

# XMM-Newton CCF Release Note

XMM-CCF-REL-188

## Masking of Complete MOS1 CCD6

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### 1 CCF Components

Name of CCF	VALDATE	EVALDATE	Blocks Changed	CAL Version	XSCS Flag
EMOS1_BADPIX_0032	2005-03-10T10:00:00	-	BADPIX		NO

### 2 Changes

Following the MOS1 CCD6 failure as a consequence of the suspected impact event of revolution 961, this CCF issue sets the CCD to "dead" in its entirety from revolution 962 onwards.

This has been done by setting CCD6 columns 1..600 as "D". Other CCD6 entries present in preceding issues are superfluous and have been removed in this issue.

Note that owing to a bug in `embadpixfind` (see Section 7), this CCF cannot be used with the public SAS 6.1. Hence, *this CCF should not be made public until the patched version of embadpixfind has found its way into the SAS release.*

### 3 Scientific Impact of this Update

Use of this CCF will effectively exclude the MOS1 CCD6 from the scientific processing results. E.g., the non-functioning CCD6 will not be included in exposure maps, and any spurious events recorded in CCD6 will be ignored.



## 4 Estimated Scientific Quality

See Section 3.

## 5 Expected Updates

For CCD6: none. For the other MOS1 CCDs: depending on the occurrence and development of hot or dead areas.

## 6 Test Procedures

Testing with `calview` and `emchain` (SAS 6.1) on pre and post failure observations.

## 7 Summary of the Test Results

Results of the `calview` testing shows MOS1 CCD6 blanked out as expected. The other CCD bad pixels remain unchanged.

Testing with `emchain` evidenced a bug in `embadpixfind` v2.1 (unexpected condition that all pixels would already be set to bad on entry) resulting in fatal error. This has been fixed by J. Ballet (CEA Saclay) in the patch `embadpixfind` v2.1.1.