

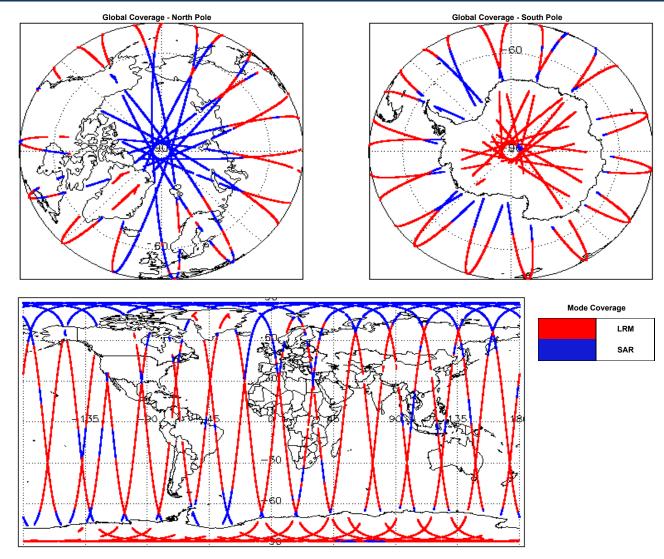
IDEAS+ Daily Report for IOP data:

<u>17/01/2017</u>

eport Production Date:	19-Jan-2017		
		Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
Processor Used.		Product Software Check	Nominal
Data Used:	Intermediate Ocean Products (IOP) L1B and L2 Science Data	Product Format Check	Nominal
Data Used.		Product Header Analysis	Nominal
		Auxiliary Data File Usage Check	Nominal
		Auxiliary Correction Error Check	See Section 5.4
		Measurement Confidence Data Check	See Section 4.6, 5.6, 5.7 and 5.8

17-Jan-2017	None
18-Jan-2017	Nothing planned





3. Instrument Configuration

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

SIRAL instrument(s) in use:

SIRAL - A

4. IOP Level 1B Data Quality Check

4.1 L1B Product Format Check

Each product, retrieved and unpacked from the science server, is checked to ensure it consists of both an XML header file (.HDR) and a binary product file (.DBL). Number of products with errors: 0

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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.

4.3 L1B Auxilary Data File Usage Check		
Each product is checked for missing Data Set Descriptors with respect to a p	re-determined baseline and also to check the va	lidity of Auxiliary Data Files is correct.
Number of products with errors: 0		
4.4 L1B Auxiliary Correction Error Check		
CryoSat L1B data includes a correction error flag (field 60) for each measure	ment record. The bit value of this flag indicates a	any problems when set.
lumber of products with errors: 0		
1.5 L1B Measurement Confidence Data Check		
	- manufacture the bit value of this flag i	
ryoSat L1B data includes a measurement confidence flag (field 12) for each umber of products with errors: 0	Theasurement record. The bit value of this hag i	indicates any problems when set.
.6 L1B Waveform Group Data Check		
ryoSat L1B data includes a waveform data flag (field 65) for each measurer	ment record. The bit value of this flag indicates a	ny problems when set.
oss of Echo Flag: This flag is currently set for products over land, but this i	is to be expected.	
umber of products with errors: 10		
roduct	Test Failed	Description
S_OFFL_SIR_IOP_1B_20170117T012507_20170117T013254_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T025219_20170117T025412_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T063857_20170117T065011_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T065214_20170117T070738_B001 S_OFFL_SIR_IOP_1B_20170117T074043_20170117T075223_B001	Loss of Echo Loss of Echo	The tracking echo is missing for one or more records The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T075632_20170117T075717_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T191425_20170117T192340_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T193519_20170117T193600_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T195156_20170117T200151_B001	Loss of Echo	The tracking echo is missing for one or more records
S_OFFL_SIR_IOP_1B_20170117T211302_20170117T212006_B001	Loss of Echo	The tracking echo is missing for one or more records
5. 1	OP Level 2 Data Quality Che	eck
5.1 L2 Product Format Check		
ach product rotrigued and uppeaked from the pointee convertige heaked to	a oncurs it consists of both on XML booder file ()	HDR) and a binary product file (DRI)
ach product, retrieved and unpacked from the science server, is checked to lumber of products with errors: 0	ensure it consists of both an XML header file (.h	HDR) and a binary product file (.DBL).
	ensure it consists of both an XML header file (.h	HDR) and a binary product file (.DBL).
umber of products with errors: 0		
umber of products with errors: 0 0 0		
umber of products with errors: 0 5.2 L2 Product Header Analysis or all products, a series of pre-defined checks are performed on the MPH and umber of products with errors: 0		
umber of products with errors: 0 5.2 L2 Product Header Analysis or all products, a series of pre-defined checks are performed on the MPH are umber of products with errors: 0 5.3 L2 Auxiliary Data File Usage Check	nd SPH in order to identify any inconsistencies a	nd/or errors raised by the ground-segment processing chain.
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Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records CS_OFFL_SIR_IOP_2_20170117T080243_20170117T080942_B001 Equilibrium Long Period Ocean Tide Total Geocentric Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records

CS_OFFL_SIR_IOP_2__20170117T130819_20170117T131026_B001

CS_OFFL_SIR_IOP_220170117T133909_20170117T134032_B001	Mean Sea Surface (2)	There is an error with the MSS height (solution 2) for one or more records
CS_OFFL_SIR_IOP_220170117T144514_20170117T144539_B001	For Four Period Ocean Tide (FES), Non-	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T145015_20170117T145201_B001	Fouilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T153751_20170117T161046_B001	Fouilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T161449_20170117T162726_B001	Fouilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T171734_20170117T173514_B001		There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records
CS_OFFL_SIR_IOP_220170117T182608_20170117T184045_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T191218_20170117T191418_B001	Total Geocentric Ocean Tide (FES), Non- Equilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T191425_20170117T192340_B001	Fouilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records
CS_OFFL_SIR_IOP_220170117T193426_20170117T193515_B001	Fouilibrium Long Period Ocean Tide	There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records

5.5 L2 Measurement Confidence Data Check

CS_OFFL_SIR_IOP_2__20170117T152646_20170117T153146_B001

CryoSat L2 data includes a measurement confidence flag (field 14) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

5.6 L2 Range Measurement Check

CryoSat L2 data includes an Ocean (field 25) and Ice (field 30) Range Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are two common status flags 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.

Ocean Range Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Range Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 37

Number of products with errors:

Product Test Failed Description The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T003737_20170117T004324_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T012507_20170117T013254_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T021642_20170117T022155_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS OFFL SIR IOP 2 20170117T035500 20170117T035642 B001 Ice Range Averaging Status ecords The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T035649_20170117T040101_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T044247_20170117T044315_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS OFFL SIR IOP 2 20170117T053016 20170117T053541 B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T053547_20170117T053553_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T053553_20170117T053559_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS OFFL SIR IOP 2 20170117T053559 20170117T053818 B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T062135_20170117T062237_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T070943_20170117T071438_B001 Ice Range Averaging Status ecord The Ice Range Averaging Status Flag has been set for one or more CS OFFL SIR IOP 2 20170117T071445 20170117T071452 B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T072254_20170117T072328_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T084914_20170117T085352_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T085355_20170117T085408_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T085414_20170117T085423_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS OFFL SIR IOP 2 20170117T085429 20170117T085545 B001 Ice Range Averaging Status ecords The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T102921_20170117T103305_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T103312_20170117T103322_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS OFFL SIR IOP 2 20170117T103327 20170117T103653 B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T112703_20170117T112934_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T120726_20170117T121219_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T121226_20170117T121555_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more CS_OFFL_SIR_IOP_2__20170117T134722_20170117T135249_B001 Ice Range Averaging Status records The Ice Range Averaging Status Flag has been set for one or more Ice Range Averaging Status CS OFFL SIR IOP 2 20170117T144514 20170117T144539 B001 records

Ice Range Averaging Status

The Ice Range Averaging Status Flag has been set for one or more records

CS_OFFL_SIR_IOP_220170117T170858_20170117T171051_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T180258_20170117T180545_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T184753_20170117T185003_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T185050_20170117T185505_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T194158_20170117T194240_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T202546_20170117T203406_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T220442_20170117T220642_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T220725_20170117T221229_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T234406_20170117T234449_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T234649_20170117T235250_B001	Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.

5.7 L2 SWH and Backscatter Measurement Check

CryoSat L2 data includes a SWH Averaging Status flag (field 49) and an Ocean (field 55) and Ice (field 61) Backscatter Averaging Status flag for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are three common status flags 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.

SWH Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ocean Backscatter Averaging Status Flag: This flag is currently set for products over land and sea ice, but this is to be expected.

Ice Backscatter Averaging Status Flag: This flag is currently set for products over land, but this is to be expected. 32

Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220170117T003737_20170117T004324_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T012507_20170117T013254_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T021642_20170117T022155_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T035500_20170117T035642_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T035649_20170117T040101_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T044247_20170117T044315_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T053016_20170117T053541_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T053553_20170117T053559_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T053559_20170117T053818_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T062135_20170117T062237_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T070943_20170117T071438_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T085355_20170117T085408_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T085414_20170117T085423_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T085429_20170117T085545_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T102921_20170117T103305_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T103312_20170117T103322_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T103327_20170117T103653_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T120726_20170117T121219_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T121226_20170117T121555_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T134722_20170117T135249_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T144514_20170117T144539_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T152646_20170117T153146_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T170858_20170117T171051_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T180258_20170117T180545_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T184753_20170117T185003_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T185050_20170117T185505_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T194158_20170117T194240_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T202546_20170117T203406_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T220442_20170117T220642_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T220725_20170117T221229_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T234406_20170117T234449_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220170117T234649_20170117T235250_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.

5.8 L2 Ocean Retracking Quality Check

CryoSat L2 data includes an ocean retracking quality flag (field 19) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

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

Number of products with errors:

6. IOP QCC Report Analysis

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

Product type	Nb. Products	Nb. QCC Reports	Nb. Valid	Nb. Warnings	Nb. Errors		
SIR_IOP_1B	284	284	284	0	0		
SIR_IOP_2	280	280	280	0	0		
6.1 QCC Errors							
Number of QCC reports with end	Number of QCC reports with errors: 0						
6.2 QCC Warnings							
Number of QCC reports with war	nings 0						
6.3 Missing QCC Report	ts						
Number of products with missing							
	g 400.0po.to. 0						