XMM-Newton CCF Release Note

XMM-CCF-REL-307

RGS HK GTI Selection

C. Gabriel

October 15, 2013

1 CCF components

Name of CCF	VALDATE	EVALDATE	List of Blocks	XSCS flag
			changed	
RGS1_HKPARMINT_0014	2000-11-07T13:00:00	2002-11-13T22:59:59	HKPARMINT	NO
RGS2_HKPARMINT_0013	2000-11-07T13:00:00	2001-02-17T10:00:00	HKPARMINT	NO

2 Changes

The validity period start of RGS1_HKPARMINT_0011 and RGS2_HKPARMINT_0010 (see CCF release notes CAL-SRN-106 ¹ and CAL-SRN-107 ² respectively) has been wrongly set to 19 November 2000, while almost all serial clock voltages had been changed 12 days earlier, on 7 November 2000. Therefore, attempts to process RGS data taken between these two dates fail if using the normal indexing of calibration files according to their dates of validity (due to voltages apparently out of the allowed range and consequent discarding of all data).

RGS1_HKPARMINT_0014 and RGS2_HKPARMINT_0013 are identical in their contents to RGS1_HKPARMINT_0011 and RGS2_HKPARMINT_0010 respectively, their VALDATE keywords just set back 12 days. In addition, an end of validity period had to be added to the new RGS1 CCF (for RGS2 the period had been fully defined in the old CCF).

¹http://xmm2.esac.esa.int/docs/documents/CAL-SRN-0106-1-0.ps.gz

²http://xmm2.esac.esa.int/docs/documents/CAL-SRN-0107-1-1.ps.gz

3 Scientific Impact of this Update

It will be possible to derive valid GTIs using HKGTIGEN for RGS1 and RGS2 data taken between 7 and 19 November 2000.

4 Estimated Scientific Quality

Not applicable.

5 Test procedures

General checks:

- use FV (or a different FITS viewer) for files inspection.
- use fdiff for establishing that the only differences between RGS1_HKPARMINT_0011 and RGS1_HKPARMINT_0014, as well as between RGS2_HKPARMINT_0010 and RGS2_HKPARMINT_0013 respectively, are just the validity and production dates.

Further checks:

Derive GTIs for data taken at different times using the SAS task HKGTIGEN. Check the GTIs produced.

6 Test results

Following tests were performed:

- hkgtigen ran on RGS1 and RGS2 data taken in rev 171 (2000-11-13) adding all new files to the current ccf.cif. GTIs produced are OK, while the derivation with just the public ccf yields empty event lists.
- cifbuild performed on data corresponding to different revolutions, correct constituents taken.

7 Expected updates

Not foreseen.