

***AATSR Cycle Report***  
***Cycle # 37***

02 May 2005, 21:59:29 orbit 16588  
06 June 2005, 21:59:29 orbit 17088

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# **1 THE CYCLIC REPORT #37**

## ***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: 37***

***Cycle Start Time: 02-MAY-2005, 21:59:29 orbit stop: 16588***

***Cycle Stop Time: 06-JUNE-2005, 21:59:29 orbit stop: 17088***

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:

<b>Product name</b>
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 available for all dates, except:

04 May 2005  
06 May 2005  
30 May 2005

#### *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.

<b>Product name</b>	<b>Start validity</b>	<b>Reason of changing</b>
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**

<b>Start</b>	<b>Stop</b>	<b>Reason</b>	<b>Reference</b>	<b>Planned</b>
17 May 2005 07:47	19 May 2005 08:24	Blackbody Cross over test		YES

**Tab 1.4.1.1: Instrument unavailability information**

### **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.

<b>UTC Start</b>	<b>UTC Stop</b>	<b>Duration (sec)</b>	<b>Orbit Start</b>	<b>Orbit Stop</b>
20/05/2005 07:56:43	20/05/2005 11:16:45	12002	16837	16839
24/05/2005 07:30:57	24/05/2005 07:38:04	427	16894	16894

**Tab 1.4.2.1: ATS\_NL\_OP missing data during cycle 37**

<b>UTC Start</b>	<b>UTC Stop</b>	<b>Duration (sec)</b>	<b>Orbit Start</b>	<b>Orbit Stop</b>
20/05/2005 08:01:49	20/05/2005 11:10:58	11349	16837	16839

**Tab 1.4.2.2: ATS\_TOA\_1P missing data during cycle 37**

#### **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.