

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

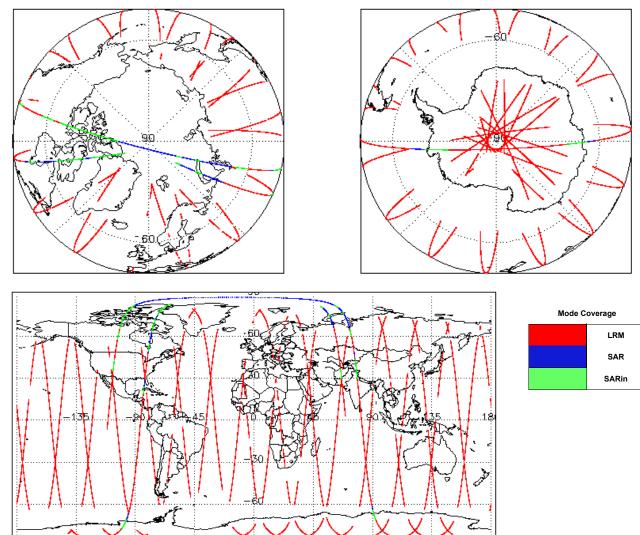
<u>12/12/2020</u>

Demont Dreductions	10 D 0000	Check	L1 & L2	P2P
Report Production:	18-Dec-2020	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Drococcer Lloodu	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:		Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
Data Useu.		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
		QCC Error/ Warning Check	See Section 7.2	See Section 7.2

1. Overview

Mission / Instrument News	
11-Dec-2020	None
12-Dec-2020	None
13-Dec-2020	Nothing planned





# 3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

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

4. IOP Level 1B Data Quality Check

# 4.1 L1B Product Format Check

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

Number of products with errors:

4.2 L1B Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH and S	PH in order to identify any inconsistencies a	and/or errors raised by the ground-segment processing chain.
L1B Processing Quality HR: The l1b_proc_flag_hr flag is currently set all L1B IC	OPR and IOPN products because the I1b_p	rocessing_quality_hr field is not correctly configured in the OSAR and
OSARIn chains. A modification is required in the next release. Number of products with errors: 0		
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4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre-d	etermined baseline and also to check the va	alidity of Auxiliary Data Files is correct.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement record.	The bit value of this flag indicates any proble	ems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measurement	at record. The hit value of this flag indicates	any problems when set
Attitude Correction Missing: This flag is currently set in error for IOPR products	-	
Number of products with errors: 0	5 5	5
4.0 L4D Waysform Crown Data Chask		
4.6 L1B Waveform Group Data Check		
CryoSat L1B data includes a waveform data flag for each measurement record. T Loss of Echo Flag: This flag is currently set for products over land, but this is to		ms when set.
Number of products with errors: 5		
	Test Failed	Description
Product CS_OFFL_SIR_IOPM1B_20201212T015703_20201212T015908_C001	Test Failed Loss of Echo	Description The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20201212T081653_20201212T082951_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20201212T143519_20201212T150757_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20201212T202528_20201212T203855_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20201212T215853_20201212T220036_C001	Loss of Echo	The tracking echo is missing for one or more records
5. IOP	Level 2 Data Quality Che	eck
5.1 L2 Product Format Check		
Each product, retrieved and unpacked from the science server, is checked to ens	ure it consists of both an XML header file (.	HDR) and a binary product file (.DBL).
Number of products with errors: 0		
5.2 L2 Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH and S Number of products with errors: 0	PH in order to identify any inconsistencies a	and/or errors raised by the ground-segment processing chain.
5.3 L2 Auxiliary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a pre-d	etermined baseline and also to check the va	alidity 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 check	ed for the default error value (32767).	
Currently, there are some common auxiliary correction errors raised in the		e to surface type. All common flags are summarised in the list below,
followed by a table highlighting any additional issues which may arise from > ECMWF Meteo Corrections: Currently the following corrections are not computed on		haris Coraction, Wet Transcriberic Correction, Javarse Barametric
Correction and the U-Wind and V-Wind components of the ECMWF model wind v not reported in the table below.		
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for pr	oducts over sea ice, but this is to be expect	ed.
> Mean Sea Surface: The error value is currently set for products over land and		
> Mean Dynamic Topography: The error value is currently set for products over	land and sea ice, but this is to be expected	L
> Altimetric Wind Speed Error: The error value is currently set for products over	r land and sea ice, but this is to be expected	d.
Number of products with errors: 8		
Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20201212T080022_20201212T081405_C001	Total Geocentric Ocean Tide (FES), Non	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or
	Equilibrium Long Period Ocean Tide	more records
CS_OFFL_SIR_IOPM_2_20201212T232634_20201212T232656_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS OFEL SIR IODN 2 202012427245554 202012427245042 0004	Mean Sea Surface (1), Mean Dynamic	There is an error with the MSS height (solution 1) and the Mean Dynamic
CS_OFFL_SIR_IOPN_2_20201212T215554_20201212T215813_C001	Topography (1)	Topography height (solution 1)

CS_OFFL_SIR_IOPN_2_20201212T233527_20201212T234009_C001	Mean Sea 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_20201212T232656_20201212T232706_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_20201212T232706_20201212T232937_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_20201212T233115_20201212T233527_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

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# 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. 0

Number of products with errors:

