backscatter Quality for one or more records Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20230421T232204_20230421T234550_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPN_2_20230421T054858_20230421T055144_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20230421T235525_20230421T235717_C001		
	CS_OFFL_SIR_IOPN_2_20230421T054858_20230421T055144_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPN_2_20230421T130846_20230421T131003_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_IOPN_2_20230421T185230_20230421T185300_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230421T201816_20230421T201914_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_20230421T214808_20230421T215118_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_IOPR_2_20230421T085652_20230421T085943_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_IOPR_2_20230421T210716_20230421T211002_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

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.

CS_OFFL_SIR_IOPN_2_20230421T004556_20230421T004936_C001 COGG Alimeter Range Quality PLRM. COGG Range and Backscatter Quality Plage have been set for one or more records. The OCOG Range and Backscatter Quality PLRM. COGG Range and Backscatte	Product	Test Failed	Description
CS_OFFL_SIR_JOPN_2_20230421T012208_20230421T012284_C001 CS_OFFL_SIR_JOPN_2_20230421T013831_20230421T012846_C001 CS_OFFL_SIR_JOPN_2_20230421T013831_20230421T013946_C001 CS_OFFL_SIR_JOPN_2_20230421T014142_20230421T014419_C001 CS_OFFL_SIR_JOPN_2_20230421T014142_20230421T014419_C001 CS_OFFL_SIR_JOPN_2_20230421T014142_20230421T014419_C001 CS_OFFL_SIR_JOPN_2_20230421T014142_20230421T014419_C001 CS_OFFL_SIR_JOPN_2_20230421T014142_20230421T014419_C001 CS_OFFL_SIR_JOPN_2_20230421T020382_20230421T020419_C001 CS_OFFL_SIR_JOPN_2_20230421T020382_20230421T020419_C001 CS_OFFL_SIR_JOPN_2_20230421T020382_20230421T020419_C001 CS_OFFL_SIR_JOPN_2_20230421T025851_20230421T025832_C001 CS_OFFL_SIR_JOPN_2_20230421T025851_20230421T025832_C001 CS_OFFL_SIR_JOPN_2_20230421T03756_20230421T032315_C001 CS_OFFL_SIR_JOPN_2_20230421T03756_20230421T032329_C001 CS_OFFL_SIR_JOPN_2_20230421T03756_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T032550_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T032550_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T030339_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T030339_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T030339_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T030339_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T030339_20230421T032339_C001 CS_OFFL_SIR_JOPN_2_20230421T040339_20230421T032339_C001 CCG_Allimeter Range_Quality PLRM. COCG Ballocater Quality CS_OFFL_SIR_JOPN_2_20230421T040339_20230421T04025_C001 CCG_Allimeter Range_Quality PLRM. CCGG Ballocater Quality CS_OFFL_SIR_JOPN_2_20230421T040339_20230421T04025_C001 CCG_Allimeter Range_Quality PLRM. CCGG Ballocater Quality CS_OFFL_SIR_JOPN_2_20230421T040339_20230421T040517_C001 CCGG Allimeter Range Quality PLRM. CCGG Ballocater Quality CGGG Range and Backscatter Quality Flags have been set for one or more records The CCGG Range and Backscatter Quality Flags have been set for one or more records The CCGG Range and Backscatter Quality Flags have been set for one or more records The CCGG Range and Backscat	CS_OFFL_SIR_IOPN_2_20230420T235941_20230421T000342_C001		
CS_OFFL_SIR_IOPN_2_20230421T013831_20230421T013946_C001 CS_OFFL_SIR_IOPN_2_20230421T014142_20230421T013946_C001 CS_OFFL_SIR_IOPN_2_20230421T014142_20230421T04419_C001 CS_OFFL_SIR_IOPN_2_20230421T02238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T0205932_C001 CS_OFFL_SIR_IOPN_2_20230421T025951_20230421T025932_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CCS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032329_C001 CCG_Altimeter Range Quality PLRM, CDG_Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set for one or more records The Occord Altimeter Range and Backscatter Quality Flags have been set f	CS_OFFL_SIR_IOPN_2_20230421T004750_20230421T004936_C001		
OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T021831_20230421T026939_C001 CS_OFFL_SIR_IOPN_2_20230421T021831_20230421T025939_C001 CS_OFFL_SIR_IOPN_2_20230421T031756_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T031756_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032252_C001 CCGA Altimeter Range Quality PLRM, CCG Backscatter Quality CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032252_C001 CCGA Altimeter Range Quality PLRM, CCGA Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032252_C001 CCGA Altimeter Range Quality PLRM, CCGA Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032252_C001 CCGA Altimeter Range Quality PLRM, CCGA Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records CCGA Altimeter Range and Backscatter Qu	CS_OFFL_SIR_IOPN_2_20230421T012208_20230421T012524_C001		
CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001 CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020215_C001 CS_OFFL_SIR_IOPN_2_20230421T020230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_20230421T03015_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T030205_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040205_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040205_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045158_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045	CS_OFFL_SIR_IOPN_2_20230421T013831_20230421T013946_C001		
