

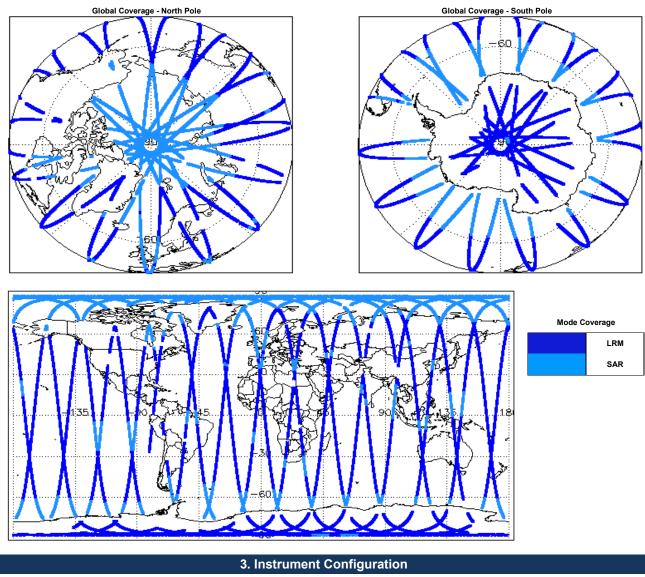
# IDEAS+ Daily Report for GOP data:

## <u>14/07/2015</u>

| Report Production Date: | 18-Aug-2015   | 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:              | Geophysical Ocean Products (GOP)<br>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 |

| 10 001 2010 | None            |
|-------------|-----------------|
| 14-Jul-2015 | None            |
| 15-Jul-2015 | Nothing planned |
|             |                 |





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

SIRAL instrument(s) in use:

SIRAL - A

## 4. GOP 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: 0

### 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. 0 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-  | e-determined baseline and also to check the va   | lidity of Auxiliary Data Files is correct.   |
| umber of products with errors: 0   |  |  |
| .4 L1B Auxiliary Correction Error Check  |  |  |
| ryoSat L1B data includes a correction error flag (field 60) for each measurem  | ent record. The bit value of this flag indicates a   | ny problems when set.  |
| umber of products with errors: 0   |  |  |
| .5 L1B Measurement Confidence Data Check   |  |  |
| ryoSat L1B data includes a measurement confidence flag (field 12) for each r   | measurement record. The bit value of this flag i   | ndicates any problems when set.  |
| lumber of products with errors: 0  |  |  |
| .6 L1B Waveform Group Data Check   |  |  |
| ryoSat L1B data includes a waveform data flag (field 65) for each measureme  | ent 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 is   | -  |  |
| umber of products with errors: 9   |  |  |
| roduct   | Test Failed  | Description  |
| S_OFFL_SIR_GOP_1B_20150714T015412_20150714T015510_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T025607_20150714T032340_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T052537_20150714T055820_B001<br>S_OFFL_SIR_GOP_1B_20150714T064028_20150714T064106_B001   | Loss of Echo<br>Loss of Echo   | The tracking echo is missing for one or more records<br>The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T064236_20150714T065008_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T084025_20150714T085453_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T102923_20150714T103856_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T103949_20150714T104132_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| S_OFFL_SIR_GOP_1B_20150714T192353_20150714T192733_B001   | Loss of Echo   | The tracking echo is missing for one or more records   |
| 5 G  | OP Level 2 Data Quality Ch   | ack  |
|  | Cr Level 2 Data Quality On   | GON  |
| 5.1 L2 Product Format Check  |  |  |
|  |  |  |
| ach product, retrieved and unpacked from the science server, is checked to e   | ensure it consists of both an XML header file (.h  | HDR) and a product file (.DBL).  |
|  | ensure it consists of both an XML header file (.h  | IDR) and a product file (.DBL).  |
| lumber of products with errors: 0  | ensure it consists of both an XML header file (.h  | IDR) and a product file (.DBL).  |
| Jumber of products with errors:     0       5.2 L2 Product Header Analysis   |  |  |
| Iumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and   |  |  |
| Each product, retrieved and unpacked from the science server, is checked to end with errors: 0   |  |  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber of products with errors:         0   |  |  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber of products with errors:         0         5.3 L2 Auxiliary Data File Usage Check  | d SPH in order to identify any inconsistencies a   | nd/or errors raised by the ground-segment processing chain.  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber 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 preserved on the method.  | d SPH in order to identify any inconsistencies a   | nd/or errors raised by the ground-segment processing chain.  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and lumber 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-         Vind Model File Usage: This file is currently not included in all L2 products.   | d SPH in order to identify any inconsistencies a   | nd/or errors raised by the ground-segment processing chain.  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber 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 previous of products with errors:         Vind Model File Usage: This file is currently not included in all L2 products.         Jumber of products with errors:       0  | d SPH in order to identify any inconsistencies a   | nd/or errors raised by the ground-segment processing chain.  |
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| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber of products with errors:         0         5.3 L2 Auxiliary Data File Usage Check         Sach product is checked for missing Data Set Descriptors with respect to a predvint with errors:         Vind Model File Usage: This file is currently not included in all L2 products.         Jumber of products with errors:       0         5.4 L2 Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are check         Corrently, there are two common auxiliary correction errors raised in the   | d SPH in order to identify any inconsistencies a<br>e-determined baseline and also to check the va<br>ecked for the default error value (32767).   | nd/or errors raised by the ground-segment processing chain.  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber 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 preserve of products with errors:         0         5.4 L2 Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the error value is currently set for products over land a set of the products over lan   | d SPH in order to identify any inconsistencies a<br>e-determined baseline and also to check the va<br>ecked for the default error value (32767).<br>I Level 2 products which are expected due to<br>om this test.<br>nd sea ice, but this is to be expected.   | nd/or errors raised by the ground-segment processing chain.  |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and Jumber 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 prestrict of products with errors:         0         5.4 L2 Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the auxiliary corrections within the Geophysical Group are check         For all products, the error value is currently set for products over land a         Autimetric Wind Speed Error: The error value is currently set for products over land a  | d SPH in order to identify any inconsistencies a<br>e-determined baseline and also to check the va<br>ecked for the default error value (32767).<br>I Level 2 products which are expected due to<br>om this test.<br>nd sea ice, but this is to be expected.   | nd/or errors raised by the ground-segment processing chain.  |
| 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         5.3 L2 Auxiliary Data File Usage Check         ach product is checked for missing Data Set Descriptors with respect to a pre-<br>Vind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         5.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are check         or all products, the auxiliary corrections within the Geophysical Group are check         or all products, the auxiliary corrections within the Geophysical Group are check         or all products, the auxiliary corrections within the Geophysical Group are check         urrently, there are two common auxiliary correction errors raised in the polowed by a table highlighting any additional issues which may arise for 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 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 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 Wind Speed Error: The error val  | d SPH in order to identify any inconsistencies a<br>e-determined baseline and also to check the va<br>ecked for the default error value (32767).<br>• Level 2 products which are expected due to<br>om this test.<br>Ind sea ice, but this is to be expected.<br>er land and sea ice, but this is to be expected.  | nd/or errors raised by the ground-segment processing chain.<br>Iidity of Auxiliary Data Files is correct.  |
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| 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<br>umber of products with errors:         0         5.3 L2 Auxiliary Data File Usage Check         ach product is checked for missing Data Set Descriptors with respect to a pre-<br>trind Model File Usage: This file is currently not included in all L2 products.         umber of products with errors:       0         5.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are che<br>urrently, there are two common auxiliary correction errors raised in the<br>polowed by a table highlighting any additional issues which may arise for<br>ea State Bias Error: The error value is currently set for products over land a<br>trimetric Wind Speed Error: The error value is currently set for products over<br>umber of products with errors:         18         roduct         S_OFFL_SIR_GOP_2_20150714T002605_20150714T002819_B001         S_OFFL_SIR_GOP_2_20150714T002942_20150714T004448_B001  | d SPH in order to identify any inconsistencies and<br>e-determined baseline and also to check the value determined baseline and sea ice, but this is to be expected.<br>Test Failed Total Geocentric Ocean Tide (FES) Total Geocentric Ocean Tide (FES), Non   | Idior errors raised by the ground-segment processing chain. Idior errors raised by the ground-segment processing chain. Idioty of Auxiliary Data Files is correct. Description Description There is an error with the Total Geocentric Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There |
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| Jumber 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 tumber of products with errors:         0         5.3 L2 Auxiliary Data File Usage Check         cach product is checked for missing Data Set Descriptors with respect to a pression of products with errors:         0         5.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are check         or all products, the auxiliary corrections within the Geophysical Group are check         currently, there are two common auxillary correction errors raised in the feather biplowed by a table highlighting any additional issues which may arise for the astrone to products with errors:         18         reduct         18         reduct         19         20 OFFL_SIR_GOP_2_20150714T002605_20150714T002819_B001         21 S_OFFL_SIR_GOP_2_20150714T002942_20150714T004448_B001         22 S_OFFL_SIR_GOP_2_20150714T015134_20150714T015355_B001         23 S_OFFL_SIR_GOP_2_20150714T015134_20150714T015355_B001   | d SPH in order to identify any inconsistencies and e-determined baseline and also to check the value determined baseline and the determine   | Ind/or errors raised by the ground-segment processing chain. Ind/or errors raised by the ground-segment processing chain. Indicipation Indicipation Indicipation Indicipation Intere is an error with the Total Geocentric Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more records There is an error with the Total Geocentric Ocean Tide height for one o more reco |
| Jumber of products with errors:       0         5.2 L2 Product Header Analysis         For all products, a series of pre-defined checks are performed on the MPH and tumber 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 prestrict of products with errors:         0         5.4 L2 Auxiliary Correction Error Check         For all products, the auxiliary corrections within the Geophysical Group are check         Corrently, there are two common auxiliary correction errors raised in the Bollowed by a table highlighting any additional issues which may arise for bollowed 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 future of products with errors:         18         Product         28_OFFL_SIR_GOP_2_20150714T002605_20150714T002819_B001         28_OFFL_SIR_GOP_2_20150714T002942_20150714T002819_B001         28_OFFL_SIR_GOP_2_20150714T015134_20150714T0024448_B001         28_OFFL_SIR_GOP_2_20150714T015134_20150714T002401_B001         28_OFFL_SIR_GOP_2_20150714T021241_20150714T002401_B001         28_OFFL_SIR_GOP_2_20150714T021241_20150714T022401_B001  | d SPH in order to identify any inconsistencies and<br>e-determined baseline and also to check the value determined baseline and the determin | Idior errors raised by the ground-segment processing chain. Idior errors raised by the ground-segment processing chain. Idioty of Auxiliary Data Files is correct. Idioty of Auxiliary Data Files is a corrowith the Total Geocentric Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height (solution FES) and the Non-equilibrium Long Period Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric Ocean Tide height for one corrow records Intere is an error with the Total Geocentric O |
| Jumber 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 Jumber of products with errors:         0         5.3 L2 Auxiliary Data File Usage Check         cach product is checked for missing Data Set Descriptors with respect to a pre-<br>Vind Model File Usage: This file is currently not included in all L2 products.         Jumber of products with errors:       0         5.4 L2 Auxiliary Correction Error Check         for all products, the auxiliary corrections within the Geophysical Group are check         Currently, there are two common auxiliary correction errors raised in the collowed by a table highlighting any additional issues which may arise for broducts over land a subter for products with errors:         18         Fonduct         20       S.OFFL_SIR_GOP_220150714T002605_20150714T002819_B001         21       S2_OFFL_SIR_GOP_220150714T002942_20150714T002819_B001         22       S2_OFFL_SIR_GOP_220150714T021241_20150714T022401_B001         23       S2_OFFL_SIR_GOP_220150714T025607_20150714T022401_B001         25       OFFL_SIR_GOP_220150714T025607_20150714T022401_B001         23       S2_OFFL_SIR_GOP_220150714T025607_20150714T022401_B001         24       S2_OFFL_SIR_GOP_220150714T025607_20150714T022401_B001   | d SPH in order to identify any inconsistencies a e-determined baseline and also to check the va e-determined baseline and searched the sequence and the sequenc    | Idily of Auxiliary Data Files is correct.  |
| 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           5.3 L2 Auxiliary Data File Usage Check           ach product is checked for missing Data Set Descriptors with respect to a prefined of products with errors:           0           5.4 L2 Auxiliary Correction Error Check           or all products, the auxiliary corrections within the Geophysical Group are checked by a table highlighting any additional issues which may arise for ea State Bias Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products are the specific set of products over land at literative Wind Speed Error: The error value is currently set for products over land at literative Wind Speed Error: The error value is currently set for products are the specific set of pro | d SPH in order to identify any inconsistencies and e-determined baseline and also to check the value acked for the default error value (32767).  | Idily of Auxiliary Data Files is correct.  |
| Jumber 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 tumber of products with errors:         0         5.3 L2 Auxiliary Data File Usage Check         cach product is checked for missing Data Set Descriptors with respect to a pression of products with errors:         0         5.4 L2 Auxiliary Correction Error Check         or all products, the auxiliary corrections within the Geophysical Group are check         currently, there are two common auxiliary correction errors raised in the Bolowed by a table highlighting any additional issues which may arise for area State Bias Error: The error value is currently set for products over land a sufficient of products with errors:         18         roduct         sc_OFFL_SIR_GOP_2_20150714T002605_20150714T002819_B001         cs_OFFL_SIR_GOP_2_20150714T002942_20150714T002819_B001         cs_OFFL_SIR_GOP_2_20150714T015134_20150714T002401_B001         cs_OFFL_SIR_GOP_2_20150714T015134_20150714T002401_B001         cs_OFFL_SIR_GOP_2_20150714T021241_20150714T022401_B001  | d SPH in order to identify any inconsistencies at<br>e-determined baseline and also to check the va<br>acked for the default error value (32767).<br>• Level 2 products which are expected due to<br>om this test.<br>Ind sea ice, but this is to be expected.<br>er land and sea ice, but this is to be expected.<br>er land and sea ice, but this is to be expected.<br>Total Geocentric Ocean Tide (FES)<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide<br>Total Geocentric Ocean Tide (FES), Non<br>Equilibrium Long Period Ocean Tide  | Idily of Auxiliary Data Files is correct.  |

| CS_OFFL_SIR_GOP_220150714T094749_20150714T095003_B001 | Total Geocentric Ocean Tide (FES), Non-<br>Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 2:<br>FES) and the Non-equilibrium Long Period Ocean Tide height for one or<br>more records |
|---|---|---|
| CS_OFFL_SIR_GOP_220150714T101224_20150714T102000_B001 | Total Geocentric Ocean Tide (FES), Non-<br>Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 2:<br>FES) and the Non-equilibrium Long Period Ocean Tide height for one or<br>more records |
| CS_OFFL_SIR_GOP_220150714T102922_20150714T103856_B001 | Total Geocentric Ocean Tide (FES), Non-<br>Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 2:<br>FES) and the Non-equilibrium Long Period Ocean Tide height for one or<br>more records |
| CS_OFFL_SIR_GOP_220150714T114339_20150714T114555_B001 | Total Geocentric Ocean Tide (FES), Non-<br>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_GOP_220150714T121158_20150714T121831_B001 | Total Geocentric Ocean Tide (FES)   | There is an error with the Total Geocentric Ocean Tide height (solution 2: FES) for one or more records   |
| CS_OFFL_SIR_GOP_220150714T152730_20150714T155301_B001 | Total Geocentric Ocean Tide (FES), Non-<br>Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 2:<br>FES) and the Non-equilibrium Long Period Ocean Tide height for one or<br>more records |
| CS_OFFL_SIR_GOP_220150714T160919_20150714T164209_B001 | Total Geocentric Ocean Tide (FES), Non-<br>Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 2:<br>FES) and the Non-equilibrium Long Period Ocean Tide height for one or<br>more records |
| CS_OFFL_SIR_GOP_220150714T193227_20150714T200356_B001 | Total Geocentric Ocean Tide (FES), Non-<br>Equilibrium Long Period Ocean Tide | There is an error with the Total Geocentric Ocean Tide height (solution 2:<br>FES) and the Non-equilibrium Long Period Ocean Tide height for one or<br>more records |
| CS_OFFL_SIR_GOP_220150714T221851_20150714T222931_B001 | Total Geocentric Ocean Tide (FES)   | 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. 0 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. 31

Number of products with errors:

| Product  | Test Failed                | Description  |
|--|----------------------------|--|
| CS_OFFL_SIR_GOP_220150714T010452_20150714T010704_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T010721_20150714T011308_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T024414_20150714T024528_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T024701_20150714T025127_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T042611_20150714T043148_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_2_20150714T060515_20150714T061027_B001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T074243_20150714T074514_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T074514_20150714T074520_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T074520_20150714T074528_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T074531_20150714T074931_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T091854_20150714T092413_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T092419_20150714T092425_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T092426_20150714T092431_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_2_20150714T092432_20150714T092634_B001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T105819_20150714T110324_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_2_20150714T110324_20150714T110330_B001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T110330_20150714T110341_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_2_20150714T110348_20150714T110503_B001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T123814_20150714T124240_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T124246_20150714T124255_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T124301_20150714T124438_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_2_20150714T141634_20150714T142154_B001 | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T142200_20150714T142524_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T155620_20150714T160431_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T173600_20150714T174120_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T191647_20150714T192019_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T205732_20150714T205925_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T210214_20150714T210400_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
| CS_OFFL_SIR_GOP_220150714T215128_20150714T215546_B001  | Ice Range Averaging Status | The Ice Range Averaging Status Flag has been set for one or more<br>records. |
|  |                            |  |

Ice Range Averaging Status

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. 24

Number of products with errors:

| Product  | Test Failed                      | Description   |
|--|----------------------------------|---|
| CS_OFFL_SIR_GOP_220150714T010452_20150714T010704_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T010721_20150714T011308_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T024414_20150714T024528_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_2_20150714T024701_20150714T025127_B001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T060515_20150714T061027_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T074243_20150714T074514_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T074531_20150714T074931_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_2_20150714T091854_20150714T092413_B001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T092419_20150714T092425_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T092432_20150714T092634_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T110330_20150714T110341_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T110348_20150714T110503_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T123814_20150714T124240_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T124301_20150714T124438_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T141634_20150714T142154_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_2_20150714T142200_20150714T142524_B001 | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T155620_20150714T160431_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T173600_20150714T174120_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T191647_20150714T192019_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T205732_20150714T205925_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T210214_20150714T210400_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T215128_20150714T215546_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_220150714T223617_20150714T223840_B001  | Ice Backscatter Averaging Status | The Ice Backscatter Averaging Status Flag has been set for one or more records. |
| CS_OFFL_SIR_GOP_2_20150714T223911_20150714T224333_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. Number of products with errors:

146