

## IDEAS+ Daily Report for IOP data:

## <u>13/10/2016</u>



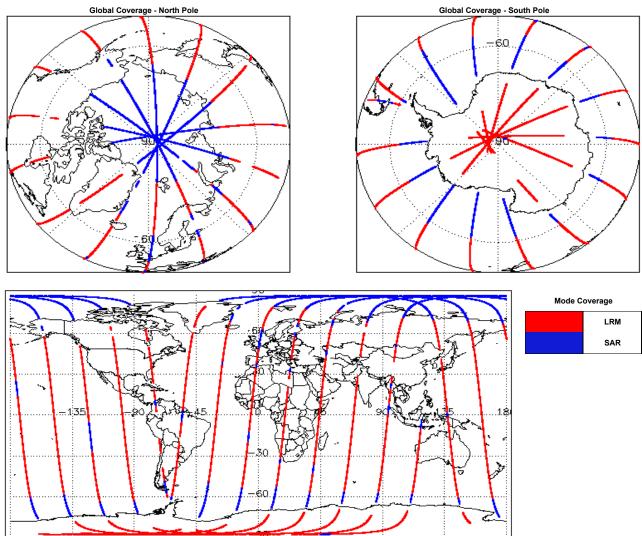
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Report Production Date:	17-Oct-2016	Check	Status
		Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ocean Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Data Used:	Intermediate Ocean Products (IOP) L1B and L2 Science Data	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 4.6, 5.6, 5.7 and 5.8

1. Overview

### Mission / Instrument News

12-Oct-2016IOP data missing from 0000 - 1200 due to missing Auxiliary files at the time of processing13-Oct-2016IOP data missing from 0000 - 1200 due to missing Auxiliary files at the time of processing14-Oct-2016Nothing 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

## 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:

### 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.

Number of products with errors:

0

Each product is checked for missing Data Set Descriptors with respect to a pr					
	e-determined baseline and also to check t	he validity of Auxiliary Data Files is correct.			
lumber of products with errors: 0					
.4 L1B Auxiliary Correction Error Check					
ryoSat L1B data includes a correction error flag (field 60) for each measurer	nent record. The bit value of this flag indica	ates any problems when set.			
Number of products with errors: 0					
.5 L1B Measurement Confidence Data Check					
ryoSat L1B data includes a measurement confidence flag (field 12) for each	measurement record. The bit value of this	flag indicates any problems when set.			
umber of products with errors: 0					
.6 L1B Waveform Group Data Check					
ryoSat L1B data includes a waveform data flag (field 65) for each measurem	pent record. The bit value of this flag indica	ates any problems when set			
oss of Echo Flag: This flag is currently set for products over land, but this is	-				
umber of products with errors: 10					
roduct	Test Failed	Description			
S_OFFL_SIR_IOP_1B_20161013T131831_20161013T132541_B001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T150546_20161013T150648_B001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T163345_20161013T164122_B001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T164432_20161013T164447_B001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T181316_20161013T182140_B001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T195133_20161013T200021_B001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T203724_20161013T204147_B001 S_OFFL_SIR_IOP_1B_20161013T214406_20161013T215100_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_201610131221524_201610131222224_8001	Loss of Echo	The tracking echo is missing for one or more records			
S_OFFL_SIR_IOP_1B_20161013T225141_20161013T230243_B001	Loss of Echo	The tracking echo is missing for one or more records			
	OP Level 2 Data Quality (				
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	d SPH in order to identify any inconsistent	cies and/or errors raised by the ground-segment processing chain.			
umber of products with errors: 0					
.3 L2 Auxiliary Data File Usage Check					
	e-determined baseline and also to check t	he validity of Auxiliary Data Files is correct.			
ach product is checked for missing Data Set Descriptors with respect to a pr					
ind Model File Usage: This file is currently not included in all L2 products.					
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0					
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         .4 L2 Auxiliary Correction Error Check	ecked for the default error value (32767).				
Vind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         6.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are churrently, there are two common auxiliary correction errors raised in the	e Level 2 products which are expected of	due to surface type. All common flags are summarised in the list below,			
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         .4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are churrently, there are two common auxiliary correction errors raised in the blowed by a table highlighting any additional issues which may arise from the set of the s	e Level 2 products which are expected or on this test.				
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         .4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are churrently, there are two common auxiliary correction errors raised in the illowed by a table highlighting any additional issues which may arise for a state Bias Error: The error value is currently set for products over land a state Bias Error.	e Level 2 products which are expected or rom this test. and sea ice, but this is to be expected.	due to surface type. All common flags are summarised in the list below,			
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         .4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are churrently, there are two common auxiliary correction errors raised in the illowed by a table highlighting any additional issues which may arise fine a State Bias Error: The error value is currently set for products over land a timetric Wind Speed Error: The error value is currently set for products over land a state of the set of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state of the error value is currently set for products over land a state ov	e Level 2 products which are expected or rom this test. and sea ice, but this is to be expected.	due to surface type. All common flags are summarised in the list below,			
ind Model File Usage: This file is currently not included in all L2 products. umber of products with errors: 0 A L2 Auxiliary Correction Error Check or all products, the auxiliary corrections within the Geophysical Group are ch urrently, there are two common auxiliary correction errors raised in the llowed by a table highlighting any additional issues which may arise for the as State Bias Error: The error value is currently set for products over land a timetric Wind Speed Error: The error value is currently set for products over umber of products with errors: 8	e Level 2 products which are expected or rom this test. and sea ice, but this is to be expected.	due to surface type. All common flags are summarised in the list below, cted.			
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         .4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are churrently, there are two common auxiliary correction errors raised in the illowed by a table highlighting any additional issues which may arise fit as State Bias Error: The error value is currently set for products over land a titmetric Wind Speed Error: The error value is currently set for products over land a titmetric Wind Speed Error: The error value is currently set for products over land a state of products with errors:	e Level 2 products which are expected of rom this test. and sea ice, but this is to be expected. ver land and sea ice, but this is to be expect	due to surface type. All common flags are summarised in the list below, cted. Description There is an error with the Total Geocentric Ocean Tide height (solution			
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         .4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are churrently, there are two common auxiliary correction errors raised in the blowed by a table highlighting any additional issues which may arise for as State Bias Error: The error value is currently set for products over land a timetric Wind Speed Error: The error value is currently set for products over land a timetric Wind Speed Error: The error value is currently set for products over land a state Group of products with errors:         8         roduct         S_OFFL_SIR_IOP_2_20161013T120719_20161013T120858_B001	Level 2 products which are expected of rom this test.     and sea ice, but this is to be expected.     ver land and sea ice, but this is to be expected.     Test Failed     Total Geocentric Ocean Tide (FES)     Equilibrium Long Period Ocean Tide     Total Geocentric Ocean Tide (GOT)	due to surface type. All common flags are summarised in the list below,         cted.         Description         , Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution fES) and the Non-equilibrium Long Period Ocean Tide height for one or more records         ), Non- Non- E         ), Non- E         ), Non- E         ), There is an error with the Total Geocentric Ocean Tide height for one or more records         ), There is an error with the Total Geocentric Ocean Tide height (solution none records)         ), Non- E         Tide height for one or more records			
Ind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         3.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are characterized by a table highlighting any additional issues which may arise file         ea State Bias Error: The error value is currently set for products over land a trimetric Wind Speed Error: The error value is currently set for products over land a trimetric Wind Speed Error: The error value is currently set for products over land a speed for products with errors:         8         roduct         S_OFFL_SIR_IOP_2_20161013T120719_20161013T120858_B001         S_OFFL_SIR_IOP_2_20161013T131831_20161013T132541_B001	and sea ice, but this is to be expected.         rer land and sea ice, but this is to be expected.         rer land and sea ice, but this is to be expected.         Test Failed         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide (GOT)         Total Geocentric Ocean Tide (FES)         Total Geocentric Ocean Tide (FES)	due to surface type. All common flags are summarised in the list below,         cted.         Description         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height for one c more records         ), Non- GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records         There is an error with the Total Geocentric Ocean Tide height (solution Tide height for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records			
Vind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         6.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are characterized by a table highlighting any additional issues which may arise file         ea State Bias Error: The error value is currently set for products over land a         Itimetric Wind Speed Error: The error value is currently set for products over land a         roduct         S_OFFL_SIR_IOP_2_20161013T120719_20161013T120858_B001         S_OFFL_SIR_IOP_2_20161013T131831_20161013T132541_B001         S_OFFL_SIR_IOP_2_20161013T145653_20161013T150545_B001	and sea ice, but this is to be expected.         rer land and sea ice, but this is to be expected.         rer land and sea ice, but this is to be expected.         Test Failed         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide (GOT)         Total Geocentric Ocean Tide (GOT)         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide         Total Geocentric Ocean Tide (FES)	due to surface type. All common flags are summarised in the list below,         cted.			
Find Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         3.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are chartered by a table highlighting any additional issues which may arise file         ea State Bias Error: The error value is currently set for products over land a litimetric Wind Speed Error: The error value is currently set for products over land a litimetric Wind Speed Error: The error value is currently set for products over land a litimetric Sing IOP_2_20161013T120719_20161013T120858_B001         S_OFFL_SIR_IOP_2_20161013T131831_20161013T132541_B001         S_OFFL_SIR_IOP_2_20161013T145653_20161013T150545_B001         S_OFFL_SIR_IOP_2_20161013T150546_20161013T150648_B001	a Level 2 products which are expected of rom this test.         and sea ice, but this is to be expected.         ver land and sea ice, but this is to be expected.         Test Failed         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide (FES)	due to surface type. All common flags are summarised in the list below,         cted.         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution or records         Non- Non- RoT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution GOT and solution 2: FES) for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solution GOT and solution 2: FES) for one or more records         Non- FES and the Non-equilibrium Long Period Ocean Tide height (solution GOT and solution 2: FES) for one or more records         Non- FES and the Non-equilibrium Long Period Ocean Tide height (solution GOT and solution 2: FES) for one or more records			
5.4 L2 Auxiliary Correction Error Check For all products, the auxiliary corrections within the Geophysical Group are ch Currently, there are two common auxiliary correction errors raised in the ollowed by a table highlighting any additional issues which may arise for Sea State Bias Error: The error value is currently set for products over land a Altimetric Wind Speed Error: The error value is currently set for products over	a Level 2 products which are expected of rom this test.         and sea ice, but this is to be expected.         ver land and sea ice, but this is to be expected.         Test Failed         Total Geocentric Ocean Tide (FES)         Equilibrium Long Period Ocean Tide (FES)         Total Geocentric Ocean Tide (FES)	due to surface type. All common flags are summarised in the list below,         cted.         Description         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior FES) and the Non-equilibrium Long Period Ocean Tide height (solutior or eccords         Non- GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior FES) and the Non-equilibrium Long Period Ocean Tide height for one more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior GOT and solution 2: FES) for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior GOT and solution 2: FES) for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior GOT and solution 2: FES) for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior GOT and solution 2: FES) for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior GOT and solution 2: FES) for one or more records         Non- FES) and the Non-equilibrium Long Period Ocean Tide height (solutior GOT and solution 2: FES) and the Non-equilibrium Long Period Ocean Tide height (solutior Non- ESS) and the Non-equilibrium Long Period Ocean Tide height (solutior Tide height for one			

 CS\_OFFL\_SIR\_IOP\_2\_20161013T213254\_20161013T213858\_B001
 Equilibrium Long Period Ocean Tide (FES), Non-Equilibrium Long Period Ocean Tide
 FES) and the Non-equilibrium Long Period Ocean Tide height for one or more records

Total Geocentric Ocean Tide (FES)

CS\_OFFL\_SIR\_IOP\_2\_\_20161013T223422\_20161013T225025\_B001

There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records

### 5.5 L2 Measurement Confidence Data Check

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.

Number of products with errors: 13

Test Failed	Description
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
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Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
Ice Range Averaging Status	The Ice Range Averaging Status Flag has been set for one or more records.
	Ice Range Averaging Status

### 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. 13

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#### Number of products with errors:

Product	Test Failed	Description
CS_OFFL_SIR_IOP_220161013T122547_20161013T123051_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T123051_20161013T123057_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T123115_20161013T123230_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T140554_20161013T141007_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T141029_20161013T141217_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T154357_20161013T154921_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T154927_20161013T155253_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T172352_20161013T173200_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T190329_20161013T190847_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T204445_20161013T204747_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T222500_20161013T222653_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T222925_20161013T223139_B001	Ice Backscatter Averaging Status	The Ice Backscatter Averaging Status Flag has been set for one or more records.
CS_OFFL_SIR_IOP_220161013T231854_20161013T232259_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.

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.