OCG Allimeter Range Quality PLRM, OCG Backscatter Quality PLRM, OCG Backscatter Quality Flags have been set for one or more records OCG Allimeter Range Quality PLRM, OCG Backscatter Quality Flags have been set for one or more records OCG Allimeter Range Quality PLRM, OCG Backscatter Quality Flags have been set for one or more records OCG Allimeter Range Quality PLRM, OCG Backscatter Quality Flags have been set for one or more records The OCG Range and Backscatter Quality Flags have been set for one or more records OCG Allimeter Range Quality PLRM, OCG Allimeter Range and Backscatter Quality Flags have been set for one or more records The OCG Range and Backscatter Quality Flags have been set for one or more records OCG Allimeter Range Quality PLRM, OCG Allimeter Range and Backscatter Quality Flags have been set for one or more records OCG Allimeter Range Quality PLRM, OCG Backscatter Quality PLRM, OCG Altimeter Range SSHA, SWH and Backscatter Quality PLRM, OCG Altimeter Range SSHA, SWH and Backscatter Quality PLRM, OCG Altimeter Range SSHA, SWH and Backscatter Quality PLRM, OCG Altimeter Range SSHA, SWH and Backscatter Quality PLRM, OCG Altimeter Range Altimeter Range and Backscatter Quality PLRM, OCG Backscatter Quality PLRM, OCG Altimeter Range Quality PLRM	CS_OFFL_SIR_IOPN_2_20230421T014142_20230421T014419_C001		
OCOG Backscatter Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range SHA, SWH and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range	CS_OFFL_SIR_IOPN_2_20230421T020238_20230421T020419_C001		
OCOG Backscatter Quality CS_OFFL_SIR_IOPN_2_20230421T031756_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032015_C001 CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032239_C001 CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032239_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032239_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032713_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T0451317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CCOG Altimeter Range Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Albackscatter Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Albackscatter Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Albackscatter Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Albackscatter Quality Flags have been set for one or more records CCOG Altimeter Range Albackscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPN_2_20230421T021631_20230421T021710_C001		
CS_OFFL_SIR_IOPN_2_20230421T031756_20230421T032015_C001 and Backscatter Quality PLRM, OCOS Altimeter Range and Backscatter Quality PLRM and the OCOG Altimeter Range and Backscatter Quality Plags have been set for one or more records CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032713_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032713_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CCCG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCG Altimeter Range Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCCG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records CCCG Altimeter Range Quality PLRM, OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPN_2_20230421T025851_20230421T025932_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032713_C001 CS_OFFL_SIR_IOPN_2_20230421T032550_20230421T032713_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CCOG Altimeter Range Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Quality PLRM, CCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records CCOG Altimeter Range Quality PLRM, CCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPN_2_20230421T031756_20230421T032015_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050220_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050200_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T045728_20230421T045728_20230421T045728_20230421T045728_20230421T045728_20230421T045728_20230421T045728_20230421T045728_20	CS_OFFL_SIR_IOPN_2_20230421T032252_20230421T032329_C001		
CS_OFFL_SIR_IOPN_2_20230421T040239_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T050259_20230421T050210_C001 OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records The 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_20230421T032550_20230421T032713_C001		
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records The OCOG Range and Backscatter Quality Flags have been set for one or more records OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or more records	CS_OFFL_SIR_IOPN_2_20230421T040039_20230421T040225_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM ocog Altimeter Range and Backscatter Quality PLRM CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001 CS_OFFL_SIR_IOPN_2_20230421T050259_20230421T050210_C001 And Backscatter Quality PLRM, 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_20230421T050259_20230421T050210_C001 OCOG 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	CS_OFFL_SIR_IOPN_2_20230421T045140_20230421T045157_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCOG Backscatter Quality OCOG Backscatter Quality more records OCOG Backscatter Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one or	CS_OFFL_SIR_IOPN_2_20230421T045255_20230421T045317_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
	CS_OFFL_SIR_IOPN_2_20230421T045728_20230421T050210_C001		
	CS_OFFL_SIR_IOPN_2_20230421T050259_20230421T050420_C001		
CS_OFFL_SIR_IOPN_2_20230421T054321_20230421T054439_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_20230421T054321_20230421T054439_C001		

