



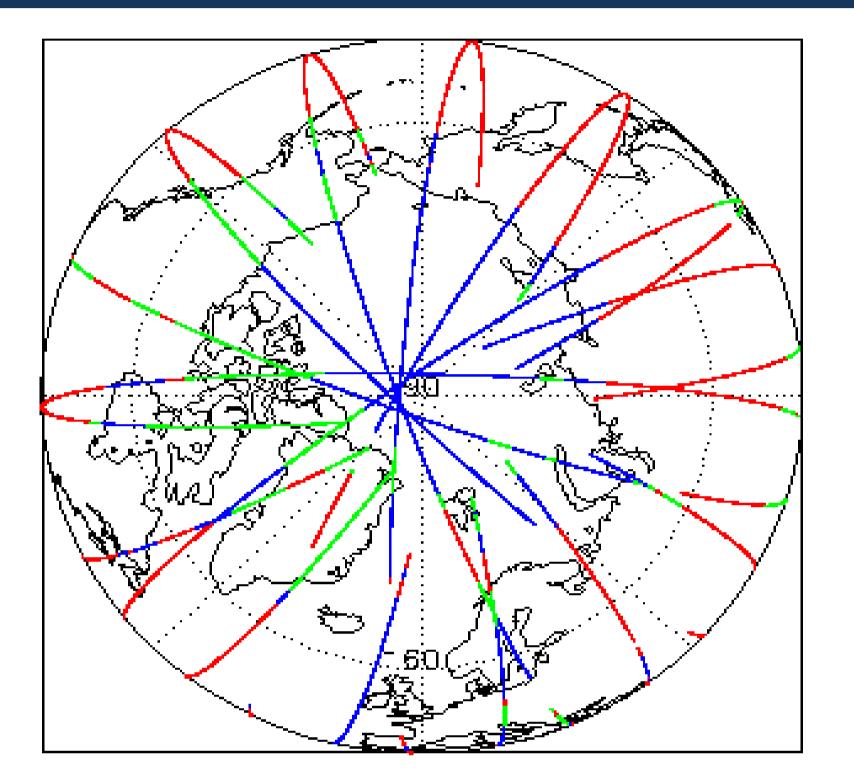
# 1. Overview

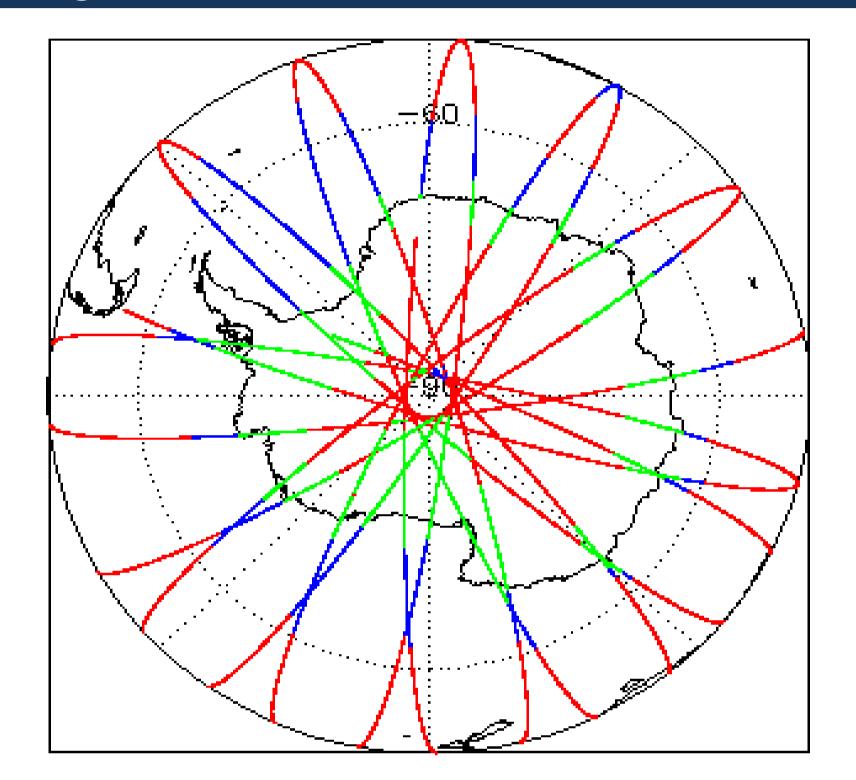
<b>Report Production:</b>	14-Jun-2021	
Processor Used:	CryoSat Ocean Processor	
Data Used:	Near Real Time Ocean Products (NOP L1B & L2 Science Data	

