

QA4EO Daily Report for IOP data:

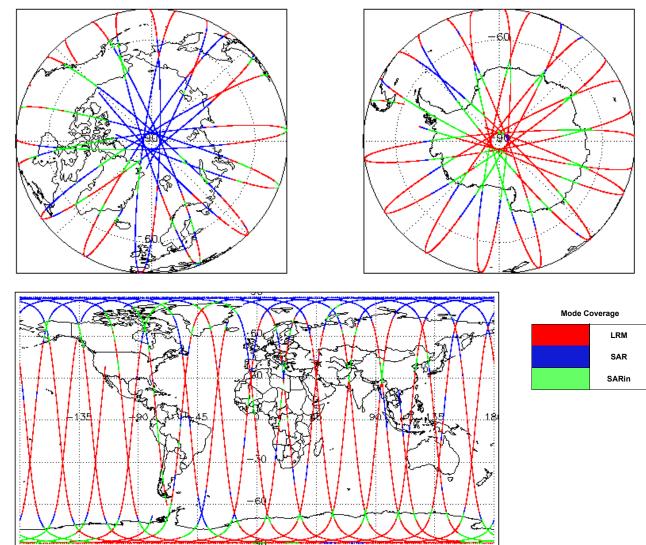
<u>20/02/2022</u>

IDEAS-QA4E0

1. Overview				
Papart Braduction	22-Feb-2022	Check	L1 & L2	P2P
Report Production:	22-Feb-2022	Server check: science-pds.cryosat.esa.int	Nominal	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal	Nominal
Processor Useu.	CryoSat Ocean Processor	Product Software Check	Nominal	Nominal
Data Used:	Intermediate Ocean Products (IOP) L1B, L2 & P2P Science Data	Product Format Check	Nominal	Nominal
Data Useu.		Product Header Analysis	Nominal	Nominal
		Auxiliary Data File Usage Check	Nominal	Nominal
		Auxiliary Correction Error Check	See Section 5.4	See Section 6.4
		Measurement Confidence Data Check	See Section 4.5, 4.6	Nominal
		Range, SWH & Backscatter Measurement Check	See Section 5.6	See Section 6.6
		Ocean Retracking Quality Check	See Section 5.7	See Section 6.7
		QCC Error/ Warning Check	See Section 7.1 and 7.2	See Section 7.1 and 7.2

Mission / Instru	Mission / Instrument News		
19-Feb-2022	None		
20-Feb-2022	None		
21-Feb-2022	Nothing planned		





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).

4.2 L1B Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. > L1B Processing Quality HR: The I1b_proc_flag_hr flag is currently set all L1B IOPR and IOPN products because the I1b_processing_quality_hr field is not correctly configured in the OSAR and OSARIn chains. A modification is required in the next release.				
Number of products with errors: 0				
4.3 L1B Auxilary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pre-d Number of products with errors: 0	etermined baseline and also to check the va	alidity of Auxiliary Data Files is correct.		
4.4 L1B Auxiliary Correction Error Check				
CryoSat L1B data includes a correction error flag for each measurement record.	The bit value of this flag indicates any proble	ems when set		
Number of products with errors: 0				
4.5 L1B Measurement Confidence Data Check				
CryoSat L1B data includes a measurement confidence flag for each measurement > Attitude Correction Missing: This flag is currently set in error for IOPR produ Number of products with errors: 0	-			
4.6 L1B Waveform Group Data Check				
CryoSat L1B data includes a waveform data flag for each measurement record. ⁻ Loss of Echo Flag: This flag is currently set for products over land, but this is to Number of products with errors: 15		ms when set.		
Product	Test Failed	Description		
CS_OFFL_SIR_IOPM1B_20220220T160907_20220220T162222_C001 CS_OFFL_SIR_IOPM1B_20220220T225555_20220220T230122_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20220220T005704_20220220T010255_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20220220T114950_20220220T115103_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20220220T122238_20220220T122751_C001 CS_OFFL_SIR_IOPN1B_20220220T153828_20220220T154308_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_202202201153526_202202201154506_C001 CS_OFFL_SIR_IOPN1B_202202201164130_202202201164241_C001	Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPN1B_20220220T200116_20220220T200219_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20220220T022818_20220220T023029_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20220220T072250_2022020T072848_C001 CS_OFFL_SIR_IOPR1B_20220220T100518_20220220T101130_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_202202201100518_202202201101130_C001 CS_OFFL_SIR_IOPR1B_202202201103854_202202201104326_C001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20220220T104432_20220220T104658_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20220220T155126_20220220T155301_C001	Loss of Echo	The tracking echo is missing for one or more records		
CS_OFFL_SIR_IOPR1B_20220220T205205_20220220T205251_C001	Loss of Echo	The tracking echo is missing for one or more records		
	Level 2 Data Quality Che	SCK		
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: 0				
5.2 L2 Product Header Analysis				
For all products, a series of pre-defined checks are performed on the MPH and SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. Number of products with errors: 0				
5.3 L2 Auxiliary Data File Usage Check				
Each product is checked for missing Data Set Descriptors with respect to a pre-determined baseline and also to check the validity of Auxiliary Data Files is correct. Number of products with errors: 0				
5.4 L2 Auxiliary Correction Error Check				
For all products, the auxiliary corrections within the Geophysical Group are checked for the default error value (32767). Currently, there are some common auxiliary correction errors raised in the Level 2 products which are expected due to surface type. All common flags are summarised in the list below,				
followed by a table highlighting any additional issues which may arise from	this test.			
> ECMWF Meteo Corrections: Currently the following corrections are not computed over CONTINENTAL ICE: Dry Tropospheric Correction, Wet Tropospheric Correction, Inverse Barometric Correction and the U-Wind and V-Wind components of the ECMWF model wind vector. This is a known anomaly (CRYO-COP-3) and will be resolved in a future IPF update. The affected products are not reported in the table below.				
> Sea State Bias & Sea State Bias PLRM: The error value is currently set for products over sea ice, but this is to be expected.				
> Mean Sea Surface: The error value is currently set for products over land and sea ice, but this is to be expected.				
 > Mean Dynamic Topography: The error value is currently set for products over land and sea ice, but this is to be expected. > Altimetric Wind Speed Error: The error value is currently set for products over land and sea ice, but this is to be expected. 				
Number of products with errors: 43				
Product	Test Failed	Description		
		There is an error with the Mean Dynamic Topography height for one or		
CS_OFFL_SIR_IOPM_2_2022020T094026_2022020T095412_C001	Mean Dynamic Topography (1)	more records		

City City City City City City City City	CS_OFFL_SIR_IOPM_2_20220220T115104_20220220T115256_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
Clipped Clipped Clipped Clipped Science	CS_OFFL_SIR_IOPM_2_20220220T141519_20220220T141617_C001	Mean Dynamic Topography (1)	
C2: 0FFL SR LOPH 2. 2022/2010/0FFL S022/2010/0FED COI Treggappy (1) Told Glocenie Coin Treggappy (1) The is an order to the coin The Location (1) is an order to the coin (1) is a	CS_OFFL_SIR_IOPN_2_20220220T000051_20220220T000259_C001		
Bits Control Mail	CS_OFFL_SIR_IOPN_2_20220220T005704_20220220T010255_C001	Topography (1), Total Geocentric Ocean	Topography (solution 1), the Total Geocentric Ocean Tide (solution 1:
Disc. MC (2000) Transparate (1) Transparate (1) Transparate (1) Dis., DFL_GRIUDEN_2_20222211000000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222211000000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_202222211000000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221100000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221100000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221100000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_202222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_202222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) Dis., DFL_GRIUDEN_2_20222221110000_CONT Mark Biss Bandmark (1) Mark Dynamics Transparate (1) <td>CS_OFFL_SIR_IOPN_2_20220220T031946_20220220T032106_C001</td> <td>Mean Dynamic Topography (1)</td> <td></td>	CS_OFFL_SIR_IOPN_2_20220220T031946_20220220T032106_C001	Mean Dynamic Topography (1)	
Displaying Card Card Card Card Card Card Card Card	CS_OFFL_SIR_IOPN_2_20220220T045936_2022020T050303_C001		
DC 90-10, DON 2, DON 2, DODD2000 (2001) Texposity (1) Texpo	CS_OFFL_SIR_IOPN_2_20220220T063844_20220220T064205_C001		
Corp. Star. Low Construction and the formation of the intervalue of the interva	CS_OFFL_SIR_IOPN_2_2022020T072849_2022020T073055_C001		
Construction Transparate (1) Transparate (1) Transparate (1) C6. OFFL_SIR_IOPL_20022201100518_00201 Mask 56.2546471, Mash Dynamic Transparate (1)	CS_OFFL_SIR_IOPN_2_2022020T082619_2022020T082729_C001	Mean Dynamic Topography (1)	
Corp. Str., Str., Corp. 2, 20220207114250, 202202207114510, 20001 Hear, Sto Subsci (1), Mean Dynamic Topography (i) The is an error with the MSB high (existen 1) and the Maan Dynamic Topography (ii) CS_OFTL_SIR_COPL_2_00220207112218, 20220207112218, 202202071132451, 2001 Mean Dynamic Topography (ii) There is an error with the MSB Dynamic Topography height (existen 1) and the Maan Dynamic Topography (iii) CS_OFTL_SIR_COPL_2_00220207113218, 202202071132451, 2001 Mean Dynamic Topography (ii) There is an error with the Maan Dynamic Topography height for one or more records. CS_OFTL_SIR_COPL_2_002202071132452, 202202071132451, 2001 Mean Dynamic Topography (ii) There is an error with the Maan Dynamic Topography height for one or more records. CS_OFTL_SIR_COPL_2_002202071140282, 202202071140340, 2001 Total Geoomtrix Outpoint Total Geoomtrix Outpoint CS_OFTL_SIR_COPL_2_002202071140141, 20020202071140141, 2002020071140141, 20020200714613	CS_OFFL_SIR_IOPN_2_2022020T090853_2022020T090959_C001		
Call Detrict Transgraph (1) Transgraph (1) Transgraph (1) CG_OFFL_SIR_JONE_2_022020T12223_D022020T12225_C001 Mean Dynamic Transgraph (1) The exame of each leads on the Mean Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T13225_D022020T13225_C001 Mean Dynamic Transgraph (1) The exame of each leads Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T14203_D022020T142014_C001 Mean Dynamic Transgraph (1) The exame of each leads Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T15326_D022020T142014_C001 Mean Dynamic Transgraph (1) The exame of each lead Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T15326_D022020T15326_C001 Mean Dynamic Transgraph (1) The exame of each lead Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T15536_022020T15326_C001 Mean Dynamic Transgraph (1) The exame of each lead Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T15536_022020T15354_C001 Mean Dynamic Transgraph (1) The exame of each leads Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_022020T15532_D1_02020_T15454_C001 Mean Dynamic Transgraph (1) The exame of each leads Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_0220220T15532_D1_02020_T15454_C001 Mean Dynamic Transgraph (1) The exame of each leads Dynamic Transgraph (1) CG_OFFL_SIR_JONE_2_0220220T15555_D1_02020_T154542_C001 Mean Dynamic Transgraph (1)<	CS_OFFL_SIR_IOPN_2_20220220T100320_20220220T100518_C001		
Concerner Series Description There is an error with the Mean Dynamic Topography (1) more records CS_OFFL_SIR_LOPN_2_0220201132219_0220201132219_0220201132219_02000 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography (1) CS_OFFL_SIR_LOPN_2_022020113228_00220201140018_0001 Total Geocentric Ocean Tide (001) There is an error with the Mean Dynamic Topography (1) CS_OFFL_SIR_LOPN_2_0220201160182_002020114018_0001 Total Geocentric Ocean Tide (001) There is an error with the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography (1) CS_OFFL_SIR_LOPN_2_0220202116018_0001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography (1) CS_OFFL_SIR_LOPN_2_0220202116019_1_0020202118019_0001 Mean Sea Sufface (1) Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) an	CS_OFFL_SIR_IOPN_2_20220220T114950_20220220T115103_C001		
Call PFI_SR_UPFI_SR_UPFI_SR_UPXI_SCREET Mean Dynamic Topography (1) more records CS_OFFL_SR_UPFN_2_2022020T142014_0220_2022020T144084_C001 Mean Dynamic Topography (1) There is an error with the Maan Dynamic Topography height for one or non-records CS_OFFL_SR_UPFN_2_20220220T1532828_20220220T1533828_20220220T1543382_0001 Total Geocomic Coesan Tide (00T) There is an error with the Maan Dynamic Topography height for one or non-records CS_OFFL_SIR_UPFN_2_20220220T1531828_20220220T154328_0001 Mean Sea Surface (1), Mean Dynamic Topography (1) There is an error with the MaSN height (coulton 1) and the Mean Dynamic CS_OFFL_SIR_UPFN_2_20220220T153158_202002 Mean Sea Surface (1), Mean Dynamic Topography height (coulton 1) and the Mean Dynamic CS_OFFL_SIR_UPFN_2_20220220T153159_20200220T23284_C001 Mean Sea Surface (1), Mean Dynamic Topography height (coulton 1) and the Mean Dynamic CS_OFFL_SIR_UPFN_2_20220220T222768_20220220T22288_C001 Mean Sea Surface (1), Mean Dynamic Topography height (coulton 1) and the Mean Dynamic CS_OFFL_SIR_UPFN_2_20220220T022768_2020020T023722_0_C001 Mean Sea Surface (1), Mean Dynamic Topography height (coulton 1) and the Mean Dynamic CS_OFFL_SIR_UPFR_2_20220220T023722_C001 Mean Sea Surface (1), Mean Dynamic Topography height (coulton 1) and the Mean Dynamic CS_OFFL_SIR_UPFR_2_20220220T004028_2020020T04958_0.0001 Mean Sea	CS_OFFL_SIR_IOPN_2_20220220T122238_20220220T122751_C001	Mean Dynamic Topography (1)	
CS_DEPL_SPL_OPPL_2AD202201163282_02202201163408_C001 Total Geocentric Opegraphy (1) more records CS_DEPL_SPL_0PPL_2_202202201163282_02202201163408_C001 Total Geocentric Opegraphy (1) There is an enror with the XSS begint (oution 1) and the kean Dynamic Topography (1) CS_DEPL_SIR_JOPN_2_20220220116312_02202201163129_C001 Mean Dynamic Topography (1) There is an enror with the XSS begint (oution 1) and the Mean Dynamic Topography (1) CS_DEFL_SIR_JOPN_2_20220220116313_0220220116313_0220220116313_0_00200220116313_0_00200220116314_0001 Mean Sea Surface (1) Mean Dynamic Topography Kegint (oution 1) and the Mean Dynamic Topography Kegint (oution 1) CS_DEFL_SIR_JOPR_2_202202	CS_OFFL_SIR_IOPN_2_20220220T132219_20220220T132451_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_JOPK_2_20220220T163026_2022020T163328_C001 Total Geodmite Cedan Indi GO(1) GCT fur one or more records CS_OFFL_SIR_JOPK_2_20220220T16131_2022020T162132_0001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_JOPR_2_20220220T222720_20220T02072222828_C001 Mean Sea Surface (1) Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_JOPR_2_2022020T02020T2222828_C001 Mean Sea Surface (1) Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_JOPR_2_2022020T050282_2022020T0505815_C001 Mean Sea Surface (1) Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_JOPR_2_20220220T054629_2022020T045815_C001 Mean Sea Surface (1) Mean Dynamic Topography height (colution 1) and the Mean Dynamic Topography height (colution 1) CS_OFFL_SIR_JOPR_2_20220220T054629_2022020T045856_C001	CS_OFFL_SIR_IOPN_2_20220220T140229_20220220T140614_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_UOPR_2_20220201181619_20220220T102123_C001 Mean Desc Surface (1), Mean Dynamic Tapography height (solution 1) and the Mean Dynamic Tapography height (solution 1) more records CS_OFFL_SIR_UOPN_2_20220220T105131_20220220T105438_C001 Mean Sea Surface (1), Mean Dynamic Tapography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tapography height (solution 1) CS_OFFL_SIR_UOPN_2_20220220T105131_20220220T105438_C001 Mean Sea Surface (1), Mean Dynamic Tapography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tapography height (solution 1) CS_OFFL_SIR_UOPN_2_20220220T222708_00220220T222820_C001 Mean Sea Surface (1), Mean Dynamic Tapography height (solution 1) There is an error with the MSS height (solution 1) and the Mean Dynamic Tapography height (solution 1) CS_OFFL_SIR_UOPR_2_20220220T02020723222_00200704_C001 Mean Sea Surface (1), Mean Dynamic Tapography height (solution 1) and the Mean Dyn	CS_OFFL_SIR_IOPN_2_20220220T153828_20220220T154308_C001	Total Geocentric Ocean Tide (GOT)	
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Construction Construction Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPN_2_202202207213200_02202207213434_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPN_2_20220220722278_02202207222826_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_202202207023222_202000508_0220220T005704_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220220T023222_0220005038_0220220T003720_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220220T023222_02200200053704_C001 Mean Ses Surface (1), Mean Dynamic Tope is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220220T040617_00220020T041821_C001 Mean Ses Surface (1), Mean Dynamic Tope is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220220T046929_20220220T065815_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220220T064929_20220220T075823_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220220T064929_20220220T075823_C001 Mean Ses Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic	CS_OFFL_SIR_IOPN_2_20220220T181819_20220220T182123_C001		
CS_OFFL_SIR_IOPN_2_202202201213200_20201213434_C001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPN_2_2022020T022708_2020220T02506_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T02502_2020T025704_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T02502_2020T025702_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T040917_2022020T041921_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T040917_2022020T041921_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T040917_2022020T0558015_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T073055_2022020T073055_2022020T073823_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T009595_20220220T0102858_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T102858_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T102858_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_I	CS_OFFL_SIR_IOPN_2_20220220T195131_20220220T195438_C001		
CS_OFFL_SIR_IOPR_2_2022022010227005204_C001 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_20220201023722_202201023720_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220201023722_202201023720_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220201049917_202202201041921_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220201054929_202202201055815_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220201054929_202202201055815_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_202202201054929_202202201055815_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022022010940942 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_IOPR_2_202202010940942 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_IOPR_2_2022020110	CS_OFFL_SIR_IOPN_2_20220220T213200_20220220T213434_C001		
CS_OFFL_SIR_IOPR_2_20220220T0203222_20220T0203222_20220T0203720_C001 Topography (1) Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220220T0203222_20220T040917_20220220T040917_20220220T040917_20220220T040917_20220220T040917_20220220T040917_20220220T055815_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220220T054929_20220220T055815_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_20220220T073055_20220220T073823_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_IOPR_2_20220220T073055_20220220T073823_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_IOPR_2_20220220T090959_20220220T091713_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) and the Mean Dynamic Topography (1) CS_OFFL_SIR_IOPR_2_20220220T102444_20220220T102658_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) There is an error with	CS_OFFL_SIR_IOPN_2_20220220T222708_20220220T222826_C001		
CS_OFFL_SIR_IOPR_2_20220220T040917_20220220T041921_C001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220220T040917_20220220T041921_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T054829_20220220T055815_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220220T073055_20220220T073823_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220220T090959_20220220T091713_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T102644_20220220T102658_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T102444_20220220T102658_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T104414_20220220T105609_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T104014_20220220T105609_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020T140714_2022	CS_OFFL_SIR_IOPR_2_2022020T005028_2022020T005704_C001		
CS_OFFL_SIR_IOPR_2_202202201054929_20220201055815_C001 Topography (1) Topography leight (solution 1) CS_OFFL_SIR_IOPR_2_202202201054929_20220201055815_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_IOPR_2_20220201073055_20220201073823_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_IOPR_2_20220220109959_202202001091713_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_IOPR_2_202202201102444_202202201102668_C001 Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT) There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1) CS_OFFL_SIR_IOPR_2_202202201102444_202202201105609_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_IOPR_2_202202201122751_202202201123409_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_IOPR_2_202202201140614_202202201140739_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) There is an error with the MSS height (solution 1) and the Me	CS_OFFL_SIR_IOPR_2_2022020T023222_2022020T023720_C001		
CS_OFFL_SIR_IOPR_2_2022020103969_20220201033615_0001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_20220201073055_20220201073823_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220201090959_20220201091713_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_2022020102444_20220201102658_C001 Mean Sea Surface (1), Total Geocentric There is an error with the MSS height (solution 1) and the Total Geocentric CS_OFFL_SIR_IOPR_2_202202201102444_202202201102658_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_202202201104914_202202201105609_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220201122751_202202201123409_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220201140614_202202201140739_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) and the Mean Dynamic CS_OFFL_SIR_IOPR_2_20220201140614_202202201140739_C001 Mean Sea Surface (1), Mean Dynamic There is an error with the MSS height (solution 1) CS_OFFL_SIR_IOPR_2_20220201140614_202202201140739_C001	CS_OFFL_SIR_IOPR_2_2022020T040917_20220220T041921_C001		
CS_OFFL_SIR_IOPR_2_202202010/3033_0022022010/3033_0001 Topography (1) Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_202202000959_20220200091713_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_20220200102658_C001 Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT) There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (GOT) CS_OFFL_SIR_IOPR_2_202202001104914_20220220T102668_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_IOPR_2_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001122751_202202001140739_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_IOPR_2_20220200000000000000000000000000000	CS_OFFL_SIR_IOPR_2_2022020T054929_2022020T055815_C001		
CS_OFFL_SIR_IOPR_2_2022020T102444_2022020T102658_C001Mean Sea Surface (1), Total Geocentric Ocean Tide (GOT)There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more recordsCS_OFFL_SIR_IOPR_2_20220220T102444_20220220T102658_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Total Geocentric Ocean Tide (solution 1: GOT) for one or more recordsCS_OFFL_SIR_IOPR_2_20220220T104914_20220220T105609_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_IOPR_2_2022020T122751_2022020T123409_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_IOPR_2_2022020T140614_20220220T140739_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_IOPR_2_2022020T140614_20220220T140739_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_IOPR_2_20220220T140739_20220220T140739_20220220T141519_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1)CS_OFFL_SIR_IOPR_2_20220220T155050_C001Mean 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_IOPR_2_20220220T155353_20220220T155353_C001<	CS_OFFL_SIR_IOPR_2_2022020T073055_2022020T073823_C001		
CS_OFFL_SIR_IOPR_2_20220201102444_20220201102636_C001 Ocean Tide (GOT) Ocean Tide (solution 1: GOT) for one or more records CS_OFFL_SIR_IOPR_2_2022020T104914_2022020T105609_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_IOPR_2_2022020T122751_2022020T123409_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_IOPR_2_2022020T140614_20220220T140739_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_IOPR_2_20220220T140614_20220220T140739_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_IOPR_2_20220220T140739_2022020T141519_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_IOPR_2_2022020T154308_2022020T155050_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_IOPR_2_2022020T155353_2022020T155537_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography he	CS_OFFL_SIR_IOPR_2_2022020T090959_2022020T091713_C001		
CS_OFFL_SIR_IOPR_2_2022020T104914_20220220T105009_C001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T122751_2022020T123409_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_2022020T140614_20220220T140739_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_20220220T140614_20220220T140739_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_20220220T140739_20220220T141519_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_20220220T155050_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_2022021155353_2022021155537_C001 Mean Dynamic Topography (1) There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_IOPR_2_20220220T102444_20220220T102658_C001		
CS_OFFL_SIR_IOPR_2_2022020T140614_20220220T140739_C001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T140614_20220220T140739_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_2022020T140739_2022020T141519_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_2022020T154308_2022020T155050_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_2022020T155353_2022020T155537_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_IOPR_2_20220220T104914_20220220T105609_C001		
CS_OFFL_SIR_IOPR_2_2022020T140739_20220220T141519_C001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOPR_2_2022020T140739_20220220T141519_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_2022020T155050_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_2022020T155353_2022021155537_C001 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_20220220T122751_20220220T123409_C001		
CS_OFFL_SIR_IOFR_2_2022020T1540739_2022020T155050_C001 Topography (1) Topography height (solution 1) CS_OFFL_SIR_IOFR_2_2022020T154308_20220220T155050_C001 Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) CS_OFFL_SIR_IOFR_2_2022020T155353_20220220T155537_C001 Mean Dynamic Topography (1) There is an error with the MSS height (solution 1)	CS_OFFL_SIR_IOPR_2_20220220T140614_20220220T140739_C001		
CS_OFFL_SIR_IOPR_2_2022021155353_2022021155537_C001 Topography (1) Topography height (solution 1) There is an error with the Mean Dynamic Topography height for one or	CS_OFFL_SIR_IOPR_2_20220220T140739_20220220T141519_C001		
	CS_OFFL_SIR_IOPR_2_20220220T154308_20220220T155050_C001		
	CS_OFFL_SIR_IOPR_2_20220220T155353_20220220T155537_C001	Mean Dynamic Topography (1)	