CS_OFFL_SIR_IOPN_2_20230421T074720_20230421T075001_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_20230421T080109_20230421T080133_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_20230421T080542_20230421T080705_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_20230421T085943_20230421T090258_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_20230421T092921_20230421T093145_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_20230421T103700_20230421T104110_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_20230421T112624_20230421T112848_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_20230421T130344_20230421T130558_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_20230421T130601_20230421T130803_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_20230421T130846_20230421T131003_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_20230421T135420_20230421T135603_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_20230421T142134_20230421T142530_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_20230421T142530_20230421T142659_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_20230421T143957_20230421T144120_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_20230421T144432_20230421T144858_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_20230421T150736_20230421T150824_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_20230421T154043_20230421T154050_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_20230421T162330_20230421T162721_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_20230421T163228_20230421T163306_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_20230421T164218_20230421T164359_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_20230421T164448_20230421T164656_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_20230421T171313_20230421T171538_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_20230421T172314_20230421T172450_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_20230421T190218_20230421T190352_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_20230421T194015_20230421T194135_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_20230421T194215_20230421T194338_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_20230421T201325_20230421T201432_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_20230421T201816_20230421T201914_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_20230421T203913_20230421T204224_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_20230421T213500_20230421T213645_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_20230421T235249_20230421T235524_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_20230421T235717_20230422T000343_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_20230421T003640_20230421T004319_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_20230421T013159_20230421T013658_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_20230421T013658_20230421T013831_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_20230421T014630_20230421T014837_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_20230421T020057_20230421T020238_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_20230421T024842_20230421T025021_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_20230421T030525_20230421T030537_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_20230421T031149_20230421T031756_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_20230421T045158_20230421T045255_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_20230421T045318_20230421T045728_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_20230421T053833_20230421T054017_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_20230421T062738_20230421T063810_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_20230421T071754_20230421T072004_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_20230421T073720_20230421T074230_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_20230421T081118_20230421T081906_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_20230421T082034_20230421T082105_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_20230421T085652_20230421T085943_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_20230421T095117_20230421T100200_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_20230421T113052_20230421T113825_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_20230421T114109_20230421T114212_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_20230421T115848_20230421T115941_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_20230421T122618_20230421T123306_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_20230421T131003_20230421T131525_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_20230421T140529_20230421T140738_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_20230421T144420_20230421T144432_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_20230421T144859_20230421T145602_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_20230421T150054_20230421T150116_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_20230421T150939_20230421T151153_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_20230421T151154_20230421T151403_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_20230421T161323_20230421T161559_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_20230421T162721_20230421T163228_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_20230421T163307_20230421T163532_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_20230421T170720_20230421T170750_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_20230421T172450_20230421T172546_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_20230421T180414_20230421T181306_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_20230421T181326_20230421T181558_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_20230421T190352_20230421T190536_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_20230421T194338_20230421T195337_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_20230421T204225_20230421T204505_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_20230421T211848_20230421T212903_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_20230421T222134_20230421T222412_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_20230421T225700_20230421T225715_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_20230421T230121_20230421T230802_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_20230421T230802_20230421T231342_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_20230421T234551_20230421T235248_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
LO Ovelity Flore (4 Hz 9 4 Hz DI DIA)		

