



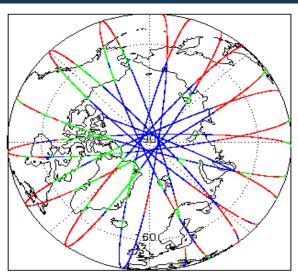
1. Overview

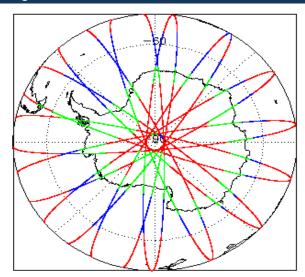
Report Production:	15-Nov-2019
Processor Used:	CryoSat Ocean Processor
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data

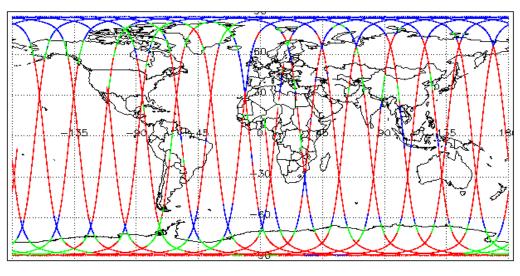
Check	L1 & L2	P2P
Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Product Software Check	Nominal	Nominal
Product Format Check	Nominal	Nominal
Product Header Analysis	Nominal	Nominal
Auxiliary Data File Usage Check	Nominal	Nominal
Auxiliary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

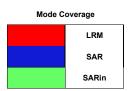
	Mission / Instrument News		
	11-Nov-2019	None	
۱	12-Nov-2019	None	
	13-Nov-2019 SIRAL unavailability on 13-Nov-2019 from 14:24:28 to 16:10:50 due to a planned orbit manoeuvre.		

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 binary product file (.DBL).

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.

L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1B IOPR and IOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.

Number of products with errors:

4.3 L1B Auxilary Data File Usage Check

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

Number of products with errors:

4.4 L1B Auxiliary Correction Error Check

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

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. This is being investigated and will be updated in the next SW update.

Number of products with errors:

1

Product	Test Failed	Description
CS OFFL SIR IOPM1B 20191112T044040 20191112T045618 C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more
00_011E_011C101111B_201911121044040_201911121043010_0001		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.

Number of products with errors:

15

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20191112T040628_20191112T042218_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T010714_20191112T011028_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T042625_20191112T042840_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T142738_20191112T143200_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T160634_20191112T160746_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T160917_20191112T161141_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T164821_20191112T165209_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T174555_20191112T174818_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T192050_20191112T192120_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T210754_20191112T211251_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20191112T223820_20191112T223911_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20191112T001446_20191112T001802_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20191112T110132_20191112T110833_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20191112T112000_20191112T112321_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20191112T173944_20191112T174555_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 binary product file (.DBL).

Number of products with errors:

0

5.2 L2 Product Header Analysis

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

Number of products with errors:

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:

(

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.

Number of products with errors:

54

CS_OFFL_SIR_IOPM_2_20191112T052720_20191112T055005_C001 CS_OFFL_SIR_IOPN_2_20191112T001802_20191112T002121_C001 CS_OFFL_SIR_IOPN_2_20191112T002648_20191112T002813_C001	Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T002648_20191112T002813_C001	1 3 1 7 ()	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T010714_20191112T011028_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_20191112T020452_20191112T020632_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_20191112T024330_20191112T024459_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T024828_20191112T024925_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_20191112T033344_20191112T033526_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T034236_20191112T034449_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_20191112T042625_20191112T042840_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_20191112T051317_20191112T051442_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T052126_20191112T052620_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_20191112T060306_20191112T060703_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_20191112T070232_20191112T070428_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T105836_20191112T110005_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T115103_20191112T115229_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_20191112T115739_20191112T120044_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_20191112T133137_20191112T133431_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_20191112T133641_20191112T134203_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_20191112T142738_20191112T143200_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_20191112T160634_20191112T160746_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_20191112T160917_20191112T161141_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T174555_20191112T174818_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_20191112T174834_20191112T175019_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 solution 2: FES) and the Non-Equilibrium Long Period Ocean Tide for one or more records
CS_OFFL_SIR_IOPN_2_20191112T182835_20191112T183026_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T183847_20191112T184059_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

