

AATSR Cycle Report
Cycle # 36

28 March 2005, 21:59:29 orbit 16087
02 May 2005, 21:59:29 orbit 16587

prepared by/*préparé par* AATSR DPQC and QWG team

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

1	The Cyclic Report #36	5
1.1	Acronyms and abbreviations	5
1.2	Summary	6
1.3	Software and Aux File Version Configuration	7
1.3.1	Software version	7
1.3.1.1	Auxiliary file	7
1.4	PDS status.....	9
1.4.1	Instrument Unavailability	9
1.4.2	Level 0 data acquisition and Level 1b processing status	9
1.4.2.1	Orbits affected by poor data quality	9
1.4.3	Level 0 and Level 1b backlog processing status	10
1.5	Data Quality Control	11
1.5.1	Monitoring of instrument parameters	11
1.5.2	User Rejections	11
1.5.3	Software Problem Reporting.....	11
1.5.3.1	Existing SPRs that are still open	11
1.5.3.2	New SPRs since the last Cyclic Report	11
1.5.3.3	Closed SPRs	11
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 #36

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: 36

Cycle Start Time: 28-MAR-2005, 21:59:29 orbit stop: 16087

Cycle Stop Time: 02-MAY-2005, 21:59:29 orbit stop: 16587

The main activities during the cycle have been as follows:

- **L0 Processor and IPF Version:**
L0 Processor – no change (5.22)
Level 1b & Level 2 processor – no change (5.59)
- **Visible channel calibration:**
The visible calibration data supplied as an aux file (ATS_VC1_AX) continued to be regularly updated throughout the cycle.
- **Planned Unavailability:**
There is one period of planned instrument unavailability during this cycle, which is an instrument out-gassing from 8th April 2005 – 11th April 2005.

1.3 Software and Aux File Version Configuration

1.3.1 Software version

AATSR IPF for Level 1 and Level 2: version 5.59

1.3.1.1 Auxiliary file

AATSR processing uses the following aux 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 in 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 Status of daily Visible Calibration (VC1) files

Reflectance channel calibration files were available for all dates, except:

08 – 11 April 2005 Instrument Outgassing

See Product Quality Disclaimer ENVI-GSOP-EOGD-QD-04_0066 (available at http://envisat.esa.int/dataproducts/availability/disclaimers/ATS_TOA_1P_Disclaimers.pdf) for more information on visible channel calibration during outgassing.

1.3.1.1.2 *Status of other auxiliary files*

The following list highlights any of the other auxiliary files changed during this cycle.

Product name	Date Introduced	Validity Range	Reason for 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

AATSR data were unavailable due to instrument unavailability at the following times during this cycle.

Start	Stop	Reason	Reference	Planned
08 April 2005 08:15	11 April 2005 14:58	Instrument Outgassing		YES

Tab 1.4.1.1: Instrument unavailability information

1.4.2 Level 0 data acquisition and Level 1b processing status

The following L0 and L1b data were missing from this cycle.

Missing L0 data are automatically also missing at L1b. Therefore the missing L1b data specifically reported in table 1.4.2.2 represent additional data gaps where the start time does not coincide with L0 data already known to be missing.

UTC Start	UTC Stop	Duration (sec)	Orbit Start	Orbit Stop
12-APR-2005 17:44:09	12-APR-2005 19:23:49	5980	16299	16300
22-APR-2005 19:08:54	22-APR-2005 20:48:16	5962	16443	16444
23-APR-2005 05:56:50	23-APR-2005 07:05:15	4105	16449	16450
24-APR-2005 13:14:48	24-APR-2005 14:51:28	5800	16468	16469
24-APR-2005 16:27:24	24-APR-2005 16:48:07	1243	16470	16470

Tab 1.4.2.1: ATS_NL_OP missing data during cycle 36

UTC Start	UTC Stop	Duration (sec)	Orbit Start	Orbit Stop
12-APR-2005 17:50	12-APR-2005 19:18	5279	16299	16300
22-APR-2005 19:15	22-APR-2005 20:43	5318	16443	16444
23-APR-2005 06:01	23-APR-2005 07:04	3724	16449	16450
24-APR-2005 13:18	24-APR-2005 14:48	5388	16468	16469

Tab 1.4.2.2: ATS_TOA_1P missing data during cycle 36

1.4.2.1 Orbits affected by poor 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 Level 0 and Level 1b backlog processing status

The following data reported missing from previous cycles have been retrieved via backlog processing.

List not available.

1.5 Data Quality Control

1.5.1 Monitoring of instrument 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 User Rejections

Not available for this report.

1.5.3 Software Problem Reporting

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

1.5.3.1 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.

1.5.3.2 New SPRs since the last Cyclic Report

There are no new SPRs since last Cyclic Report.

1.5.3.3 Closed SPRs

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.