

QA4EO Daily Report for NOP data:

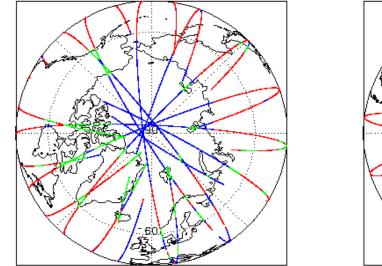
<u>04/12/2021</u>

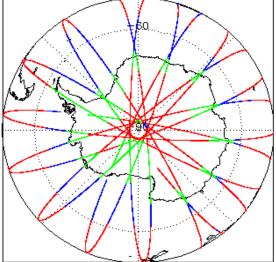
anaut Duaduation.	06 Dec 2021	Check	L1 & L2
Report Production:	06-Dec-2021	Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
Processor used.	CryoSat Ocean Processor	Product Software Check	Nominal
Data Used:	Near Real Time Ocean Products (NOP)	Product Format Check	Nominal
Data Used:	L1B & L2 Science Data	Product Header Analysis	Nominal
		Auxiliary Data File Usage Check	Nominal
		Auxiliary Correction Error Check	See Section 5.4
		Measurement Confidence Data Check	See Section 4.5, 4.6
		Measurement Quality Flag Check	See Section 5.6
		Ocean Retracking Quality Check	See Section 5.7
		QCC Error/ Warning Check	See Section 7.1 and 7.2

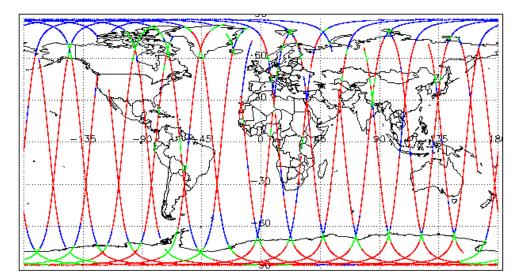
1. Overview

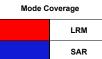
Mission / In	Mission / Instrument News	
03-Dec-20	1 None	
04-Dec-20	1 None	
05-Dec-20	1 Nothing planned	











SARIn

3. Instrument Configuration

The SIRAL instrument configuration for the day of acquisition is provided below.		
SIRAL instrument(s) in use:	SIRAL - A	
Star Tracker(s) in use:	Star Tracker 1 & 2	

Star Tracker(s) in use:	Star Tracker 1 & 2

4. NOP Level 1B Data Quality Check

4.1 L1B Product Format Check

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

For all products, a series of pre-defined checks are performed on the MPH and	d SPH in order to identify any inc	consistencies and/or errors raised by the ground-segment processing chain.
L1B Processing Quality HR: The I1b proc flag hr flag is currently set all L1	B IOPR and IOPN products beca	use 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	e-determined baseline and also	o check the validity of Auxiliary Data Files is correct.
Dynamic Atmospheric Correction: The DAC is missing in all products becau	use the auxiliary files required an	e not available in time for processing. This known and expected behaviour.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag for each measurement recor	d. The bit value of this flag indic	ates any problems when set.
Number of products with errors: 0		
4.5 L1B Measurement Confidence Data Check		
		2 • 1 • 1 • 1
CryoSat L1B data includes a measurement confidence flag for each measurer		
> Attitude Correction Missing: This flag is currently set in error for NOPR provide the set of products with errors: 0	outrois due to a configuration ISS	ao. This is being investigated and will be updated in the flext SW update.
4.6 L1B Waveform Group Data Check		
CryoSat L1B data includes a waveform data flag for each measurement record	d. The bit value of this flag indica	tes any problems when set.
> Loss of Echo Flag: This flag is currently set for products over land, but this	is to be expected.	
Number of products with errors: 13		
Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20211204T104633_20211204T110748_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211204T145941_20211204T151554_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20211204T164210_20211204T165407_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211204T021112_20211204T021232_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211204T025137_20211204T025720_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211204T085342_20211204T085458_C001 CS_OFFL_SIR_NOPN1B_20211204T101707_20211204T101819_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_NOPN1B_20211204T101707_20211204T101815_C001	Loss of Echo	The tracking echo is missing for one or more records
CS OFFL SIR NOPNIB 20211204113500_202112041134233 C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20211204T151936_20211204T152148_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211204T015440_20211204T015622_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211204T101117_20211204T101314_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20211204T154222_20211204T155109_C001	Loss of Echo	The tracking echo is missing for one or more records
		althe Chaole
	DP Level 2 Data Qu	
5.1 L2 Product Format Check		
Each product, retrieved and unpacked from the science server, is checked to e	ensure it consists of both an XM	header file (.HDR) and a binary product file (.DBL).
Number of products with errors: 0		
5.2 L2 Product Header Analysis		
For all products, a series of pre-defined checks are performed on the MPH and	d SPH in order to identify any inc	ionsistencies and/or errors raised by the ground-segment processing chain
	a or this order to identify any Inc	onolocition and or entries 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-	e-determined baseline and also	o check the validity of Auxiliary Data Files is correct.
Wind Model File Usage: This file is currently not included in all L2 products.		
Number of products with errors: 0		