CS_OFFL_SIR_IOPN_2_20191112T192050_20191112T192120_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T192543_20191112T193003_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T200811_20191112T200950_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPN_2_20191112T214806_20191112T215147_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_20191112T232734_20191112T233051_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_20191112T233603_20191112T233729_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20191112T011028_20191112T011825_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_20191112T024925_20191112T025508_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_20191112T042840_20191112T043529_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_20191112T060703_20191112T061225_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_20191112T074523_20191112T075528_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20191112T092247_20191112T092644_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_20191112T092644_20191112T093025_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_20191112T094049_20191112T094145_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20191112T110132_20191112T110833_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_20191112T110833_20191112T110959_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_20191112T124009_20191112T124732_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_20191112T124732_20191112T125003_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_20191112T142204_20191112T142624_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_20191112T142624_20191112T142738_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_20191112T160000_20191112T160448_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_20191112T160448_20191112T160634_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_20191112T171715_20191112T172258_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_IOPR_2_20191112T173944_20191112T174555_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_20191112T191653_20191112T191933_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20191112T192120_20191112T192543_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_20191112T205846_20191112T210754_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_20191112T223911_20191112T224659_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_20191112T044040_20191112T045618_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20Hz)

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.

80

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20191111T235323_20191112T001446_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_20191112T002121_20191112T002235_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_20191112T002242_20191112T002648_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_20191112T003220_20191112T004154_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_20191112T004341_20191112T004951_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_20191112T005135_20191112T005616_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_20191112T011825_20191112T015327_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_20191112T015626_20191112T020133_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_20191112T021232_20191112T024330_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_20191112T024708_20191112T024828_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_20191112T025858_20191112T031732_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_20191112T031756_20191112T033313_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_20191112T033526_20191112T034031_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_20191112T035007_20191112T040008_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_20191112T040628_20191112T042218_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_20191112T044040_20191112T045618_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_20191112T045758_20191112T051134_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_20191112T051442_20191112T051942_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_20191112T052720_20191112T055005_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_20191112T055127_20191112T060045_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_20191112T062906_20191112T065016_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_20191112T065523_20191112T065858_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_20191112T065905_20191112T065914_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_20191112T065920_20191112T070232_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_20191112T070613_20191112T073217_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_20191112T080507_20191112T082942_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_20191112T083305_20191112T083812_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_20191112T084612_20191112T091905_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_20191112T094146_20191112T094924_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_20191112T100455_20191112T100832_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_20191112T101304_20191112T101845_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_20191112T102622_20191112T105830_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_20191112T113117_20191112T114657_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_20191112T115229_20191112T115739_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_20191112T120430_20191112T123845_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_20191112T125003_20191112T125202_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_20191112T130216_20191112T130651_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_20191112T130732_20191112T132505_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_20191112T134417_20191112T141915_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_20191112T141920_20191112T141923_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_20191112T143233_20191112T145108_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_20191112T145157_20191112T150520_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_20191112T151352_20191112T151549_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_20191112T151713_20191112T152051_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_20191112T152308_20191112T153812_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_20191112T154013_20191112T154936_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_20191112T161141_20191112T162858_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_20191112T165209_20191112T165516_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_20191112T165519_20191112T165953_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_20191112T170255_20191112T171715_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_20191112T175515_20191112T180445_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_20191112T180448_20191112T182652_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_20191112T183026_20191112T183241_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_20191112T183250_20191112T183847_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_20191112T184222_20191112T190712_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_20191112T194002_20191112T200533_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_20191112T201237_20191112T201653_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_20191112T202148_20191112T204956_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_20191112T205639_20191112T205846_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_20191112T211251_20191112T214333_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_20191112T215147_20191112T215727_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_20191112T220105_20191112T220509_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_20191112T221757_20191112T222245_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_20191112T223628_20191112T223753_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_20191112T225102_20191112T232354_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_20191112T233051_20191112T233603_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_20191112T234138_20191112T235741_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T004951_20191112T005054_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_20191112T034102_20191112T034109_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_20191112T040008_20191112T040114_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_20191112T040403_20191112T040415_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_20191112T052016_20191112T052023_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_20191112T154936_20191112T155255_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_20191112T165953_20191112T170138_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T172855_20191112T172953_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_20191112T193058_20191112T193220_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_20191112T210754_20191112T211251_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