# 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_20201211T234216_20201212T000717_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_20201212T004018_20201212T010545_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_20201212T011314_20201212T011913_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_20201212T012133_20201212T014938_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_20201212T021209_20201212T024521_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_20201212T025223_20201212T025745_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_20201212T030129_20201212T030540_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_20201212T030829_20201212T031159_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_20201212T033439_20201212T033453_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_20201212T033547_20201212T033929_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_20201212T035136_20201212T040024_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_20201212T040310_20201212T042504_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_20201212T043119_20201212T043227_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_20201212T043232_20201212T043639_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_20201212T044126_20201212T045143_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_20201212T045331_20201212T045811_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_20201212T053014_20201212T060341_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_20201212T053014_20201212T060341_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OPPL_SIR_JOPM_2_20201212709146_0201212709256_001         OCOG_Attender Rengo Quality, OCOG Backscaller Quality, OCOG Attender Rengo and Backscaller Quality Plags have been ker and backscaller Quality, OCOG Attender Rengo and Backscaller Quality, SIN, SINI and Backscaller Quality, OCOG Attender Rengo and Backscaller Quality, SIN, SINI and Backscaller Quality, COCO Attender Rengo and Backscaller Quality, SIN, SINI and Backscaller Quality, COCO Attender Rengo and Backscaller Quality, SIN, SINI and Backscaller Quality, SIN, SINI and Backscaller Quality, Plags have been Attender Rengo and Backscaller Quality, SIN, SINI and Backscaller Quality, COCO Attender Rengo and Backscaller Quality, SINI, SINI and Backscaller Quality, SINI, SINI and Backscaller Quality, Plags have been Attender Rengo and Backscaller Quality, SINI, SINI and Backscaller Quality, Plags have been Attender Rengo and Backscaller Quality, SINI and Backscaller Quality, Plags have been Attender Rengo and Backscaller Quality, COCO Attender Rengo and Backscaller Quality, SINI and Backscaller Quality, Plags have been set for exit more records.           CS_OPFL_SIR_JOPM_2_202012/2107/4515_202012/2107/4515_202011         COCO Attender Rengo Quality, COCO Beackscaller Quality, COCO Attender Rengo and Backscaller Quality, Plags have been set for exit more records.           CS_OPFL_SIR_JOPM_2_202012/2107/4515_2020112/2107/4515_202011         COCO Attender Rengo Quality, COCO Beackscaller Quality, Flags have been set for exit more records.           CS_OPFL_SIR_JOPM_2_202012/2106/453_2020112/2106/455_2020112/2106/4
GS_OFFL_SIR_JOPM_2_20201212107228_202012121072196_C001       and Badscatter Quality, COOG Attinueter Range and Sackscatter Quality Flags have been Attinueter Range and Sackscatter Quality Flags have been set for one or more records.         GS_OFFL_SIR_JOPM_2_202012121074515_202012121075283_C001       DCGG Attinueter Range Quality, COCG Attinueter Range Quality, COCG Coce Attinueter Range Cuality, COCG Coce Attinueter Range Statis, SMN, With and Backscatter Quality, Flags have been set for one or more records.         GS_OFFL_SIR_JOPM_2_20201212109622_202012121096229_C001       COCG Attinueter Range Statis, SMN, With and Backscatter Quality, Flags have been Attinueter Range Statis, SMN, BWH and Backscatter Quality, COCG Attinueter Range, SSHA, SWH and Backscatter Quality, COCG Attinueter Range ASH, SWH and Backscatter Quality, Flags have been set for one or more records.         GS_OFFL_SIR_JOPM_2_202012121096249_20201212109249_C001       Cocean Attinueter Range, SSHA, SWH and Backscatter Quality, COCG Attinueter Range ASH, SWH
CS_OFFL_SIR_IOPM_2_20201212T071286_20201212T072106_C001       and Backscatter Quality COCG Millimeter Range and Backscatter Quality Flags have been add the COCG Allimeter Range. SNA, SNH and Backscatter Quality Flags have been add backscatter Quality Flags have been add for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T072656_20201212T074318_C001       COCG Allimeter Range Quality.COCG Millimeter Range and Backscatter Quality Flags have been add for one or more records.       The OCGA Allimeter Range and Backscatter Quality Flags have been add for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T074013_20201212T075025_C001       COCG Allimeter Range Quality.COCG Millimeter Range and Backscatter Quality Flags have been add for one or more records.       The OCCG Allimeter Range and Backscatter Quality Flags have been add for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T076102_20201212T075025_C001       COCG Allimeter Range Quality.COCG Allimeter Range and Backscatter Quality Flags have been add for one or more records.       The OCCG Allimeter Range and Backscatter Quality Flags have been add for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T080022_20201212T080405_C001       COCG Allimeter Range, SNA, SWH and Backscatter Quality Flags have been add for one or more records.       The OCCGA Allimeter Range, SNA, SWH and Backscatter Quality Flags have been add for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T080455_C0011       COCGA Allimeter Range, SNA, SWH and Backscatter Quality Flags have been add for one or more records.       The OCCGA Allimeter Range and Backscatter Quality Flags have been add to coCGA Allimeter Range and Backscatter Quality Flags have been add to coCGA Allimeter Range and Backscatte
CS_OFFL_SIR_IOPM_2.20201212T072656_20201212T074318_C001       and Backscatter Quality.COCG       Minneter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T075102_20201212T075025_C001       OCCG Altimeter Range Quality.COCG       The OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T075102_20201212T075233_C001       OCCG Altimeter Range Guality.COCG       The OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T080022_20201212T081405_C001       Decom Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T080022_20201212T081405_C001       Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T081653_20201212T082951_C001       Occan Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T082951_C001       Cocan Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T082951_C001       Cocan Altimeter Range Guality.COCG       The OCCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.20201212T082951_C001       Cocan Altimeter Range Guality.COCG       The OCCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2.2020
SDFTL_SIR_IOPM_2_20201212T075102_20201212T075233_C001         Backscatter Quality         for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T075102_20201212T075233_C001         OCOG 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_20201212T080022_20201212T081405_C001         Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T081065_20201212T081405_C001         Ocean Altimeter Range and Backscatter Quality set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T081065_20201212T082951_C001         Ocean Altimeter Range and Backscatter Quality set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T080748_20201212T082159_C001         Ocean Altimeter Range and Backscatter Quality Hags have been set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T08246_20201212T082459_C001         Ocean Altimeter Range and Backscatter Quality         The Ocean Altimeter Range and Backscatter Quality           CS_OFFL_SIR_IOPM_2_20201212T08244_20201212T082457_C001         OCCEA Altimeter Range and Backscatter Quality         The OCCGA Altimeter Range and Backscatter Quality           CS_OFFL_SIR_IOPM_2_20201212T08244_20201212T082457_C001         OCCEA Altimeter Range Quality, OCCG         The OCCGA Altimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T08244_20201212T082457_C001         OCCGA Altimeter Range, SSHA, SWH and Backscatter Qu