L2 Quality Flags (1 Hz & 1 Hz PLRM)

 $\label{lem:currently} \textbf{Currently, there are several common flags raised in the Level 2 products, which are summarised below.}$

60

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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:

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_220230420T235732_20230421T004710_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_220230421T004710_20230421T013647_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_220230421T013647_20230421T022624_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_20230421T022624_20230421T031601_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_220230421T031601_20230421T040539_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_20230421T040539_20230421T045516_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_20230421T045516_20230421T054454_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_20230421T054454_20230421T063431_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_20230421T063431_20230421T072409_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_20230421T072409_20230421T081346_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_20230421T081346_20230421T090323_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_20230421T090323_20230421T095300_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_20230421T095300_20230421T104238_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_20230421T104238_20230421T113215_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_20230421T113215_20230421T122153_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_20230421T122153_20230421T131130_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_20230421T131130_20230421T140107_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_20230421T140107_20230421T145044_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_20230421T145044_20230421T154022_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_20230421T154022_20230421T162959_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_20230421T162959_20230421T171937_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_20230421T171937_20230421T180914_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_20230421T180914_20230421T185852_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_20230421T185852_20230421T194829_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_20230421T194829_20230421T203806_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_20230421T203806_20230421T212743_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_20230421T212743_20230421T221721_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_20230421T221721_20230421T230658_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_20230421T230658_20230421T235635_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)

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_220230421T212743_20230421T221721_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: 30

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: 3

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: 2

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:

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.

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	168	168	2	166	0
SIR_IOPR1B	140	103	5	98	0
SIR_IOPN1B	103	140	0	140	0
SIR_IOPM_2	168	168	116	52	0
SIR_IOPR_2	140	103	39	64	0
SIR_IOPN_2	103	140	56	82	2
SIR_IOP_P2P	29	29	0	27	2

7.1 QCC Errors

Number of QCC reports with errors:

10

Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOPR_2	2	2	2	2							
·										•	·
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOP_2_	2	2	2	2							

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

7.2 QCC Warnings

Number of QCC reports with warnings

2187

Total number of occurrences of each warning								
	Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
	SIR_IOPM1B	166	0	0	0	0	0	0
	SIR_IOPM_2	0	0	39	38	0	40	0
	SIR_IOPN1B	96	0	0	0	0	0	0
	SIR_IOPN_2	0	0	10	36	5	29	29
	SIR_IOPR1B	133	0	0	0	0	0	0
	SIR IOPR 2	0	2	29	48	0	31	23

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCE	RPEPOPFDPLRMSINNCDI	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	34	1	30	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	22	1	0	0	26	0	37
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	9	1	0	52	0	59	0

	Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
Ī	SIR_IOPM1B	0	0	0	0	0	0	0
	SIR_IOPM_2	27	0	0	4	23	0	5
	SIR_IOPN1B	0	0	0	0	0	0	0
	SIR_IOPN_2	0	0	32	15	38	55	26
	SIR_IOPR1B	0	0	0	0	0	0	0
	SIR IOPR 2	0	50	0	3	69	33	7

Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_IOPM1B	0	0	0	0	0	0	
SIR_IOPM_2	32	0	3	0	0	0	
SIR_IOPN1B	0	0	0	0	49	1	
SIR_IOPN_2	31	30	6	1	0	0	
SIR_IOPR1B	0	0	0	0	140	7	
SIR_IOPR_2	30	49	1	2	0	0	

	Dura de cata Trans	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD	DDCZODOEDNODE
- 1	Product Type	Юнишоок	MVIOEPFDNCDF	MVIOEPNODF	MAIONCDE	RBSZUPUEPFUNCUF	RB520P0EPFDPLRMNCD	RB520POEPNCDF
	SIR_IOP_2_	15	27	29	5	28	18	27

Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR IOP 2	4	15	28	24	14	29	18

Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF	-	-
SIR_IOP_2_	25	29	19	9	29		
Product Type	-	•	-	-	-	-	-

Test Description Key:							
Abbreviation	Test name	Details					
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter					
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)					
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees					
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only					
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean					
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees					

RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
	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:

0