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

5.5 L2 Measurement Confidence Data Check

CryoSat L2 data includes a measurement confidence flag for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.
Number of products with errors:
0

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (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.

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Product	Test Failed	Description
CS_OFFL_SIR_IOPM_2_20220220T000259_2022020T001108_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_20220220T001300_20220220T002858_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_20220220T004257_20220220T004311_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_20220220T011156_20220220T013917_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_20220220T014424_20220220T014947_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_20220220T015218_20220220T021736_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_20220220T025108_20220220T031757_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_20220220T032353_20220220T032955_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_20220220T033118_20220220T035217_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_2022020T035220_2022020T035933_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_20220220T035952_20220220T040058_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_20220220T040138_20220220T040333_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_20220220T040758_20220220T040917_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_20220220T042315_20220220T045710_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_20220220T050303_20220220T050831_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_2022020T051001_20220220T051621_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_2022020T054718_2022020T054928_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_20220220T060243_20220220T061242_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_2022020T061352_2022020T063649_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_20220220T064205_20220220T064309_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_20220220T064311_20220220T064720_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_20220220T064852_20220220T070857_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_20220220T074052_20220220T081445_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_20220220T081739_20220220T082207_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_20220220T082226_20220220T082619_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_20220220T082814_20220220T083218_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_20220220T083308_20220220T090438_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_20220220T090601_20220220T090853_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_20220220T092434_20220220T093146_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_20220220T093628_20220220T093757_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_20220220T094026_20220220T095412_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_20220220T095549_20220220T100106_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_20220220T101130_20220220T102444_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_20220220T102658_20220220T103854_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_20220220T110624_20220220T111526_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_20220220T111828_20220220T113328_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_20220220T113516_20220220T114019_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_20220220T114025_20220220T114036_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_20220220T115534_20220220T120108_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_20220220T120648_20220220T121037_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_20220220T121200_20220220T121317_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_20220220T121320_20220220T121909_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_20220220T124151_20220220T124153_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_20220220T124157_20220220T124234_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_20220220T125050_20220220T131235_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_20220220T131540_20220220T131936_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_20220220T132542_20220220T135430_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_20220220T142631_20220220T145207_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_20220220T145857_20220220T150223_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_20220220T150459_20220220T153828_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_20220220T160907_20220220T162222_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_20220220T162520_20220220T163151_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_20220220T163330_20220220T164129_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_20220220T164402_20220220T171839_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_20220220T180044_20220220T181133_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_20220220T181304_20220220T181819_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_20220220T182342_20220220T184630_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_20220220T184915_20220220T185851_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_20220220T191156_20220220T191459_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_20220220T192218_20220220T192717_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_20220220T192924_20220220T193526_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_20220220T193713_20220220T195039_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_20220220T195439_20220220T195721_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_20220220T200328_20220220T203036_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_20220220T203040_20220220T203359_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_20220220T203457_20220220T203537_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_20220220T205326_20220220T210024_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_20220220T210042_20220220T212458_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_20220220T213434_20220220T213629_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_20220220T213840_20220220T214129_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_20220220T214258_20220220T214710_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_20220220T214800_20220220T221012_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_20220220T222826_20220220T223216_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_20220220T223342_20220220T223537_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_20220220T223748_20220220T224935_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_20220220T230410_20220220T230658_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_20220220T231312_20220220T231548_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_20220220T231608_20220220T232035_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_20220220T232221_20220220T233720_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_20220220T090453_20220220T090600_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_20220220T142221_20220220T142408_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_20220220T174128_20220220T174259_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_2022020T071724_20220220T071739_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_20220220T185851_20220220T190011_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_0FFL_SIR_IOPR_2_20220220T214710_20220220T214800_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records

L2 Quality Flags (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.

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Product	Test Failed	Description
	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
CS OFFE SIR TOPN 2 202202201003805 202202201004146 CO01	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
	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_20220220T005704_20220220T010255_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
	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 20220220T023029 20220220T023055 C001	OCOG Altimeter Range Quality PLRM,	The OCOG Range and Backscatter Quality Flags have been set for one or
	OCOG Backscatter Quality Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG	more records The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags
CS_OFFL_SIR_IOPN_2_20220220T023157_20220220T023222_C001	Altimeter Range and Backscatter Quality PLRM	and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records
CS_OFFL_SIR_IOPN_2_2022020T032206_2022020T032353_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_2022020T032955_2022020T033118_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_2022020T052829_2022020T052905_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_2022020T054128_2022020T054140_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_2022020T055815_2022020T060032_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_2022020T070858_2022020T071225_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_2022020T072849_2022020T073055_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_20220220T104658_20220220T104914_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_20220220T115256_20220220T115534_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_20220220T120108_20220220T120547_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_20220220T121037_20220220T121200_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_20220220T122238_20220220T122751_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_20220220T131235_20220220T131540_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_20220220T132219_20220220T132451_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_20220220T135430_20220220T135629_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_20220220T140229_20220220T140614_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_20220220T142221_20220220T142408_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_20220220T145208_20220220T145327_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_20220220T150223_20220220T150344_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_20220220T153828_20220220T154308_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_20220220T155050_20220220T155126_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_0FFL_SIR_IOPN_2_20220220T171840_20220220T172000_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_20220220T173447_20220220T173610_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_0FFL_SIR_IOPN_2_20220220T174845_20220220T175029_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_20220220T175253_20220220T175350_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_20220220T181819_20220220T182123_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_20220220T192717_20220220T192924_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_20220220T195131_20220220T195438_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_20220220T195721_20220220T200106_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_20220220T200116_20220220T200219_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_20220220T213629_20220220T213840_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_20220220T223216_20220220T223342_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_20220220T225148_20220220T225216_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_20220220T230658_20220220T231312_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_20220220T010255_20220220T010515_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_2022020T022818_2022020T023029_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_20220220T040612_20220220T040757_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_2022020T040917_20220220T041921_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM	The Ocean Attimeter Range, SSHA, SWH 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_2022020T051621_20220220T051918_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_2022020T054309_2022020T054602_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_2022020T054929_2022020T055815_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_20220220T060032_20220220T060121_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_20220220T072250_20220220T072848_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_2022020T073055_2022020T073823_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_20220220T073938_20220220T074052_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_2022020T082729_2022020T082813_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_20220220T090959_2022020T091713_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_2022020T092005_2022020T092434_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_20220220T100518_20220220T101130_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_20220220T102444_20220220T102658_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_20220220T103854_20220220T104326_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_20220220T104327_20220220T104426_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_20220220T104432_20220220T104658_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_20220220T104914_20220220T105609_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_20220220T122751_20220220T123409_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_20220220T124917_20220220T125050_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_20220220T140614_20220220T140739_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_20220220T154308_20220220T155050_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_20220220T155126_20220220T155301_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_20220220T155353_20220220T155537_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_20220220T172236_20220220T172910_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_20220220T175747_20220220T180043_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_20220220T185851_20220220T190011_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_20220220T190054_20220220T190810_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_20220220T191459_20220220T191840_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_20220220T204051_20220220T204212_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_20220220T204230_20220220T204707_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_20220220T212458_20220220T213200_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_20220220T222037_20220220T222544_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_20220220T224936_20220220T225148_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_20220220T230122_20220220T230410_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_20220220T233720_20220220T233859_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records
12 Quality Flore (1 Hz & 1 Hz BI DM)		

L2 Quality Flags (1 Hz & 1 Hz PLRM)

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

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

Number of products with errors:

5.8 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20 Hz)

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

> Ocean Retracking Quality Flag: This flag is currently set for products over land and sea ice, but this is to be expected. The number of products with this error flag set is given below.

L2 Retracking Flags (20 Hz PLRM)

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

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

Number of products with errors:

6. IOP L2 Pole-to-Pole Data Quality Check

6.1 P2P Product Format Check

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

Number of products with errors:

6.2 P2P Product Header Analysis

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

Number of products with errors:

6.3 P2P Auxiliary Data File Usage Check

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

Number of products with errors:

6.4 P2P Auxiliary Correction Error Check

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

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

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

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

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220220219T231623_20220220T000601_C002	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
CS_OFFL_SIR_IOP_220220220T000601_20220220T005538_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_220220220T005538_20220220T014516_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_20220220T014516_20220220T023452_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_220220220T023452_2022020T032430_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_220220220T032430_20220220T041407_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_220220220T041407_20220220T050345_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_220220220T050345_2022020T055322_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_220220220T055322_20220220T064300_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_220220220T064300_20220220T073236_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_220220220T073236_20220220T082214_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_220220220T082214_20220220T091151_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_220220220T091151_20220220T100129_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_220220220T100129_20220220T105106_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_220220220T105106_20220220T114043_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_220220220T114043_20220220T123020_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_220220220T123020_20220220T131958_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_20220220T131958_20220220T140935_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_220220220T140935_20220220T145913_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_220220220T145913_20220220T154850_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_220220220T154850_20220220T163828_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_220220220T163828_20220220T172804_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_220220220T172804_20220220T181742_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_220220220T181742_20220220T190719_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_220220220T190719_20220220T195657_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_220220220T195657_20220220T204634_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_220220220T204634_20220220T213612_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_220220220T213612_20220220T222548_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_220220220T222548_20220220T231526_C001	Mean Sea Surface (1), Mean Dynamic Topography (1)	There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1)
6.5 P2P Measurement Confidence Data Check		
CryoSat P2P data includes a measurement confidence flag for each 20-Hz mea	surement record. The bit value of this flag ind	dicates any problems when set.
Number of products with errors: 0		
6.6 P2P Measurement Quality Flag Check		

Since the P2P Quality Flags are copied directly from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.					
Number of products with errors:	29				
P2P Quality Flags (20 Hz PLRM)					
Since the P2P Quality Flags are copied directly	y from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.				
Number of products with errors:	28				
P2P Quality Flags (1 Hz & 1 Hz PLRM	0)				
Since the P2P Quality Flags are copied directly	y from the L2 Quality Flags, please see Section 5.6 for the full list of products affected.				
Number of products with errors:	29				
6.8 P2P Ocean Retracking Quality Check					
P2P Retracking Flags (20 Hz)					
Cryosat P2P data includes an ocean retracking quality flag (field 19) for each 20 Hz measurement record. The bit value of this flag indicates any problems when set.					

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

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

Number of products with errors:

P2P Quality Flags (20 Hz)

P2P Retracking Flags PLRM

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

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

Number of products with errors:

7. IOP QCC Report Analysis

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

Product type	No. Products	No. QCC Reports	No. Valid	No. Warnings	No. Errors
SIR_IOPM1B	183	183	2	181	0
SIR_IOPR1B	115	101	4	94	3
SIR_IOPN1B	101	115	0	115	0
SIR_IOPM_2	183	183	127	56	0
SIR_IOPR_2	115	98	43	55	0
SIR_IOPN_2	98	115	38	76	1
SIR_IOP_P2P	28	28	0	27	1

7.1 QCC Errors

Number of QCC	reports with er	rors:	13								
					Total number	of occurrences	of each error				
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	ISSOPOBHRNO	-	-	-	-	-	-
SIR_IOPN1B	0	0	0	0	3						
SIR_IOPR_2	1	1	1	1	0						
Product Type	RLOBOPNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_IOP_2_	1	1	1	1							
Test Description	n Key:										

Abbreviation	Test name	Details			
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7			
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7			
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7			
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7			
RRTAISSOPOBHRNCD RangeRecordTAIStartStopOPOrBlankHRNetC The time value should be between the record TAI start/stop times of the SPH					

7.2 QCC Warnings

Number of QCC repo	rts with warnings	1995	Total numl	ber of occurrences of e	ach warning		
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC
SIR IOPM1B	181	0	0	0	0	0	0
SIR IOPM 2	0	0	41	40	0	40	0
SIR_IOPN1B	96	0	0	0	0	0	0
SIR_IOPN_2	0	0	10	26	2	20	28
SIR IOPR1B	112	0	0	0	0	0	0
SIR IOPR 2	0	1	25	43	1	23	18
Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNO	RPEPOPFDPLRMSINNC	RPEPOPFDSARNCDF	RPEPOPFDSINNCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	33	1	35	0	0	0	0
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	14	0	0	0	12	0	28
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	11	3	0	36	0	42	0
	·	÷				÷	
Product Type	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF	RSSHAONCDF
SIR_IOPM1B	0	0	0	0	0	0	0
SIR_IOPM_2	27	0	0	4	27	0	4
SIR_IOPN1B	0	0	0	0	0	0	0
SIR_IOPN_2	0	0	19	16	36	45	28
SIR_IOPR1B	0	0	0	0	0	0	0
SIR_IOPR_2	0	37	0	4	52	30	18
				r		1	
Product Type	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SOOHHIFHD	SCSTODHRNCDF	SCSTODNCDF	-
SIR_IOPM1B	0	0	0	0	0	0	
SIR_IOPM_2	36	0	3	0	0	0	
SIR_IOPN1B	0	0	0	0	47	1	
SIR_IOPN_2	25	29	15	1	0	0	
SIR_IOPR1B	0	0	0	0	115	7	
SIR_IOPR_2	23	39	1	7	0	0	
Product Type	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC	
SIR_IOP_2_	15	27	27	3	28	16	27
Product Type	RNELPOTONCDF	RPEPOPFDPLRMSINNC		RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_IOP_2_	4	15	25	16	16	28	16
Due du st To	DESUAONODE	DOWLOEDEDNORS		DOWNOEDNODE			
Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF		SPHLPQWNCDF	•	-
SIR_IOP_2_	24	28	17	17	28		

Test Description Key:	Fest Description Key:					
Abbreviation	Test name	Details				
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter				
IOHHMOOR	IndexOf1Hzin20HzMappingOutOfRange	The mapping of 20 Hz to 1 Hz measurements should be in the range 0 to (number of 1 Hz samples - 1)				
MVIOEPFDNCDF	MissingValueIntOceanExcludingPolarFD2NetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIOEPNCDF	MissingValueIntOceanExcludingPolarNetCDF	The value should not be a 'missing value' for surface type 0 only for latitudes between -70 and 70 degrees				
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only				
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPFDPLRM NCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RBSZOPOEPNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RNELPOTONCDF	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean				
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSAR NCDF	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDPLRMSINN CDF	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPLRMNCDF	RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSARNCDF	RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RPEPOPSINNCDF	RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RSSBCONCDF	RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean				
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAOFDPLRMNCD F	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean				
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				
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample				

SCSTODHRNCDF	SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter			
SCSTODNCDF	SequenceCounterStepTODNetCDF	The sequence counter should be one higher (modulo 16384) with regard to the previous sequence counter			
7.3 Missing QC	C Reports				
Number of products with missing QCC reports: 0					