

IDEAS+ Daily Report for OFFLINE data:

<u>03/01/2016</u>

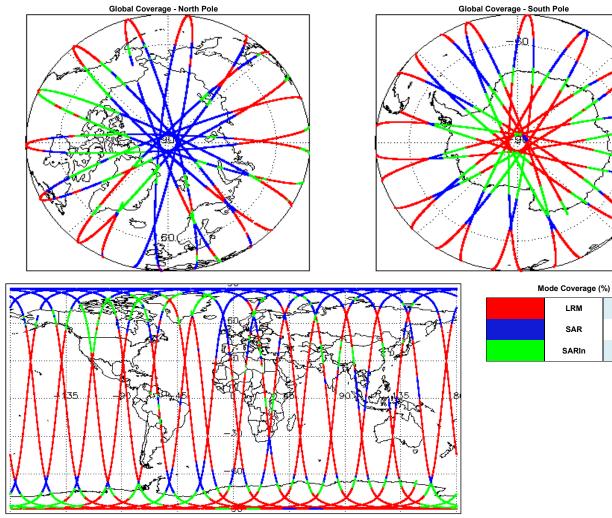
21.1

12.0

0.0

| 1. Overview | | | | | | | |
|---------------------------|--------------|-------------------------|--|-------------------------|--|--|--|
| | | | | | | | |
| Report Production Date: | | 02-Feb-2016 | Check | Status | | | |
| | | | Server check: science-pds.cryosat.esa.int | Nominal | | | |
| Processor Used | lead. | CryoSat Ice Processor | Server check: calval-pds.cryosat.esa.int | Nominal | | | |
| FIOCESSOI C | Joeu. | Cryobal ice i rocessoi | Product Software Check | Nominal | | | |
| Data Use | lsed: | L1B and L2 OFFLINE Data | Product Format Check | Nominal | | | |
| Data Use | | | Product Header Analysis | See Section 4.2 and 5.2 | | | |
| - | | | 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 | | | |
| | | | | | | | |
| Mission / Instrument News | | | | | | | |
| 02-Jan-2016 Non | 6 None | | | | | | |
| 03-Jan-2016 Non | e | | | | | | |
| 04-Jan-2016 Noth | hing planned | | | | | | |

2. Global Coverage



Mode Coverage Surface Type 100% 100% 90% 80% 80% 70% 60% 60% 50% 40% 40% 30% 20% 20% 10% 0% 0% OPEN_OCEAN CLOSED_SEA CONTINENTAL_ICE LAND LRM SAR SARIN LAND CONTINENTAL_ICE CLOSED_SEA OPEN_OCEAN SARIN LRM SAR 3. Instrument Configuration

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

SIRAL instrument(s) in use: SIRAL - A

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:

| SPH in order to identify any inconsistencies and/or errors raised by the ground-segment processing chain. |
|---|
| |
| Test Failed |
| Percentage of processing errors detected greater than minimum acceptable threshold. |
| Percentage of processing errors detected greater than minimum acceptable threshold. |
| Percentage of processing errors detected greater than minimum acceptable threshold. |
| d in processing. |
| |
| ve been used in processing. |
| |
| |

Number of products with errors: 0

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:

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: 2

| Product | Test Failed |
|---|---|
| CS_OFFL_SIR_SAR_220160103T010447_20160103T010449_C001 | Percentage of processing errors detected greater than minimum acceptable threshold. |
| CS_OFFL_SIR_SAR_220160103T010632_20160103T010633_C001 | Percentage of processing errors detected greater than minimum acceptable threshold. |

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.
Number of products with errors:
0

Number of products with errors.

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.

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.

