

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

<u>03/07/2023</u>

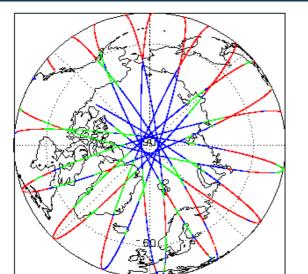
# IDEAS-QA4E0

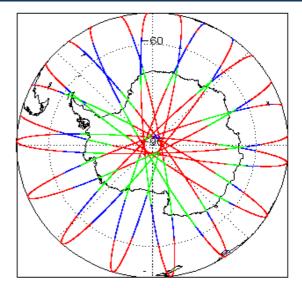
Demont Dueduction.	00 101 0000	Check	L1 & L2	P2P
Report Production:	06-Jul-2023	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:		Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Usea:	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP)	Product Format Check	Nominal	Nominal
Data Used:	L1B, L2 & P2P Science Data	Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
We would	love to hear from you!	Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
Please let us know your feedback about these daily quality reports: What do you like/ dislike? What quality information do you need? Send your feedback to cs2_qc_team@telespazio.com		Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5	See Section 6.5
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.2	See Section 7.2

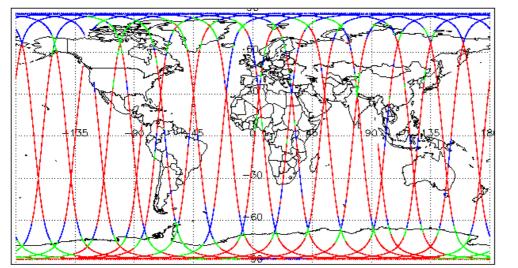
1. Overview

Mission / Instrument News		
02-Jul-2023	None	
03-Jul-2023	None	
04-Jul-2023	Nothing planned	

# 2. Global Coverage







## Mode Coverage



# 3. Instrument Configuration

SIRAL instrument(s) in use:

SIRAL - A

0

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 NetCDF product file (.nc).

Number of products with errors:

For all products, a series of pre-defined checks are performed on the MPH an	d SPH in order to identify any inconsis	stencies and/or errors raised by the ground-segment processing chain.
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 pr	re-determined baseline and also to ch	eck the validity 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 reco	rd. The bit value of this flag indicates a	any problems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
CryoSat L1B data includes a measurement confidence flag for each measure	ment record. The bit value of this flag	indicates any problems when set.
CryoSat L1B data includes a measurement confidence flag for each measure > Attitude Correction Missing: This flag is currently set in error for IOPR pro update.		indicates any problems when set. he attitude correction is actually not missing. This will be resolved in the next SV
> Attitude Correction Missing: This flag is currently set in error for IOPR pro		
Attitude Correction Missing: This flag is currently set in error for IOPR proupdate.		he attitude correction is actually not missing. This will be resolved in the next SV
Attitude Correction Missing: This flag is currently set in error for IOPR pro update.     Number of products with errors: 2	oducts due to a configuration issue. Th	he attitude correction is actually not missing. This will be resolved in the next SV

### 4.6 L1B Waveform Group Data Check

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

21

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

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM1B_20230703T055309_20230703T060007_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230703T094706_20230703T095806_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230703T104856_20230703T110132_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPM1B_20230703T163617_20230703T164421_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T042057_20230703T042144_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T074802_20230703T075029_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T092509_20230703T092934_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T102917_20230703T103047_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T110607_20230703T110958_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T134451_20230703T134633_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPN1B_20230703T210937_20230703T211057_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T002028_20230703T002214_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T060343_20230703T060427_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T093138_20230703T093700_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T110420_20230703T110512_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T165108_20230703T165359_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T182940_20230703T183334_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T210417_20230703T210827_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T210827_20230703T210936_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T215121_20230703T215135_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_IOPR1B_20230703T224226_20230703T224359_C001	Loss of Echo	The tracking echo is missing for one or more records

# 5. IOP Level 2 Data Quality Check

### 5.1 L2 Product Format Check

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

Number of products with errors:

### 5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0

# 5.3 L2 Auxiliary Data File Usage Check

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

Number of products with errors:

### 5.4 L2 Auxiliary Correction Error Check

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

0

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.

64

> 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:

Construction         Toosparaby (f)         Toosparaby (f)         Toosparaby (f)           CS, OFFL, SIR, JOPN, 2, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371011082, 2023070371021040, 2023070371021040, 2023070371021040, 2023070371021040, 2023070371021040, 2023070371021040, 2023070371022040, 2011         Mean See Surtice (1), Mean Dynamic         Toose is an orre with the MSS height (solution 1) and the Mean Dynamic           CS, OFFL, SIR, JOPN, 2, 2023070371022040, 2003         Mean See Surtice (1), Mean Dynamic         Toose is an orre with the MSS height (solution 1) and the Mean Dynamic           CS, OFFL, SIR, JOPN, 2, 2023070371022040, 2003         Mean See Surtice (1), Mean Dynamic         Toose is an orre with the MSS height (solution 1) and the Mean Dynamic           CS, OFFL, SIR, JOPN, 2, 2023070371021020, C001         Mean See Surtice (1), Mean Dynamic         Toose is an orre with the MSS height (solution 1) and the Mean Dynamic           CS, OFFL, SIR, JOPN, 2, 202307037101200, C001         Mean See Surtice (1), Mean Dynamic         Toose is an orre with the MSS height (solution 1) and the Mea	Product	Test Failed	Description
Corp., Sep. Onl., Sep. Onl. 2, Sep	CS_OFFL_SIR_IOPM_2_20230703T011012_20230703T011048_C001	Mean Dynamic Topography (1)	
Sourch Control         Source Transcence         Source Transcence           Source Transcence         Source Transcence         Source Transcence	CS_OFFL_SIR_IOPM_2_20230703T161359_20230703T161724_C001	Mean Dynamic Topography (1)	
Standborg         Construction         Construction         Construction         Construction         Construction           CS, OFEL, SH, ICAN, Z. 2020/00/1018/2.022/00/00/1022/.500/1         Mem DS Station (1) Mean Drawnic         Tensor and mer and the MSS horid ( Construction 1) and the Mean Drawnic           CS, OFEL, SH, ICAN, Z. 2020/00/1022.022/00/00/1022/.500/00/1022/00/00/1022.0220/00/1022/00/00/1022.0220/00/1022/00/00/1022/00/00/1022/00/00/1022/00/00/1022/00/00/1022/00/00/102/00/00/00/00/00/00/00/00/00/00/00/00/0	CS_OFFL_SIR_IOPM_2_20230703T162116_20230703T162206_C001	Mean Dynamic Topography (1)	
Number         Treagraphy (1)         Treagraphy (2)         Treagraphy (2)           05.0FTL_SRL,OFTL_20200151111062_0020015111206_0001         Main Dynamic Taxoyardy (1)         The bit is an over with the Moth Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20200151111062_0020011111064_0001         Main Dynamic Taxoyardy (1)         The bit is an over with the Moth Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20200151111062_0020011111064_0001         Main Dynamic Taxoyardy (1)         The bit is an over with the Moth Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20000151111062_0020011111064_0001         Main Dynamic Taxoyardy (1)         The bit is an over with the MOS hight (outcort 1) and the Main Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20000151111064_0001         Main Dynamic Taxoyardy (1)         The bit is an over with the MOS hight (outcort 1) and the Main Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20000151111064_0001         Main Dynamic Taxoyardy (1)         The bit is an over with the MOS hight (outcort 1) and the Main Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20000151110640_001         Main Dynamic Taxoyardy (1)         The bit is an over with the MOS hight (outcort 1) and the Main Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20000151110660_001         Main Dynamic Taxoyardy (1)         The bit is an over with the MOS hight (outcort 1) and the Main Dynamic Taxoyardy (1)           05.0FTL_SRL,OFTL_20000151110660_001         Main Dynamic Taxoyardy (1)         The bit is an over with the MOS hight (outcort 1) and the Main Dynamic	CS_OFFL_SIR_IOPN_2_20230703T002215_20230703T002400_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
Sci OFTL SIR CONV_2 ACCOUNTING TO EXCLUSION TO SIGN CONVERSION OF MAIN DURING TO ACCOUNT OF ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACCOUNT ACCOUNT	CS_OFFL_SIR_IOPN_2_20230703T011318_20230703T011518_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
Science Discoverse (i)         Troopsends (i)         Troopsends (i)           Science J, Jon J, 2. 2020/001102557. 2020/01102557. 202	CS_OFFL_SIR_IOPN_2_20230703T011902_20230703T012345_C001	Mean Dynamic Topography (1)	
CSL DFL SHLDEN & 2000/001/00260 / 20000/001/00260 / 2000/001/00260 / 2000/001/00260 / 2000/001/00260 /	CS_OFFL_SIR_IOPN_2_20230703T021034_20230703T021319_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
Start         Start         Transprantly fully         Transprantly fully         Transprantly fully           CS_OFFL_SIR_JOPN_2_D02070370310410532_0001         Mean Base Surface (1), Mean Dynamic         Transprantly fully fu	CS_OFFL_SIR_IOPN_2_20230703T025257_20230703T025430_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
Start         Encomparity (1)         Transprayby (1)         Transprayby (1)         Transprayby (1)           CS_OFFL_SIR_JOPN_2_20220703T042547_20220703T042144_C001         Mean Dynamic Topography (1)         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T061552_20220703T064544_C001         Mean Sas Surface (1), Mean Dynamic Topography (1)         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T070552_20220703T071056_C001         Mean Sas Surface (1), Mean Dynamic Topography (1)         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T074622_20220703T0710502_0_C001         Mean Sas Surface (1), Mean Dynamic Topography (1)         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T074622_20220703T07620_0_C001         TEGEORTH_COME         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T07620_20220703T07620_2001         TEGEORTH_COME         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T10262_0020703T07620_2002         TEGEORTH_COME         There is an enror with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_20220703T10262_0020703T10262_0001         TEGEORTH_COME         TEGEORTH_COME	CS_OFFL_SIR_IOPN_2_20230703T025733_20230703T025842_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
USE OFFL_SIN_DEPL.         Additional Status (1)         Mean Dynamic Topography (1)         Tor one or more records           CS_OFFL_SIN_OPFL_2.00230703108.010         Additional Status (1)         Mean Dynamic Topography (1)         There is an encr with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIN_OPFL_2.00230703170625.202307031706150_0001         Mean Sas Status (1)         Mean Dynamic Topography (1)         There is an encr with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIN_OPFL_2.0023070317076569_202307031707669_0001         Mean Dynamic Topography (1)         There is an encr with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIN_OPFL_2.002307031707669_202307031707669_20001         There is an encr with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIN_OPFL_2.0023070317076709_2023070317075292_0001         Mean Dynamic Topography (1)         There is an encr with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIN_OPFL_2.0023070317076709_2023070317075292_0001         Mean Dynamic Topography (1)         There is an encr with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIN_OPFL_2.002307031706292_202307031706292_202307031706292_20001         Mean Dynamic Topography Magn (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIN_OPFL_2.002307031706292_202307031706292_202307031706292_202307031706292_202307031706292_202307031706292_20230703170629_201         Mean Bas Status (	CS_OFFL_SIR_IOPN_2_20230703T034139_20230703T034528_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_DFL_SR_DPL_2_02307031061192_019_02007031061424_L001       Topography (1)       Tree is an error with the Man Dynamic Topography (1)         CS_DFFL_SIR_DPN_2_02020703107685_0200703107685_0200703107685_0200703107685_0200703107685_0200703107685_0200703107685_0200703107685_0200703107685_0200703107685_000       Mean Dsa Sartace (1), Man Dynamic Topography (1)       There is an error with the Man Dynamic Topography (1)         CS_OFFL_SIR_DPN_2_0020703107685_0200703107685_02007031075028_0001       Mean Sas Sartace (1), Man Dynamic Topography (1)       There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1)         CS_OFFL_SIR_IOPN_2_0020703107508_002070507528_0001       Mean Sas Sartace (1), Man Dynamic Topography (1)       There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1)         CS_OFFL_SIR_IOPN_2_0020703107508_0020705108230_0001       Mean Sas Sartace (1), Man Dynamic Topography (1)       There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1)         CS_OFFL_SIR_IOPN_2_0020705108209_0020705108230_0001       Mean Sas Sartace (1), Man Dynamic Topography (1)       There is an error with the MSS height (solution 1), and the Mean Dynamic Topography (1)         CS_OFFL_SIR_IOPN_2_0020705108209_0020705108230_0001       Mean Sas Sartace (1), Man Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_IOPN_2_0020705108209_0020705108230_0001       Mean Sas Sartace (1), Man Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)	CS_OFFL_SIR_IOPN_2_20230703T042057_20230703T042144_C001	Mean Dynamic Topography (1)	
CS, DFL, SH, UPN, 2, 2023070310710812, 202307031071085, 202307031071085, 202307031071085, 202307031071085, 202307031071085, 202307031071085, 202307031071086, 2001         Topography (1)         There is an error with the Man Dynamic Topography (i) (solution 1) and the Man Dynamic Topography (i), Total Geocemic Tool           CS, OFFL, SIR, JOPN, 2, 202307031071682, 202307031075029, 2001         Wean Ses Surface (1), Mean Dynamic Topography (isolution 1) and idial corrections for one or more records           CS, OFFL, SIR, JOPN, 2, 202307031075029, 2001         Wean Ses Surface (1), Mean Dynamic Topography (isolution 1) and the Man Dynamic Topography (isolution 1) and the Mean Dynamic Topography (isolution 1) and the Man Dynamic Topography (isolution 1) and the Mean Dynamic Topograp	CS_OFFL_SIR_IOPN_2_20230703T052119_20230703T052434_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_DFIL_SIR_JOPN_2_202307031074802_202307031075029_C001         International Dynamic Topography (1)         Tor orange and constructions for one or more records           CS_OFIL_SIR_JOPN_2_202307031074802_202307031075029_C001         Mean Ses Surface (1). Mean Dynamic Topography (colution 1) and the Mean Dynamic Topography (colution 1) and the MSS height (colution 1), the Mean Dynamic Topography (colution 1) and the MSS height (colution 1) and the Mean Dynamic Topography (colution 1) and the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_202307031075029_202307031095294_C001         Mean Ses Surface (1). Mean Dynamic Topography (1)         There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_202307031092924_202307031092934_C001         Mean Ses Surface (1). Mean Dynamic Topography (1)         There is an error with the MSS height (colution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_JOPN_2_202307031092924_202307031092934_C001         Mean Ses Surface (1). Mean Dynamic Topography leght (colution 1) and the Mean Dynamic Topography leght (colution 1). The Mean Dynamic Topography leght (colution 1) and the Mean Dynamic Topography leght (colution 1).           CS_OFFL_SIR_JOPN_2_202307031110640_202307031110640_C001         Mean Ses Surface (1). Mean Dynamic Topography leght (colution 1).         There is an error with the MSS height (colution 1).           CS_OFFL_SIR_JOPN_2_202307031111064_C001         Mean Dynamic Topogr	CS_OFFL_SIR_IOPN_2_20230703T061059_20230703T061250_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CB_OFIL_SIR_IOPN_2_202307031074602_202307031075089_C001         Topography (1). Total Geocentric Coean Tede (CG), Total Geocentric Coean Topography leight (solution 1) and the Mean Dynamic Topography leight (solution 1). He Total Geocentric Coean Topography leight (solution 1), He Total Geocentric Coean Topography leight (solution 1). He Total Geocentric Coean Topography leight (solution 1) and the Mean Dynamic Topography leight (solution 1) and the Mean D	CS_OFFL_SIR_IOPN_2_20230703T070855_20230703T071006_C001	Mean Dynamic Topography (1)	
CS_DFR_SIR_IOPN_2_20230703T092599_20220703T092594_C001         Topography (i) Topography (i). Total Geocentric Ocent Topography (ii). Total Geocentric Ocent Topography (ii). Total Geocentric Ocent Topography (ii). Total Geocentric Ocent Topography height (solution 1) and the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T102430_20230703T102430_20230703T102455_C001         Mean Sea Surface (1). Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T110607_20230703T110698_C001         Mean Sea Surface (1). Mean Dynamic Topography (ii). Total Geocentric Ocean Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T11101_20230703T111034_C001         Mean Sea Surface (1). Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T111618_20230703T111608_C001         Mean Dynamic Topography (ii)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124507_C001         Mean Dynamic Topography (ii)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124507_C001         Mean Dynamic Topography (ii)           CS_OFFL_SIR_IOPN_2_20230703T124506_2020703T124502_0003T115031_C001         Mean Dynamic Topography (ii)           CS_OFFL_SIR_IOPN_2_20230703T124502_00230703T1245028_C001         Mean Dynamic Topography (ii)	CS_OFFL_SIR_IOPN_2_20230703T074802_20230703T075029_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	
CS_OFFL_SIR_IOPN_2_20230703T082509_20230703T082594_C001         Topography (1). Total Geocentric Ocean Tide (FES), Nan-Equilibrium Long Period Cean Tide         There is an error with the MSS height (solution 1), the Mean Dynamic Topography (aution 1) and tida corrections for one or more records           CS_OFFL_SIR_IOPN_2_20230703T083034_20230703T083038_C001         Mean Sas Surface (1), Mean Dynamic Topography (aution 1) and tida corrections for one or more records           CS_OFFL_SIR_IOPN_2_20230703T102430_20230703T102825_C001         Mean Sas Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (aution 1)           CS_OFFL_SIR_IOPN_2_20230703T110607_20230703T110825_C001         Mean Sas Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (aution 1)           CS_OFFL_SIR_IOPN_2_20230703T111067_20230703T111058_C001         Mean Sas Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (aution 1)           CS_OFFL_SIR_IOPN_2_20230703T111060_20230703T111606_C001         Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T1124656_20230703T1126026_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124652_20230703T126026_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)	CS_OFFL_SIR_IOPN_2_20230703T075106_20230703T075228_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230703T102430_20230703T102825_C001       Topography (1)       The set is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1). There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1).         CS_OFFL_SIR_IOPN_2_20230703T111010_20230703T111034_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1). There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1).         CS_OFFL_SIR_IOPN_2_20230703T114506_20230703T111080_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1).         CS_OFFL_SIR_IOPN_2_20230703T124506_2003703T112657_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1).         CS_OFFL_SIR_IOPN_2_20230703T12452_20230703T126506_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1).         CS_OFFL_SIR_IOPN_2_20230703T12452_20230703T126506_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1).         CS_OFFL_SIR_IOPN_2_20230703T12452_20230703T126506_C001       Mean Dynamic Topography (1).       There is an error with the Mean Dynamic Topography height (solution 1).         C	CS_OFFL_SIR_IOPN_2_20230703T092509_20230703T092934_C001	Topography (1), Total Geocentric Ocean Tide (GOT), Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period	
CS_OFFL_SIR_IOPN_2_20230703T1102430_20230703T110958_C001         Topography (1)         Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T110607_20230703T110958_C001         Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)         Topography height (solution 1), the Total Geocentric Ocean Tide (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T111010_20230703T111034_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T111618_20230703T111800_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124857_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124857_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124502_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T160311_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T165559_20230703T165523_C00	CS_OFFL_SIR_IOPN_2_20230703T093024_20230703T093138_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230703T110607_20230703T110958_C001         Topography (1), Total Geocentric Ocean         Topography (solution 1), the Mass Deight (solution 1) and the Mean Dynamic           CS_OFFL_SIR_IOPN_2_20230703T114606_20230703T1124857_C001         Mean Sea Surface (1), Mean Dynamic         Topography (solution 1)         There is an error with the MSS height (solution 1) and the Mean Dynamic           CS_OFFL_SIR_IOPN_2_20230703T124923_20230703T125026_C001         Mean Sea Surface (1), Mean Dynamic         Topography (solution 1)         There is an error with the Mean Dynamic Topography height (solution 1)         Toro error more records           CS_OFFL_SIR_IOPN_2_20230703T164512_20230703T16433_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic To	CS_OFFL_SIR_IOPN_2_20230703T102430_20230703T102825_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230703T111618_20230703T111800_C001         Topography (1)         Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T111618_20230703T111800_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124857_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124923_20230703T125026_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           CS_OFFL_SIR_IOPN_2_20230703T124923_20230703T125026_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T134451_20230703T134633_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T160352_20230703T165523_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height (solution 1)           CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography	CS_OFFL_SIR_IOPN_2_20230703T110607_20230703T110958_C001	Topography (1), Total Geocentric Ocean	Topography (solution 1), the Total Geocentric Ocean Tide (solution 1:
CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124857_C001       Mean Synamic Topography (1)       for one or more records.         CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124857_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the 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_20230703T124923_20230703T125026_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         CS_OFFL_SIR_IOPN_2_20230703T134451_20230703T134633_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T160152_20230703T160311_C001       Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T160359_20230703T165523_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_IOPN_2_20230703T111010_20230703T111034_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230703T124923_20230703T124937_C001Topography (1)Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T124923_20230703T125026_C001Mean 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_20230703T134451_20230703T134633_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T160152_20230703T160311_C001Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T165359_20230703T165523_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T1753034_20230703T175308_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPN_2_20230703T1753034_20230703T175308_C001Mean Dynamic Topography (1)	CS_OFFL_SIR_IOPN_2_20230703T111618_20230703T111800_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_IOPN_2_20230703T134451_20230703T134633_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1)         CS_OFFL_SIR_IOPN_2_20230703T160152_20230703T160311_C001       Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)       There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (SOLUTION 1: GOT) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T160359_20230703T165523_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) and the Total Geocentric Ocean Tide (SOLUTION 1: GOT) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T165359_20230703T165523_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_IOPN_2_20230703T124506_20230703T124857_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230703T160152_20230703T160311_C001       Mean Dynamic Topography (1), Total       There is an error with the Mean Dynamic Topography (solution 1) and the         CS_OFFL_SIR_IOPN_2_20230703T160152_20230703T160311_C001       Mean Dynamic Topography (1), Total       There is an error with the Mean Dynamic Topography (solution 1: GOT) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T165359_20230703T165523_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175049_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOPN_2_20230703T124923_20230703T125026_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOPN_2_20230703T165359_20230703T165523_C001       Geocentric Ocean Tide (GOT)       Total Geocentric Ocean Tide (solution 1: GOT) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T165359_20230703T165523_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_IOPN_2_20230703T134451_20230703T134633_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001       Mean Dynamic Topography (1)       for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records         CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_IOPN_2_20230703T160152_20230703T160311_C001		There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001 Mean Dynamic Topography (1) for one or more records CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height (solution 1) for one or more records CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOPN_2_20230703T165359_20230703T165523_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_IOPN_2_202307031175205_202307031175308_C001 Mean Dynamic Topography (1) for one or more records CS_OFFL_SIR_IOPN_2_2023070311833448_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height (solution 1)	CS_OFFL_SIR_IOPN_2_20230703T170049_20230703T170401_C001	Mean Dynamic Topography (1)	
	CS_OFFL_SIR_IOPN_2_20230703T175205_20230703T175308_C001	Mean Dynamic Topography (1)	
	CS_OFFL_SIR_IOPN_2_20230703T183334_20230703T183448_C001	Mean Dynamic Topography (1)	

CS_OFFL_SIR_IOPN_2_20230703T183947_20230703T184309_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_20230703T201424_20230703T201700_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_20230703T210237_20230703T210416_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230703T215135_20230703T215555_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_20230703T224209_20230703T224226_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230703T224854_20230703T224958_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_20230703T225315_20230703T225521_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230703T233155_20230703T233348_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPN_2_20230703T234211_20230703T234359_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230703T011518_20230703T011901_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_20230703T025430_20230703T025733_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_20230703T025843_20230703T025943_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_20230703T042144_20230703T042246_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230703T043254_20230703T044041_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_20230703T061250_20230703T062115_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_20230703T075228_20230703T075811_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_20230703T093138_20230703T093700_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_20230703T111035_20230703T111618_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_20230703T124857_20230703T124923_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_20230703T125026_20230703T125401_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_20230703T142552_20230703T143321_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_20230703T160513_20230703T161200_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_20230703T162206_20230703T162347_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230703T174304_20230703T175039_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_20230703T175039_20230703T175205_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_20230703T182940_20230703T183334_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230703T192249_20230703T192938_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_20230703T192938_20230703T193059_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_20230703T210417_20230703T210827_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_20230703T210827_20230703T210936_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_20230703T213157_20230703T213410_C001	Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the Mean Dynamic Topography (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOPR_2_20230703T224226_20230703T224359_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height (solution 1) for one or more records
CS_OFFL_SIR_IOPR_2_20230703T224428_20230703T224624_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_20230703T224624_20230703T224854_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: 2 Product Test Failed Description CS\_OFFL\_SIR\_IOPM\_2\_20230703T042312\_20230703T042437\_C001 Power scaling error There is an error in the scaling of the L1B waveform for one or more records CS\_OFFL\_SIR\_IOPM\_2\_20230703T104856\_20230703T110132\_C001 Power scaling error There is an error in the scaling of the L1B waveform for one or more records

# 5.6 L2 Measurement Quality Flag Check

### L2 Quality Flags (20 Hz)

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

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

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

> OCOG Altimeter Range and Backscatter Quality Flags: These flags are currently set for some records over continental ice.

86

### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20230702T235721_20230703T002028_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_20230703T002400_20230703T003236_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_20230703T003557_20230703T010014_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_20230703T010239_20230703T010308_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_20230703T011012_20230703T011048_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_20230703T013401_20230703T015931_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_20230703T020615_20230703T021034_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_20230703T021518_20230703T024109_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_20230703T024111_20230703T024357_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_20230703T024652_20230703T025241_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_20230703T030707_20230703T033747_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_20230703T034528_20230703T035115_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_20230703T035412_20230703T035857_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_20230703T041332_20230703T041912_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_20230703T044410_20230703T051727_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_20230703T052434_20230703T052947_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_20230703T053416_20230703T055056_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_20230703T060920_20230703T061059_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_20230703T062115_20230703T065126_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_20230703T065137_20230703T065631_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_20230703T070249_20230703T070435_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_20230703T070442_20230703T070854_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_20230703T071346_20230703T073928_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_20230703T073952_20230703T074632_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_20230703T075029_20230703T075106_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_20230703T080006_20230703T081853_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_20230703T083009_20230703T083547_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_20230703T083811_20230703T084335_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_20230703T084354_20230703T084610_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_20230703T085442_20230703T090708_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_20230703T090825_20230703T092509_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_20230703T094706_20230703T095806_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_20230703T100022_20230703T101441_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_20230703T101739_20230703T102234_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_20230703T102311_20230703T102430_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_20230703T103138_20230703T103612_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_20230703T104856_20230703T110132_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_20230703T113930_20230703T115338_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_20230703T115713_20230703T120148_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_20230703T120932_20230703T123103_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_20230703T123105_20230703T123503_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_20230703T130834_20230703T132853_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_20230703T132937_20230703T133239_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_20230703T133716_20230703T134103_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_20230703T134125_20230703T134450_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_20230703T134818_20230703T141446_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_20230703T143642_20230703T144523_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_20230703T144726_20230703T151227_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_20230703T151528_20230703T152018_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_20230703T152836_20230703T160152_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_20230703T161359_20230703T161724_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_20230703T164657_20230703T164832_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_20230703T165032_20230703T165108_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_20230703T165523_20230703T170048_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_20230703T170755_20230703T174304_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_20230703T175308_20230703T175627_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_20230703T181251_20230703T182940_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_20230703T183449_20230703T183947_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_20230703T184655_20230703T192248_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_20230703T194428_20230703T200725_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_20230703T202640_20230703T204116_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_20230703T204119_20230703T205619_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_20230703T211057_20230703T211349_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_20230703T211521_20230703T213157_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_20230703T213411_20230703T214854_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_20230703T215851_20230703T220308_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_20230703T220528_20230703T222019_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_20230703T222219_20230703T223139_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_20230703T225609_20230703T230626_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_20230703T231612_20230703T232927_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_20230703T233349_20230703T234211_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_20230703T234524_20230704T000135_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_20230703T041237_20230703T041332_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_20230703T042246_20230703T042312_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_20230703T075106_20230703T075228_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_20230703T102304_20230703T102311_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_20230703T112921_20230703T112956_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_20230703T130624_20230703T130834_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_20230703T143439_20230703T143459_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_20230703T215806_20230703T215851_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_20230703T024357_20230703T024433_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_20230703T025843_20230703T025943_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_20230703T060427_20230703T060920_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_20230703T110558_20230703T110607_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_20230703T120711_20230703T120931_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_20230703T175039_20230703T175205_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

## L2 Quality Flags (20 Hz PLRM)

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

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

> OCOG Altimeter Range and Backscatter PLRM Quality Flags: These flags are currently set for occasional records over continental ice.

91

Number of	products with errors:	

Product	Test Failed	Description
CS_OFFL_SIR_IOPN_2_20230703T010015_20230703T010239_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_20230703T011902_20230703T012345_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_20230703T012433_20230703T012555_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_20230703T020457_20230703T020614_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_20230703T021034_20230703T021319_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_20230703T025257_20230703T025430_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_20230703T034139_20230703T034528_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_20230703T041237_20230703T041332_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_20230703T055056_20230703T055308_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_20230703T070855_20230703T071006_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_20230703T074802_20230703T075029_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_20230703T092509_20230703T092934_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_20230703T093700_20230703T093842_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_20230703T102304_20230703T102311_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_20230703T102430_20230703T102825_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_20230703T110132_20230703T110255_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_20230703T110607_20230703T110958_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_20230703T111618_20230703T111800_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_20230703T120342_20230703T120711_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_20230703T124253_20230703T124416_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_20230703T124506_20230703T124857_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_20230703T125403_20230703T125442_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_20230703T130350_20230703T130532_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_20230703T134451_20230703T134633_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_20230703T151404_20230703T151528_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_20230703T152354_20230703T152433_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_20230703T160351_20230703T160512_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_20230703T170049_20230703T170401_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_20230703T175627_20230703T175817_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_20230703T201853_20230703T202519_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_20230703T211349_20230703T211521_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_20230703T214939_20230703T215120_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_20230703T220308_20230703T220443_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_20230703T231444_20230703T231612_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_20230703T010421_20230703T010522_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_20230703T010849_20230703T011012_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_20230703T011052_20230703T011318_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_20230703T015931_20230703T020153_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_20230703T033747_20230703T034139_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_20230703T040942_20230703T041137_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_20230703T042144_20230703T042246_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_20230703T042634_20230703T042718_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_20230703T044158_20230703T044239_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_20230703T051727_20230703T052119_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_20230703T053106_20230703T053416_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_20230703T060008_20230703T060155_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_20230703T065631_20230703T065836_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_20230703T074739_20230703T074801_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_20230703T075811_20230703T080006_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_20230703T084756_20230703T085442_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_20230703T090708_20230703T090825_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_20230703T094656_20230703T094706_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_20230703T101442_20230703T101555_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_20230703T102825_20230703T102916_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_20230703T103047_20230703T103138_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_20230703T103612_20230703T103651_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_20230703T104312_20230703T104836_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_20230703T111035_20230703T111618_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_20230703T113113_20230703T113326_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_20230703T113328_20230703T113541_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_20230703T113548_20230703T113720_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_20230703T115339_20230703T115521_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_20230703T120711_20230703T120931_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_20230703T123504_20230703T123732_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_20230703T125026_20230703T125401_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_20230703T133239_20230703T133449_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_20230703T134633_20230703T134817_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_20230703T141446_20230703T141636_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_20230703T142552_20230703T143321_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_20230703T143429_20230703T143439_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_20230703T143459_20230703T143642_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_20230703T151228_20230703T151404_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_20230703T161724_20230703T161826_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_20230703T165108_20230703T165359_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_20230703T170401_20230703T170755_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_20230703T174304_20230703T175039_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_20230703T175039_20230703T175205_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_20230703T175817_20230703T175959_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_20230703T182940_20230703T183334_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_20230703T184309_20230703T184655_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_20230703T192249_20230703T192938_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_20230703T193411_20230703T193519_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_20230703T200725_20230703T201424_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_20230703T215121_20230703T215135_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_20230703T222019_20230703T222125_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_20230703T224226_20230703T224359_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
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CS_OFFL_SIR_IOPR_2_20230703T225124_20230703T225315_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_20230703T225521_20230703T225608_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_20230703T231111_20230703T231430_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_20230703T231432_20230703T231444_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_20230703T232927_20230703T233155_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 & 1 Hz PLRM)		'
Currently, there are several common flags raised in the Level 2 products, wh	ich are summarised below.	
> 1 Hz and 1 Hz Ocean SSHA Quality Flags: These flags are currently set for pro-	oducts over sea ice, which is to be expected	ed. The number of products with this error flag set is given below.
Number of products with errors: 200		
5.8 L2 Ocean Retracking Quality Check		
L2 Retracking Flags (20 Hz)		
CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz measurer	ment record. The bit value of this flag indica	ates 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. Th	ne number of products with this error flag set is given below.
Number of products with errors: 64		
L2 Retracking Flags (20 Hz PLRM)		
CryoSat L2 data includes an ocean retracking quality flag for each 20 Hz PLRM me	easurement record. The bit value of this fla	g indicates any problems when set.
> Ocean Retracking Quality Flag (PLRM): This flag is currently set for products I given below.	IOPR and IOPN products over sea ice, but	this is to be expected. The number of products with this error flag set is
Number of products with errors: 156		
	Pole-to-Pole Data Quality	Check
0. 10P L2 P		
6.1 P2P Product Format Check		
Each product, retrieved and unpacked from the science server, is checked to ensu	are it consists of both an XML header file (.	HDR) and a NetCDF product file (.nc).
	re it consists of both an XML header file (.	HDR) and a NetCDF product file (.nc).
Number of products with errors: 0	ure 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		
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 SP		
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 SP         Number of products with errors:       0		
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 SP         Number of products with errors:       0	PH in order to identify any inconsistencies a	ind/or errors raised by the ground-segment processing chain.
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 SP         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-defined	PH in order to identify any inconsistencies a	ind/or errors raised by the ground-segment processing chain.
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 SP         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-de         Number of products with errors:       0	PH in order to identify any inconsistencies a	ind/or errors raised by the ground-segment processing chain.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check	PH in order to identify any inconsistencies a PH in order to identify any inconsistencies a termined baseline and also to check the va	ind/or errors raised by the ground-segment processing chain.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checked	PH in order to identify any inconsistencies a termined baseline and also to check the vandalso to check the va	alidity of Auxiliary Data Files is correct.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L	PH in order to identify any inconsistencies a termined baseline and also to check the vanda disc to ch	alidity of Auxiliary Data Files is correct.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         Followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind ve	PH in order to identify any inconsistencies a termined baseline and also to check the var d for the default error value (32767). evel 2 products which are expected due this check. ed over CONTINENTAL ICE: Dry Troposp	and/or errors raised by the ground-segment processing chain. Alidity of Auxiliary Data Files is correct.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind year on reported in the table below.	PH in order to identify any inconsistencies a termined baseline and also to check the var d for the default error value (32767). <b>evel 2 products which are expected due this check.</b> red over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO	Ind/or errors raised by the ground-segment processing chain. Alidity of Auxiliary Data Files is correct.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from soft reported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for pro	PH in order to identify any inconsistencies a termined baseline and also to check the var d for the default error value (32767). evel 2 products which are expected due this check. ed over CONTINENTAL ICE: Dry Troposp pector. This is a known anomaly (CRYO-CO ducts over sea ice, but this is to be expect	Ind/or errors raised by the ground-segment processing chain. Alidity of Auxiliary Data Files is correct.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind very not reported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for pro         > Mean Sea Surface: The error value is currently set for products over land and set	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). <b>evel 2 products which are expected due this check.</b> ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO ducts over sea ice, but this is to be expect ea ice, but this is to be expected.	alidity of Auxiliary Data Files is correct.
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 SP         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-def         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary corrections raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind very not reported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and sis > Mean Dynamic Topography: The error value is currently set for products over land and sis > Mean Dynamic Topography: The error value is currently set for products over land and sis > Mean Dynamic Topography: The error value is currently set for products over land and sis > Mean Dynamic Topography: The error value is currently set for products over land and sis > Mean Dynamic Topography: The error value is currently set for products over land and sis > Mean Dynamic Topography: The error value is currently set for products over land and sis over lan	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). <b>evel 2 products which are expected due this check.</b> ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO iducts over sea ice, but this is to be expect ea ice, but this is to be expected. land and sea ice, but this is to be expected	alidity of Auxiliary Data Files is correct.
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 SP         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-defined of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checked         Currently, there are some common auxiliary correction errors raised in the Lefollowed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not compute Gorrection and the U-Wind and V-Wind components of the ECMWF model wind version the reported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and sea Surface: The error value is currently set for products over land and sea Surface: The error value is currently set for products over land and sea Surface: The error value is currently set for products over land and sea Surface Wind Speed Error: The error value is currently set for products over land and sea Surface is the error value is currently set for products over land and sea Surface is the error value is currently set for products over land and sea Surface is the error value is currently set for products over land and sea Surface is the error value is currently set for products over land and sea Surface is the error value is currently set for products over land and sea Surface is the error value is curren	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). <b>evel 2 products which are expected due this check.</b> ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO iducts over sea ice, but this is to be expect ea ice, but this is to be expected. land and sea ice, but this is to be expected	Ind/or errors raised by the ground-segment processing chain. alidity of Auxiliary Data Files is correct. It is to surface type. All common flags are summarised in the list below, heric Corection, Wet Tropospheric Correction, Inverse Barometric P-3) and will be resolved in a future IPF update. The affected products are ed.
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 SP         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-def         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind or on terported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and sis a mean Dynamic Topography: The error value is currently set for products over land and sis a Mean Dynamic Topography: The error value is currently set for products over land and sis a Mean Dynamic Topography: The error value is currently set for products over land and sis a Mean Dynamic Topography: The error value is currently set for products over land and sis a Mean Dynamic Topography: The error value is currently set for products over land and sis a Mean Dynamic Topography: The error value is currently set for products over land and sis a Mean Dynamic Topography: The error value is currently set for products ove	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). <b>evel 2 products which are expected due this check.</b> ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO iducts over sea ice, but this is to be expect ea ice, but this is to be expected. land and sea ice, but this is to be expected	Ind/or errors raised by the ground-segment processing chain. alidity of Auxiliary Data Files is correct. It is to surface type. All common flags are summarised in the list below, heric Corection, Wet Tropospheric Correction, Inverse Barometric P-3) and will be resolved in a future IPF update. The affected products are ed.
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind vertor to reported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and set Mean Dynamic Topography: The error value is currently set for products over land and s	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). <b>evel 2 products which are expected due</b> <b>this check.</b> ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO ducts over sea ice, but this is to be expected. land and sea ice, but this is to be expected land and sea ice, but this is to be expected	alidity of Auxiliary Data Files is correct. alidity of Auxiliary Data Files is correct. e to surface type. All common flags are summarised in the list below, heric Corection, Wet Tropospheric Correction, Inverse Barometric P-3) and will be resolved in a future IPF update. The affected products are ed. I. d.
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 SP         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-def         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind or or to reported in the table below.         > Sea State Bias & Sea State Bias PLFM: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products over land and si si Mean Dynamic Topography: The error value is currently set for products o	PH in order to identify any inconsistencies a termined baseline and also to check the variation of the default error value (32767). <b>evel 2 products which are expected due this check.</b> ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO iducts over sea ice, but this is to be expected. land and sea ice, but this is to be expected. land and sea ice, but this is to be expected. land and sea ice, but this is to be expected. land and sea ice, but this is to be expected. land and sea ice, but this is to be expected. <b>Test Failed</b> Mean Sea Surface (1), Mean Dynamic	alidity of Auxiliary Data Files is correct.  alidity of Auxiliary Data Files is correct.  a to surface type. All common flags are summarised in the list below, heric Corection, Wet Tropospheric Correction, Inverse Barometric (P-3) and will be resolved in a future IPF update. The affected products are ed.  d.  Description There is an error with the MSS height (solution 1) and the Mean Dynamic
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 SP         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-def         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind version treported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and sis         > Mean Dynamic Topography: The error value is currently set for products over land and sis         > Mean Dynamic Topography: The error value is currently set for products over land and sis         > Mean Dynamic Topography: The error value is currently set for products over land and sis         > Mean Dynamic Topography: The error value is currently set for products over land and sis         > Mean Dynamic Topography: The error value is currently set for products over land and	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). evel 2 products which are expected due this check. ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO ducts over sea ice, but this is to be expect ea ice, but this is to be expected. land and sea ice, but this is to be expected land and sea ice, but this is to be expected and and and and sea ice, but this is to be expected and and and sea ice, but this is to be expected and and and and and and	Ind/or errors raised by the ground-segment processing chain. alidity of Auxiliary Data Files is correct. There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic
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 SP         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-def         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput Correction and the U-Wind and V-Wind components of the ECMWF model wind version treported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set for products over land and se > Mean Dynamic Topography: The error value is currently set	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). <b>evel 2 products which are expected due</b> <b>this check.</b> ed over CONTINENTAL ICE: Dry Troposp sector. This is a known anomaly (CRYO-CO ducts over sea ice, but this is to be expected land and sea ice, but this is to be expected land and sea ice, but this is to be expected land and sea ice, but this is to be expected land and sea ice, but this is to be expected mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic	Ind/or errors raised by the ground-segment processing chain.  It is a constructed by the groun
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 SP         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-de         Number of products with errors:       0         6.4 P2P Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are checke         Currently, there are some common auxiliary correction errors raised in the L         followed by a table highlighting any additional issues which may arise from         > ECMWF Meteo Corrections: Currently the following corrections are not comput         Correction and the U-Wind and V-Wind components of the ECMWF model wind vert not reported in the table below.         > Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over land and set is a mean Dynamic Topography: The error value is currently set for products over land and set is a Mean Dynamic Topography: The error value is currently set for products over land and set is currently with for products over land and set is currently with for products over land and set is currently set for products over land and set is mean Dynamic Topography: The error value is currently set for products over land and set is currently set for products over land and set is currently set for products over land and set is currently set for products over land and set is durently set for products over land and set is d	PH in order to identify any inconsistencies a termined baseline and also to check the va d for the default error value (32767). evel 2 products which are expected due this check. ed over CONTINENTAL ICE: Dry Troposp ector. This is a known anomaly (CRYO-CO ducts over sea ice, but this is to be expected land and sea ice, but this is to be expected land and sea ice, but this is to be expected land and sea ice, but this is to be expected land and sea ice, but this is to be expected mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1) Mean Sea Surface (1), Mean Dynamic	alidity of Auxiliary Data Files is correct.  b to surface type. All common flags are summarised in the list below, heric Corection, Wet Tropospheric Correction, Inverse Barometric P-3) and will be resolved in a future IPF update. The affected products are ed.  c b construction Description There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)

Mean Sea Surface (1), Mean Dynamic Topography (1)

CS\_OFFL\_SIR\_IOP\_2\_20230703T034539\_20230703T043515\_C001

There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)  $% \left( {\frac{1}{2}} \right) = 0$ 

CS_OFFL_SIR_IOP_2_20230703T043515_20230703T052454_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_20230703T052454_20230703T061430_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_20230703T061430_20230703T070408_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_20230703T070408_20230703T075344_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_20230703T075344_20230703T084323_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_20230703T084323_20230703T093259_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_220230703T093259_20230703T102237_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_20230703T102237_20230703T111214_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20230703T111214_20230703T120152_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_20230703T120152_20230703T125128_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_20230703T125128_20230703T134107_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_20230703T134107_20230703T143043_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_220230703T143043_20230703T152022_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_220230703T152022_20230703T160958_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_220230703T160958_20230703T165936_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_220230703T165936_20230703T174912_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_220230703T174912_20230703T183851_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_220230703T183851_20230703T192827_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_20230703T192827_20230703T201806_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_220230703T201806_20230703T210742_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_20230703T210742_20230703T215720_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Tide (GOT)	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1), the Total Geocentric Ocean Tide (solution 1: GOT) for one or more records
CS_OFFL_SIR_IOP_2_20230703T215720_20230703T224656_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_20230703T224656_20230703T233635_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_220230703T233635_20230704T002611_C001	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:
 2

Product	Test Failed	Description
CS_OFFL_SIR_IOP_2_20230703T034539_20230703T043515_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records
CS_OFFL_SIR_IOP_2_20230703T102237_20230703T111214_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

# 6.6 P2P Measurement Quality Flag Check

# P2P Quality Flags (20 Hz)

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

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

# Number of products with errors:

P2P Quality Flags (20 Hz PLRM)
Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected. The number of P2P products affected is given below.

29

30

P2P Quality Flags (1 Hz & 1 Hz PL	HM)			
Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the number of L2 products affected. The number of P2P products affected is given below.				
Number of products with errors:	30			
6.8 D2D Ocean Petracking Out	lity Chock			
6.8 P2P Ocean Retracking Qua	lity Check			
6.8 P2P Ocean Retracking Qua P2P Retracking Flags (20 Hz)	lity Check			
P2P Retracking Flags (20 Hz)	Ility Check g quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.			
P2P Retracking Flags (20 Hz) Cryosat P2P data includes an ocean retrackin				

### P2P Retracking Flags PLRM

DOD Quality Flama (1 LI= 8 1 LI= DI DI

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.

30

0

2274

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	137	137	5	132	0
SIR_IOPR1B	128	103	2	101	0
SIR_IOPN1B	103	128	0	128	0
SIR_IOPM_2	137	137	80	57	0
SIR_IOPR_2	128	103	29	74	0
SIR_IOPN_2	103	128	45	83	0
SIR_IOP_P2P	29	29	0	29	0

## 7.1 QCC Errors

Number of QCC reports with errors:

## 7.2 QCC Warnings

Number of QCC reports with warnings

SIR_IOPM1B           SIR_IOPM1B           SIR_IOPN1B           SIR_IOPN1B           SIR_IOPN1B           SIR_IOPN1B           SIR_IOPN1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPN1B           SIR_IOPN1B           SIR_IOPR1B           SIR_IOPR1B           SIR_IOPR1B           SIR_IOPR1B           SIR_IOPM1B           SIR_IOPM1B	BCSHNCDF 132 0 132 0 101 0 127 0 RLPTONCDF 0 4 0 27 0 26 RPEPOPFDSINNCDF 0 0	MVIOEPFDNCDF           0           42           0           13           0           40             RNELPOTONCDF           0           1           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0           0	MVIOEPNCDF 0 42 0 32 0 44  ROLTONCDF 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 5 1 <b>RPEPOPFDLRMNCDF</b> 0 37 0 0	RBSZOPOEPFDNCDF           0           41           0           28           0           32           RPEPOPFDPLRMSARNCE           0	0 0 24 0	0 36 0 21 0 18
SIR_IOPM_2         ()           SIR_IOPN1B         ()           SIR_IOPN2         ()           SIR_IOPR1B         ()           SIR_IOPR2         ()           Product Type         I           SIR_IOPM1B         ()           SIR_IOPM1B         ()           SIR_IOPM1B         ()           SIR_IOPN1B         ()           SIR_IOPN1B         ()           SIR_IOPR2         2           SIR_IOPR1B         ()           SIR_IOPR2         2           SIR_IOPR1B         ()           SIR_IOPR2         2           SIR_IOPR1B         ()           SIR_IOPR2         2	0 101 0 127 0 <b>RLPTONCDF</b> 0 4 0 27 0 26 <b>RPEPOPFDSINNCDF</b>	42 0 13 0 40 <b>RNELPOTONCDF</b> 0 1 0 0 0 0 0 0 0	42 0 32 0 44 <b>ROLTONCDF</b> 0 1 0 0 0 0	5 0 1 <b>RPEPOPFDLRMNCDF</b> 0 37 0 0 0 0	41 0 28 0 32 <b>RPEPOPFDPLRMSARNCE</b> 0 0 0 0 0 0 0	0 0 26 0 30 <b>RPEPOPFDPLRMSINNC</b> 0 0 24 0	0 21 0 18 CDIRPEPOPFDSARNCDF 0 0 0 0 0 0 0 0 0 0 0 0 0
SIR_IOPN1B           SIR_IOPN2           SIR_IOPR1B           SIR_IOPR2           Product Type           I           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPM1B           SIR_IOPN1B           SIR_IOPR1B           SIR_IOPR2           SIR_IOPR1B           SIR_IOPM1B           SIR_IOPM2	101 0 127 0 <b>RLPTONCDF</b> 0 4 0 27 0 26 <b>RPEPOPFDSINNCDF</b>	0 13 0 40	0 32 0 44 <b>ROLTONCDF</b> 0 1 0 0 0 0	5 0 1 <b>RPEPOPFDLRMNCDF</b> 0 37 0 0 0 0	0 28 0 32 <b>RPEPOPFDPLRMSARNCE</b> 0 0 0 0 0 0	0 26 0 30 <b>RPEPOPFDPLRMSINNC</b> 0 0 0 24 0	0 21 0 18 20 20 20 20 20 20 20 20 20 20 20 20 20
SIR_IOPN_2         (           SIR_IOPR1B         (           SIR_IOPR2         (           Product Type         I           SIR_IOPM1B         (           SIR_IOPM1B         (           SIR_IOPM1B         (           SIR_IOPM1B         (           SIR_IOPN1B         (           SIR_IOPN1B         (           SIR_IOPR1B         (           SIR_IOPR2         2           Product Type         I           SIR_IOPM1B         (           SIR_IOPM1B         (	0 127 0 <b>RLPTONCDF</b> 0 4 0 27 0 26 <b>RPEPOPFDSINNCDF</b>	13         0         40         RNELPOTONCDF         0         1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	32 0 44 0 1 0 0 0 0	5 0 1 <b>RPEPOPFDLRMNCDF</b> 0 37 0 0 0 0	28 0 32 <b>RPEPOPFDPLRMSARNCE</b> 0 0 0 0 0	26 0 30 <b>RPEPOPFDPLRMSINNC</b> 0 0 0 24 0	21 0 18 20 (RPEPOPFDSARNCOF 0 0 0 0 0 0 0
SIR_IOPR1B           SIR_IOPR2         I           Product Type         I           SIR_IOPM1B         I           SIR_IOPM1B         I           SIR_IOPM2         I           SIR_IOPM1B         I           SIR_IOPM1B         I           SIR_IOPM2         I           SIR_IOPM1B         I           SIR_IOPR1B         I           SIR_IOPR2         I           Product Type         I           SIR_IOPM1B         I           SIR_IOPM1B         I	127 0 <b>RLPTONCDF</b> 0 4 0 27 0 26 <b>RPEPOPFDSINNCDF</b>	0 40 RNELPOTONCDF 0 1 0 0 0 0 0	0 44 ROLTONCDF 0 1 0 0 0 0 0	1	0 32 RPEPOPFDPLRMSARNCE 0 0 0 0 0 0 0	0 30 RPEPOPFDPLRMSINNC 0 0 24 0	0 18 20(RPEPOPFDSARNCOF 0 0 0 0 0 0 0
SIR_IOPR_2         I           Product Type         I           SIR_IOPM1B         I           SIR_IOPM1B         I           SIR_IOPM1B         I           SIR_IOPN1B         I           SIR_IOPN1B         I           SIR_IOPN1B         I           SIR_IOPN1B         I           SIR_IOPR1B         I           SIR_IOPR2         I           Product Type         I           SIR_IOPM1B         I           SIR_IOPM1B         I	0  RLPTONCDF  0  4  0  27  0  26  RPEPOPFDSINNCDF	40 RNELPOTONCDF 0 1 0 0 0 0 0 0 0	44 <b>ROLTONCDF</b> 0 1 0 0 0 0 0	1	32 RPEPOPFDPLRMSARNCE 0 0 0 0 0 0	30 <b>RPEPOPFDPLRMSINNC</b> 0 0 24 0	18 <b>D</b> (RPEPOPFDSARNCDF 0 0 0 0 0 0 0
Product Type         I           SIR_IOPM1B         SIR_IOPM1B           SIR_IOPN1B         SIR_IOPN1B           SIR_IOPN1B         SIR_IOPN1B           SIR_IOPN1B         SIR_IOPR1B           SIR_IOPR12         SIR_IOPR1B           SIR_IOPR12         SIR_IOPR1B           SIR_IOPM1B         SIR_IOPM1B           SIR_IOPM1B         SIR_IOPM2	RLPTONCDF           0           4           0           27           0           26           RPEPOPFDSINNCDF	RNELPOTONCDF           0           1           0           0           0           0           0           0           0           0           0           0           0	ROLTONCDF           0           1           0           0           0           0           0           0           0	0 37 0 0 0 0	RPEPOPFDPLRMSARNCE 0 0 0 0 0	RPEPOPFDPLRMSINNC 0 0 24 0	DIRPEPOPFDSARNCDF 0 0 0 0 0 0
SIR_IOPM1B         0           SIR_IOPM2         4           SIR_IOPN1B         0           SIR_IOPN2         2           SIR_IOPR1B         0           SIR_IOPR2         2           Product Type         I           SIR_IOPM1B         0           SIR_IOPM2         2	0 4 0 27 0 26 <b>RPEPOPFDSINNCDF</b>	0 1 0 0 0 0	0 1 0 0 0	0 37 0 0 0 0	0 0 0 0 0	0 0 0 24 0	0 0 0 0 0
SIR_IOPM1B         SIR_IOPM2           SIR_IOPN1B         SIR_IOPN2           SIR_IOPN2         SIR_IOPR2           SIR_IOPR2         SIR_IOPR2           Product Type         I           SIR_IOPM1B         SIR_IOPM2	4 0 27 0 26 <b>RPEPOPFDSINNCDF</b>	0 0	1 0 0 0	37 0 0 0	0 0 0 0	0 24 0	0 0 0
SIR_IOPM_2         4           SIR_IOPN1B         0           SIR_IOPN2         2           SIR_IOPR1B         0           SIR_IOPR2         2           Product Type         I           SIR_IOPM1B         0           SIR_IOPM1B         0           SIR_IOPM1B         0           SIR_IOPM1B         0	0 27 0 26 <b>RPEPOPFDSINNCDF</b>	0 0	0 0	0 0 0	0 0 0	0 24 0	0 0 0
SIR_IOPN1B         SIR_IOPN2           SIR_IOPR1B         SIR_IOPR1B           SIR_IOPR2         SIR_IOPR2           Product Type         I           SIR_IOPM1B         SIR_IOPM1B           SIR_IOPM2         SIR_IOPM2	27 0 26 RPEPOPFDSINNCDF	0 0	0 0	0	0	24 0	0
SIR_IOPN_2 2 SIR_IOPR1B 0 SIR_IOPR_2 2 Product Type 1 SIR_IOPM1B 0 SIR_IOPM_2 0	27 0 26 RPEPOPFDSINNCDF	0 0	0 0	0	0	24 0	0
SIR_IOPR1B         ()           SIR_IOPR_2         2           Product Type         I           SIR_IOPM1B         ()           SIR_IOPM2         ()	0 26 RPEPOPFDSINNCDF	0	0			0	
SIR_IOPR_2 2 Product Type F SIR_IOPM1B 0 SIR_IOPM_2 0	26 RPEPOPFDSINNCDF	0					
Product Type     I       SIR_IOPM1B     0       SIR_IOPM_2     0	RPEPOPFDSINNCDF	-	0	•		0	55
SIR_IOPM1B SIR_IOPM_2						-	
SIR_IOPM_2	0	THE LEOPENWINGDE	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCI
	0	0	0	0	0	0	0
SIR IOPN1B	0	33	0	0	8	28	0
	0	0	0	0	0	0	0
SIR_IOPN_2	32	0	0	27	14	41	49
	0	0	0	0	0	0	0
SIR IOPR 2	0	0	52	0	3	60	36
			1				1
	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCD		SCSTODHRNCDF	SCSTODNCDF	-
_	0	0	0	*	0	0	
	8	40	0		0	0	
-	0	0	0		49	1	
	24	28	27	16	0	0	
SIR_IOPR1B	0	0	0	0	128	6	
SIR_IOPR_2	7	35	45	5	0	0	
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMN	
	17	29	29		29	17	29
	17	25	25	5	20	17	25
Product Type	RLPTONCDF	RNELPOTONCDF	ROLTONCDF	RPEPOPFDPLRMSINNCD	RPEPOPFDSINNCDF	RPEPOPSINNCDF	RSSBCONCDF
SIR IOP 2	29	1	1	16	28	22	17
					l		
Product Type F	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHLPQWNCDF
SIR_IOP_2_	29	17	23	29	17	17	29
			÷				÷
st Description Key:							
breviation	Test name			Details			
SHNCDF	BurstCounterStep20HzNe	etCDF		The burst counter should be	one higher with regard to th	e previous burst counter	
IOEPFDNCDF	MissingValueIntOceanExc	cludingPolarFD2NetCDF		The value should not be a 'r	nissing value' for surface typ	e 0 only for latitudes betw	een -70 and 70 degrees
IOEPNCDF	MissingValueIntOceanExc	cludingPolarNetCDF		The value should not be a 'r	missing value' for surface tur	e 0 only for latitudes botw	een -70 and 70 decrees

The value should not be a 'missing value' for surface type 0 only

The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees

RBSZOPOEPFDPLRM NCDF RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF

MissingValueIntOceanNetCDF

RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF

MVIONCDF

RBSZOPOEPFDNCDF

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
RLPTONCDF	RangeLongPeriodTideOceanNetCDF	The Long period tide height should be between -50mm and 50mm (or missing) for surface type = ocean - NetCDF
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
ROLTONCDF	RangeOceanLoadingTideOceanNetCDF	#N/A
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF	RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC DF	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF	RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter

7.3 Missing QCC Reports

Number of products with missing QCC reports: 0