XMM Optical Monitor

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Description of Changes to DPU Software May-June 2000 (Release 10b)

DOCUMENT: XMM-OM/UCSB/TC/0051 Version 1.0 13-Jun-00

Contents

This document describes the changes made for the delta release "10b", released to ESA June 2000. This release was made to fixed the failure of field aquistion bug present in release 10. It summarizes the changes and fixes reported in the ECR's and NCR's below. The description of the revision versions indicates changes since the last delivery of May 2000. For previous changes to the DPU flight software, see documents XMMOM/UCSB/TC/0041, 0042, 0043, 0045 (available from UCSB web site.) Test reports specific to the changes described in this document are found in XMMOM/UCSB/RP/0006. For a description of ICU flight software and other testing performed at MSSL please see document XMMOM/MSSL/SP/0232.

ECR 77 has modifications included in this release, but is not yet closed.

List of NCRs/ECRS Described in this Document

NCR/ECR	Description	Status this Release
NCR 203	FAQ failure: DPU assumes incorrect word ordering of input reference stars	closed

1 NCR 203 - FAQ failure: DPU assumes incorrect word ordering of input reference stars

Explanation:

When loading reference stars for field acquistion, the DPU code assumes that the word ordering of the coordinates in the IC_LOAD_REF_STARS (A428) command as least significant word first. The DPU-ICU Protocol Definitions document (XMM-OM/MSSL/ML/0011.4) states that "In all cases, the most significant bit is transmitted first." This error causes the input reference star positions to be corrupted and therefore field acquisition fails.

Affected codes:
- white/src/cc/cwhite.c

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revision 1.48.2.1
date: 2000/06/13 11:58:29;  author: jak;  state: Exp;  lines: +3 -3
JK2000-06-13: NCR203. Change word ordering in IC_LOAD_REF_STARS to conform
to what is being commanded (and in ICU-DPU protocol document).
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