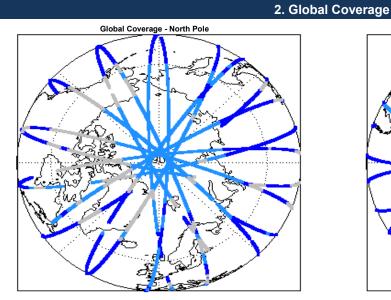


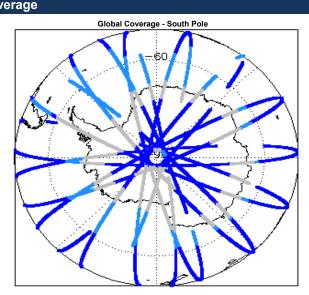
# IDEAS+ Daily Report for OFFLINE data:

<u>14/12/2015</u>

Report Production Date:	13-Jan-2016	Check	Status
		Server check: science-pds.cryosat.esa.int	Nominal
Processor Used:	CryoSat Ice Processor	Server check: calval-pds.cryosat.esa.int	Nominal
		Product Software Check	Nominal
Data Used:	L1B and L2 OFFLINE Data	Product Format Check	Nominal
		Product Header Analysis	Nominal
•		Star Tracker Usage Check	Nominal
		L1B Calibration Usage Check	Nominal
		L1B & L2 Auxiliary Data File Usage Check	Nominal
		L1B & L2 Auxiliary Correction Error Check	Nominal
		L1B & L2 Measurement Confidence Data Check	See Section 4.7 and 5.5

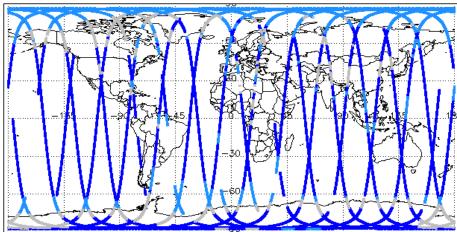
13-Dec-2015 None	7
14-Dec-2015 None	
15-Dec-2015 Nothing planned	

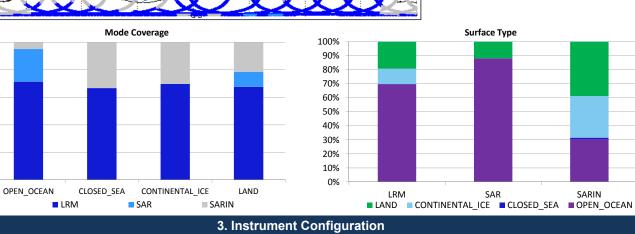




Mode Coverage (%)

LRM	70.4
SAR	18.5
SARIn	11.1





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

SIRAL instrument(s) in use: SIRAL - A

100%

80%

60%

40%

20%

0%

# 4. 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 product file (.DBL)

# Number of products with errors:

# 4.2 L1B Product Header Analysis

For all products, a series of pre-defined checks are carried out 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

# 4.3 Star Tracker Usage Check

Each product is checked in order to ensure a valid star tracker file has been used in processing

Number of products with errors:

## 4.4 L1B Calibration Usage Check

Each product is checked in order to ensure that the necessary calibration files have been used in processing

Number of products with errors:

# 4.5 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. Number of products with errors: 0

Number of products with errors.

#### 4.6 L1B Auxiliary Correction Error Check

CryoSat L1B data includes a correction error flag (field 54) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

#### 4.7 L1B Measurement Confidence Data Check

CryoSat L1B data includes a measurement confidence flag (field 18) for each measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 1B products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Block Degraded Flag: This flag is currently set for a number of individual records generally at the start or end of products (all modes), but this is to be expected.