CS_OFFL_SIR_IOPM_2_20201212T08102_20201212T08105_C001         Backscatter Quality         for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T081022_20201212T08105_C001         Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range, SSHA, SWH and Backscatter Quality Flags have been altimeter Range and Backscatter Quality Stags and Backscatter Quality Flags have been altimeter Range and Backscatter Quality COCG         The OCGO Altimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T092944_20201212T092955_C001         OCCG Altimeter Range Quality, OCCG         The OCGO Altimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_OFFL_SIR_IOPM_2_20201212T093915_20201212T093942_C001         Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         The OCGO Altimeter Range, SSHA, SWH and Backs
CS_OFFL_SIR_IOPM_2_20201212T080002_20201212T08105_C001       and Backscatter Quality, CCOG       and the OCCG Allimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20201212T081653_20201212T08255_C001       Cean Allimeter Range, SSHA, SWH and Backscatter Quality, CCOG       The Ocean Allimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20201212T080748_20201212T082158_C001       Cean Allimeter Range, SSHA, SWH and Backscatter Quality, CCOG       The Ocean Allimeter Range and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20201212T080748_20201212T082158_C001       CCean Allimeter Range All Backscatter Quality, CCOG       The Ocean Allimeter Range and Backscatter Quality Flags have been set         CS_OFFL_SIR_IOPM_2_20201212T082436_20201212T082937_C001       CCCG Allimeter Range Quality, OCCG       The OCCGA Allimeter Range and Backscatter Quality Flags have been set         CS_OFFL_SIR_IOPM_2_20201212T082944_20201212T082945_C001       CCCG Allimeter Range Quality, OCCG       The OCCGA Allimeter Range and Backscatter Quality Flags have been set         CS_OFFL_SIR_IOPM_2_20201212T083916_20201212T083914_C001       CCCG Allimeter Range Quality, OCCG       The OCCGA Allimeter Range and Backscatter Quality Flags have been set         CS_OFFL_SIR_IOPM_2_20201212T083914_20201212T08391
CS_OFFL_SIR_IOPM_2_20201212T081653_20201212T082051_0001       and Backscatter Quality OCOG Altimeter Range and Backscatter Quality Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality And Backscatter Quality Flags have been Altimeter Range and Backscatter Quality And Backscatter Quality Flags have been Altimeter Range and Backscatter Quality And Backscatter Quality Flags have been Altimeter Range Quality.OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T092944_20201212T092955_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_20201212T092944_20201212T092955_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_20201212T093942_2001       OCOG Altimeter Range, SSHA, SWH and Backscatter Quality.OCOG Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality.COG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range.SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range.SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range.SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range.SSHA, SWH and Backscatter Quality Flags and the OCOG Al
CS_OFFL_SIR_IOPM_2_20201212T090748_20201212T092158_C001       and Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T092944_20201212T092955_C001       OCOG Altimeter Range Quality, OCOG       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T093016_20201212T093012_20201212T093942_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality Flags have been and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality, COCG Altimeter Range and Backscatter Quality Flags have been and Backscatter Quality, COCG Altimeter Range and Backscatter Quality, Flags have been and Backscatter Quality, COCG Altimeter Range
CS_OFFL_SIR_IOPM_2_20201212T092944_20201212T092955_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T092944_20201212T092955_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_20201212T093016_20201212T093118_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_20201212T093812_20201212T093942_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T093812_20201212T093942_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T093812_20201212T093942_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T094207_20201212T095153_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T1095452_20201212T1095957_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T1103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and
CS_OFFL_SIR_IOPM_2_202012121092944_202012121092935_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T093016_20201212T093118_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_20201212T093812_20201212T093942_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T094207_20201212T095153_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T095452_20201212T095957_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T1035452_20201212T1095957_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T1103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T11103847_20201212T1110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR
CS_OFFL_SIR_IOPM_2_202012121093016_202012121093118_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T093812_20201212T093942_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T094207_20201212T095153_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T095452_20201212T095957_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T10116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T1103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T111535_20201212T114038_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags <br< td=""></br<>
CS_OFFL_SIR_IOPM_2_20201212T093812_20201212T093942_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_20201212T094207_20201212T095153_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, SSHA, SWH and Backscatter Quality Flags to ne or more records.         CS_OFFL_SIR_IOPM_2_20201212T095452_20201212T095957_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T1095452_20201212T1095957_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 and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T11103847_20201212T114038_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 Qua
CS_OFFL_SIR_IOPM_2_20201212T094207_20201212T095153_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_20201212T095452_20201212T095957_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, SSHA, SWH and Backscatter Quality Flags to ne or more records.         CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality, Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T1103847_20201212T110116_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 have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T111535_20201212T114038_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20201212T095452_20201212T095957_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been         Altimeter Range and Backscatter Quality       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T110116_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         Altimeter Range and Backscatter Quality       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20201212T111535_20201212T114038_C001       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T103847_20201212T110116_C001       and Backscatter Quality, OCOG       and the OCOG Altimeter Range and Backscatter Quality Flags have been         Altimeter Range and Backscatter Quality       Ocean Altimeter Range, SSHA, SWH       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been         CS_OFFL_SIR_IOPM_2_20201212T111535_20201212T114038_C001       and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T111535_20201212T114038_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T121526_20201212T124030_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20201212T124255_20201212T124809_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_20201212T125547_20201212T132827_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20201212T135051_20201212T135054_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_20201212T135859_20201212T140954_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20201212T141446_20201212T141923_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20201212T142256_20201212T142844_C001 OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_IOPM_2_20201212T143519_20201212T150757_C001 Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been and the OCOG Altimeter Range and Backscatter Quality Flags have been been and backscatter Quality flags and the OCOG Altimeter Range and Backscatter Quality Flags have been been and backscatter Quality flags been and backscatter Quality flags have been and backscatter Quality flags been

