Detailed functional tests for DAS/CCD3 software
FITS header (TCS, instrument specific, by external FITS information module)

Date: 28/9 - 2009
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Version: 28/9 - 2009, Initial version.
13/11 – 2009, Comments by AiC.
20/4 – 2010, Certain FITS keyword are no longer written by CCD3, but by the external FITS information module.

Test number	**3**
Test name	**FITS header (TCS, instrument specific, by external FITS information module)**
Test document	**03-test-FITS-HDR-ext**
Depends on test	7, Transmission of CCD3 events (over Ivy bus) (for triggering)
Require-ments	The FITS keyword records shall be present in the image file in the correct (see “Criterias”) extensions and with the correct values of the different keywords. Depending on which camera system is to be commissioned, it is only required that the specific FITS headers for that camera system are present.
Circum-stances	– The complete CCD3/DAS system shall be running, connected to a detector controller, controlling a CCD or reading out a dummy test pattern. – There shall be a network connection available for the external FITS information module to access the NOT “Operations” database.
Test descrip-tions	Subtest 3.1 (headers for ALFOSC/FASU/TCS): – The external FITS information module shall be started for the ALFOSC/FASU/TCS system. – A normal exposure (i.e. with the shutter open) of 5 seconds shall be made, using the command “exp 5”. Subtest 3.2 (headers for FIES/TCS): – The external FITS information module shall be started for the FIES/TCS system. – A normal exposure (i.e. with the shutter open) of 5 seconds shall be made, using the command “exp 5”. Subtest 3.2 (headers for STANCAM/TCS): – The external FITS information module shall be started for the STANCAM/TCS system. – A normal exposure (i.e. with the shutter open) of 5 seconds shall be made, using the command “exp 5”.

	Subtest 3.3 (headers for NOTCam/TCS) **Not an initial requirement** : – The external FITS information module shall be started for the NOTCam/TCS system. – A normal exposure (i.e. with the shutter open) of 5 seconds shall be made, using the command “exp 5”. Subtest 3.4 (headers for MOSCA (FASU/TCS)): – The external FITS information module shall be started for the FASU/TCS system. – A normal exposure (i.e. with the shutter open) of 5 seconds shall be made, using the command “exp 5”.
Criterias	The result is acceptable and thus the test is PASSED when (Addendum 1., 20/4-2010: with the exception of 'OBJECT','OBSERVER', 'IMAGETYP', 'OBS_MODE' and 'IMAGECAT' which will be created and updated via the external FITS information module). 1) The FITS header in the image file resulting from the exposure contains the keywords described in ref. 6 of the ODF-TEST document and marked in this document as being collected by the external FITS module. 2) The value of these keywords are consistent with the value of the instrument parameters they are representing. 3) The values of these keywords are the values as they are at the beginning of the exposure. It is acceptable that the above criterias are met for only one of the systems mentioned in each of the subtests at a time. I.e. if the ALFOSC/FASU system is to be commissioned only subtest 3.1 needs to be passed.
Result	❑ Subtest 3.1 PASSED. Tested by _____ on ____ / ____ 20____ Signed _____ ❑ Subtest 3.2 PASSED. Tested by _____ on ____ / ____ 20____ Signed _____ ❑ Subtest 3.3 PASSED. Tested by _____ on ____ / ____ 20____ Signed _____

	❑ Subtest 3.4 PASSED. Tested by _____ on ____ / ____ 20____ Signed _____
Notes	