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 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.

> 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:

Market Name <			
Control Description Description <thdescrin< th=""> <thdescrin< th=""> Descrin</thdescrin<></thdescrin<>	Product	Test Failed	Description
Ci, H.L., M. MAREL, Z. 2011 (2011) 2011 2011 2010 2010 Exception (1) role decoders in the program (1) in the decoders in the program (1) is the decoders in the program (1) in the decoders in the program (1) is the decoders in the program (1) is the decoders in the program (1) is the decoder in the decoders in the program (1) is the decoder in the decoders in the decoders in the decoders in the decoder in the decoders in the decoder	CS_OFFL_SIR_NOPM_2_20211204T052117_20211204T052213_C001	Topography (1)	Topography height (solution 1) for one or more records
Back StructureKath StructureKath StructureKath StructureKath StructureC1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureStructureC1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG1, GPT, JBL, GOPD, Z. 2011 SOFT HATL STRUCTUREKash SpeciesTarget structureG	CS_OFFL_SIR_NOPM_2_20211204T082522_20211204T083025_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide
Back Mark (2004) Back Mark (2004) Back Mark (2004) The mode CS, OHL SR, NOHE Z 2011201120122 2011201140242 See Dynamic 10000491(1) The mark mark the Man Dynamic Tongopaly half of name CS, OHL SR, NOHE Z 2011201120122 2011201140242 See Dynamic 10000491(1) See Dynamic 10000491(1) See Dynamic 10000491(1) CS, OHL SR, NOHE Z 2011201120122 2011201114020120 Mark Sta Backer (1) Mark Dynamic Tongopaly half of name See Dynamic 10000491(1) See Dynamic 1000491(1)	CS_OFFL_SIR_NOPM_2_20211204T121231_20211204T124645_C001	Mean Dynamic Topography (1)	
SQUIT_SILLOWING_CAUTION INSEL_CAUTION INSELECTION INSELEC	CS_OFFL_SIR_NOPM_2_20211204T141111_20211204T142619_C001	Mean Dynamic Topography (1)	
Ball Description Description <thdescription< th=""></thdescription<>	CS_OFFL_SIR_NOPM_2_20211204T144253_20211204T145321_C001	Mean Dynamic Topography (1)	
Ball Mark Control Transpersive (1) Transpersive (1) Transpersive (1) CB, OPH, LIR, NORM, J., 20110041101022, 20110041101020, 2001 Mark Bas Selface (1), Mark Dynamic Torospersive (1) Torospersive (1) CB, OPH, LIR, NORM, J., 20110041101022, 20110041101020, 2001 Mark Bas Selface (1), Mark Dynamic Torospersive (1)	CS_OFFL_SIR_NOPM_2_20211204T203722_20211204T204452_C001	Mean Dynamic Topography (1)	
Sci OF, Sci No, No, Z. 2011001102112_2011001102102_0001 Toggapping (n) Toggappingin (n) Toggapping (n)	CS_OFFL_SIR_NOPN_2_20211204T011602_20211204T011836_C001		
Strict Strict Additional Control Contro Contro Contrectica Control Control Control Control Control Cont	CS_OFFL_SIR_NOPN_2_20211204T021112_20211204T021232_C001		
Start Control Mean Dynamic Topography (1) mean consists CS_OFFL_SIR_NOPM_2_2007120417043257_2007120417043257_2007120417043257_2007120417043257_200712041704357 Mean Dynamic Topography (1) There is a more with the Man Dynamic Topography (1) There is a more with the Man Dynamic Topography (1) There is a more with the Man Dynamic Topography (1) CS_OFFL_SIR_NOPM_2_2007120417043252_2007120417043254_0001 Mean Dynamic Topography (1) There is a more with the MSD Topography height for ore or more received. CS_OFFL_SIR_NOPM_2_200712041704326_0001 Mean Dynamic Topography (1) There is a more with the MSD Topography height for ore or more received. CS_OFFL_SIR_NOPM_2_200712041704326_0001 Mean Dynamic Topography (1) There is a more with the MSD Topography height for ore or more received. CS_OFFL_SIR_NOPM_2_200712041704326_0001 Mean Dynamic Topography (1) There is a more with the MSD Topography height for ore or more received. CS_OFFL_SIR_NOPM_2_200712041704351_00211044711240_0001 Mean Bo Startler (1), Mean Dynamic Topography (1) There is a more with the MSD Topography height for ore or more received. CS_OFFL_SIR_NOPM_2_200712041710410_20212047111448_0001 Mean Bo Startler (1), Mean Dynamic Topography (1) There is a more with the MSD Topography height for ore or more received. CS_OFFL_SIR_NOPM_2_2007120417104140_20212047111448_0001 Mean Bo Startler (1), Mean Dynamic Topography (1)	CS_OFFL_SIR_NOPN_2_20211204T025137_20211204T025720_C001		