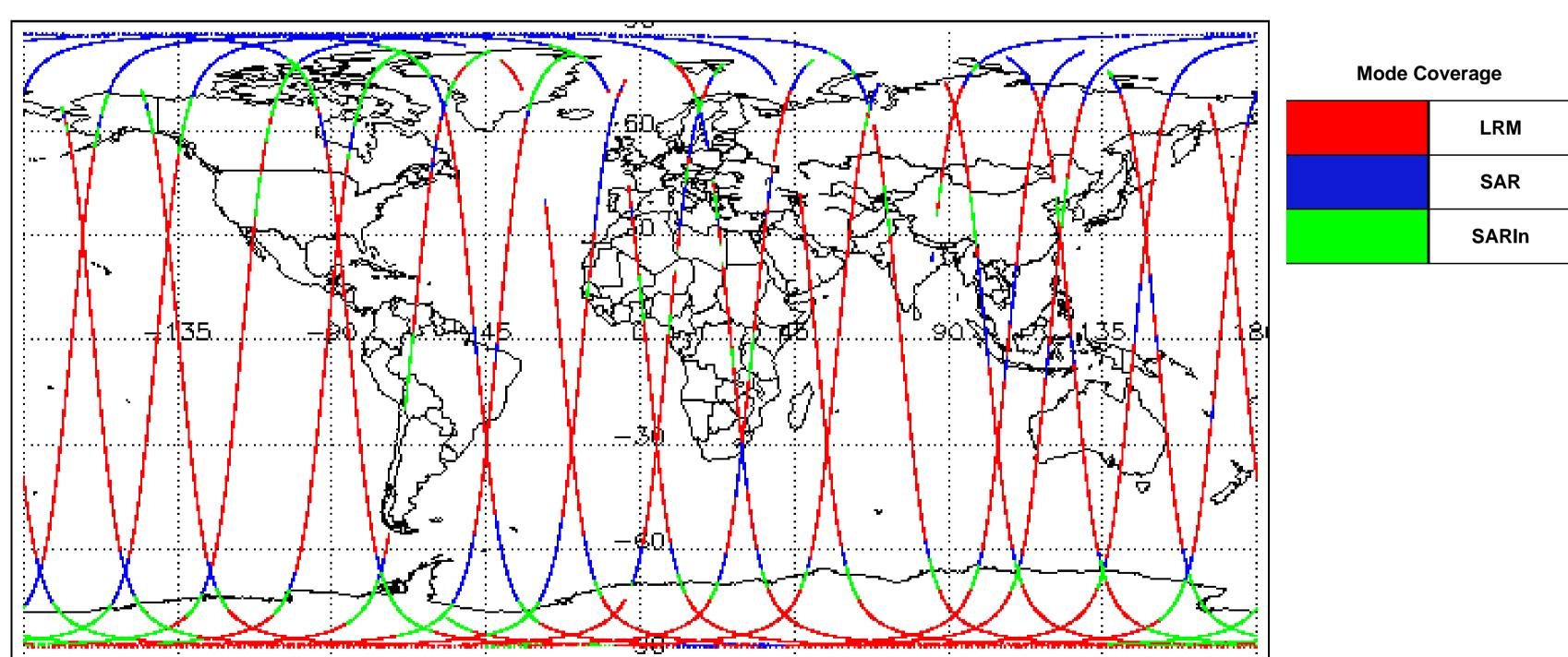
Check	L1 & L2
Server check: science-pds.cryosat.esa.int	Nominal
Server check: calval-pds.cryosat.esa.int	Nominal
Product Software Check	Nominal
Product Format Check	Nominal
Product Header Analysis	Nominal
Auxiliary Data File Usage Check	Nominal
Auxiliary Correction Error Check	See Section 5.4
Measurement Confidence Data Check	See Section 4.5, 4.6 and 5.5
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

Mission / Instru	ument News
12-Jun-2021	None
13-Jun-2021	None
14-Jun-2021	Nothing planned

# 2. Global Coverage







# **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

# 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).

Number of products with errors:



## **4.2 L1B Product Header Analysis**

For all products, a series of pre-defined checks are performed on the MPH and 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	I
OSARIn chains. A modification is required in the next release.	

Number of products with errors:

# 4.3 L1B Auxilary 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.

Dynamic Atmospheric Correction: The DAC is missing in all products because the auxiliary files required are not available in time for processing. This known and expected behaviour.

Number of products with errors:

## **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 problems when set.

0

0

0

1

Number of products with errors:

## **4.5 L1B Measurement Confidence Data Check**

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

> Attitude Correction Missing: This flag is currently set in error for NOPR products due to a configuration issue. This is being investigated and will be updated in the next SW update.

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20210613T014158_20210613T014953_C001	Power scaling error	There is an error in the scaling of the L1B waveform for one or more records

### 4.6 L1B Waveform Group Data Check

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

> Loss of Echo Flag: This flag is currently set for products over land, but this is to be expected.

18

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM1B_20210613T005536_20210613T012800_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210613T105107_20210613T110617_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210613T110818_20210613T111741_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210613T175242_20210613T175406_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPM1B_20210613T232312_20210613T233244_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210613T095537_20210613T100009_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210613T113440_20210613T113550_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210613T113704_20210613T113849_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210613T131400_20210613T131947_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPN1B_20210613T230341_20210613T230611_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210612T235635_20210613T000331_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T124524_20210613T125339_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T144923_20210613T145407_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T162607_20210613T163607_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T171241_20210613T171622_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T180717_20210613T181505_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T194742_20210613T195529_C001	Loss of Echo	The tracking echo is missing for one or more records
CS_OFFL_SIR_NOPR1B_20210613T201905_20210613T202015_C001	Loss of Echo	The tracking echo is missing for one or more records

# **5. NOP Level 2 Data Quality Check**

# **5.1 L2 Product Format Check**

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

Number of products with errors:

0

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.

Wind Model File Usage: This file is currently not included in all L2 products.

Number of products with errors:

# **5.4 L2 Auxiliary Correction Error Check**

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

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:

SCHTL ST. UNDERLEGATION TRADET 2014 (0011112004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the Deal Dynamic Torrapping (1)         SCHTL ST. UNDERLEGATION TRADET 2014 (0011112004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the Deal Dynamic Torrapping (1)         SCHTL ST. UNDERLEGATION TRADET 2014 (0011112004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the Deal Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORRATION TORES 2014 (0011112004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the Deal Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORRATION TORES 2014 (0011112004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the DEAL Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORRATION TORES 2014 (00111112004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the DEAL Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORRATION TORES 2014 (001111111004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the DEAL Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORRATION TORES 2014 (001111111004) CONTRACTOR       Main Dynamic Torrapping (1)       The air and the DEAL Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORES 2015 (1)       Main Dynamic Torrapping (1)       Main Dynamic Torrapping (1)       The air and the DEAL Dynamic Torrapping (1)         ACHL ST. AND PLANDET TORES 2015 (1)       Main Dynamic Torrapping (1)       Main Dynamic Torrapping (1)       The Dain Torrapping (1)         AC	Product	Test Failed	Description
Quint Control       Part Parties Transmission         Quint Control       2000 Topolity 1000000000000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20210613T050702_20210613T050746_C001	Mean Dynamic Topography (1)	
Curring Control Current Control Contrel Contro Contrece Control Control Control Control Control Control	CS_OFFL_SIR_NOPM_2_20210613T150647_20210613T153405_C001	Mean Dynamic Topography (1)	
Quint_SCURDPLZAL 0010000000000000000000000000000000000	CS_OFFL_SIR_NOPM_2_20210613T232312_20210613T233244_C001	Mean Dynamic Topography (1)	
Curr Lear Unit Cubrant (Lear Using Lear Usi	CS_OFFL_SIR_NOPN_2_20210613T004044_20210613T004239_C001	Mean Dynamic Topography (1)	
Super-Samponic Call         Tapparaby (1)         Tapparaby (1)         Tapparaby (1)         Tapparaby (1)           S. OFF, Sam NOPN, 2, 207 0831108364, 2021051004107, CO20         Mean Dystems Tapparaby (1)	CS_OFFL_SIR_NOPN_2_20210613T004927_20210613T005407_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
as unit a set Young 2 advision above         March 2 a	CS_OFFL_SIR_NOPN_2_20210613T013105_20210613T013459_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
2.971_SRC. XOPN_2_202106131034686_XOP 0031003002_0001         Tooggapy (1)         Tooggapy (2)           32_0F1_SRC_XOPN_2_20210613103468_20210613102261_0001         Mann Starbing (1), Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do the Xolin Dymmin: Tooggapy (2), Cold Col, 1) and the KSS height cold Chin (1) do	CS_OFFL_SIR_NOPN_2_20210613T053954_20210613T054109_C001	Mean Dynamic Topography (1)	
Sty OFR_SR_NOPK_2.2021001370764-120100137072661_2001       Texpagely (1) Tradi Genomic Coloni       Texpagely (1) Tradi Genomic Coloni       Texpagely (1) Tradi Genomic Coloni         Sty OFR_SR_NOPK_2.202100137086582_02106137109205_CO01       Mem See Surger (1) Mem Dynamic Tepogephy (1)       There is an error white MS heigh (dollar) (1) and the Mem Dynamic Tepogephy (1)         Sty OFR_SR_NOPK_2.20210013700405_202100137104000_CO01       Mem Dynamic Tepogephy (1)       There is an error white MS heigh (dollar) (1) and the Mem Dynamic Tepogephy (1)         Sty OFR_SR_NOPK_2.202100137104005_202100137104000_CO01       Mem Dynamic Tepogephy (1)       There is an error white MS heigh (dollar) (1) and the Mem Dynamic Tepogephy (1)         Sty OFR_SR_NOPK_2.202100137103005_2021001371104005_20210010371104005_2021001371104005_2021001371104005_20210013	CS_OFFL_SIR_NOPN_2_20210613T054848_20210613T055003_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Structure         Topography (1)         Topography (1)         Topography (1)         Topography (1)         Topography (1)           SS_OFF_SR_NOPA_2.2010013700409_X210013700400_C001         Mono Bio Subtract (1) Mean Dynamic Topography (1)         There is a nerror with the MSS begit (addumt 1) on one or more iscards           SS_OFF_SR_NOPA_2.2010013700409_X210013700400_C001         Mean Dynamic Topography (1)         There is a nerror with the MSS begit (addumt 1), the Mean Dynamic Topography (1)           SS_OFF_SR_NOPA_2.20100137104010_X2100137104000_C001         Mean Dynamic Topography (1)         There is a nerror with the MSS begit (addumt 1), the Mean Dynamic Topography (1)           SS_OFF_SR_NOPA_2.20100137104010_X2100137104100_C001         Mean Sea Suttact (1), Mean Dynamic Topography (1)         There is a nerror with the MSS begit (addumt 1), the Mean Dynamic Topography (1)           SS_OFF_SR_NOPA_2.202100137104058_202106137104100_C001         Mean Sea Suttact (1), Mean Dynamic Topography (1)         There is a nerror with the MSS begit (addumt 1) and the Mean Dynamic Topography (1)           SS_OFF_SR_NOPA_2.202100137104062_202106137104062_C001         Mean Dynamic Topography (1)         There is a nerror with the MSS begit (addumt 1) and the Mean Dynamic Topography (1)           SS_OFF_SR_NOPA_2.202100137113047_202106137113047_C001         Mean Dynamic Topography (1)         There is a nerror with the MSD Dynamic Topography (1)           SS_OFF_SR_NOPA_2.202100137113047_202106137130487_C001         Mean Dynamic Topography (1)         There is a nerror with the MSD Dynamic Topograp	CS_OFFL_SIR_NOPN_2_20210613T072541_20210613T072851_C001	Topography (1), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
So DPTL SM, NOPN 2, 20210813104084, 20210813108500, 2001       Mean Dynamic Topography legit (solution 1) for one or more necodes         SS, DPTL SM, NOPN, 2, 20210813106683, 202108137108030, 2001       Mean Dynamic Topography legit (solution 1) and the Total Geocentric Cean Title (solution 1) for one or more necodds         SS, DPTL SIR, NOPN, 2, 202108137104038, 202108137104038, 2001       Mean Dynamic Topography legit (solution 1) for one or more necodds         SS, DPTL SIR, NOPN, 2, 202108137104038, 2021081371104038, 2001       Mean Dynamic Topography legit (solution 1) for one or more necodds         SS, DPTL SIR, NOPN, 2, 2021081371104038, 2021081371104038, 2001       Mean Dynamic Topography legit (solution 1) for one or more necodds         SS, DPTL SIR, NOPN, 2, 2021081371104038, 2021081371104038, 2001       Mean Dynamic Topography legit (solution 1) for one or more necodds         SS, DPTL SIR, NOPN, 2, 202108137113400, 202108137113890, 2001       Total Geocentric Doean Title (SOT)       Total Geocentric Doean Title (SOT)         SS, DPTL SIR, NOPN, 2, 202108137113504, 202108137113890, 2001       Mean Dynamic Topography legit (solution 1) for one or more necodds         SS, DPTL SIR, NOPN, 2, 20210813714600, 202108137116955, 2001       Mean Dynamic Topography (1)       There is a nort with the Mean Dynamic Topography height for one or more necodds         SS, DPTL SIR, NOPN, 2, 202108137146407, 202108137114692, 202108137146407, 2021081371146535, 2001<	CS_OFFL_SIR_NOPN_2_20210613T085959_20210613T090237_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Back Control         State S	CS_OFFL_SIR_NOPN_2_20210613T090445_20210613T091015_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
SS, OFFL, SIR, NOPN 2, 202106131103018, 202108131100009, 2001       Tooography (f) Total Geoentric Cean       Tooography heght claution 11 and the Total Geoentric Cean         SS, OFFL, SIR, NOPN 2, 202106131103018, 202108131104156, 2001       Mean See Sutice (f), Mean Dynamic Topography (f)       There is an entry with the MSS height (claution f) and the Mean Dynamic Topography heght (actuation 1) for one or more records         SS, OFFL, SIR, NOPN 2, 202106131104058, 202108131105038, 2001       Mean See Sutice (f), Mean Dynamic Topography heght (claution f) and the Mean Dynamic Topog	CS_OFFL_SIR_NOPN_2_20210613T094938_20210613T095009_C001	Mean Dynamic Topography (1)	