	9 3.	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191112T093049_20191112T093328_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_20191112T100832_20191112T101146_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 (20Hz PLRM)

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20191112T001802_20191112T002121_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_20191112T004951_20191112T005054_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_IOPN_2_20191112T010446_20191112T010532_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_IOPN_2_20191112T010714_20191112T011028_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_20191112T020452_20191112T020632_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_20191112T024828_20191112T024925_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_20191112T033344_20191112T033526_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_20191112T034236_20191112T034449_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_20191112T040008_20191112T040114_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_IOPN_2_20191112T042218_20191112T042519_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_20191112T051317_20191112T051442_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_IOPN_2_20191112T060306_20191112T060703_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_20191112T062202_20191112T062257_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one o more records.
CS_OFFL_SIR_IOPN_2_20191112T062334_20191112T062717_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one omore records.
CS_OFFL_SIR_IOPN_2_20191112T065250_20191112T065523_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_20191112T075642_20191112T075655_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.
CS_OFFL_SIR_IOPN_2_20191112T084146_20191112T084316_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_20191112T091905_20191112T092106_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_20191112T093025_20191112T093049_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_20191112T102046_20191112T102201_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_20191112T110011_20191112T110052_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one of more records.

CS_OFFL_SIR_IOPN_2_20191112T111238_20191112T111337_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T115739_20191112T120044_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 Fand the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T133641_20191112T134203_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T142738_20191112T143200_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T151117_20191112T151352_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T154936_20191112T155255_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T160634_20191112T160746_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T160917_20191112T161141_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T162858_20191112T163425_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T164404_20191112T164506_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T164821_20191112T165209_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 I and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T165953_20191112T170138_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T174555_20191112T174818_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T174834_20191112T175019_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T182835_20191112T183026_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T190712_20191112T191036_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T191512_20191112T191624_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T192050_20191112T192120_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T192543_20191112T193003_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 I and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T193058_20191112T193220_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T200811_20191112T200950_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T201108_20191112T201237_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T201653_20191112T201946_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T210754_20191112T211251_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.
CS_OFFL_SIR_IOPN_2_20191112T214806_20191112T215147_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T215727_20191112T215842_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 and the OCOG Altimeter Range and Backscatter Quality Flags have set for one or more records.
CS_OFFL_SIR_IOPN_2_20191112T221423_20191112T221757_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for more records.

Comparison Com			
Comparison	CS_OFFL_SIR_IOPN_2_20191112T224908_20191112T225102_C001		
Section Control Cont	CS_OFFL_SIR_IOPN_2_20191112T235741_20191113T000057_C001		
Company	CS_OFFL_SIR_IOPR_2_20191112T010532_20191112T010714_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Section Column	CS_OFFL_SIR_IOPR_2_20191112T011028_20191112T011825_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Co. OFFL. SRI, IOPR_2. 20191112T00402_2019112T00302C_CO.	CS_OFFL_SIR_IOPR_2_20191112T020632_20191112T021232_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sey (DPR_2_2001112782604_2001112780606_CO) and Bankwarder Quality (PLRQ_COS) Selected Country (PLRQ_COS) Selected	CS_OFFL_SIR_IOPR_2_20191112T024925_20191112T025508_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SRI_OPR_2_20191112T050419_2019112T050320_COID CS_OFFL_SRI_OPR_2_2019112T050419_2019112T050320_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_20191112T050320_2019112T050330_COID CS_OFFL_SRI_OPR_2_2019112T050320_2019112T051330_COID CS_OFFL_SRI_OPR_2_20191112T050320_COID CS_OFFL_SRI_OPR_2_20191112T05030_COID CS_OFFL_SRI_OPR_2_20191112T05030_COID CS_OFFL_SRI_OPR_2_20191112T05030_COID CS_OFFL_SRI_OPR_2_20191112T05030_COID CS_OFFL_SRI_OPR_2_20191112T0	CS_OFFL_SIR_IOPR_2_20191112T025524_20191112T025635_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
## DESASSABLE CARRY PLEAS CODE ## ADMINISTRATION CODE ## ADMINISTRAT	CS_OFFL_SIR_IOPR_2_20191112T034031_20191112T034038_C001	9 ,	
DOCS Backsouter Guality PERM, OCCO CS_OFFL_SIR_IOPR_2_20191112T042819_20191112T042825_C001	CS_OFFL_SIR_IOPR_2_20191112T034449_20191112T035007_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
SG_OFFL_SIR_IOPR_2_2019112T042649_2019112T042652_CO01 Altreder Range and Backscater Coulty Flags, and Backscater Coulty Flags and Backscater	CS_OFFL_SIR_IOPR_2_20191112T040415_20191112T040628_C001	OCOG Backscatter Quality	
CS_OFFL_SIR_JOPR_2_20191112T092490_20191112T092392_COOI CS_OFFL_SIR_JOPR_2_20191112T092134_20191112T092386_COOI CS_OFFL_SIR_JOPR_2_20191112T092392_0191112T092396_COOI CS_OFFL_SIR_JOPR_2_20191112T092392_0191112T092396_COOI CS_OFFL_SIR_JOPR_2_20191112T092392_0191112T092396_COOI CS_OFFL_SIR_JOPR_2_20191112T092392_0191112T092396_COOI CS_OFFL_SIR_JOPR_2_20191112T092392_0191112T093936_COOI CS_OFFL_SIR_JOPR_2_20191112T094382_0191112T095398_COOI CS_OFFL_SIR_JOPR_2_20191112T094842_0191112T095398_COOI CS_OFFL_SIR_JOPR_2_20191112T094842_0191112T095398_COOI CS_OFFL_SIR_JOPR_2_20191112T094842_0191112T095398_COOI CS_OFFL_SIR_JOPR_2_20191112T0939442_0191112T093944_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T093944_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T093944_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T093945_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T093945_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T093945_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T0939445_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T0939445_COOI CS_OFFL_SIR_JOPR_2_20191112T0939482_0191112T0939445_COOI COCGA Allimeter Range _Ossilly PLRM. COOI COCGA Allimeter Range _Os	CS_OFFL_SIR_IOPR_2_20191112T042519_20191112T042625_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, COCG Affineder Range and Backscatter Quality Flags and to for one or more records. CS_OFFL_SIR_JOPR_2_20191112706703_201911127061226_CO01 CS_OFFL_SIR_JOPR_2_20191112706703_201911127061368_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112706200_CO01 CS_OFFL_SIR_JOPR_2_20191112706200_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112707428_20191112707628_CO01 CS_OFFL_SIR_JOPR_2_20191112706204_201911127092644_CO01 CS_OFFL_SIR_JOPR_2_20191112709244_201911127092644_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_201911127092544_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_201911127095254_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_201911127095254_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_201911127095254_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_201911127095254_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_201911127094145_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_20191112709455_CO01 CS_OFFL_SIR_JOPR_2_201911127094040_2019	CS_OFFL_SIR_IOPR_2_20191112T042840_20191112T043529_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20191112T060703_20191112T061256_C001 Almeder Range and Backscatter Quality PLRM. OCOG Allimeter Range Quality PLRM. OCOG Backscatter Quality PLRM. OCOG Allimeter Range. SSHA. SWH and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20191112T070428_20191112T070613_C01 GS_OFFL_SIR_IOPR_2_20191112T070428_20191112T070528_C001 CS_OFFL_SIR_IOPR_2_20191112T082842_20191112T083151_C001 GS_OFFL_SIR_IOPR_2_20191112T082842_20191112T083151_C001 CS_OFFL_SIR_IOPR_2_20191112T082842_20191112T083151_C001 CS_OFFL_SIR_IOPR_2_20191112T082842_20191112T083025_C001 CS_OFFL_SIR_IOPR_2_20191112T082842_20191112T083025_C001 CS_OFFL_SIR_IOPR_2_20191112T082842_20191112T083025_C001 CS_OFFL_SIR_IOPR_2_20191112T083406_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T084049_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001 COCOG Allimeter Ra	CS_OFFL_SIR_IOPR_2_20191112T051134_20191112T051256_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20191112T08299_2019112T08290_C001 CS_OFFL_SIR_IOPR_2_20191112T082800_20191112T082900_C001 CS_OFFL_SIR_IOPR_2_20191112T082800_20191112T082900_C001 CS_OFFL_SIR_IOPR_2_20191112T082800_20191112T082900_C001 CS_OFFL_SIR_IOPR_2_20191112T082800_20191112T082900_C001 CS_OFFL_SIR_IOPR_2_20191112T082800_20191112T07613_C001 CS_OFFL_SIR_IOPR_2_20191112T070428_20191112T07528_C001 CS_OFFL_SIR_IOPR_2_20191112T074523_20191112T07528_C001 CS_OFFL_SIR_IOPR_2_20191112T074523_20191112T075528_C001 CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T083191_C001 CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T082942_C00191112T082943_C00191112T082943_C00191112T082944_C00191112T082943_C00191112T082944_C001911112T082944_C001911112T082944_C00191112T083945_C	CS_OFFL_SIR_IOPR_2_20191112T060703_20191112T061225_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
OCG Backscatter Quality CS_OFFL_SIR_IOPR_2_20191112T06506_20191112T065250_C001 CS_OFFL_SIR_IOPR_2_20191112T076428_20191112T07613_C001 CS_OFFL_SIR_IOPR_2_20191112T070428_20191112T07613_C001 CS_OFFL_SIR_IOPR_2_20191112T074282_20191112T075528_C001 CS_OFFL_SIR_IOPR_2_20191112T074282_20191112T075528_C001 CS_OFFL_SIR_IOPR_2_20191112T074282_20191112T075528_C001 CS_OFFL_SIR_IOPR_2_20191112T08244_20191112T083131_C001 CS_OFFL_SIR_IOPR_2_20191112T08244_20191112T083035_C001 CS_OFFL_SIR_IOPR_2_20191112T093046_20191112T083025_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093525_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093525_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093525_C001 CS_OFFL_SIR_IOPR_2_20191112T0935957_20191112T093525_C001 CCG_OFFL_SIR_IOPR_2_20191112T0935957_20191112T093525_C001 CCG_OFFL_SIR_IOPR_2_20191112T0935957_20191112T093525_C001 CCG_OFFL_SIR_IOPR_2_20191112T0935957_20191112T093525_C001 CCG_OFFL_SIR_IOPR_2_20191112T0935957_20191112T093525_C001 CCG_OFF	CS_OFFL_SIR_IOPR_2_20191112T061259_20191112T061358_C001		, ,
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Plags and the OCOG Altimeter Range and Backscatter Quality Plags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20191112T070428_20191112T070513_C001 CS_OFFL_SIR_IOPR_2_20191112T074523_20191112T075528_C001 CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T083131_C001 CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T083131_C001 CS_OFFL_SIR_IOPR_2_20191112T092247_20191112T092644_C001 CS_OFFL_SIR_IOPR_2_20191112T092644_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T093057_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T0941	CS_OFFL_SIR_IOPR_2_20191112T062800_20191112T062906_C001		
CS_OFFL_SIR_IOPR_2_20191112T070428_20191112T070613_C001 and Baskscatter Quality PLRM, COCG Allimeter Range and Backscatter Quality Plags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20191112T074523_20191112T075528_C001 CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T083131_C001 CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T092844_C001 CS_OFFL_SIR_IOPR_2_20191112T092247_20191112T092844_C001 CS_OFFL_SIR_IOPR_2_20191112T092644_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T0934049_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T109455_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T109455_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T109455_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T1094049_20191112T094045_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T1093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T1093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T1093957_20191112T1094045_C001 CS_OFFL_SIR_IOPR_2_20191112T1094049_20191112T1094045_C001 COGA Allimeter Range Cuality PLRM, COCG Allimeter Range and Backscatter Quality Plags have been set for one or more records. COGA Allimeter Range Cuality PLRM, COCG Allimeter Range and Backscatter Quality Plags have been set for one or more records. COGA Allimeter Range Cuality PLRM, COCG Allimeter Range and Backscatter Quality Plags have been set for one or more records. COGA Allimeter Range SNA, SWH and Backscatter Quality Plags have been set for one or more records. COGA Allimeter Range SNA, SWH and Backscatter Quality Plags have been set for one or more records. COGA Allimeter Range SNA, SWH and Backscatter Quality Plags have been set for one or more records. COGA Allimeter Range	CS_OFFL_SIR_IOPR_2_20191112T065016_20191112T065250_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20191112T074523_20191112T075528_C001 Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T092644_C001 CS_OFFL_SIR_IOPR_2_20191112T092644_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T095957_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T09201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T09201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_	CS_OFFL_SIR_IOPR_2_20191112T070428_20191112T070613_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags 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 PLRM. OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20191112T092644_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T095957_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T095957_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T09201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T10	CS_OFFL_SIR_IOPR_2_20191112T074523_20191112T075528_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20191112T092644_20191112T093644_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records. CS_OFFL_SIR_IOPR_2_20191112T093644_20191112T093025_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001 CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001 CS_OFFL_SIR_IOPR_2_20191112T095957_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T09201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T09201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T09201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_201911	CS_OFFL_SIR_IOPR_2_20191112T082942_20191112T083131_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM ocog Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, O	CS_OFFL_SIR_IOPR_2_20191112T092247_20191112T092644_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001 OCOG Backscatter Quality OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality OCOG Backscatter Quality The OCOG Range and Backscatter Quality Flags have been set for one or more records. Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range, SSHA, SWH 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_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 OCOG Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH 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. 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 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPR_2_20191112T092644_20191112T093025_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPR_2_20191112T1093957_20191112T100455_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001 CS_OFFL_SIR_IOPR_2_20191112T10132_20191112T10833_C001	CS_OFFL_SIR_IOPR_2_20191112T093406_20191112T093521_C001		
CS_OFFL_SIR_IOPR_2_20191112T100455_C001 and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality Plags have been and Backscatter Quality Plags PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Plags have been and Backscatter Quality Plags PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Plags have been and Backscatter Quality Plags P	CS_OFFL_SIR_IOPR_2_20191112T094049_20191112T094145_C001	OCOG Backscatter Quality	
and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records. The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Ba	CS_OFFL_SIR_IOPR_2_20191112T095957_20191112T100455_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been
and Backscatter Quality PLRM, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been and Back	CS_OFFL_SIR_IOPR_2_20191112T102201_20191112T102622_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been
PLRM set for one or more records.	CS_OFFL_SIR_IOPR_2_20191112T110132_20191112T110833_C001	and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPR_2_20191112T110833_20191112T110959_C001	Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191112T114657_20191112T115103_C001	Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191112T120044_20191112T120430_C001	Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191112T124009_20191112T124732_C001	Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (1 Hz & 1Hz PLRM)

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

> 1Hz and 1Hz Ocean SSHA Quality Flags: These flags are currently set for products over sea ice, which is to be expected.

Number of products with errors: 18

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20Hz)

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:

58

L2 Retracking Flags (20Hz, PLRM)

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

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

Number of products with errors:

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:

0

6.3 P2P Auxiliary Data File Usage Check

Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to 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 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_IOP_220191111T233244_20191112T002219_C002		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220191112T002219_20191112T011158_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_220191112T011158_20191112T020133_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220191112T020133_20191112T025111_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_220191112T025111_20191112T034046_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220191112T034046_20191112T043025_C001	Topography (1), Total Geocentric Ocean	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_220191112T043025_20191112T052000_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220191112T052000_20191112T060938_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_220191112T060938_20191112T065914_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_220191112T065914_20191112T074852_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_220191112T074852_20191112T083827_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_220191112T083827_20191112T092806_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_220191112T092806_20191112T101741_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_220191112T101741_20191112T110719_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_220191112T110719_20191112T115654_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_220191112T115654_20191112T124633_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_220191112T124633_20191112T133608_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_220191112T133608_20191112T142546_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_220191112T142546_20191112T151521_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_220191112T151521_20191112T160500_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_220191112T160500_20191112T165435_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_220191112T165435_20191112T174413_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_220191112T174413_20191112T183348_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_220191112T183348_20191112T192327_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_220191112T192327_20191112T201302_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_20191112T201302_20191112T210241_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_20191112T210241_20191112T215216_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_220191112T215216_20191112T224154_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_220191112T224154_20191112T233129_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

6.5 P2P Measurement Confidence Data Check

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

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220191112T043025_20191112T052000_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

6.6 P2P Measurement Quality Flag Check

P2P Quality Flags (20Hz)

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.

Number of products with errors:

P2P Quality Flags (20Hz 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.

Number of products with errors:

P2P Quality Flags (1 Hz & 1Hz PLRM)

Number of products with errors:

30

6.8 P2P Ocean Retracking Quality Check

P2P Retracking Flags (20Hz)
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.