D. J. PHL, BR, JONE 2, 2020-0111-002, 20012-011627     Dott Allow and Low an	CS_OFFL_SIR_IOPM_2_20201212T154344_20201212T154533_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.
Construction         Biolance Output         Biolance Output         Biolance Output         Biolance Output           CI         CHR-SHR (CHM 2. 2007)127110544. 2007)1271110544. C001         Aman Manage Graph SMM MM         Biolance Output SMM AND	CS_OFFL_SIR_IOPM_2_20201212T154651_20201212T155740_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CH_0FF_JHE_0FF_2_300119151646_2011         pixel Rescalut Quarky DDD         pixel Rescalut Quarky DDD         pixel Rescalut Quarky DDD           CH_0FF_JHE_0FF_2_3001191516467_C011         DDDeer Allmein Regr. SDH 2011 DDD HADD QUARKY DDD HADD QUA	CS_OFFL_SIR_IOPM_2_20201212T160226_20201212T160737_C001		
Ci. 0FH, SIR, IOPA 2, 20010121108082, 20010121108082, 20010121108082, 20010121108082, 20010121108082, 20010121010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012010808, 2001012000, 2001012010808, 20010120008, 20010120008, 20010120008, 2001012008, 2001012008, 2001012008, 2001012008, 2001012008, 2001010008, 20010008, 2001000008, 20000000, 200008, 200008, 200008, 200008,	CS_OFFL_SIR_IOPM_2_20201212T161404_20201212T163549_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CB_OFT_LBR_UOM_2_8001212110134_00011212110134_00011212110135_0001121111002_0001     and bescare to carry of the second decader of	CS_OFFL_SIR_IOPM_2_20201212T163833_20201212T164807_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Der Lein, Lond, 2.40012121110800_0001         Bestesster Quity         to une noverexet.           C5. 0FFL_SR_UPML2_20012121111755_0001         COCOR Atmater Range Quity COCOR         The COCR Atmater Range Quity COCOR           C6. 0FFL_SR_UPML2_20012121111150_0001         Cocon Atmater Range Quity COCOR         The COCR Atmater Range Quity COCOR           C6. 0FFL_SR_UPML2_20012121111150_0001         Cocon Atmater Range Quity COCOR         The COCR Atmater Range Quity COCOR           C6. 0FFL_SR_UPML2_200012121111150_0001         Cocon Atmater Range Quity Cocore         The Cocon Atmater Range Quity Cocore           C6. 0FFL_SR_UPML2_200012121111150_0001         Cocon Atmater Range QUITy Cocore         The Cocon Atmater Range QUITy Cocore           C6. 0FFL_SR_UPML2_200012121110155_0001         Cocon Atmater Range QUITy Cocore         The Cocon Atmater Range QUITy Cocore           C6. 0FFL_SR_UPML2_200012121110155_0001         Cocon Atmater Range QUITy Cocore         The Cocon Atmater Range QUITy Cocore           C6. 0FFL_SR_UPML2_200012121110155_0001         Cocon Atmater Range QUITy Cocore         The Cocon Atmater Range QUITy Cocore           C6. 0FFL_SR_UPML2_200012121110155_0001         Cocon Atmater Range QUITy Cocore         The Cocon Atmater Range QUITy Cocore           C6. 0FFL_SR_UPML2_200012121110155_0001         Cocon Atmater Range QUITy Cocore         The Cocon Atmater Range QUITy Cocore           C6. 0FFL_SR_UPML2_200012121110155_0001         Cocon Atmater Range QUITy Cocore	CS_OFFL_SIR_IOPM_2_20201212T170134_20201212T170157_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
Sector London Control models  Sector London  Secto	CS_OFFL_SIR_IOPM_2_20201212T170923_20201212T171054_C001		
<ul> <li>CS DFL_SR_DFM_2_20201212119358_20201212119359_0001</li> <li>CG DFL_SR_DFM_2_20201212119235_0001</li> <li>CG DFL_SR_DFM_2_20201212119235_0001</li> <li>CG DFL_SR_DFM_2_20201212119235_0001</li> <li>CG DFL_SR_DFM_2_20201212119015_001</li> <li>CG DFL_SR_DFM_2_20201212119055_001</li> <li>CG DFL_SR_DFM_2_20201212119055_001</li> <li>CG DFL_SR_DFM_2_2020121219055_001</li> <li>CG DFL_SR_DFM_2_2020121219055_001</li> <li>CG DFL_SR_DFM_2_2020121219055_001</li> <li>CG DFL_SR_DFM_2_2020121219055_001</li> <li>CG DFL_SR_DFM_2_2020121219055_001</li> <li>CG DFL_SR_DFM_2_2020121219055_001</li> <li>CG DFL_SR_DFM_2_2020121212055_001</li> <li>CG DFL_SR_DFM_2_2020121212055_001</li> <li>CG DFL_SR_DFM_2_2020121212055_001</li> <li>CG DFL_SR_DFM_2_2020121212055_001</li> <li>CG DFL_SR_DFM_2_2020121212055_001</li> <li>CG DFL_SR</li></ul>	CS_OFFL_SIR_IOPM_2_20201212T171735_20201212T171755_C001		
CS_OFFL_SIR_JOPM_2_20201212T192035_0001       and the decision for our more records.         CS_OFFL_SIR_JOPM_2_20201212T192035_0001212T192035_0001       and the decision for one more records.         CS_OFFL_SIR_JOPM_2_20201212T191035_00011       Common Nithere Range SSHA, SVH       The OCeeA Attracter Gravity Flags have been Attracter Flags and Backscatter Guality Flags have been	CS_OFFL_SIR_IOPM_2_20201212T171830_20201212T173704_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_JOPM_2_202012127180185_0001       and Backscatter Quality, COCG       and the OCCG Altimiter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_JOPM_2_202012127190183_202012127190183_0001       Cocen Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The OCCEN Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_JOPM_2_202012127190183_202012127190183_0001       Cocen Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The OCCEN Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_JOPM_2_202012127190202_202012127198054_001       Cocen Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The OCCEN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_JOPM_2_202012127198016_00010127198054_0011       Cocen Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for dear or noe records.       The OCCEN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for dear or noe records.         CS_OFFL_SIR_JOPM_2_2020121272012021212021202012127108054_0001       Cocen Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for dear or noe records.       The OCCEN Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for dear or noe records.         CS_OFFL_SIR_JOPM_2_202012127202020_2012127108054_0001       Cocen Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for dear or noe	CS_OFFL_SIR_IOPM_2_20201212T175341_20201212T182636_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SR_IOPM_2_20201212T100153_20201212T19445_C001       and the COGG Altmeter Range and Backscatter Quality Flags have been and the Conder Annote and the COGG Altmeter Range and Backscatter Quality Flags have been and to come or more records.         CS_OFFL_SIR_IOPM_2_20201212T192732_20201212T192732_20201212T1939052_C001       Ocean Altmeter Range Quality, OCGG Altmeter Range and Backscatter Quality Flags have been and to come or more records.         CS_OFFL_SIR_IOPM_2_20201212T192732_20201212T194812_C001       Ocean Altmeter Range SSHA_SWH and Backscatter Quality Flags have been and to come or more records.         CS_OFFL_SIR_IOPM_2_20201212T190515_20201212T190564_C001       Ocean Altmeter Range SSHA_SWH and Backscatter Quality Flags have been and the COGG Altmeter Range and Backscatter Quality Flags and the OCGG Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags and the OCGG Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the OCGG Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and the Cord Altmeter Range and Backscatter Quality Flags have been and	CS_OFFL_SIR_IOPM_2_20201212T184230_20201212T190135_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFF_SIR_UOPM_2_20001212T193252_20201212T194812_C001         Backscatter Quality         for one or more records.           CS_OFFL_SIR_UOPM_2_20201212T193252_20201212T194812_C001         Ocean Altimeter Range and Backscatter Quality CGG Altimeter Range and Backscatter Quality CGG         The Ocean Altimeter Range and Backscatter Quality Flags have been and the OCGA Altimeter Range and Backscatter Quality Flags have been ast for one or more records.           CS_OFFL_SIR_UOPM_2_20201212T195015_20201212T195054_C001         Ocean Altimeter Range Quality, OCGG Altimeter Range and Backscatter Quality Flags have been ast for one or more records.           CS_OFFL_SIR_UOPM_2_20201212T201743_20201212T201555_C001         Ocean Altimeter Range, SINA, SWH and Backscatter Quality Flags have been ast for one or more records.           CS_OFFL_SIR_UOPM_2_20201212T202212_20201212T202515_C001         Ocean Altimeter Range, SINA, SWH and Backscatter Quality Flags have been Altimeter Range and Backscatter Quality         The Ocean Altimeter Range, SINA, SWH and Backscatter Quality           CS_OFFL_SIR_UOPM_2_20201212T202528_20201212T202585_C001         Ocean Altimeter Range, SINA, SWH and Backscatter Quality         The Ocean Altimeter Range, SINA, SWH and Backscatter Quality           CS_OFFL_SIR_UOPM_2_20201212T2102528_20201212T2102585_C001         Ocean Altimeter Range, SINA, SWH and Backscatter Quality         The OCOO Altimeter Range and Backscatter Quality Flags have been alt for one or more records.           CS_OFFL_SIR_UOPM_2_20201212T2102528_20201212T210545_C001         Ocean Altimeter Range and Backscatter Quality Flags have been set for one or more records.           CS_O	CS_OFFL_SIR_IOPM_2_20201212T190153_20201212T191443_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T193252_20201212T194812_C001       and Backscatter Quality_Flags have been Attimeter Range and Backscatter Quality_Flags have been Attimeter Range and Backscatter Quality_COCG         CS_OFFL_SIR_IOPM_2_20201212T195015_20201212T195954_C001       Cocean Attimeter Range, SSHA, SWH and Backscatter Quality_Flags have been attimeter Range, SSHA, SWH and Backscatter Quality_Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T200142_20201212T201935_C001       COCG Attimeter Range Quality_OCCG       The OCCG Attimeter Range and Backscatter Quality_Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T202212_20201212T202515_C001       Cocean Attimeter Range and Backscatter Quality_Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T202212_20201212T200515_C001       Cocean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T202212_20201212T200555_C001       Cocean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210221_20201212T210552_C001       Cocean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210253_20201212T210552_C001       CocGA Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210552_C001       CoCGA Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T2115253_20201212T210523_20201212T21052	CS_OFFL_SIR_IOPM_2_20201212T192732_20201212T193052_C001		
CS_OFFL_SIR_IOPM_2_20201212T195015_0201212T195954_C001       and Backscatter Quality. COCG Attimeter Range and Backscatter Quality. COCG Backscatter Quality. COCG Attimeter Range and Backscatter Quality. Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T202212_20201212T202515_C001       Ocean Attimeter Range. SSHA, SWH and Backscatter Quality. COCG Attimeter Range and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been at the COCG Attimeter Range. SSHA, SWH and Backscatter Quality. Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210522_0201212T210512_C001       OCCG Attimeter Range Quality. OCCG Backscatter Quality. COCG Attimeter Range and Backscatter Quality. Flags have been set for one or more records.       The OCCG Attimeter Range and Backscatter Quality. Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210542_C001       OCCG Attimeter Range Quality. OCCG Attimeter Range and Backscatter Quality. Flags have been set for one or more records.       The OCCG Attimeter Range and Backscatter Quality. Flags have been set for one or more records.       The OCCG Attimeter	CS_OFFL_SIR_IOPM_2_20201212T193252_20201212T194812_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
LS_OFFL_SIR_IOPM_2_202012127202212_202012127202515_C001       Backscatter Quality       for one or more records.         GS_OFFL_SIR_IOPM_2_202012127202212_202012127202515_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and Backscatter Quality Flags have been at the OCOG Altimeter Range and B	CS_OFFL_SIR_IOPM_2_20201212T195015_20201212T195954_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T202212_20201212T202515_C001       and Backscatter Quality, COGG Altimeter Range and Backscatter Quality set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T202528_20201212T203855_C001       Cean Altimeter Range, SHA, SWH and Backscatter Quality at for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T2102528_20201212T2103855_C001       Cocan Altimeter Range, SHA, SWH and Backscatter Quality set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210221_20201212T210512_C001       COCG Altimeter Range Quality, OCCG Backscatter Quality, Stop Set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210954_C001       COCG Altimeter Range Quality, OCCG Backscatter Quality, Stop Set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210954_C001       COCG Altimeter Range, SHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T211226_20201212T212641_C001       Cocan Altimeter Range, SHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T21425_20201212T214312_C001       CocG Altimeter Range Quality, OCCG Backscatter Quality       The OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T221435_20201212T2214312_C001       OCCG Altimeter Range Quality, OCCG Backscatter Quality       The OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T221435_20201212T221435_C001       OCCG Altimeter Range	CS_OFFL_SIR_IOPM_2_20201212T201743_20201212T201935_C001		
CS_OFFL_SIR_IOPM_2_20201212T202528_20201212T203855_C001       and Backscatter Quality, OCOG Attimeter Range and Backscatter Quality       and the OCOG Attimeter Range and Backscatter Quality Flags have been attimeter Range Quality, OCOG         CS_OFFL_SIR_IOPM_2_20201212T210221_20201212T210512_C001       OCOG Attimeter Range Quality, OCOG Backscatter Quality       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210954_C001       OCOG Attimeter Range Quality, OCOG Backscatter Quality       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T211226_20201212T212641_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality       The OCOG Attimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T214257_20201212T214312_C001       OCOG Attimeter Range Quality, OCOG Attimeter Range and Backscatter Quality       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T214257_20201212T214312_C001       OCOG Attimeter Range Quality, OCOG Attimeter Range Quality, OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T221455_20201212T221435_20201212T224057_C001       OCOG Attimeter Range, SSHA, SWH and Backscatter Quality       The OCOG Attimeter Range, SSHA, SWH and Backscatter Quality         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T22	CS_OFFL_SIR_IOPM_2_20201212T202212_20201212T202515_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210954_C001       Backscatter Quality       COCOG 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_20201212T211226_20201212T2112641_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T214257_20201212T214312_C001       Ocean Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T214257_20201212T214312_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T22125_20201212T22101_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T2220533_20201212T222101_C001       OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T221345_20201212T223725_C001       OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001       OCOG Altimeter Range Quality, OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T22	CS_OFFL_SIR_IOPM_2_20201212T202528_20201212T203855_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_202012121210323_202012121212034_0001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T211226_20201212T212641_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range and Backscatter Quality, OCOG Attimeter Range and Backscatter Quality, OCOG Backscatter Quality, OCOG       The Ocean Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T214257_20201212T214312_C001       OCOG Attimeter Range Quality, OCOG Backscatter Quality       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T220533_20201212T221101_C001       OCOG Attimeter Range Quality, OCOG Backscatter Quality       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T221345_20201212T223725_C001       Ocean Attimeter Range, SSHA, SWH and Backscatter Quality, OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.       The Ocean Attimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001       Ocean Attimeter Range Quality, OCOG Backscatter Quality, OCOG       The OCOG Attimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001       OCOG Attimeter Range Quality, OCOG Backscatter Quality, OCOG       The OCOG Attimeter Range and Backscatter Quality Fl	CS_OFFL_SIR_IOPM_2_20201212T210221_20201212T210512_C001		
CS_OFFL_SIR_IOPM_2_20201212T211226_20201212T2112641_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_20201212T214257_20201212T214312_C001OCOG Altimeter Range Quality, OCOG Backscatter QualityThe OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20201212T220533_20201212T221101_C001OCOG Altimeter Range Quality, OCOG Backscatter QualityThe OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20201212T221345_20201212T223725_C001Ocean 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_20201212T224025_20201212T224857_C001OCOG Altimeter Range Quality, OCOG Backscatter QualityThe OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001OCCG Altimeter Range Quality, OCOG Backscatter Quality, OCOGThe OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T2231645_C001Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOGThe OCCG Altimeter Range, SSHA, SWH and Backscatter Quality Flags hand Backscatter Quality, OCOG	CS_OFFL_SIR_IOPM_2_20201212T210523_20201212T210954_C001		
CS_OFFL_SIR_IOPM_2_20201212T220533_20201212T221101_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T220533_20201212T221101_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_20201212T221345_20201212T223725_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.       The OCOG Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality Flags have been set for one or more records.       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001       OCOG Altimeter Range Quality, OCOG Backscatter Quality, OCOG Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T224857_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T225132_20201212T231645_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG	CS_OFFL_SIR_IOPM_2_20201212T211226_20201212T212641_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T22033_20201212T22101_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T221345_20201212T223725_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been attimeter Range and Backscatter Quality       The OCCG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001       OCCG Altimeter Range Quality, OCCG Backscatter Quality       The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T224857_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set for one or more records.         CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T231645_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been set and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20201212T214257_20201212T214312_C001		
CS_OFFL_SIR_IOPM_2_20201212T221345_20201212T223725_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_20201212T224025_20201212T224857_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_20201212T224025_20201212T224857_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, SSHA, SWH and Backscatter Quality, OCOG	CS_OFFL_SIR_IOPM_2_20201212T220533_20201212T221101_C001		
CS_OFFL_SIR_IOPM_2_202012121224025_202012121224857_C001       Backscatter Quality       for one or more records.         CS_OFFL_SIR_IOPM_2_202012121225132_20201212T231645_C001       Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and Backscatter Quality, OCOG       The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20201212T221345_20201212T223725_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been
CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T231645_C001 and Backscatter Quality, OCOG and the OCOG Altimeter Range and Backscatter Quality Flags have been	CS_OFFL_SIR_IOPM_2_20201212T224025_20201212T224857_C001		
	CS_OFFL_SIR_IOPM_2_20201212T225132_20201212T231645_C001	and Backscatter Quality, OCOG	and the OCOG Altimeter Range and Backscatter Quality Flags have been

CS_OFFL_SIR_IOPM_2_20201212T234009_20201212T234056_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_20201212T235015_20201213T001547_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_20201212T000718_20201212T000910_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_20201212T221223_20201212T221345_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_20201212T001735_20201212T001928_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_20201212T220348_20201212T220511_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_20201212T223837_20201212T224024_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_20201212T232937_20201212T232955_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_20201212T233527_20201212T234009_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_20201212T234056_20201212T234218_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_20201212T001735_20201212T001928_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_20201212T220126_20201212T220348_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_20201212T220511_20201212T220533_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_20201212T221101_20201212T221222_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_20201212T223725_20201212T223837_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_20201212T225046_20201212T225132_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_20201212T232706_20201212T232937_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_20201212T232955_20201212T233052_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, which are summarised below.

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> 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:

# 5.8 L2 Ocean Retracking Quality Check

### L2 Retracking Flags (20Hz)

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:

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.

# 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: 0

#### 6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

# 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).

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

> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Corection, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.

> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.

> Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.

> Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected.

> Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected.

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220201212T075035_20201212T084010_C001	Total Geocentric Ocean Tide (FES), Non Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide 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)

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

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

30

29

28

1

Number of products with errors:

### P2P Quality Flags (20Hz PLRM)

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

Number of products with errors:

#### P2P Quality Flags (1 Hz & 1Hz PLRM)

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:

### 6.8 P2P Ocean Retracking Quality Check

#### P2P Retracking Flags (20Hz)

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

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

Number of products with errors:

#### P2P Retracking Flags PLRM

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

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

Number of products with errors:

# 7. IOP QCC Report Analysis

The Quality Control for CryoSat (QCC) facility performs a primary survey of data products immediately after production by the PDS and LTA processing facilities. A list of the tests which raised errors or warnings is provided below.

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	191	191	3	188	0
SIR_IOPR1B	14	17	0	17	0
SIR_IOPN1B	17	14	0	14	0
SIR_IOPM_2	191	191	140	51	0
SIR_IOPR_2	14	17	5	12	0
SIR_IOPN_2	17	14	3	11	0
SIR_IOP_P2P	29	29	0	29	0

# 7.1 QCC Errors

Number of QCC reports with errors:

0

QCC Warni							
nber of QCC repo	orts with warnings	1068	Total				
Product Type	BCSHNCDF	MVIOEPFDNCDF	MVIOEPNCDF	Imber of occurrences of e MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMN	CERBSZOPOEPNCDF
SIR IOPM1B	188	0	0	0	0	0	0
SIR IOPM 2	0	37	39	1	33	0	28
SIR IOPN1B	17	0	0	0	0	0	0
SIR IOPN 2	0	0	5	0	4	5	2
SIR_IOPR1B	11	0	0	0	0	0	0
SIR IOPR 2	0	3	5	0	1	0	0
Product Type	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARN	CERPEPOPFDPLRMSINN	CDIRPEPOPFDSARNCDF	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	27	0	0	0	0	22	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	6	0	6	0	0
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	5	0	7	0	0	5
			1	T.			r
Product Type	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMN
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	0	7	24	0	5	35	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	5	4	7	10	5	6	6
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	0	9	6	1	4	4
Product Type	RSWHOEPNCDF	SPHRTASCNSNCDF	SCSTODHRNCDF	•	-	-	-
SIR_IOPM1B	0	1	0				
SIR_IOPM_2	2	1	0				
SIR IOPN1B	0	0	9				
SIR_IOPN_2	0	0	-				
SIR_IOPN_2 SIR_IOPR1B	0	0	14				
SIR_IOPN_2		0 0 0	-				
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2	0 0	0	14 0	АХОНМЕ	AXSCHME	AXSLHME	AXSTAME
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2 Product Type	0 0 AXCHME	0 AXCSME	14 0 AXCHME	<b>AXOHME</b> 29	AXSCHME	AXSLHME	AXSTAME
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2	0 0	0	14 0	<b>ахонме</b> 29	АХSCHME 29	AXSLHME 29	AXSTAME 29
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2 Product Type	0 0 AXCHME	0 AXCSME	14 0 AXCHME				
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2 Product Type SIR_IOP_2_	0 0 <b>AXCHME</b> 29	0 AXCSME 29	14 0 <b>AXCHME</b> 29	29	29	29	29
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2 <b>Product Type</b> SIR_IOP_2_ <b>Product Type</b> SIR_IOP_2_	0 0 <b>AXCHME</b> 29 <b>AXUHME</b> 29	0  AXCSME 29  IOHHMOOR 24	14         0           AXCHME         29           MVIOEPFDNCDF         24	29 <b>MVIOEPNCDF</b> 23	29 MVIONCDF 1	29 RBSZOPOEPFDNCDF 25	29 RBSZOPOEPNCDF 23
SIR_IOPN_2           SIR_IOPR1B           SIR_IOPR_2           Product Type           SIR_IOP_2_           Product Type           SIR_IOP_2_           Product Type           SIR_IOP_2_	0 0 <b>AXCHME</b> 29 <b>AXUHME</b> 29 29 <b>RPEPOPFDSINNCDF</b>	AXCSME 29 IOHHMOOR	14         0           AXCHME         29           WVIOEPFDNCDF         24           RSSHAOFDNCDF         24	29 MVIOEPNCDF	29 MVIONCDF 1 RSWHOEPFDNCDF	29 RBSZOPOEPFDNCDF 25 RSWHOEPNCDF	29 RBSZOPOEPNCDF 23 SPHLPQWNCDF
SIR_IOPN_2 SIR_IOPR1B SIR_IOPR_2 <b>Product Type</b> SIR_IOP_2_ <b>Product Type</b> SIR_IOP_2_	0 0 <b>AXCHME</b> 29 <b>AXUHME</b> 29	0  AXCSME 29  IOHHMOOR 24	14         0           AXCHME         29           MVIOEPFDNCDF         24	29 <b>MVIOEPNCDF</b> 23	29 MVIONCDF 1	29 RBSZOPOEPFDNCDF 25	29 RBSZOPOEPNCDF 23
SIR_IOPN_2           SIR_IOPR1B           SIR_IOPR_2           Product Type           SIR_IOP_2_           Product Type           SIR_IOP_2_           Product Type           SIR_IOP_2_	0 0 <b>AXCHME</b> 29 <b>AXUHME</b> 29 29 <b>RPEPOPFDSINNCDF</b>	0 AXCSME 29 IOHHMOOR 24	14         0           AXCHME         29           WVIOEPFDNCDF         24           RSSHAOFDNCDF         24	29 <b>MVIOEPNCDF</b> 23	29 MVIONCDF 1 RSWHOEPFDNCDF	29 RBSZOPOEPFDNCDF 25 RSWHOEPNCDF	29 RBSZOPOEPNCDF 23 SPHLPQWNCDF

Test Description Key:						
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPFDPLRM	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSAR	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch				
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter				

# 7.3 Missing QCC Reports

Number of products with missing QCC reports:

12

Product name 0 0

0	CS_OFFL_SIR_IOP_220201212T084010_20201212T092950_C002
0	CS_OFFL_SIR_IOP_220201212T092950_20201212T101925_C002
0	CS_OFFL_SIR_IOP_220201212T101925_20201212T110904_C002
0	CS_OFFL_SIR_IOP_220201212T110904_20201212T115840_C002
0	CS_OFFL_SIR_IOP_220201212T115840_20201212T124819_C002
0	CS_OFFL_SIR_IOP_220201212T151709_20201212T160648_C002
0	CS_OFFL_SIR_IOP_220201212T165624_20201212T174603_C002
0	CS_OFFL_SIR_IOP_220201212T201453_20201212T210432_C002
0	CS_OFFL_SIR_IOP_220201212T215408_20201212T224347_C002
0	CS_OFFL_SIR_IOP_220201212T224347_20201212T233323_C002