Schult Sin NDPN 2 202100131103019 20210013110408       Color 101101010110110110110110110110110110110	CS_OFFL_SIR_NOPN_2_20210613T095537_20210613T100009_C001	Topography (1), Total Geocentric Ocean	Topography height (solution 1) and the Total Geocentric Ocean Tide
Bits         Dynamic Topography (1)         more records           SS_OFFL_SIR_NOPN_2_20210613T113400_20210613T113550_0001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613T113400_20210613T1131640_0001         Total Geocentric Ocean Tide (GOT)         There is an error with the Maan Dynamic Topography height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613T131640_20210613T131947_0001         Mean Dynamic Topography (1)         There is an error with the Maan Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613T140050_20210613T140950_20210613T1409513_0001         Mean Dynamic Topography (1)         There is an error with the Maan Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613T140950_20210613T1409513_0001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the Maan Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613T140950_20210613T1409513_0001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           SS_OFFL_SIR_NOPN_2_20210613T165041_20210613T140952_0001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           SS_OFFL_SIR_NOPN_2_20210613T165041_20210613T165091_00011         Mean Sea Surface (1), Mean Dynamic Topography height for one or more records	CS_OFFL_SIR_NOPN_2_20210613T103919_20210613T104156_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Sp. DFL_SIR_NOPK_2_20210613111364Q_20210613111364Q_2001         Topography (1)         Topography height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613113704_20210613113549_C001         Total Geocentric Ocean Tide (GOT)         There is an error with the Total Geocentric Ocean Tide (GOT)           SS_OFFL_SIR_NOPN_2_20210613113640_202106131135635_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613114660_202106131145635_C001         Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613114660_202106131146913_C001         Mean Sea Surface (1). Mean Dynamic Topography (1)         There is an error with the Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613114660_202106131145832_C001         Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_202106131145632_C001         Mean Sea Surface (1). Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_2021061311465641_202106131145591_C001         Mean Sea Surface (1). Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_202106131190414_202106131146591_C001         Mean Sea Surface (1). Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_202106131190412_02106131190538_C001 <td< td=""><td>CS_OFFL_SIR_NOPN_2_20210613T104858_20210613T105038_C001</td><td>Mean Dynamic Topography (1)</td><td></td></td<>	CS_OFFL_SIR_NOPN_2_20210613T104858_20210613T105038_C001	Mean Dynamic Topography (1)	
St. DFL_SIR_NOPN_2_20210613T113404_20210613T13947_001       Total Gebbarnit Ocean 184 (601)       GOT) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T131600_20210613T135835_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height for one or more records         SS_OFFL_SIR_NOPN_2_20210613T135646_20210613T135835_C001       Mean Dynamic Topography (1)       There is an error with the Mean Dynamic Topography height for one or more records         SS_OFFL_SIR_NOPN_2_20210613T140650_20210613T140913_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)         SS_OFFL_SIR_NOPN_2_20210613T145607_20210613T145922_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one rore records         SS_OFFL_SIR_NOPN_2_20210613T17622_20210613T171967_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 (1)         SS_OFFL_SIR_NOPN_2_20210613T185641_20210613T195931_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 (1)         SS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_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 (1)         S	CS_OFFL_SIR_NOPN_2_20210613T113440_20210613T113550_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
St. OFFL_SIR_NOPN_2_20210613113640_20210613113647_0001         Interest is an error with the Mean Dynamic Topography height for one or more records           SS_OFFL_SIR_NOPN_2_20210613T140650_20210613T140913_C001         Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) or one or more records           SS_OFFL_SIR_NOPN_2_20210613T140650_20210613T145832_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613T145407_20210613T145822_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613T171622_20210613T1957_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 (1)         There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)           SS_OFFL_SIR_NOPN_2_20210613T196541_20210613T190538_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)           SS_OFFL_SIR_NOPN_2_20210613T194522_20210613T194742_C001         Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613T204318_20210613T202426_C001         Mean Sea Surface (1), Mea	CS_OFFL_SIR_NOPN_2_20210613T113704_20210613T113849_C001	Total Geocentric Ocean Tide (GOT)	There is an error with the Total Geocentric Ocean Tide height (solution 1: GOT) for one or more records
Sort L Sirk NOPN 2 20210613T135645 20210613T135645 2001       Mean Dynamic Topography (1)       more records         So. OFFL_SIR_NOPN_2_20210613T140650_20210613T140913_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         So. OFFL_SIR_NOPN_2_20210613T145607_20210613T145822_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic         SS_OFFL_SIR_NOPN_2_20210613T145642_20210613T145822_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic         SS_OFFL_SIR_NOPN_2_20210613T145541_20210613T1455901_C001       Mean Sea Surface (1), Mean Dynamic       Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T204426       Mean Sea Surface (1), Mean Dynamic       There is an error with the MSS height (solution 1) and the Mean Dynamic         SS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426       Mean	CS_OFFL_SIR_NOPN_2_20210613T131400_20210613T131947_C001	Mean Dynamic Topography (1)	
SS_OFFL_SIR_NOPN_2_20210613T140630_20210613T140682_20001       Mean Dynamic Topography (1)       Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T145407_20210613T145882_C001       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         SS_OFFL_SIR_NOPN_2_20210613T145541_20210613T171957_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T185541_20210613T185901_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204428_C001       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         SS_OFFL_SIR_NOPN_2_20210613T22021 20210613T220212 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	CS_OFFL_SIR_NOPN_2_20210613T135646_20210613T135835_C001	Mean Dynamic Topography (1)	
NOFFL_SIR_NOPN_2_20210613T174540/_20210613T1745822_0001         Mean Dynamic Topography (1)         more records           SS_OFFL_SIR_NOPN_2_20210613T171622_20210613T171957_C001         Mean Sea Surface (1), Mean Dynamic Topography (1)         There is an error with the MSS height (solution 1) for one or more records           SS_OFFL_SIR_NOPN_2_20210613T185541_20210613T185901_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           SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_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           SS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_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           SS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426_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)           SS_OFFL_SIR_NOPN_2_20210613T204318_20210613T20426_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 (1)           SS_OFFL_SIR_NOPN_2_20210613T203041_20210613T2030611_C0001         Mean Sea Surface (1), Mean Dynamic Topograph	CS_OFFL_SIR_NOPN_2_20210613T140650_20210613T140913_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
