## Detailed functional tests for DAS/CCD3 software FITS header (basic, by CCD3)

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Version: 28/9 - 2009, Initial version.

13/11 – 2009, Comments by AiC.

14/4 – 2010, Certain FITS keyword are no longer written by CCD3, but by the external FITS information module.

Test number	2
Test name	FITS header (basic, by CCD3)
Test document	02-test-FITS-HDR-int
Depends on test	
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.
Circum- stances	<ul> <li>The CCD3 system shall be running, connected to a detector controller, controlling a CCD or reading out a dummy test pattern.</li> </ul>
Test descrip- tions	Subtest 2.1A normal exposure (i.e. with the shutter open) of 5 seconds shall be made, using the command "exp 5".Subtest 2.2A dark exposure (i.e. with the shutter remaining closed) of 5 seconds shall be made, using the command "dark 5".Subtest 2.3A bias exposure shall be made, using the command "dark 0".
Criterias	<ul> <li>The result is acceptable and thus the test is PASSED when</li> <li>1) The FITS header in the image file resulting from subtests 2.1, 2.2 and 2.3 contains the keywords described in ref.6 of the ODF-TEST document and marked in this document as being collected by CCD3. (Addendum 1., 14/4-2010: with the exception of 'OBJECT', 'OBSERVER', 'IMAGETYP', 'OBS_MODE' and 'IMAGECAT' which will be created and updated via the external FITS information module).</li> <li>2) The value of these keywords are consistent with the value of the detector/controller/software parameters they are representing.</li> <li>3) The time the value of these keywords are obtained are the same as</li> </ul>

	<ul> <li>indicated for each keyword in ref.6 of the ODF-TEST document. (See addendum 1.).</li> <li>4) The value of the FITS header keyword "IMAGETYP" is cleared internally in the CCD3 programme after the image is stored. (See addendum 1.).</li> <li>5) The value of the FITS header keyword "IMAGETYP" is the argument of the command "IMTYPE" (the test of this command is described in test 5). (See addendum 1.).</li> <li>6) The value of the FITS header keyword "OBS_MODE" is cleared internally in the CCD3 programme after the image is stored. (See addendum 1.).</li> <li>7) The value of the FITS header keyword "OBS_MODE" is the argument of the command "OBSMODE" (the test of this command is described in test 5). (See addendum 1.).</li> <li>8) The value of the FITS header keyword "IMAGECAT" is cleared internally in the CCD3 programme after the image is stored. (See addendum 1.).</li> <li>8) The value of the FITS header keyword "IMAGECAT" is cleared internally in the CCD3 programme after the image is stored. (See addendum 1.).</li> <li>9) The value of the FITS header keyword "IMAGECAT" is the argument of the command "IMAGECAT" (the test of this command is described in test 5). (See addendum 1.).</li> </ul>
Result	Test PASSED. Tested by on / 20 Signed
Notes	