Bits Description Inter Description CB_CPEL_SER_NOPM_2_DEST120411044305_2021120411044305_2021120411044305_2011 Mean Description Transprash Tra	CS_OFFL_SIR_NOPN_2_20211204T041351_20211204T041526_C001	Mean Dynamic Topography (1)	
Bis Drift, Sign (Jub 2) Drift (Sign (Jub 2) Press is an error with the MSS height (soution 1) and the Mean Drawnic Toography (Jub 2) CS, OFFL, SIR, NOP4, 2, 2021120411052065, 2021120411052465, 2021 Mean Drawnic Toography (Jub 2) There is an error with the MSS height (soution 1), the Mean Drawnic Toography (Jub 2) CS, OFFL, SIR, NOP4, 2, 2021120411052165, 2021120411052465, 2021 Mean Drawnic Toography (Jub 2) There is an error with the MSS height (soution 1), the Mean Drawnic Toography (J), Tool (Soution) Control, Single (soution 1), the Mean Drawnic Toography (J), Tool (Soution) Control, Single (soution 1), the Mean Drawnic Toography (J), Tool (Soution) Control, Single (soution 1), and the Mean Drawnic Toography (J), Tool (Soution) Control, Single (soution 1), and the Mean Drawnic Toography (J) CS, OFFL, SIR, NOP4, 2, 2021120411105410, 20211204111448, Control Means Sea Stafes (J), Mean Drawnic Toography (J) There is an error with the MSS height (soution 1) and the Mean Drawnic Toography (J) CS, OFFL, SIR, NOP4, 2, 20211204111445, 20211204111448, Control Means Sea Stafes (J), Mean Drawnic Toography (J) There is an error with the MSS height (soution 1) and the Mean Drawnic Toography (J) CS, OFFL, SIR, NOP4, 2, 202112041124758, 2021120411142582, 2001 Means Sea Stafes (J), Mean Drawnic Toography (J) There is an error with the MSS height (soution 1) and the Mean Drawnic Toography (J) CS, OFFL, SIR, NOP4, 2, 2021120411125782, 2001 Means Sea Stafes (J), Mean Drawnic Toography (J) There is an error with the MSS height (soution 1) and the Mean Drawnic T	CS_OFFL_SIR_NOPN_2_20211204T043327_20211204T043505_C001	Mean Dynamic Topography (1)	
St. DFL, SM, NOPH, 2, 200110411003010, 200110410 (SSM0, 2001) Topography (1) Topography (1) Topography (1) CS, GERL, SR, NOPH, 2, 200110411003040, 2001 Mean Dynamic Topography (1) There is an arre with the MAan Dynamic Topography (1) There is an arre with the MAan Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 200110411010400, 2001 Mean Dynamic Topography (1) There is an arre with the MAan Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 200110411010400, 2001 Mean Dynamic Topography (1) There is an arre with the MAan Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 200110411010400, 2001 Mean Se Suffact (1), Mean Dynamic Topography (2), 200110411010207, 20011041100400, 2001 CS, GERL, SR, NOPH, 2, 20011041110202, 2001104110202, 20011 Mean Se Suffact (1), Mean Dynamic Topography (1) Mean Se Suffact (1), Mean Dynamic Topography (1) There is an arre with the MAan Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 20011041110202, 20011041110202, 20011 Mean Se Suffact (1), Mean Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 20011041110202, 2001041110202, 20011 Mean Se Suffact (1), Mean Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 20011041110202, 2001041110202, 20011 Mean Se Suffact (1), Mean Dynamic Topography (1) CS, GERL, SR, NOPH, 2, 20011041110202, 2001041110401, 2001104110401, 20011	CS_OFFL_SIR_NOPN_2_20211204T044352_20211204T044600_C001	Mean Dynamic Topography (1)	