| Product | Test Failed | Description |
|--|---|---|
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFEL_SIR_LRM_2_20160103T002943_20160103T004717_C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS OFFL SIR LRM 2 20160103T010818 20160103T012028 C001 | Height Error (Retracker 2), Backscatter | There is a height and backscatter error for Retracker 2 for one or more |
| CS OFFL SIR LRM 2 20160103T012232 20160103T013747 C001 | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) | records |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| | Height Error (Retracker 2), Height Error (Retracker 3), 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 |
| CS_OFFL_SIR_LRM_220160103T033109_20160103T040441_C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFEL_SIR_LRM_220160103T051018_20160103T053634_C001 | Height Error (Retracker 2), Backscatter | There is a height and backscatter error for Retracker 2 for one or more |
| CS_OFEL_SIR_LRM_2_20160103T053637_20160103T053851_C001 | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) Height Error (Retracker 2), Height Error | records There is a height and backscatter error for Retracker 2 and a height error |
| CS_OFFL_SIR_LRM_220160103T061037_20160103T063510_C001 | (Retracker 3), Backscatter Error (Retracker 2) | for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160103T064254_20160103T064621_C001 | Surface Model Unavailable | No DEM or Slope Model was used for the location of one or more records |
| CS_OFFL_SIR_LRM_220160103T065053_20160103T072405_C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS OFFL SIR LRM 2 20160103T073708 20160103T073842 C001 | Height Error (Retracker 2), Backscatter | There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) Height Error (Retracker 2), Height Error | records There is a height and backscatter error for Retracker 2 and a height error |
| CS_OFFL_SIR_LRM_220160103T074941_20160103T075636_C001 | (Retracker 3), Backscatter Error (Retracker 2) | for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160103T083001_20160103T090258_C001 | Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error | There is a height and backscatter error for Retracker 2 and a height error for Retracker 3 for one or more records |
| | (Retracker 2) Height Error (Retracker 2), Height Error | |
| CS_OFFL_SIR_LRM_220160103T093103_20160103T095215_C001 | (Retracker 3), 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 |
| CS_OFFL_SIR_LRM_220160103T095705_20160103T100213_C001 | Surface Model Unavailable | No DEM or Slope Model was used for the location of one or more records |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFEL_SIR_LRM_2_20160103T110648_20160103T112944_C001 | Height Error (Retracker 2), Backscatter | There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) Surface Model Unavailable | records No DEM or Slope Model was used for the location of one or more records |
| | Height Error (Retracker 2), Height Error | There is a height and backscatter error for Retracker 2 and a height error |
| CS_OFFL_SIR_LRM_220160103T114829_20160103T120547_C001 | (Retracker 3), Backscatter Error (Retracker 2) | for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160103T121015_20160103T121839_C001 | Height Error (Retracker 2), Height Error (Retracker 3), 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 |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFFL_SIR_LRM_220160103T132725_20160103T134244_C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFFL_SIR_LRM_220160103T141956_20160103T142053_C001 | Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error | There is a height and backscatter error for Retracker 2 and a height error |
| | (Retracker 2) Height Error (Retracker 2), Height Error | for Retracker 3 for one or more records |
| CS_OFFL_SIR_LRM_220160103T142100_20160103T143310_C001 | (Retracker 3), 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 |
| | Surface Model Unavailable | No DEM or Slope Model was used for the location of one or more records |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFFL_SIR_LRM_220160103T155914_20160103T163159_C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFFL_SIR_LRM_220160103T163505_20160103T163713_C001 | Surface Model Unavailable | No DEM or Slope Model was used for the location of one or more records |
| CS_OFFL_SIR_LRM_220160103T163740_20160103T164316_C001 | Surface Model Unavailable | No DEM or Slope Model was used for the location of one or more records |
| | Height Error (Retracker 2), Backscatter | There is a height and backscatter error for Retracker 2 for one or more |
| CS_OFEL_SIR_LRM_220160103T174237_20160103T181001_C001 | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| CS OFEL SIR LBM 2 20160103T182530 20160103T185251 C001 | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| | Error (Retracker 2) Height Error (Retracker 2), Backscatter | records There is a height and backscatter error for Retracker 2 for one or more |
| CS_0FFL_SIR_LRM_2_201601031200507_201601031200942_C001 | Error (Retracker 2) | records |
| | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS_OFFL_SIR_LRM_220160103T205545_20160103T212905_C001 | Height Error (Retracker 2), Height Error (Retracker 3), 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 |
| CS_OFFL_SIR_LRM_220160103T214518_20160103T220530_C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| CS OFFL SIR LRM 2 20160103T223356 20160103T230730 C001 | Height Error (Retracker 2), Backscatter Error (Retracker 2) | There is a height and backscatter error for Retracker 2 for one or more records |
| | Surface Model Unavailable | No DEM or Slope Model was used for the location of one or more records |
| | Height Error (Retracker 2), Height Error (Retracker 3), Backscatter Error | There is a height and backscatter error for Retracker 2 and a height error |
| | (Retracker 2) | for Retracker 3 for one or more records |

CS_OFFL_SIR_SIN_2__20160102T235918_20160103T000047_C001 CS OFFL SIR SIN 2 20160103T000909 20160103T001054 C001 CS_OFFL_SIR_SIN_2__20160103T004717_20160103T004844_C001 CS_OFFL_SIR_SIN_2__20160103T005301_20160103T005354_C001 CS OFFL SIR SIN 2 20160103T013822 20160103T014004 C001 CS_OFFL_SIR_SIN_2__20160103T014537_20160103T014544_C001 CS_OFFL_SIR_SIN_2__20160103T014707_20160103T014927_C001 CS OFFL SIR SIN 2 20160103T023056 20160103T023308 C001 CS_OFFL_SIR_SIN_2__20160103T031718_20160103T031919_C001 CS OFFL SIR SIN 2 20160103T032435 20160103T032441 C001 CS OFFL SIR SIN 2 20160103T032451 20160103T032457 C001 CS_OFFL_SIR_SIN_2__20160103T032605_20160103T033039_C001 CS OFFL SIR SIN 2 20160103T041649 20160103T041721 C001 CS_OFFL_SIR_SIN_2__20160103T045730_20160103T050002_C001 CS_OFFL_SIR_SIN_2__20160103T050333_20160103T050339_C001 CS OFFL SIR SIN 2 20160103T050349 20160103T050355 C001 CS_OFFL_SIR_SIN_2__20160103T050723_20160103T050906_C001 CS_OFFL_SIR_SIN_2__20160103T063614_20160103T063745_C001 CS_OFFL_SIR_SIN_2_20160103T064246_20160103T064253_C001 CS_OFFL_SIR_SIN_2__20160103T064621_20160103T064757_C001 CS_OFFL_SIR_SIN_2__20160103T073501_20160103T073526_C001 CS OFFL SIR SIN 2 20160103T081628 20160103T081743 C001 CS OFFL SIR SIN 2 20160103T082318 20160103T082636 C001 CS OFFL SIR SIN 2 20160103T091427 20160103T091452 C001 CS OFFL SIR SIN 2 20160103T091458 20160103T091523 C001 CS OFFL SIR SIN 2 20160103T095544 20160103T095704 C001 CS_OFFL_SIR_SIN_2__20160103T100214_20160103T100524_C001 CS_OFFL_SIR_SIN_2__20160103T113636_20160103T113916_C001 CS_OFFL_SIR_SIN_2__20160103T114117_20160103T114647_C001 CS OFFL SIR SIN 2 20160103T123205 20160103T123645 C001 CS_OFFL_SIR_SIN_2__20160103T132026_20160103T132134_C001 CS_OFFL_SIR_SIN_2__20160103T132528_20160103T132707_C001 CS OFFL SIR SIN 2 20160103T141108 20160103T141217 C001 CS_OFFL_SIR_SIN_2__20160103T141328_20160103T141502_C001 CS_OFFL_SIR_SIN_2__20160103T145318_20160103T145630_C001 CS OFFL SIR SIN 2 20160103T150430 20160103T150618 C001 CS_OFFL_SIR_SIN_2__20160103T155025_20160103T155616_C001 CS OFFL SIR SIN 2 20160103T163316 20160103T163504 C001 CS OFFL SIR SIN 2 20160103T163714 20160103T163740 C001 CS_OFFL_SIR_SIN_2__20160103T164317_20160103T164539_C001 CS_OFFL_SIR_SIN_2__20160103T172359_20160103T172417_C001 CS OFFL SIR SIN 2 20160103T172513 20160103T172546 C001 CS_OFFL_SIR_SIN_2__20160103T181245_20160103T181426_C001 CS OFFL SIR SIN 2 20160103T181534 20160103T181713 C001 CS_OFFL_SIR_SIN_2__20160103T182149_20160103T182247_C001 CS_OFFL_SIR_SIN_2__20160103T182308_20160103T182430_C001 CS OFFL SIR SIN 2 20160103T195250 20160103T195623 C001 CS_OFFL_SIR_SIN_2__20160103T200156_20160103T200312_C001 CS_OFFL_SIR_SIN_2__20160103T213206_20160103T213526_C001 CS OFFL SIR SIN 2 20160103T214039 20160103T214203 C001 CS OFFL SIR SIN 2 20160103T222246 20160103T222406 C001

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, Surface Model Unavailable 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, Surface Model Unavailable SARIn X-track Angle Error SARIn X-track Angle Error

An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode and no DEM or Slope Model was used for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records An ambiguous angle was detected for SARIn mode for one or more records

| CS_OFFL_SIR_SIN_220160103T230917_20160103T231154_C001 | ISARIN X-Track Andle Error | An ambiguous angle was detected for SARIn mode for one or more records |
|---|----------------------------|---|
| CS_OFFL_SIR_SIN_220160103T231941_20160103T232049_C001 | SARIN X-track Angle Error | An ambiguous angle was detected for SARIn mode for one or more records |
| CS_OFFL_SIR_SIN_220160103T235828_20160103T235926_C001 | ISARIN X-track Angle Error | An ambiguous angle was detected for SARIn mode for one or more records |