



SDM10

SOFTWARE VERIFICATION REPORT SUMMARY

CENTER FOR SPACE RESEARCH
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Title:

Data Base Part Number:

36-57303.17

Date:

May 07, 1997

Procedure Number:

36-57301.17

Procedure Name:

ExposureTime

Report Number:

36-57303.17

Report/Script File Name:

ExposureTime-17/reports/

Number of sub reports

Passed

2

Number of sub reports

Failed

0

Comments:

Test was performed with out a test script. Measurements taken with scope and logic analyzer.

Test Deviations:

1. Was not able to measure to + or - 10 usec on 9.9 and 10 second exposures. Measured to within + or - 5 msec.
2. Zero second primary exposures times on multiple FEPS do not skew properly. Problem report 107 written.

Cognizant Engineer:

8 of 8

Report Number: 1

DATE RUN: 01 May 97 at 13:10

VERIFICATION REPORT: 36-57303.17; REV: 01; ExposureTime

TEST PROCEDURE: 36-57301.17; REV: A;

TEST SCRIPT: Interactive

SCRIPT FILE: none

WORKING DIRECTORY: /amd/acis/h2/jimf/ExpTime/

LAST MODIFIED: May 07, 1997

CEI PARAGRAPHS VERIFIED: 3.1.3.1a-1; 3.1.3.1a-3; 3.1.3.1a-4 3.1.3.1a-5;

PROCEDURE PARAGRAPHS VERIFIED: 4.1, 4.2

NUMBER OF DEVIATIONS: 2 (See next page)

SOFTWARE VERSION: Flight-1.4

IPCL VERSION: ipcl_struct.xs3,v 1.17 1996/07/18 09:12:41

HARDWARE CONFIGURATION: BEP=1E FEP=6E 1 video board ON CYPRESS

HOST: cypress/sun4/sparc/80715546

TEST_CONDUCTOR:

Jim Francis/ R Blozie
MIT-CSR
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(617)253-8657

RCS STATUS: None

SUMMARY OF TEST RESULTS: 2 PASSED, 0 FAILED

The procedures performed verified: 1) that ACIS produces both primary and secondary exposures between .1 and 10 seconds within + or - 10usec at .1 second increments. 2) That there can be from 0 to 15 secondary exposures per primary exposure. 3) That sub arrays are processed more quickly than full arrays.

Cognizant Engineer: 

Date: 5/7/97

Quality Assurance: _____

Date: _____

LOCATION OF TEST FILES:

/amd/snebulos/h1/alan/VER_PROCS/ExposureTime-17/telemetry/

SUMMARY OF TEST Procedure:

1) Results of verifying via test procedure 4.1.3

a. ACIS was started and the TE block test1_0_0.te was loaded. Exposures were taken until the scope could sync up. Times of 80 Msecs was read for the P + S times with 0 time for EXP. Results 4.1.3-7 PASSED.

A time of 3 seconds was recorded to read the image from the framestore into the FEP.

2) Results of verifying via test procedure 4.1.6

a. ACIS was started and the TE block test1_0_1.te was loaded. Exposures were taken until the scope could sync up. Times of 100msecs was read for the primary exposure. Results 4.1.6-5 PASSED No 4 second exposures were observed. Results 4.1.6-8 PASSES. Read out time was approximately 2.5 seconds which is less then the 3 seconds observed for run 4.1.3 above. Results 4.1.6-9 PASSED.

3) Results of verifying via test procedure 4.1.9

a. ACIS was started and the TE block test1_02_01.te was loaded. Exposures were taken until the scope could sync up. Times of 200msecs was read for the primary exposure and 100Msecs for the secondary exposures were observed. Results 4.1.9-5 PASSED

4) Results of verifying via test procedure 4.1.12

a. ACIS was started and the TE block test1_02_00.te was loaded. Exposures were taken until the scope could sync up. Times of 200msecs was read for the primary exposure and 80Msecs for the Fp and Sp flushes were with 0 secondary exposure times were observed. Results 4.1.12-5 PASSED

5. Results of verifying via test procedure 4.2.3

a. ACIS was started and the TE block test2_99_30.te was loaded. Exposures were taken until the logic analyzer recorded sufficient data. Times of 9041 msecs was read for the primary exposure and 15, 3041 msecs for the secondary exposures were read. DEVIATION #1. It was not possible to increase the number of digits on the display so we could not verify to usec level. Times are accurate to within + or - 5 msec. Results 4.2.3-7 PASSED.

6. Results of verifying via test procedure 4.2.6

a. ACIS was started and the TE block test2_10_30.te was loaded. Exposures were taken until the logic analyzer recorded sufficient data. Times of 10041 msecs was read for the primary exposure and 10, 3041 msecs for the secondary exposures were read. DEVIATION #1. It was not possible to increase the number of digits on the display so we could not verify to usec level. Times are accurate to within + or - 5 msec. Results 4.2.6-6 PASSED

DEVIATION #2 An additional test was performed for multiple 0 sec exposures times on multiple FEPS. It was found that the exposures were not properly skewed. A problem report was written.