

AATSR Cycle Report
Cycle # 39

11 July 2005, 21:59:29 orbit 17590
15 August 2005, 21:59:29 orbit 18090

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T A B L E O F C O N T E N T S

1	The Cyclic Report #39	5
1.1	Acronyms and abbreviations	5
1.2	Summary	6
1.3	Software version and Auxiliary files version	7
1.3.1	Software version	7
1.3.1.1	Auxiliary file version	7
1.4	PDS status.....	9
1.4.1	Instrument Unavailability	9
1.4.2	Level0 data acquisition and Level1b processing status	9
1.4.2.1	Compromised orbits owning major bad data quality	9
1.4.3	Level0 and Level1b backlog processing status	10
1.5	Quality Control.....	11
1.5.1	Monitoring of parameters	11
1.5.2	Users Rejection	11
1.5.3	Software Problem Reporting. Potential impact.....	11
1.5.3.1	SPR open	11
1.5.3.2	SPR closed	12
1.6	Instrument Performance	12
1.7	Calibration/Validation activities and results	12
1.7.1	Calibration	12
1.7.2	Validation.....	12
1.8	Disclaimers.....	12

1 THE CYCLIC REPORT #39

1.1 *Acronyms and abbreviations*

AATSR	Advanced Along Track Scanning Radiometer
CR	Cyclic Report
DMOP	Detailed Mission Operation Plan
DMS	Data Management System
EN-UNA-YYYY/#	Envisat Unavailability (plus year and number)
ESOC	European Space Operation Center
HSM	High Speed Multiplexer
IECF	Instrument Engineering and Calibration Facilities
IPF	Instrument Processing Facilities
MPS	Mission Planning Schedule
NRT	Near Real Time
OCM	Orbit Control Manoeuvre
PDS	Payload Data Segment
PMC	Payload Management Computer
SPR	Software Problem Reporting
SW	Software
VISCAL	Visible Calibration

The AATSR list of acronyms and abbreviation is in the following site:

<http://envisat.esa.int/dataproducts/aatsr/CNTR5.htm#eph.aatsr.glossary>

1.2 Summary

Cyclic number: 39

Cycle Start Time: 11-JULY-2005, 21:59:29 orbit stop: 17590

Cycle Stop Time: 15-AUGUST-2004, 21:59:29 orbit stop: 18090

The main activities during the cycle have been the following:

- **Processor L0 and IPF Version:** No change in the version of AATSR processor for Level0 (5.22). No change in the IPF version for Level1 and Level2 (5.59).
- **Visible calibration data:** The visible calibration coefficients data (ATS_VC1_AX) are changed regularly during the cycle. These VC1 files are being used within the time criteria set for NRT processing. Off-line data processing is expected to take place within 2 weeks of acquisition. When this is the case the VC1 file used should be +/- 1 day from the date of acquisition (i.e. within specification). If off-line data are generated before 2 weeks from acquisition, this may not be achieved.

1.3 Software version and Auxiliary files version

1.3.1 Software version

AATSR IPF for Level1 and Level2; version: AATSR/05.59

1.3.1.1 Auxiliary file version

This list defines the AATSR auxiliary files:

- **Browse Product Look-up Data (ATS_BRW_AX)**
- **L1b Characterization Data (ATS_CH1_AX)**
- **Cloud Look-up Table Data (ATS_CL1_AX)**
- **General Calibration Data (ATS_GC1_AX)**
- **AATSR Instrument Data (ATS_INS_AX)**
- **Visible Calibration Coefficients Data (ATS_VC1_AX)**
- **Level1B Processing Configuration Data (ATS_PC1_AX)**
- **Level2 Processing Configuration Data (ATS_PC2_AX)**
- **SST Retrieval Coefficients Data (ATS_SST_AX)**
- **LST Land Surface Temperature Coefficients Data (ATS_LST_AX)**

The latest filename for each auxiliary file in use on the PDS is as follows:

Product name
ATS_BRW_AXVIEC20020123_072338_20020101_000000_20200101_000000
ATS_CH1_AXVIEC20021114_113144_20020301_000000_20070801_235959
ATS_CL1_AXVIEC20020123_073044_20020101_000000_20200101_000000
ATS_GC1_AXVIEC20020123_073430_20020101_000000_20200101_000000
ATS_INS_AXVIEC20030731_092706_20020301_000000_20070801_235959
See below for VC1 files
ATS_LST_AXVIEC20040311_095537_20020301_000001_20070801_235959
ATS_PC1_AXVIEC20040812_063722_20020301_000000_20070801_235959
ATS_PC2_AXVIEC20020123_074151_20020101_000000_20200101_000000
ATS_SST_AXVIEC20020123_074408_20020101_000000_20200101_000000

Tab 1.3.1.1: Latest auxiliary files currently in use by the PDS

1.3.1.1.1 Daily Visible Calibration (VC1) files

Reflectance channel calibration files were generated for all dates, however, due to problems with VC1 file dissemination, non-nominal VC1 files were used for the following dates during NRT production:

19-Jul-05 00:00 – 20-Jul-05 12:00

1.3.1.1.2 Other auxiliary files

This section will report the list of other auxiliary files changed in the cycle, and for each file, the date and the reason for the change will be specified.

Product name	Start validity	Reason of changing
No changes during this cycle		

Tab 1.3.1.2: Auxiliary files list changed during the period

1.4 PDS status

1.4.1 Instrument Unavailability

There was no planned or unplanned instrument unavailability during this period.

1.4.2 Level0 data acquisition and Level1b processing status

This chapter will report on missing Level0 data and unplanned data unavailability during the period.

Level 1b data will only be reported if the start time does not coincide with the start time of unavailable Level0 data.

UTC Start: start time of the missing acquisition.

UTC Stop: stop time of the missing acquisition.

Duration: duration of the missing acquisition.

Orbit Start: absolute orbit start of the missing acquisition.

Orbit Stop: absolute orbit stop of the missing acquisition.

UTC Start	UTC Stop	Duration (sec)	Orbit Start	Orbit Stop
20/07/2005 01:54:38	20/07/2005 03:09:19	4481	17706	17707
28/07/2005 08:27:43	28/07/2005 08:28:26	43	17825	17825
31/07/2005 21:17:19	31/07/2005 21:28:08	649	17875	17875
02/08/2005 20:41:50	02/08/2005 20:46:45	295	17904	17904
04/08/2005 22:34:20	04/08/2005 22:35:21	61	17933	17933
06/08/2005 21:28:22	06/08/2005 21:43:14	892	17961	17962

Tab 1.4.2.1: ATS_NL_OP missing data during cycle 39

UTC Start	UTC Stop	Duration (sec)	Orbit Start	Orbit Stop
15/07/2005 10:21:53	15/07/2005 11:50:44	5331	17640	17641
20/07/2005 02:01:00	20/07/2005 03:03:28	3748	17706	17707
28/07/2005 08:32:42	28/07/2005 10:03:06	5424	17825	17826
06/08/2005 21:31:02	06/08/2005 21:43:14	732	17961	17962

Tab 1.4.2.2: ATS_TOA_1P missing data during cycle 39

1.4.2.1 Compromised orbits owing major bad data quality

The information reported in the tables 1.4.2.1 and 1.4.2.2 does not consider the quality of the data, only whether or not it is available.

List of orbits with bad data quality: *Not available for this report*

1.4.3 Level0 and Level1b backlog processing status

In this chapter a check with respect to the previous cycle is done to verify if the status of the missing data has changed after backlog processing.

The list of data missing during the previous cycle has not changed.

1.5 Quality Control

1.5.1 Monitoring of parameters

JITTER: *Not available for this report.*

SENSOR TEMPERATURE: *Not available for this report.*

VISCAL: *Not available for this report.*

TOTAL NOISE: *Not available for this report.*

NEAT: *Not available for this report.*

1.5.2 Users Rejection

Not available for this report.

1.5.3 Software Problem Reporting. Potential impact

This section describes the open SPRs, their potential impact on the data quality, and SPRs that have been closed.

1.5.3.1 SPR open

This section lists the open SPRs.

1.5.3.1.1 Existing SPRs that are still open

Unphysical sea surface temperature values in Level 2 AATSR products from PDHS-E at intervals of 480 rows: Open – The investigation shows that the problem does not happen using the IPF 5.59 with respect to the IPF 5.52 on which the problem was detected. Further information on the changes introduced in V5.59 has been requested.

50 / 17 km Cell Size Anomaly in AST product: Open – The reason for this effect is understood, but it is proposed that the cell size should stay as-is until further consultation with AATSR users has taken place.

Inconsistent values in AST confidence word, 17 km cell: Investigation completed - to be corrected with a patch at the next appropriate opportunity.

1.5.3.1.2 New SPRs since the last Cyclic Report

There are no new SPRs since last Cyclic Report.

1.5.3.2 SPR closed

No SPRs have been closed since the last Cyclic Report.

1.6 Instrument Performance

Nominal

1.7 Calibration/Validation activities and results

1.7.1 Calibration

Not available for this report.

1.7.2 Validation

Not available for this report.

1.8 Disclaimers

No new disclaimers have been issued during this cycle.