Phase Perturbation Flag: This flag is currently set for all L1B SARIn products, indicating that the ADC correction application is deactivated, but this is in line with the current configuration. Number of products with errors: 1

Test Failed

Product

CS\_OFFL\_SIR\_LRM\_1B\_20151214T053436\_20151214T060254\_C001

Echo error, TRK echo error

Description The tracking echo has returned an error and the Rx1 Echo Error flag is set, indicating a degraded echo

# 5. 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 product file (.DBL).

Number of products with errors:

#### 5.2 L2 Product Header Analysis

For all products, a series of pre-defined checks are carried out 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.

#### 5.4 L2 Auxiliary Correction Error Check

CryoSat L2 data includes a correction error flag (field 30) for each measurement record. The bit value of this flag indicates any problems when set.

Number of products with errors:

#### 5.5 L2 Measurement Quality Flag Check

CryoSat L2 data includes a quality flag (field 50) for each 20-Hz measurement record. The bit value of this flag indicates any problems when set.

Currently, there are several common error flags raised in the Level 2 products which are expected due to operational mode or surface type. All common flags are summarised in the list below, followed by a table of any additional issues arising from this test.

Freeboard error: This flag is correctly set in all L2 SAR products that are not discriminated as sea-ice, and for which freeboard cannot be calculated.

Height and Backscatter errors: These flags are currently set for products over land, but this is to be expected. Retracker 1 Height and Backscatter error flags are also set for products over sea-ice, but this is to be expected.

Peakiness error: This flag is currently set for products over sea-ice, but this is to be expected.

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SARIN X-Track Angle Error: This flag is set when the difference between the computed surface elevation and the DEM is >50 m. The DEM is only available over Greenland and Antarctica and as a result this flag is set for L2 SARIn products in all other locations as expected.

SSHA interpolation error: This flag is currently set for a number of SAR products occurring at surface type boundaries, but this is to be expected.

Number of products with errors:

Product	Test Failed	Description
CS OFFE SIR FRM 2 201512131234913 201512141002246 C001		There is a height and backscatter error for Retracker 2 for one or more records
CS OFFE SIR FRM 2 201512141004134 201512141011306 C001		There is a height and backscatter error for Retracker 2 for one or more records

CS OFFL SIR LRM 2 20151214T013118 20151214T014009 C001 CS OFFL SIR LRM 2 20151214T014450 20151214T020219 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T023524\_20151214T024404\_C001 CS OFFL SIR LRM 2 20151214T031447 20151214T032510 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T032650\_20151214T034100\_C001 CS OFFL SIR LRM 2 20151214T040317 20151214T040943 C001 CS OFFL SIR LRM 2 20151214T041435 20151214T041601 C001 CS OFFL SIR LRM 2 20151214T041604 20151214T041902 C001 CS OFFL SIR LRM 2 20151214T042145 20151214T042733 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T045758\_20151214T051957\_C001 CS OFFL SIR LRM 2 20151214T053436 20151214T060254 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T063624\_20151214T065932\_C001 CS OFFL SIR LRM 2 20151214T070718 20151214T071044 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T071440\_20151214T074700\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T081149\_20151214T083015\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T084150\_20151214T084949\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T085425\_20151214T092656\_C001 CS OFFL SIR LRM 2 20151214T095243 20151214T095336 C001 CS OFFL SIR LRM 2 20151214T100215 20151214T101641 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T103309\_20151214T105042\_C001 CS OFFL SIR LRM 2 20151214T110202 20151214T110712 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T112020\_20151214T112226\_C001 CS OFFL SIR LRM 2 20151214T113033 20151214T114341 C001 CS OFFL SIR LRM 2 20151214T114529 20151214T115558 C001 CS OFFL SIR LRM 2 20151214T121235 20151214T124548 C001 CS OFFL SIR LRM 2 20151214T130130 20151214T133312 C001 CS OFFL SIR LRM 2 20151214T134250 20151214T134445 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T134652\_20151214T134951\_C001 CS OFFL SIR LRM 2 20151214T135145 20151214T142010 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T144145\_20151214T145749\_C001 CS OFFL SIR LRM 2 20151214T152124 20151214T152404 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T153117\_20151214T154537\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T154717\_20151214T155000\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T162451\_20151214T162954\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T163238\_20151214T165620\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T165915\_20151214T170800\_C001 CS OFFL SIR LRM 2 20151214T171024 20151214T173202 C001 CS OFFL SIR LRM 2 20151214T180714 20151214T183447 C001 CS OFFL SIR LRM 2 20151214T184941 20151214T191909 C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T194240\_20151214T201320\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T202917\_20151214T203417\_C001 CS\_OFFL\_SIR\_LRM\_2\_\_20151214T203722\_20151214T204458\_C001 CS OFFL SIR LRM 2 20151214T211917 20151214T213011 C001

Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Surface Model Unavailable Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Surface Model Unavailable Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2)

There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records No DEM or Slope Model was used for the location of one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records No DEM or Slope Model was used for the location of one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more ecords There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records No DEM or Slope Model was used for the location of one or more records. No DEM or Slope Model was used for the location of one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records No DEM or Slope Model was used for the location of one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records No DEM or Slope Model was used for the location of one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records There is a height and backscatter error for Retracker 2 for one or more records There is a height and backscatter error for Retracker 2 for one or more ecords There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records

There is a height and backscatter error for Retracker 2 for one or more records

CS\_OFFL\_SIR\_LRM\_2\_\_20151214T221118\_20151214T222631\_C001 CS OFFL SIR LRM 2 20151214T225822 20151214T230754 C001 CS OFFL SIR LRM 2 20151214T231040 20151214T233212 C001 CS OFFL SIR SIN 2 20151214T003438 20151214T003554 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T011718\_20151214T011823\_C001 CS OFFL SIR SIN 2 20151214T020237 20151214T020412 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T021002\_20151214T021004\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T025522\_20151214T025737\_C001 CS\_OFFL\_SIR\_SIN\_2\_20151214T034151\_20151214T034339\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T034859\_20151214T034905\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T043100\_20151214T043611\_C001 CS OFFL SIR SIN 2 20151214T052758 20151214T052804 C001 CS\_OFFL\_SIR\_SIN\_2\_20151214T053054\_20151214T053315\_C001 CS OFFL SIR SIN 2 20151214T070025 20151214T070150 C001 CS OFFL SIR SIN 2 20151214T071044 20151214T071206 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T075909\_20151214T075945\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T084026\_20151214T084150\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T084949\_20151214T085101\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T101957\_20151214T102123\_C001 CS OFFL SIR SIN 2 20151214T102638 20151214T102941 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T115955\_20151214T120302\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T120539\_20151214T121046\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T125641\_20151214T130025\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T134016\_20151214T134250\_C001 CS\_OFFL\_SIR\_SIN\_2\_20151214T134446\_20151214T134651\_C001 CS OFFL SIR SIN 2 20151214T134951 20151214T135112 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T143928\_20151214T144145\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T151513\_20151214T152124\_C001 CS\_OFFL\_SIR\_SIN\_2\_20151214T152404\_20151214T152423\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T152851\_20151214T153032\_C001 CS OFFL SIR SIN 2 20151214T161455 20151214T161707 C001 CS OFFL SIR SIN 2 20151214T165735 20151214T165915 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T170801\_20151214T170958\_C001 CS OFFL SIR SIN 2 20151214T175414 20151214T175858 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T183712\_20151214T183844\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T184018\_20151214T184131\_C001 CS OFFL SIR SIN 2 20151214T184553 20151214T184830 C001 CS OFFL SIR SIN 2 20151214T210732 20151214T210811 C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T215635\_20151214T215949\_C001 CS\_OFFL\_SIR\_SIN\_2\_20151214T220503\_20151214T220619\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T233352\_20151214T233812\_C001 CS\_OFFL\_SIR\_SIN\_2\_\_20151214T234408\_20151214T234523\_C001

Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Backscatter Error (Retracker 2) Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error Retracker 2) SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error SARIn X-track Angle Error

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