

Detailed functional tests for DAS/CCD3 software

Timing

Date: 22/10 - 2009
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Version: 22/10 - 2009, Initial version.
16/11 - 1009, Comments by AiC.

Test number	9
Test name	<u>Timing</u>
Test document	09-test-timing
Depends on test	None.
Requirements	The difference in time between an event or action in the CCD3 program happens and the resulting recording of the event or transmission of a message bus message shall meet the criterias.
Circumstances	<ul style="list-style-type: none">- The CCD3 system shall be running, connected to a detector controller, controlling a CCD or reading out a dummy test pattern.- The CCD3 programme shall be set up so that it logs (stores or prints out) the time an event happens and the time the associated Ivy message is sent, using the Ivy library calls.
Test descriptions	<p><u>Subtest 9.1:</u> A normal exposure shall be made, using the “exp 5” command and full frame unbinned image.</p> <p><u>Subtest 9.2:</u> A short, normal exposure shall be made, using the “exp 0.1” command and a readout window with an x and y size of 100.</p>
Criteria	<p>The result is acceptable and thus the test is PASSED when</p> <ul style="list-style-type: none">- The difference in time between the start of the exposure (as indicated by the log message) and the value of the FITS keywords DATE-OBS and TM_START (or another FITS keyword that indicates the start of the exposure) is less than 0.1 second.- The difference in time between the midpoint of the exposure (as indicated by the difference between start end end times logges divided by two) and the value of the FITS keyword DATE-AVG (or another FITS keyword that indicates the midpoint of the exposure) is less than 0.1 second.- The difference in time between the end of the readout (as indicated by the log message) and the value of the FITS keyword TM_END (or another

FITS keyword that indicates the end of the readout) is **less than 0.1 second**.

Result

Subtest 9.1 PASSED. Tested by _____ on ____ / ____ 20 ____

Signed _____

Subtest 9.2 PASSED. Tested by _____ on ____ / ____ 20 ____

Signed _____

Notes