SS_OFFL_SIR_NOPN_2_202106131171622_202106131171957_0001       Topography (1)       Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPN_2_20210613T185541_20210613T185901_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         SS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001       Mean Dynamic Topography (1)       There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)         SS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_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         SS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426_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)         SS_OFFL_SIR_NOPN_2_20210613T22021_20210613T22221_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)         SS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_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)         SS_OFFL_SIR_NOPN_2_20210613T230641_20210613T230611_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_NOPN_2_20210613T145407_20210613T145822_C001	Mean Dynamic Topography (1)	
Topography (1)Topography height (solution 1) for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_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) for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T22021_20210613T222212_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)SS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)SS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)SS_OFFL_SIR_NOPN_2_20210613T235635_20210613T000331_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recordsSS_OFFL_SIR_NOPR_2_20210613T01300_20210613T013001_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) and the Mean Dynamic Topography (1)SS_OFFL_SIR_NOPR_2_20210613T01300_2020613T0130031_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recordsMean Sea Surfac	CS_OFFL_SIR_NOPN_2_20210613T171622_20210613T171957_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Mean Dynamic Topography (1)more recordsDS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_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) for one or more recordsDS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426_C001Mean 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 recordsDS_OFFL_SIR_NOPN_2_20210613T22021_20210613T22021_20210613T222212_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) for one or more recordsDS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_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) for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_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) for one or more recordsSS_OFFL_SIR_NOPR_2_20210612T235635_20210613T000331_C001Mean Sea Surface (1), Mean Dynamic Topography (1)There is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1)SS_OFFL_SIR_NOPR_2_20210613T012800_20210613T0130031_C001Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric OceaThere is an error with the MSS height (solution 1) and the Mean Dynamic Topography (1), Total Geocentric OceaSS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013001_C001Mean Sea Surface (1), Mean	CS_OFFL_SIR_NOPN_2_20210613T185541_20210613T185901_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
SS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194627_202106131194742_C001Topography (1)Topography height (solution 1) for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426_C001Mean Dynamic Topography (1)There is an error with the Mean Dynamic Topography height for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T222021_20210613T222212_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) for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_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) for one or more recordsSS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_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) for one or more recordsSS_OFFL_SIR_NOPR_2_20210613T235853_20210613T000331_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) for one or more recordsSS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recordsSS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more recordsSS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_NOPN_2_20210613T190414_20210613T190539_C001	Mean Dynamic Topography (1)	
Mean Dynamic Topography (1)       more records         SS_OFFL_SIR_NOPN_2_20210613T222021_20210613T222212_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)         SS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_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)         SS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_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)         SS_OFFL_SIR_NOPN_2_20210612T235635_20210613T000331_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records         SS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001       Mean Sea Surface (1), Mean Dynamic Topography height (solution 1) for one or more records    <	CS_OFFL_SIR_NOPN_2_20210613T194627_20210613T194742_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
LS_OFFL_SIR_NOPN_2_202106131222021_202106131222021_202106131222021_202106131222021_202106131222021_202106131222021_202106131222021_202106131222021_202106131222021_20011Topography (1)Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_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) for one or more recordsCS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_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) for one or more recordsCS_OFFL_SIR_NOPR_2_20210612T235635_20210613T000331_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) for one or more recordsCS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric OceanThere is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) for one or more records	CS_OFFL_SIR_NOPN_2_20210613T204318_20210613T204426_C001	Mean Dynamic Topography (1)	
CS_OFFL_SIR_NOPN_2_202106131230341_202106131230611_C001Topography (1)Topography height (solution 1) for one or more recordsCS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_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) for one or more recordsCS_OFFL_SIR_NOPR_2_20210612T235635_20210613T000331_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) for one or more recordsCS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric OceanThere is an error with the MSS height (solution 1), the Mean Dynamic Topography height (solution 1) for one or more records	CS_OFFL_SIR_NOPN_2_20210613T222021_20210613T222212_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
S_OFFL_SIR_NOPN_2_202106131235853_202106141000019_C001       Topography (1)       Topography height (solution 1) for one or more records         CS_OFFL_SIR_NOPR_2_20210612T235635_20210613T000331_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_NOPR_2_20210613T012800_20210613T013021_C001       Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean       There is an error with the MSS height (solution 1), the Mean Dynamic Topography (1), Total Geocentric Ocean	CS_OFFL_SIR_NOPN_2_20210613T230341_20210613T230611_C001		There is an error with the MSS height (solution 1) and the Mean Dynamic Topography height (solution 1) for one or more records
Topography (1) CS_OFFL_SIR_NOPR_2_20210613T012800_20210613T013021_C001 Topography (1) Topography (1) Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocean Topography (solution 1) and the tidal corrections for one or more records	CS_OFFL_SIR_NOPN_2_20210613T235853_20210614T000019_C001		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_20210613T012800_20210613T013021_C001 Topography (1), Total Geocentric Ocean Topography (solution 1) and the tidal corrections for one or more records	CS_OFFL_SIR_NOPR_2_20210612T235635_20210613T000331_C001		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_20210613T012800_20210613T013021_C001	Topography (1), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records