Sty OFFL_Sint_NOPE_2_02112041002001 Mean Dynamic Topography (1) more records CS_OFFL_Sint_NOPE_2_02112041075240_0211204107533_0001 Mean Dynamic Topography (1) more records CS_OFFL_Sint_NOPE_2_02112041075240_0211204107533_0001 Mean Dynamic Topography (1) more records CS_OFFL_Sint_NOPE_2_02112041076325_0001 Mean Dynamic Topography (1) more records CS_OFFL_Sint_NOPE_2_02112041063257_022112041093500_0001 Mean Dynamic Topography (1) There is an error with the MSS heigh (caulion 1) and the Mean Dynamic Topography (1) CS_OFFL_SINT_NOPE_2_021120411997_30_2112041111120_0001 Mean Sea Surface (1). Mean Dynamic Topography (1) There is an error with the MSS heigh (caulion 1) and the Mean Dynamic Topography (1) CS_OFFL_SINT_NOPE_2_02112041111997_012112011120120_0_0001 Mean Sea Surface (1). Mean Dynamic Topography (1) There is an error with the MSS heigh (caulion 1) and the Mean Dynamic Topography (1) CS_OFFL_SINT_NOPE_2_02112041114102_02112041124020_0001 Mean Sea Surface (1). Mean Dynamic Topography (1) There is an error with the MSS heigh (caulion 1) and the Mean Dynamic Topography (1) CS_OFFL_SIN_NOPE_2_022112041114020_02112041124020_0001 Mean Sea Surface (1). Mean Dynamic Topography (1) There is an error with the MSS heigh (caulion 1) and the Mean Dynamic Topography (1) CS_OFFL_SIN_NOPE_2_022112041140140_02112211441100020_00011 Mean Sea Surface (1). Mean Dynamic To	CS_OFFL_SIR_NOPN_2_20211204T052958_20211204T053445_C001		
Call DFFL_SIR_NOPK_2_001104107530_021104107533_0001 Topography (1) The additional provide the formation of the set of t	CS_OFFL_SIR_NOPN_2_20211204T062144_20211204T062408_C001	Mean Dynamic Topography (1)	
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CS_DFL_SR_NOPN_2_0211204T1140105221_0211204T11418_C001 Teopraphy (1) Teopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T114001_32211204T11418_C001 Maan Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T11857_30211204T11220_C001 Mean Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T134140_20211204T134232_C001 Mean Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T134140_20211204T134232_C001 Mean Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T134140_20211204T134232_C001 Mean Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T16553_20211204T16759_C001 Mean Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T16552_20211204T170012_C001 Mean Sas Surface (1) Mean Dynamic Toopraphy (1) There is an error with the MSS height (solution 1) and the Mean Dynamic Toopraphy (1) CS_OFFL_SIR_NOPN_2_20211204T1204T164563_20211204T170012_	CS_OFFL_SIR_NOPN_2_20211204T084311_20211204T084407_C001	Mean Dynamic Topography (1)	
CS_DFL_SIR_NOPN_2_20211204T11967_92211204T11967_92211204T112120_C001 Topography (1) Topography (explained in the second in the	CS_OFFL_SIR_NOPN_2_20211204T093227_20211204T093540_C001		
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CS_UPFL_SIR_NOPM_2_202112041126132_30_0011 Mean Dynamic 1 opography (1) more records CS_OFFL_SIR_NOPM_2_20211204T134140_20211204T13423_C0011 Mean Sea Surface (1). Mean Dynamic Topography leight (aclution 1) for one or more records CS_OFFL_SIR_NOPM_2_20211204T143441_20211204T132148_C0011 Them Sea Surface (1). Mean Dynamic Topography leight (aclution 1) and the Mean Dynamic Topography leight (aclution 1) are or more records CS_OFFL_SIR_NOPM_2_20211204T15148_C0011 Them Sea Surface (1). Mean Dynamic Topography leight (aclution 1) are or more records CS_OFFL_SIR_NOPM_2_20211204T161655_20211204T160759_C0011 Mean Dynamic Topography leight (aclution 1) are the Mean Dynamic Topography leight (aclution 1) are the Mean Dynamic Topography (1) CS_OFFL_SIR_NOPM_2_20211204T16055_20211204T16055_C0011 Mean Dynamic Topography leight (aclution 1) are the Mean Dynamic Topography leight (aclution 1)	CS_OFFL_SIR_NOPN_2_20211204T111957_20211204T112120_C001		ö ()
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	CS_OFFL_SIR_NOPR_2_20211204T084407_20211204T085158_C001		
	CS_OFFL_SIR_NOPR_2_20211204T102221_20211204T103341_C001		

CS_OFFL_SIR_NOPR_2_20211204T120337_20211204T121100_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) for one or more records
CS_OFFL_SIR_NOPR_2_20211204T134233_20211204T134814_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) for one or more records
CS_OFFL_SIR_NOPR_2_20211204T152148_20211204T152840_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) for one or more records
CS_OFFL_SIR_NOPR_2_20211204T170012_20211204T170528_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) for one or more records
CS_OFFL_SIR_NOPR_2_20211204T183807_20211204T184836_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) for one or more records
CS_OFFL_SIR_NOPR_2_20211204T201612_20211204T202344_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) for one or more records
CS_OFFL_SIR_NOPR_2_20211204T202738_20211204T202856_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records
CS_OFFL_SIR_NOPR_2_20211204T203259_20211204T203457_C001	Mean Dynamic Topography (1)	There is an error with the Mean Dynamic Topography height for one or more records

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:

5.6 L2 Measurement Quality Flag Check

L2 Quality Flags (20Hz)

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

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

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

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

0

81

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20211203T234833_20211204T001440_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_NOPM_2_20211204T001619_20211204T002225_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_NOPM_2_20211204T003744_20211204T004441_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_NOPM_2_20211204T004456_20211204T010902_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_NOPM_2_20211204T012756_20211204T013233_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_NOPM_2_20211204T013326_20211204T014349_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_NOPM_2_20211204T014402_20211204T014453_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_NOPM_2_20211204T014600_20211204T015440_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_NOPM_2_20211204T020044_20211204T020053_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_NOPM_2_20211204T020320_20211204T020324_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_NOPM_2_20211204T021232_20211204T021640_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_NOPM_2_20211204T021756_20211204T023202_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_NOPM_2_20211204T023956_20211204T025137_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_NOPM_2_20211204T030014_20211204T030438_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_NOPM_2_20211204T030701_20211204T032122_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_NOPM_2_20211204T032302_20211204T033727_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_NOPM_2_20211204T035630_20211204T035833_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_NOPM_2_20211204T040317_20211204T040705_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_NOPM_2_20211204T040828_20211204T041351_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_NOPM_2_20211204T041526_20211204T043135_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_NOPM_2_20211204T043505_20211204T044352_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_NOPM_2_20211204T044651_20211204T050828_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_NOPM_2_20211204T053706_20211204T061025_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_NOPM_2_20211204T061717_20211204T062144_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_NOPM_2_20211204T062630_20211204T065103_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_NOPM_2_20211204T071907_20211204T072141_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_NOPM_2_20211204T072306_20211204T074824_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_NOPM_2_20211204T075633_20211204T080223_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_NOPM_2_20211204T080547_20211204T081909_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_NOPM_2_20211204T084131_20211204T084233_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_NOPM_2_20211204T085458_20211204T092833_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_NOPM_2_20211204T093540_20211204T094055_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_NOPM_2_20211204T094738_20211204T095039_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_NOPM_2_20211204T101819_20211204T102221_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_NOPM_2_20211204T103341_20211204T104347_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_NOPM_2_20211204T104633_20211204T110748_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_NOPM_2_20211204T111549_20211204T111957_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_NOPM_2_20211204T112513_20211204T113504_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_NOPM_2_20211204T113652_20211204T114410_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_NOPM_2_20211204T114457_20211204T114927_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_NOPM_2_20211204T121231_20211204T124645_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.
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CS_OFFL_SIR_NOPM_2_20211204T124918_20211204T125442_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_NOPM_2_20211204T125501_20211204T125739_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_NOPM_2_20211204T130543_20211204T131814_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_NOPM_2_20211204T131827_20211204T133558_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_NOPM_2_20211204T133715_20211204T134140_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_NOPM_2_20211204T134948_20211204T135027_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_NOPM_2_20211204T135115_20211204T135146_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_NOPM_2_20211204T135719_20211204T140907_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_NOPM_2_20211204T141111_20211204T142619_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_NOPM_2_20211204T142841_20211204T143340_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_NOPM_2_20211204T143400_20211204T143412_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_NOPM_2_20211204T143419_20211204T143541_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_NOPM_2_20211204T144253_20211204T145321_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_NOPM_2_20211204T145941_20211204T151554_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_NOPM_2_20211204T152840_20211204T153219_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_NOPM_2_20211204T155109_20211204T160452_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_NOPM_2_20211204T160759_20211204T161253_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_NOPM_2_20211204T162031_20211204T164208_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_NOPM_2_20211204T164210_20211204T165407_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_NOPM_2_20211204T171622_20211204T171716_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_NOPM_2_20211204T172100_20211204T174212_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_NOPM_2_20211204T174244_20211204T174337_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_NOPM_2_20211204T174841_20211204T175210_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_NOPM_2_20211204T175935_20211204T182522_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_NOPM_2_20211204T185702_20211204T192258_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_NOPM_2_20211204T192625_20211204T193124_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

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CS_OFFL_SIR_NOPM_2_20211204T194001_20211204T201253_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_NOPM_2_20211204T202523_20211204T202738_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_NOPM_2_20211204T205813_20211204T210103_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_NOPM_2_20211204T210624_20211204T211157_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_NOPM_2_20211204T211919_20211204T215155_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_NOPM_2_20211204T220456_20211204T220612_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_NOPM_2_20211204T222428_20211204T224007_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_NOPM_2_20211204T224545_20211204T225054_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_NOPM_2_20211204T225751_20211204T233301_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_NOPM_2_20211204T235534_20211205T000000_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_NOPN_2_20211204T145735_20211204T145941_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_NOPN_2_20211204T165620_20211204T170012_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_NOPN_2_20211204T185442_20211204T185506_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_NOPR_2_20211204T061025_20211204T061303_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality, OCOG Altimeter Range and Backscatter Quality	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags and the OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

L2 Quality Flags (20Hz PLRM)

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

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

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

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20211204T003236_20211204T003313_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_NOPN_2_20211204T003347_20211204T003457_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_NOPN_2_20211204T011602_20211204T011836_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_NOPN_2_20211204T012513_20211204T012654_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_NOPN_2_20211204T015622_20211204T015812_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20211204T023851_20211204T023956_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20211204T025137_20211204T025720_C001		The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20211204T035401_20211204T035630_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_NOPN_2_20211204T035833_20211204T035955_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_NOPN_2_20211204T044352_20211204T044600_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_NOPN_2_20211204T051029_20211204T051337_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_NOPN_2_20211204T051433_20211204T051605_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_NOPN_2_20211204T051958_20211204T052117_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_NOPN_2_20211204T052958_20211204T053445_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_NOPN_2_20211204T053544_20211204T053706_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_NOPN_2_20211204T061303_20211204T061430_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_NOPN_2_20211204T061613_20211204T061717_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_NOPN_2_20211204T062144_20211204T062408_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_NOPN_2_20211204T080223_20211204T080349_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_NOPN_2_20211204T083824_20211204T083947_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_NOPN_2_20211204T085158_20211204T085256_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_NOPN_2_20211204T085342_20211204T085458_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_NOPN_2_20211204T101314_20211204T101407_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_NOPN_2_20211204T101707_20211204T101819_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_NOPN_2_20211204T111001_20211204T111418_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_NOPN_2_20211204T114410_20211204T114457_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_NOPN_2_20211204T115930_20211204T120149_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_NOPN_2_20211204T133558_20211204T133715_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_NOPN_2_20211204T142658_20211204T142841_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_NOPN_2_20211204T143541_20211204T143803_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_NOPN_2_20211204T145321_20211204T145427_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_NOPN_2_20211204T145735_20211204T145941_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_NOPN_2_20211204T151936_20211204T152148_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_NOPN_2_20211204T165620_20211204T170012_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_NOPN_2_20211204T170528_20211204T170601_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_NOPN_2_20211204T171716_20211204T172035_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_NOPN_2_20211204T174607_20211204T174841_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, 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
CS_OFFL_SIR_NOPN_2_20211204T175600_20211204T175743_C001	PLRM OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	set for one or more records. The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20211204T185400_20211204T185442_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_NOPN_2_20211204T193459_20211204T193636_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_NOPN_2_20211204T204519_20211204T204731_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_NOPN_2_20211204T222244_20211204T222428_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_NOPN_2_20211204T224427_20211204T224545_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_NOPN_2_20211204T225054_20211204T225405_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_NOPR_2_20211204T003457_20211204T003630_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_NOPR_2_20211204T010902_20211204T011602_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_NOPR_2_20211204T023202_20211204T023551_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_NOPR_2_20211204T030618_20211204T030701_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_NOPR_2_20211204T061025_20211204T061303_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_NOPR_2_20211204T062408_20211204T062630_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_NOPR_2_20211204T070045_20211204T070214_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_NOPR_2_20211204T070455_20211204T071028_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_NOPR_2_20211204T074824_20211204T075240_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_NOPR_2_20211204T083947_20211204T084018_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_NOPR_2_20211204T092833_20211204T093227_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_NOPR_2_20211204T094206_20211204T094738_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_NOPR_2_20211204T102221_20211204T103341_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_NOPR_2_20211204T110748_20211204T111001_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_NOPR_2_20211204T112120_20211204T112513_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_NOPR_2_20211204T115859_20211204T115930_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_NOPR_2_20211204T120337_20211204T121100_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_NOPR_2_20211204T125925_20211204T130543_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_NOPR_2_20211204T134233_20211204T134814_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_NOPR_2_20211204T143803_20211204T144253_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_NOPR_2_20211204T145729_20211204T145735_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_NOPR_2_20211204T151849_20211204T151936_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_NOPR_2_20211204T152148_20211204T152840_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_NOPR_2_20211204T154222_20211204T155109_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_NOPR_2_20211204T170012_20211204T170528_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_NOPR_2_20211204T170601_20211204T170720_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_NOPR_2_20211204T174337_20211204T174607_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_NOPR_2_20211204T183807_20211204T184836_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_NOPR_2_20211204T193636_20211204T194001_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_NOPR_2_20211204T201612_20211204T202344_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_NOPR_2_20211204T202738_20211204T202856_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_NOPR_2_20211204T205500_20211204T205813_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_NOPR_2_20211204T210103_20211204T210508_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_NOPR_2_20211204T211516_20211204T211919_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_NOPR_2_20211204T220741_20211204T221043_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_NOPR_2_20211204T224007_20211204T224427_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_NOPR_2_20211204T225405_20211204T225751_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.

L2 Quality Flags (1 Hz & 1Hz PLRM)

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

180

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

Number of products with errors:

5.7 L2 Ocean Retracking Quality Check

L2 Retracking Flags (20Hz)

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

Ocean Retracking Quality Flag: This flag is currently set for products falling at ocean/ land boundaries, but this is expected.

Number of products with errors:

L2 Retracking Flags (20Hz, PLRM)

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

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

7. NOP 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_NOPM1B	196	196	5	191	0
SIR_NOPR1B	103	103	0	103	0
SIR_NOPN1B	103	103	2	101	0
SIR_NOPM_2	196	196	136	60	0
SIR_NOPR_2	103	103	36	63	4
SIR_NOPN_2	103	103	43	60	0

7.1 QCC Errors

Number of QCC reports with errors:

Total number of occurrences of each error											
Product Type RLOBO	PNCDF	RL	RLOBOPNCDF	RL	-	-	-	-	-	-	-
SIR_NOPR_2	4	4	4	4							
Test Description Key:											
Abbreviation	Test na	me		Details							
RLOBOPNCDF	RangeLa	titudeOrBlankOP_	7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF							
RL	RangeLa	titude_7		Latitude should be between -90E7 and 90E7							
RLOBOPNCDF	RangeLo	ngitudeOrBlankOl	P_7NetCDF	Longitude should be between -180E7 and 180E7 - NetCDF							
RL	RangeLo	ngitude_7		Longitude should b	be between -180E7	and 180E7					

7

7.2 QCC Warnings

Number of QCC reports with warnings

Number of QCC report	ts with warnings	1511					
			Total numb	er of occurrences of ea	ch warning		
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNCD
SIR_NOPM1B	191	0	0	0	0	0	0
SIR_NOPM_2	0	0	45	47	1	46	0
SIR_NOPN1B	99	0	0	0	0	0	0
SIR_NOPN_2	0	0	8	29	3	20	23
SIR_NOPR1B	97	0	0	0	0	0	0
SIR_NOPR_2	0	4	34	41	0	28	21

Product Type	RBSZOPOEPNCDF	RNELPOTONCDF	ROLTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNCI	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	39	0	0	39	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	14	1	0	0	0	19	0
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	7	1	1	0	38	0	48
			l.			I.	
Product Type	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	0	32	0	0	5	28	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	31	0	0	24	12	36	48
SIR_NOPR1B	0	0	0	0	0	0	0
SIR NOPR 2	0	0	39	0	1	54	29
			l.			I.	
	DOOLLAONODE	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	REWHOERNORE	SPHRTASCNSNCDF	SPHRTASCNSNCDF	SOOHHIFHD
Product Type	RSSHAONCDF	RSWHUEPFUNCUF	RSWHOEPFDPLRWINCDF	ROWHOEFNODF	SFIRTASCIUSIODI	SFIRIASCINSINCUL	3000000

SIR_NOPM1B	0	0	0	0	1	0	0
SIR_NOPM_2	2	38	0	3	1	0	0
SIR_NOPN1B	0	0	0	0	1	0	0
SIR_NOPN_2	27	26	25	9	0	1	0
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	9	37	41	1	0	0	6

Abbreviation	Test name	Details
BCSHNCDF	BurstCounterStep20HzNetCDF	The burst counter should be one higher with regard to the previous burst counter
DOOIIINODI		
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
WIVIOEPINGDF	Missing value into cean Excluding Folan veto DF	The value should not be a Thissing value for surface type of only for failudes between -70 and 70 degrees
MVIONCDF	MissingValueIntOceanNetCDF	The value should not be a 'missing value' for surface type 0 only
		5 5 5
RBSZOPOEPFDNCDF	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2NetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes
		between -70 and 70 degrees
RBSZOPOEPFDPLRM	RangeBackscatterSigmaZeroOPOceanExcludingPolarFD2PLRMNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes
NCDF		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
	RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) fo
RNELPOTONCDF	Rangenetroteannueoceanneicor	surface type = ocean
ROLTONCDF	RangeOceanLoadingTideOceanNetCDF	The ocean loading tide should be between -100mm and 100mm (or missing) for surface type = ocean
NOLTONODI		
RPEPOPFDLRMNCDF	RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70
	с с С	and 70 degrees
RPEPOPFDPLRMSAR	RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70
NCDF		and 70 degrees
RPEPOPFDPLRMSINN	RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70
CDF		and 70 degrees
RPEPOPFDSARNCDF	RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70
RPEPOPFDSINNCDF	RangePeakinessExcludingPolarOPFD2SINNetCDF	and 70 degrees The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70
RPEPOPFDSINNCDF	RangereakinessExcludingrolatOFFD25initetCDF	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
DOOLLAOEDNODE	Banan Can Curford Unight Anomaly Concer ED 2Not CDE	The app surface height anomaly should be between 2000mm and 2000mm (as mission) for surface to a
RSSHAOFDNCDF	RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =
RSSHAOFDPLRMNCD	RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	ocean The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type =
ROOFDPLRMINCD	Nangebeaburrater reightentomary ofean FD3FLRWINetCDF	ocean

RSSHAONCDF	RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RSWHOEPFDNCDF		The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPFDPLRMNC	RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RSWHOEPNCDF		The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SPHRTASCNSNCDF	SPH_Rel_Time_ASC_Node_Stop_v2_NetCDF	Rel_Time_ASC_Node_Stop mismatch
SOOHHIFHD	SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample

7.3 Missing QCC Reports

Number of products with missing QCC reports: