

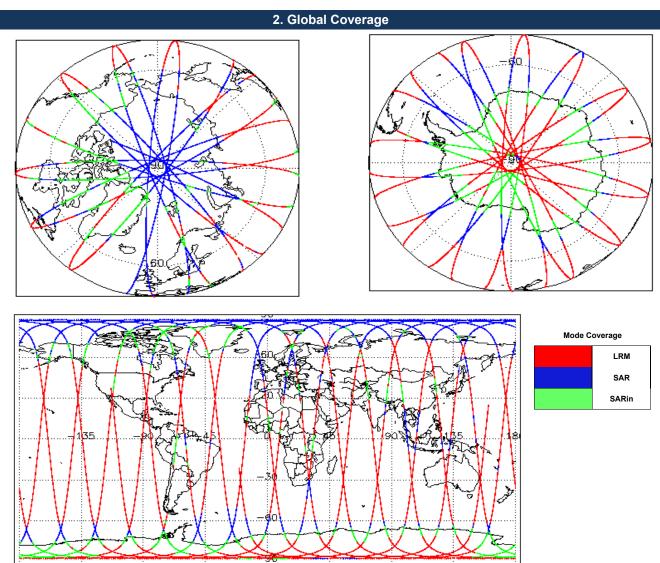
# **QA4EO Daily Report for IOP data:**

# <u>15/12/2019</u>

nort Broduction	18-Dec-2019	Check	L1 & L2	P2P
eport Production:	18-Dec-2019	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CriveSet Oscar Brasses	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Usea:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	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	Nominal
		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

1. Overview

# Mission / Instrument News 14-Dec-2019 None 15-Dec-2019 None 16-Dec-2019 Nothing planned



## 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	d SPH in order to identify any incor	sistencies and/or e	errors raised by the ground-segment processing chain.		
L1B Processing Quality HR: The l1b_proc_flag_hr flag is currently set all L1I OSARIn chains. A modification is required in the next release.	B IOPR and IOPN products becaus	e the I1b_processi	ng_quality_hr field is not correctly configured in the OSAR and		
Number of products with errors: 0					
4.3 L1B Auxilary Data File Usage Check					
Each product is checked for missing Data Set Descriptors with respect to a pro	e-determined baseline and also to	beck the validity o	f Auviliany Data Files is correct		
Number of products with errors: 0	s-determined baseline and also to t				
·					
4.4 L1B Auxiliary Correction Error Check					
CryoSat L1B data includes a correction error flag for each measurement recor Number of products with errors: 0	d. The bit value of this flag indicate	s any problems wh	en set.		
4.5 L1B Measurement Confidence Data Check					
CryoSat L1B data includes a measurement confidence flag for each measurer	nent record. The bit value of this fla	g indicates any pro	oblems when set.		
Attitude Correction Missing: This flag is currently set in error for IOPR produ	ucts due to a configuration issue. T	nis is being investig	pated and will be updated in the next SW update.		
Number of products with errors: 0					
4.6 L1B Waveform Group Data Check					
CryoSat L1B data includes a waveform data flag for each measurement record	d. The bit value of this flag indicate	any problems wh	en set.		
Loss of Echo Flag: This flag is currently set for products over land, but this is	-				
Number of products with errors: 11					
Product	Test Failed	Desc	ription		
CS_OFFL_SIR_IOPM1B_20191215T014809_20191215T020325_C001	Loss of Echo	The t	racking echo is missing for one or more records		
CS_OFFL_SIR_IOPM1B_20191215T023643_20191215T024857_C001	Loss of Echo	The t	racking echo is missing for one or more records		
CS_OFFL_SIR_IOPM1B_20191215T185106_20191215T191929_C001	Loss of Echo	The t	racking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20191215T011842_20191215T011937_C001	Loss of Echo	The t	racking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20191215T143648_20191215T143759_C001	Loss of Echo	The t	racking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20191215T161607_20191215T162102_C001	Loss of Echo	The t	racking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20191215T174943_20191215T174959_C001	Loss of Echo		racking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20191215T193811_20191215T194244_C001	Loss of Echo		racking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20191215T205643_20191215T205838_C001	Loss of Echo		racking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20191215T024857_20191215T025245_C001 CS_OFFL_SIR_IOPR1B_20191215T223826_20191215T224128_C001	Loss of Echo Loss of Echo		racking echo is missing for one or more records racking echo is missing for one or more records		
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5. 10	OP Level 2 Data Qua	lity Check			
5.1 L2 Product Format Check					
Each product, retrieved and unpacked from the science server, is checked to e	ensure it consists of both an XML h	eader file (.HDR) a	nd 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	d SPH in order to identify any incor	sistencies and/or e	errors raised by the ground-segment processing chain.		
Number of products with errors: 0					
5.2.1.2 Auvilians Data File Usage Check					
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 characteristics	ecked for the default error value (3	2767).			
Currently, there are some common auxiliary correction errors raised in the followed by a table highlighting any additional issues which may arise from the source of the s	om 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 reporte in the table below.					
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for	r products over sea ice, but this is t	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 of	over land and sea ice, but this is to	be expected.			
Number of products with errors: 50					
Product	Test Failed		ription		
CS_OFFL_SIR_IOPM_2_20191215T113744_20191215T115519_C001	Mean Dynamic Topography	1)	e is an error with the Mean Dynamic Topography height for one or records		
CS_OFFL_SIR_IOPM_2_20191215T180824_20191215T183541_C001	Mean Dynamic Topography		e is an error with the Mean Dynamic Topography height for one or records		

CS\_OFFL\_SIR\_IOPN\_2\_20191215T003452\_20191215T003636\_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_20191215T011842_20191215T011937_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_20191215T021246_20191215T021503_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_20191215T025639_20191215T025851_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_20191215T034259_20191215T034452_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_20191215T035140_20191215T035622_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_20191215T043320_20191215T043714_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_20191215T052306_20191215T052537_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_20191215T053258_20191215T053445_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_20191215T084205_20191215T084318_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_20191215T085058_20191215T085213_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_20191215T102118_20191215T102241_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_20191215T102750_20191215T103059_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean	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_20191215T120205_20191215T120450_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_20191215T120653_20191215T121221_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_20191215T125748_20191215T130215_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_20191215T134127_20191215T134402_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_20191215T143648_20191215T143759_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_20191215T165851_20191215T170040_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_20191215T170856_20191215T171117_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_20191215T201824_20191215T202200_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_20191215T202736_20191215T202851_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_20191215T205643_20191215T205838_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_20191215T215744_20191215T220103_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_20191215T224832_20191215T224945_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_20191215T234519_20191215T234627_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_20191215T011937_20191215T012518_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_20191215T025851_20191215T030540_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_20191215T043013_20191215T043242_C001	Mean Sea Sunace (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (EES) Non-Equilibrium Long Period	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_IOPR_2_20191215T043715_20191215T044233_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_20191215T061530_20191215T062526_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_20191215T075306_20191215T080042_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_20191215T081001_20191215T081157_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_20191215T093056_20191215T094010_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_20191215T094944_20191215T095320_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_20191215T111040_20191215T111746_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_20191215T111746_20191215T112205_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_20191215T112214_20191215T113227_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_20191215T125219_20191215T125639_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_20191215T125639_20191215T125748_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_20191215T143016_20191215T143221_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_20191215T143221_20191215T143648_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_20191215T144417_20191215T144537_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (EES) Non-Equilibrium Long Period	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_IOPR_2_20191215T160954_20191215T161607_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_20191215T175130_20191215T175609_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_20191215T192849_20191215T193811_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_20191215T210923_20191215T211710_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_20191215T224945_20191215T225935_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.
Number of products with errors:
0

## 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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20191214T235111_20191215T002420_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_20191215T002629_20191215T003145_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_20191215T003205_20191215T003452_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_20191215T004246_20191215T011302_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_20191215T011446_20191215T011842_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_20191215T013300_20191215T014605_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_20191215T014809_20191215T020324_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_20191215T020540_20191215T021042_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_20191215T021102_20191215T021114_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_20191215T022007_20191215T023023_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_20191215T023643_20191215T024857_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_20191215T032347_20191215T032629_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_20191215T032809_20191215T034225_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_20191215T034453_20191215T034953_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_20191215T035018_20191215T035027_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_20191215T035645_20191215T041911_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_20191215T041914_20191215T043012_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_20191215T045941_20191215T052138_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_20191215T052538_20191215T052909_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_20191215T052932_20191215T053257_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_20191215T053555_20191215T060435_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_20191215T063550_20191215T070047_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_20191215T070320_20191215T070823_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_20191215T071625_20191215T074937_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_20191215T080318_20191215T080415_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_20191215T081158_20191215T082215_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_20191215T083508_20191215T083908_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_20191215T084318_20191215T084855_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_20191215T085025_20191215T085057_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_20191215T085539_20191215T092833_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_20191215T100126_20191215T101752_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_20191215T102241_20191215T102750_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_20191215T103412_20191215T110811_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_20191215T113227_20191215T113648_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_20191215T113744_20191215T115519_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_20191215T120450_20191215T120653_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_20191215T121406_20191215T122948_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_20191215T123110_20191215T123426_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_20191215T123555_20191215T124424_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.

B. SPHL BR (DML 2: 2010)21111202 (210)21111300.001         Control Answer (Samp, Sim), Sim)         Re is down Allows (Samp, Sim), Sim)         Re is down Allows (Samp, Sim), Sim)           B. SPHL BR (DML 2: 2010)21111202 (210)21111300.001         Control Allows (Samp, Sim), Sim)         Re is down Allows (Samp, Sim), Sim, Sim, Sim, Sim, Sim, Sim, Sim, Sim	CS_OFFL_SIR_IOPM_2_20191215T130254_20191215T132058_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.
Big OFTL_BRL_DRN_2_2014215118281_DB1215114082_DD11         evel Beckenber Duding DD03         evel Beckenber Duding DD03           Big OFTL_BRL_DRN_2_2014215114282_DB1215114082_DD11         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215114283_DB1215114082_DD11         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215114283_DB1215114088_DD11         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215114283_DB1215114088_DD11         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215114684_DD1215114084_DD11         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215114684_DD1215114684_DD1201         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215114684_DD12015116186_DD11         DD04 Allebate Rage Duding DD03         The DD04 Allebate Rage Duding DD03           Big OFTL_BRL_DRN_2_2014215115182_D0151151820_D0151151820_D015115182_D015115182_D015115182_D015115182_D01511	CS_OFFL_SIR_IOPM_2_20191215T132209_20191215T133552_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
BL_PPE_JBR_0PM_2_201911714002_001       ord Backatter Dully GED       ord Backatter Dully GED         BL_PPE_JBR_0PM_2_2019121114202_001       OED Allines Rage and Backatter Dully Rage Name Rage Gally, COD       The CODA Allines Rage and Backatter Dully Rage Name Rage Gally, COD         BL_PPE_JBR_0PM_2_2019215114202_0019121114200_001       CDDO Allines Rage Gally, COD       The CODA Allines Rage of Backatter Dully Rage Name Rage Gally, COD         BL_PPE_JBR_0PM_2_2019215114210_001       CDDO Allines Rage Gally, COD       The CODA Allines Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewalls, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rage, SDB, SDH ord Rakewall, Dully Fage Name Name Rakewall, Dully Dully Fage Name Name Rage, SDB, SDH ord Ra	CS_OFFL_SIR_IOPM_2_20191215T135303_20191215T140824_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Control         Control <t< td=""><td>CS_OFFL_SIR_IOPM_2_20191215T141026_20191215T141950_C001</td><td>and Backscatter Quality, OCOG</td><td>and the OCOG Altimeter Range and Backscatter Quality Flags have been</td></t<>	CS_OFFL_SIR_IOPM_2_20191215T141026_20191215T141950_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Control         Control <t< td=""><td>CS_OFFL_SIR_IOPM_2_20191215T142543_20191215T142630_C001</td><td></td><td></td></t<>	CS_OFFL_SIR_IOPM_2_20191215T142543_20191215T142630_C001		
CB. DFL_SRUOPK_2.20191215114038_20191215114038_001     Marketer Regins SM, With and Backadeth Cashiny, COCG Marketer Regins CM, With and Backadeth Cashiny Cock Park LSRUOPK_2.20191215114038_00191215114038_00191     Cocers Allenser Regins SM, With and Backadeth Cashiny, COCG Marketer Regins CM, With and Backadeth Cashiny Cock Park LSRUOPK_2.20191215114038_00191215114038_00191     Cocers Allenser Regins SM, With and Backadeth Cashiny, COCG Marketer Regins CM, With and Backadeth Cashiny Cock Park LSRUOPK_2.201912151151032_01912151151038_00191     Cocers Allenser Regins SM, With and Backadeth Cashiny, COCG Marketer Regins CM, With and Backadeth Cashiny Figsthame LSRU Marketer Regins CMA	CS_OFFL_SIR_IOPM_2_20191215T143759_20191215T143916_C001		
CB_OPEL_SRUGPM_2_201012101144580101213114500_C001     and Badasaber Cuality C000     and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_2010121511502_2010121511500_C001     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The CO00 Altimete Range SMA, SWI and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_2010121511500_C001     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The CO00 Altimete Range SMA, SWI and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_2010121511500_C001     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The CO00 Altimete Range SMA, SWI and Badasaber Cuality Flag Inve bane and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_2010121511500_C001     Ocean Altimete Range SMA, SWI Altimete Range SMA, SWI and Badasaber Cuality C000     The Coon Altimete Range SMA, SWI and Badasaber Cuality Flag Inve bane and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_20101215115021_20101215115612_0_0010     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The Coon Altimeter Range SMA, SWI and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_20101215115622_0101215115612_00101     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The Coon Altimeter Range SMA, SWI and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_20101215115612_00101215115612_00101     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The Coon Altimeter Range SMA, SWI and Badasaber Cuality C000       CB_OPEL_SRUGPM_2_201012151115614_C001     Ocean Altimete Range SMA, SWI and Badasaber Cuality C000     The Coon Altimeter Range SMA, SWI and Badasaber Cuality Flag Inve baber athe cuality Flag Inve baber ather and Badasaber Cuality Flag	CS_OFFL_SIR_IOPM_2_20191215T144219_20191215T144417_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB, OFL, SR, IOPA, 2, 201912151151532, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 201912151151582, 20191215115984, 2019       Decan Altineter Range, SSH, SVH and Backscatter Quality Flags have been Altineter Range, SSH, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 201912151159232, 201912151159216, 2019       Cocan Altineter Range, SSH, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116224, 20191215116478, 2019       Cocan Altineter Range, SSH, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116224, 20191215116478, 2019       Cocan Altineter Range, SSH, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116224, 20191215116478, 2019       Cocan Altineter Range, SSH, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116224, 20191215116478, 2019       Cocan Altineter Range, SSH, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116224, 20191215116678, 2011       Cocan Altineter Range, SHA, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116254, 20191215116268, 2011       Cocan Altineter Range, SHA, SVH and Backscatter Quality Flags have been at the origin of more records.         CS, OFL, SR, IOPA, 2, 20191215116268, 2019       Cocan Altineter Range, SHA, SV	CS_OFFL_SIR_IOPM_2_20191215T144538_20191215T145909_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
C2.0.0FTL_SIR_UPR4_2_001912157151858_201912157151810_001       and the Account Quality, Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the Account Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the Account Quality Flags have been and the Account Quality Flags have been and the Account Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the COS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the QCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Flags have been and the ACCOS Allineater Range and Backscatter Quality Fl	CS_OFFL_SIR_IOPM_2_20191215T151502_20191215T151630_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Control         Set one of more records.         For the or more records.           Cols         OFFL_SIR_JOPM_2_201912151152647_20191215115273_COOD         Doesn Altimeter Range, SSHA, SVM and Backscatter Quality Flags have been additioned and the QCOD Altimeter Range, SSHA, SVM and Backscatter Quality Flags have been additioned Range and Backscatter Quality Fla	CS_OFFL_SIR_IOPM_2_20191215T151653_20191215T151818_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
C8_OFFL_SIR_JOPM_2_20191215715327_20191215715473_0_0001         and Backscater Duality_OCOG         and the COCOA Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been Alimeter Range and Backscater Duality Flags have been Alimeter Range and Backscater Duality Flags have been Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_201912157170312_01912157170555_C001         OCOG Alimeter Range, SSHA, SWH and Sackscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_201912157170312_01912157170352_C001         OCOG Alimeter Range, SSHA, SWH and Backscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_201912157170312_01912157170350_C001         Ocean Alimeter Range, SSHA, SWH and Backscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_201912157170352_C011         Ocean Alimeter Range, SSHA, SWH and Backscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_201912157170352_C011         Ocean Alimeter Range, SSHA, SWH and Backscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_20191215718024_01912157182841_0001         Ocean Alimeter Range, SSHA, SWH and Backscater Duality Flags have been set for one or none records.           C8_OFFL_SIR_JOPM_2_201912157180240_01912157182840_0001         Ocean Alimeter Range, SSHA, SWH and Backs	CS_OFFL_SIR_IOPM_2_20191215T152213_20191215T153006_C001		
C6_OFFL_SIR_JOPM_2_20191215T163284_20191215T163430_001       and Backscatter Quality. COOG Mitheret Range and Backscatter Quality. Flags have been Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags have been and the OCOG Affanteer Range and Backscatter Quality. Flags and the OCOG Affanteer Range and Backscatter Quality. Flags have been affancer Range and Backscatter Quality. Flags have been affancer Range and Backscatter Quality. Flags have been ast for one or more records.         C8_OFFL_SIR_JOPM_2_20191215T184263_20191215T191282.001       Ocean Affanteer Range SSHA, SWH and Backscatter Quality. Flags have been affancer Range and Backscatter Quality. Flags have been affancer Range and Backscatter Quality. Flags have been and the OCOG Affanteer	CS_OFFL_SIR_IOPM_2_20191215T153247_20191215T154730_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_JOPM_2.20191215T18438_20191215T16735_C001       and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been and the or cords.         CS_OFFL_SIR_JOPM_2.20191215T170312_20191215T170355_C001       OCCG Altimeter Range Quality, OCCG Backscatter Quality, Flags have been and the or cords.       The OCCG Altimeter Range and Backscatter Quality Flags have been and the or cords.         CS_OFFL_SIR_JOPM_2.20191215T170352_C001       OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the or on or more records.         CS_OFFL_SIR_JOPM_2.20191215T1812625_20191215T191292_0011       Occan Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and the OCCG Altimeter Range SIA, SWH and Backscatter Quality, Flags have been and to or on ormore records.         CS_OF	CS_OFFL_SIR_IOPM_2_20191215T162524_20191215T163433_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Dis_OPTSIR_UPM_2_20191215110352_0001         Backscatter Quality         for one or more records.           CS_OPFL_SIR_UOPM_2_201912151177227_201912151173659_C001         Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_UOPM_2_201912151180824_201912151183541_C001         Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         The Ocean Altimeter Range, SS	CS_OFFL_SIR_IOPM_2_20191215T163436_20191215T165735_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T171227_20191215T173859_C001       and Backscatter Quality.CCOG Attimeter Range and Backscatter Quality Flags have been and the OCOA Attimeter Range and Backscatter Quality Flags have been and the OCOA Attimeter Range and Backscatter Quality Flags have been and the OCOA Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T184250_20191215T184718_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T184718_C001       OCGA Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T185106_20191215T18520_0011       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T182663_20191215T191929_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192849_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T1912620_2001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T1920323_20191215T201452_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T203043_20191215T203521_C001       Ocean Attimeter Range, SS	CS_OFFL_SIR_IOPM_2_20191215T170312_20191215T170855_C001		
CS_OFFL_SIR_IOPM_2_20191215T180824_20191215T183541_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T184250_20191215T184718_C001       COCG Altimeter Range Quality, OCOG       The OCean Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T185106_20191215T191929_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192849_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192849_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192849_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T192849_C001       Ocean Altimeter Range ad Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T20200_20191215T202735_C001       OCGG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T20343_20191215T203521_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T210343_20191215T203521_C001       Ocean Altimeter Range, SSHA,	CS_OFFL_SIR_IOPM_2_20191215T171227_20191215T173659_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_201912151104/20_201912151104/16_201912151201452_001       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been at Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been at Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been at Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been at Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been Ratimeter Range, SHA, SWH and Backscatter Quality, OCOG Altimeter Range, SHA, SWH and Backscatter Quality, Flags have been Ratimeter Range, SHA, SWH and Backscatter Quality, Flags have been Ratimeter Range, SHA, SWH and Backscatter Quality, Flags have been Ratimeter Range, SHA, SWH and Backscatter Quality, Flags have been Ratimeter Range, SHA, SWH and Backscatter Quality, Flags have been Ratimeter Range, SHA, SWH and Backscatter Quality, Flags have been Ratimeter Rang	CS_OFFL_SIR_IOPM_2_20191215T180824_20191215T183541_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T185106_20191215T191929_C001       and Backscatter Quality, OCOG         Altimeter Range and Backscatter Quality       ocean Altimeter Range, SSHA, SWH       and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192649_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20191215T192643_20191215T201452_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20191215T192244_20191215T201452_C001       Ocean Altimeter Range Quality, OCOG       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T202200_20191215T202735_C001       OCCGA Altimeter Range Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T203043_20191215T203521_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T210841_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T215439_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T215439_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH         CS_OFFL_SIR_IOPM_2_20191215T2121272013_20191215T215439_C001	CS_OFFL_SIR_IOPM_2_20191215T184250_20191215T184718_C001		
CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192849_001       and Backscatter Quality, OCOG Atlimeter Range and Backscatter Quality, OCOG Atlimeter Range, SSHA, SWH and Backscatter Quality, OCOG Atlimeter Range and Backscatter Quality       The Ocean Atlimeter Range and Backscatter Quality Flags and the OCOG Atlimeter Range and Backscatter Quality, Flags and the OCOG Atlimeter Range and Backscatter Quality Flags and the OCOG Atlimeter Range, SSHA, SWH and Backscatter Quality, OCOG Atlimeter Range and Backscatter Quality Flags and the OCOG Atlimeter Range and Backscatter Q	CS_OFFL_SIR_IOPM_2_20191215T185106_20191215T191929_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T194244_20191215T201452_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality Flags have been act for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T202200_20191215T202735_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_20191215T203043_20191215T203521_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been altimeter Range, and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been and backscatter Quality, 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_20191215T22103_20191215T220615_C001       Ocean Altimeter Range Quality, OCOG Backscatter Quality, OCOG       The OCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T220615_C001       OCCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG       The OCCOG Altimeter Range and Backscatter Quality	CS_OFFL_SIR_IOPM_2_20191215T192653_20191215T192849_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_201912151202200_201912151202735_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T203043_20191215T203521_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T210841_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T212127_20191215T212439_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_C001       OCCG Altimeter Range Quality, OCOG Backscatter Quality, OCOG       The OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T2220615_C001       OCCG Altimeter Range Quality, OCOG Backscatter Quality, OCOG and Backscatter Quality, OCOG Hatimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20191215T194244_20191215T201452_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T203043_20191215T203521_C001and Backscatter Quality, OCOG Altimeter Range and Backscatter Qualityand the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T210841_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter QualityThe Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags hat the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hand backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags hat the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hat the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hat been atter Range and Backscatter Quality Flags hat been atter Range and Backscatter Quality Flags hat the OCOG Altimeter Range and Backscatter Quality Flags hat the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_C001OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOGThe OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_C001OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOGThe OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T222001_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOGThe OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20191215T202200_20191215T202735_C001		
CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T210841_C001       and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T212127_20191215T212439_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, 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 have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_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_20191215T220103_20191215T220615_C001       OCOGA 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_20191215T220103_20191215T220615_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Ba	CS_OFFL_SIR_IOPM_2_20191215T203043_20191215T203521_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T212127_20191215T215439_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_C001       OCOG Altimeter Range Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_C001       OCOG Altimeter Range, Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T222801_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.	CS_OFFL_SIR_IOPM_2_20191215T210634_20191215T210841_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T220105_20191215T220015_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T222801_C001       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_20191215T212127_20191215T215439_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T222801_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20191215T220103_20191215T220615_C001		
	CS_OFFL_SIR_IOPM_2_20191215T221054_20191215T222801_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

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CS_OFFL_SIR_IOPM_2_20191215T225935_20191215T232135_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_20191215T232233_20191215T233318_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_20191215T233818_20191215T234102_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_20191215T234119_20191215T234519_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_20191215T235003_20191216T001617_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_20191215T025639_20191215T025851_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_20191215T035140_20191215T035622_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_20191215T052926_20191215T052932_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_20191215T175056_20191215T175130_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_20191215T204440_20191215T204601_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_20191215T224832_20191215T224945_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T003636_20191215T004246_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T013150_20191215T013151_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T013214_20191215T013214_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T125029_20191215T125125_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T144110_20191215T144218_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T205608_20191215T205643_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPR_2_20191215T223826_20191215T224128_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

### L2 Quality Flags (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.

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Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20191215T021246_20191215T021503_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_20191215T023023_20191215T023129_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_20191215T025245_20191215T025543_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_20191215T025639_20191215T025851_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_20191215T035140_20191215T035622_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_20191215T043320_20191215T043714_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_20191215T045209_20191215T045315_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_20191215T045359_20191215T045730_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_20191215T052306_20191215T052537_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_20191215T053258_20191215T053445_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_20191215T062634_20191215T062653_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_20191215T070148_20191215T070320_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_20191215T082215_20191215T082549_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_20191215T084856_20191215T085025_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_20191215T085058_20191215T085213_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_20191215T094259_20191215T094406_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_20191215T094824_20191215T094848_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_20191215T094854_20191215T094939_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_20191215T100023_20191215T100126_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_20191215T102118_20191215T102241_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_20191215T102750_20191215T103059_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_20191215T113648_20191215T113744_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_20191215T120205_20191215T120450_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_20191215T125748_20191215T130215_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_20191215T141950_20191215T142249_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_20191215T145909_20191215T150511_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_20191215T155657_20191215T160056_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_20191215T161607_20191215T162102_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_20191215T162406_20191215T162524_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_20191215T165851_20191215T170040_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_20191215T170252_20191215T170312_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_20191215T173700_20191215T174047_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_20191215T174943_20191215T174959_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_20191215T175056_20191215T175130_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_20191215T175609_20191215T180030_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_20191215T180111_20191215T180233_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_20191215T193811_20191215T194244_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_20191215T201824_20191215T202200_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_20191215T204440_20191215T204601_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_20191215T205643_20191215T205838_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_20191215T205931_20191215T205944_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_20191215T211945_20191215T212122_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_20191215T220616_20191215T220740_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_20191215T222802_20191215T223117_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_20191215T233456_20191215T233818_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_20191215T002421_20191215T002453_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_20191215T011303_20191215T011306_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_20191215T011937_20191215T012518_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_20191215T012532_20191215T012658_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_20191215T013223_20191215T013228_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_20191215T014628_20191215T014809_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_20191215T021503_20191215T022007_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_20191215T023431_20191215T023643_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_20191215T024857_20191215T025245_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_20191215T025544_20191215T025638_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_20191215T025851_20191215T030540_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_20191215T032003_20191215T032347_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_20191215T043715_20191215T044233_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_20191215T045731_20191215T045807_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_20191215T053445_20191215T053555_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_20191215T061530_20191215T062526_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_20191215T075128_20191215T075156_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_20191215T075306_20191215T080042_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_20191215T083908_20191215T084138_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_20191215T092833_20191215T092901_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_20191215T093056_20191215T094010_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_20191215T094411_20191215T094746_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_20191215T094944_20191215T095320_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_20191215T103059_20191215T103412_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_20191215T110812_20191215T110944_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_20191215T111040_20191215T111746_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_20191215T111746_20191215T112205_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_20191215T115519_20191215T120204_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_20191215T124424_20191215T124805_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_20191215T125128_20191215T125147_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_20191215T125219_20191215T125639_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_20191215T125639_20191215T125748_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_20191215T132059_20191215T132209_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_20191215T133552_20191215T134127_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_20191215T143016_20191215T143221_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_20191215T144417_20191215T144537_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_20191215T155111_20191215T155546_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_20191215T160954_20191215T161607_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_20191215T183541_20191215T183822_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_20191215T192538_20191215T192653_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_20191215T192849_20191215T193811_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_20191215T201452_20191215T201824_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_20191215T202851_20191215T203043_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_20191215T210202_20191215T210534_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_20191215T210923_20191215T211710_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_20191215T211848_20191215T211944_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_20191215T212122_20191215T212127_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_20191215T215439_20191215T215743_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_20191215T223613_20191215T223650_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_20191215T223826_20191215T224128_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_20191215T224128_20191215T224832_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG 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, wh	ich 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: 187				
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:

#### 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.

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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: 0

#### 6.2 P2P Product Header Analysis

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

Number of products with errors:

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

#### 6.4 P2P Auxiliary Correction Error Check

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

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.

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> 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:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20191215T003147_20191215T012125_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_20191215T012125_20191215T021100_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_220191215T021100_20191215T030039_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_220191215T030039_20191215T035014_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_20191215T035014_20191215T043952_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_20191215T043952_20191215T052928_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_220191215T052928_20191215T061906_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_220191215T061906_20191215T070841_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_220191215T070841_20191215T075819_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_220191215T075819_20191215T084755_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_220191215T084755_20191215T093733_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_220191215T093733_20191215T102708_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_220191215T102708_20191215T111647_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	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_220191215T111647_20191215T120622_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_20191215T120622_20191215T125600_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_20191215T125600_20191215T134535_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_220191215T134535_20191215T143514_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_20191215T143514_20191215T152449_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_220191215T152449_20191215T161427_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_220191215T161427_20191215T170403_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_220191215T170403_20191215T175341_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_220191215T175341_20191215T184316_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_220191215T184316_20191215T193254_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_220191215T193254_20191215T202230_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_220191215T202230_20191215T211208_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_20191215T211208_20191215T220143_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_20191215T220143_20191215T225122_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_220191215T234057_20191216T003035_C002	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

### 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:

## 6.6 P2P Measurement Quality Flag Check

## P2P Quality Flags (20Hz)

CrvoSat P2P data includes Quali	tv 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:

29

0

P2P Quality Flags (1 Hz & 1Hz PL	_RM)	
Since the P2P Quality Flags are copied di	rectly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.	
Number of products with errors:	29	
6.8 P2P Ocean Retracking Qu	ality Check	
P2P Retracking Flags (20Hz)		
Cryosat P2P data includes an ocean retrack	ing 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): T	his flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.	
Number of products with errors:	26	
P2P Retracking Flags PLRM		
CryoSat L2 data includes an ocean retrackin	ng 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): T	his flag is currently set for products IOPR and IOPN products over sea ice, but this is to be expected.	
Number of products with errors:	29	