CS_OFFL_SIR_NOPR_2_20210613T013459_20210613T014017_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_20210613T050746_20210613T050945_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_20210613T094817_20210613T094938_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_20210613T112757_20210613T113032_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_20210613T114156_20210613T114311_C001	Mean Sea Surface (1), Mean Dynamic Topography (1), Total Geocentric Ocear Tide (GOT), Total Geocentric Ocean	There is an error with the MSS height (solution 1), the Mean Dynamic Topography (solution 1) and the tidal corrections for one or more records
CS_OFFL_SIR_NOPR_2_20210613T144923_20210613T145407_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_20210613T162607_20210613T163607_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_20210613T180717_20210613T181505_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_20210613T194742_20210613T195529_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_20210613T212656_20210613T213403_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_20210613T230611_20210613T231333_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

# 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:

1

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210613T014158_20210613T014953_C001	Power scaling error	There is an error in the scaling of the L2 waveform for one or more records

# 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.

74

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPM_2_20210613T002131_20210613T002414_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_20210613T002553_20210613T003952_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_20210613T004239_20210613T004739_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_20210613T005536_20210613T012800_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_20210613T033331_20210613T035845_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_20210613T040109_20210613T040612_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_20210613T041340_20210613T044728_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_20210613T050046_20210613T050629_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_20210613T051300_20210613T052003_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_20210613T053257_20210613T053739_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_20210613T054109_20210613T054645_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_20210613T055335_20210613T062651_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_20210613T063933_20210613T064049_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_20210613T065431_20210613T065801_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_20210613T065915_20210613T071621_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_20210613T072032_20210613T072541_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_20210613T073210_20210613T080817_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_20210613T083017_20210613T083438_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_20210613T083533_20210613T085311_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_20210613T090242_20210613T090445_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_20210613T091216_20210613T092806_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_20210613T092902_20210613T093107_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_20210613T093347_20210613T094817_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_20210613T100051_20210613T101845_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_20210613T102147_20210613T103349_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_20210613T104156_20210613T104356_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_20210613T104506_20210613T104858_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_20210613T105107_20210613T110617_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_20210613T110818_20210613T111741_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_20210613T113550_20210613T113704_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_20210613T114408_20210613T115701_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_20210613T121252_20210613T121503_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_20210613T122005_20210613T122801_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_20210613T123045_20210613T124524_C001	<b>C N</b>	The Ocean Altimeter Range, SSHA, SWH 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_20210613T132227_20210613T133203_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_20210613T133242_20210613T135517_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_20210613T140107_20210613T140650_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_20210613T141038_20210613T143448_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_20210613T143841_20210613T144333_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_20210613T150027_20210613T150312_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_20210613T150647_20210613T153405_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_20210613T154046_20210613T154518_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_20210613T154927_20210613T161637_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_20210613T164034_20210613T171241_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_20210613T171957_20210613T172532_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_20210613T172832_20210613T173318_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_20210613T180428_20210613T180652_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_20210613T181915_20210613T185229_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_20210613T185901_20210613T190414_C001		The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPM_2_20210613T190813_20210613T192559_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_20210613T193445_20210613T193553_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_20210613T195649_20210613T201905_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_20210613T202015_20210613T203057_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_20210613T203919_20210613T204318_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_20210613T204802_20210613T211421_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_20210613T212320_20210613T212545_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_20210613T213403_20210613T214838_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_20210613T215319_20210613T221031_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_20210613T221242_20210613T221801_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_20210613T222853_20210613T224140_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_20210613T224353_20210613T230057_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_20210613T232312_20210613T233244_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_20210613T233321_20210613T233339_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_20210613T233519_20210613T234924_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_20210613T235208_20210613T235713_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_20210613T235737_20210613T235853_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_20210613T052003_20210613T052337_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_20210613T203254_20210613T203604_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_20210613T231935_20210613T232312_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_NOPR_2_20210613T063854_20210613T063933_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_NOPR_2_20210613T085311_20210613T085959_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_NOPR_2_20210613T100009_20210613T100051_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_NOPR_2_20210613T114338_20210613T114408_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_NOPR_2_20210613T181645_20210613T181749_C001	OCOG Altimeter Range Quality, OCOG Backscatter Quality	The OCOG Altimeter Range and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (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.

88

#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_NOPN_2_20210613T004044_20210613T004239_C001	Laitimeter Rande and Backscatter Ullality	The Ocean Altimeter Range, SSHA, SWH 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_20210613T004927_20210613T005407_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_20210613T013105_20210613T013459_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_20210613T014953_20210613T015101_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_20210613T032352_20210613T032436_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_20210613T035937_20210613T040109_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_20210613T040947_20210613T041122_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_20210613T044728_20210613T044908_C001	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, The OCOG Range and Backscatter Quality Flags have been set for one CE OFFL SID NODN 2 20210612T044047 20210612T046054 C004

CS_OFFL_SIR_NOPN_2_20210613T044947_20210613T045054_C001	OCOG Backscatter Quality	or more records.
CS_OFFL_SIR_NOPN_2_20210613T052003_20210613T052337_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_20210613T053954_20210613T054109_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_20210613T054848_20210613T055003_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_20210613T064049_20210613T064159_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_20210613T064606_20210613T064629_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T064656_20210613T064731_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T065801_20210613T065915_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T083438_20210613T083533_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T085959_20210613T090237_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T090445_20210613T091015_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T095537_20210613T100009_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T111741_20210613T111919_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T113440_20210613T113550_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T115701_20210613T120304_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T121643_20210613T122005_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T122924_20210613T122949_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T125456_20210613T125850_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T131400_20210613T131947_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T132159_20210613T132227_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T135646_20210613T135835_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T140650_20210613T140913_C001	Ocean Altimeter Range, SSHA, SWH and Backscatter Quality PLRM, OCOG Altimeter Range and Backscatter Quality PLRM
CS_OFFL_SIR_NOPN_2_20210613T143634_20210613T143841_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T145407_20210613T145822_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T145904_20210613T150017_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.
CS_OFFL_SIR_NOPN_2_20210613T163607_20210613T164034_C001	OCOG Altimeter Range Quality PLRM, The OCOG Range and Backscatter Quality Flags have been set for one OCOG Backscatter Quality or more records.

CS_OFFL_SIR_NOPN_2_20210613T171622_20210613T171957_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_20210613T174304_20210613T174418_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_20210613T175441_20210613T175633_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_20210613T181505_20210613T181645_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_20210613T185541_20210613T185901_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_20210613T192559_20210613T192916_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_20210613T203254_20210613T203604_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_20210613T230341_20210613T230611_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_20210613T231935_20210613T232312_C001	OCOG Altimeter Range Quality PLRM,	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
CS_OFFL_SIR_NOPN_2_20210613T235022_20210613T235208_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_20210612T235635_20210613T000331_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_20210613T001706_20210613T002131_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_20210613T002414_20210613T002553_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_20210613T012800_20210613T013021_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_20210613T013459_20210613T014017_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_20210613T032107_20210613T032312_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_20210613T035845_20210613T035937_C001	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_20210613T041122_20210613T041340_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_20210613T053739_20210613T053954_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_20210613T055003_20210613T055335_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_20210613T064205_20210613T064523_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_20210613T071621_20210613T071909_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_20210613T072851_20210613T073210_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_20210613T085311_20210613T085959_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_20210613T094817_20210613T094938_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_20210613T103349_20210613T103919_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_20210613T112757_20210613T113032_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_20210613T113849_20210613T114007_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_20210613T114156_20210613T114311_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_20210613T114338_20210613T114408_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_20210613T124524_20210613T125339_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_20210613T131947_20210613T132159_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_20210613T140913_20210613T141038_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_20210613T144753_20210613T144849_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_20210613T144923_20210613T145407_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_20210613T153405_20210613T153618_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_20210613T162607_20210613T163607_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_20210613T171241_20210613T171622_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_20210613T172648_20210613T172832_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_20210613T173318_20210613T173653_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_20210613T180015_20210613T180326_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_20210613T180717_20210613T181505_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_20210613T181645_20210613T181749_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_20210613T185229_20210613T185541_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_20210613T194407_20210613T194627_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_20210613T194742_20210613T195529_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_20210613T195540_20210613T195649_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_20210613T203057_20210613T203254_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_20210613T204426_20210613T204802_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_20210613T212656_20210613T213403_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_20210613T222212_20210613T222853_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_20210613T224140_20210613T224353_C001	OCOG Altimeter Range Quality PLRM, OCOG Backscatter Quality	The OCOG Range and Backscatter Quality Flags have been set for one or more records.
	Ocean Altimeter Range, SSHA, SWH	The Ocean Altimeter Range, SSHA, SWH and Backscatter Quality Flags

	and Backscatter (
CS_OFFL_SIR_NOPR_2_20210613T230611_20210613T231333_C001	Altimeter Range a

CS\_OFFL\_SIR\_NOPR\_2\_20210613T233244\_20210613T233321\_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 beer set for one or more records.
<b>577</b>	The OCOG Range and Backscatter Quality Flags have been set for one or more records.

# L2 Quality Flags (1 Hz & 1Hz PLRM)

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

> 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.

Number of products with errors:

125

60

# 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	133	133	3	130	0
SIR_NOPR1B	87	87	0	87	0
SIR_NOPN1B	92	92	1	91	0
SIR_NOPM_2	133	133	83	47	3
SIR_NOPR_2	87	87	17	68	2
SIR_NOPN_2	92	92	35	55	2

# 7.1 QCC Errors

Number of QCC reports with errors:

14

#### Total number of occurrences of each error Product Type EOVSNCDF MPHSVSNCDF RLOBOPNCDF RLOBOPNCDF RL RL -----SIR\_NOPM\_2 3 0 3 0 0 0 SIR\_NOPN\_2 2 2 0 0 0 0 SIR\_NOPR\_2 1 1 1 1

<b>Test Description Key:</b>	Test Description Key:		
Abbreviation	Test name	Details	
EOVSNCDF	EnumOrbitVectorSourceNetCDF	Orbit vector source should match one of the allowed enumeration values - NetCDF	
MPHSVSNCDF	MPH_State_Vector_Source_NetCDF	State_Vector_Source mismatch	
RLOBOPNCDF	RangeLatitudeOrBlankOP_7NetCDF	Latitude should be between -90E7 and 90E7 - NetCDF	
RL	RangeLatitude_7	Latitude should be between -90E7 and 90E7	
RLOBOPNCDF	RangeLongitudeOrBlankOP_7NetCDF	Longitude should be between -180E7 and 180E7 - NetCDF	
RL	RangeLongitude_7	Longitude should be between -180E7 and 180E7	

# 7.2 QCC Warnings

#### Number of QCC reports with warnings

		Total number of occurrences of each warning					
Product Type	BCSHNCDF	IOHHMOOR	MVIOEPFDNCDF	MVIOEPNCDF	MVIONCDF	RBSZOPOEPFDNCDF	RBSZOPOEPFDPLRMNC
SIR_NOPM1B	130	0	0	0	0	0	0
SIR_NOPM_2	0	0	42	42	0	34	0
SIR_NOPN1B	89	0	0	0	0	0	0
SIR_NOPN_2	0	0	6	30	3	24	28
SIR_NOPR1B	82	0	0	0	0	0	0
SIR_NOPR_2	0	1	33	45	2	32	27

Product Type	RBSZOPOEPNCDF	RLPTONCDF	RNELPOTONCDF	RPEPOPFDLRMNCDF	RPEPOPFDPLRMSARNC	RPEPOPFDPLRMSINNCD	RPEPOPFDSARNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	29	0	0	35	0	0	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	18	15	0	0	0	24	0
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	17	7	1	0	47	0	52

Product Type	RPEPOPFDSINNCDF	RPEPOPLRMNCDF	RPEPOPSARNCDF	RPEPOPSINNCDF	RSSBCONCDF	RSSHAOFDNCDF	RSSHAOFDPLRMNCDF
SIR_NOPM1B	0	0	0	0	0	0	0
SIR_NOPM_2	0	29	0	0	7	24	0
SIR_NOPN1B	0	0	0	0	0	0	0
SIR_NOPN_2	31	0	0	27	24	36	46
SIR_NOPR1B	0	0	0	0	0	0	0
SIR_NOPR_2	0	0	48	0	2	57	37

Product Type	RSSHAONCDF	RSWHOEPFDNCDF	RSWHOEPFDPLRMNCDF	RSWHOEPNCDF	SPHRTASCNSNCDF	SOOHHIFHD	SCSTODHRNCDF
SIR_NOPM1B	0	0	0	0	1	0	0
SIR_NOPM_2	4	36	0	2	1	0	0
SIR_NOPN1B	0	0	0	0	0	0	42
SIR_NOPN_2	28	25	25	10	0	1	0
SIR_NOPR1B	0	0	0	0	0	0	87
SIR_NOPR_2	8	42	45	2	0	2	0

Test 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				
	RangeBackscatterSigmaZeroOPOceanExcludingPolarNetCDF	The backscatter sigma zero should be between 700 and 7500 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees				
RLPTONCDF	RangeLongPeriodTideOceanNetCDF	The Long period tide height should be between -50mm and 50mm (or missing) for surface type = ocean - NetCDF				

RangeNELPOceanTideOceanNetCDF	The Non-equilibrium long period ocean loading tide height should be between -40mm and 40mm (or missing) for surface type = ocean
RangePeakinessExcludingPolarOPFD2LRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPFD2PLRMSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPFD2PLRMSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPFD2SARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPFD2SINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPLRMNetCDF	The Peakiness should be between 0 and 6400 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPSARNetCDF	The Peakiness should be between 0 and 15000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangePeakinessExcludingPolarOPSINNetCDF	The Peakiness should be between 0 and 90000 (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangeSeaStateBiasCorrectionOceanNetCDF	The sea state bias correction should be between -500mm and 0mm (or missing) for surface type = ocean
RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RangeSeaSurfaceHeightAnomalyOceanNetCDF	The sea surface height anomaly should be between -3000mm and 3000mm (or missing) for surface type = ocean
RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
RangeSignificantWaveHeightOceanExcludingPolarNetCDF	The significant wave height should be between 0mm and 15000mm (or missing) for surface type = ocean for latitudes between -70 and 70 degrees
SPH_Rel_Time_ASC_Node_Start_v2_NetCDF	Rel_Time_ASC_Node_Start mismatch (DBL ASC, rounded up to 0.1)
SameOrOneHigher1HzIndexFor20HzData	The 1 Hz index of a 20 Hz sample should be the same or 1 higher than its previous sample
SequenceCounterStepTODHRNetCDF	The sequence counter should be modulo 4 higher with regard to the previous sequence counter
	RangePeakinessExcludingPolarOPSARNetCDF RangePeakinessExcludingPolarOPSINNetCDF RangeSeaStateBiasCorrectionOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanFD3NetCDF RangeSeaSurfaceHeightAnomalyOceanFD3PLRMNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSeaSurfaceHeightAnomalyOceanNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2NetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF RangeSignificantWaveHeightOceanExcludingPolarFD2PLRMNetCDF SPH_Rel_Time_ASC_Node_Start_v2_NetCDF

# 7.3 Missing QCC Reports

Number of products with missing QCC reports: