

May 17, 2013

## **XMM-Newton Users Group**

### **Resolution on savings & priorities**

The XMM-Newton Users Group (UG) would like to express its disagreement with the way the cost saving exercise has been conducted. We recognise that the responsibility to implement savings in the XMM-Newton operations remains with the ESA management. Nonetheless, the UG should have been shown the various options and been asked to comment and make recommendations on these options at an earlier stage, i.e. before they were actually adopted, in agreement with the UG mission statement<sup>1</sup>.

XMM-Newton is the only ESA flagship mission, which was ranked within the top tier by the ESA advisory structure, thanks to its productivity and impact. In a cost reduction exercise across the whole ESA Science programme, XMM-Newton's already limited operational resources should have been fully preserved, and the distribution of savings should have reflected more radically the gradient in scientific throughput and excellence across ESA's science missions.

The UG notes that any savings in the operational costs of XMM-Newton will result at this stage in a negative impact in the quantity and quality of the science delivered by the mission.

Savings at the XMM-Newton SOC and/or through the UKSA contract entail a double impact: the reduction of much needed human resources to operate the mission and the irreversible loss of expertise in the knowledge of the instruments.

In the current situation where it appears that savings have been already decided, priorities should be established so the impact on the mission's present and future scientific return is minimised. The UG recommends the following priorities being established:

#### Calibration

This is an essential ingredient for the mission's scientific success, which requires a continued effort. The UG acknowledges, appreciates and applauds the achievements by the calibration teams both at the XMM-Newton's SOC and at the PI institutes, and hopes that this effort can continue in as much as possible under the very challenging existing conditions. Priorities in this area should be:

1. MOS-pn EPIC cross-calibration has to be the highest priority, including the time dependence of the cross-calibration. This is to guarantee that the full EPIC effective area can be reliably exploited.

---

<sup>1</sup> From UG Mission statement: *The XMM-Newton Users' Group advises ESA, through the Project Scientist, on all matters relating to the optimisation of the scientific output of the XMM-Newton mission.*

2. Closely linked to the above, continue working in the improvement of the cross-calibration of XMM-Newton's instruments with other missions, in particular with Chandra, Suzaku and NuStar, provided these other teams also deploy the necessary matching resources for this very necessary joint effort.
3. Work towards completing the EPIC timing mode calibration, including characterisation of the PSF at higher energies.
4. Burst mode calibration

Continuous monitoring of the EPIC-pn long-term stability including the energy scale, effects of contamination, RGS and OM characterisation etc, should be part of the normal house-keeping procedures with the highest priority.

### SAS & user support

The UG welcomes the work and excellent services being provided by helpdesk, scheduling (including coordinated observations), enhancement of the proposals and having a working version of the SAS. The UG welcomes the upcoming release of the next version of the XMM-Newton science archive, and hopes that the user friendliness and services provided by the XSA will continue to increase.

Priorities in this area should be set as follows

- Maintaining the SAS threads to follow all updates in extraction procedures. These threads are the main guiding tools for users to analyze XMM-Newton data. In particular when there are new SAS version releases, clear indications should be made to the users of the new functionalities and the impact of these compared to previously extracted data.
- Selecting only a few of the most commonly used platforms/operating systems for SAS support, so that the effort can be concentrated where it is most required
- SAS workshops are important to train newcomers to the XMM-Newton users community, and it would be very helpful to continue them. Before discontinuing them totally, the possibility of reducing their frequency should be explored.
- The publication of the public long-term plan, although it is useful for the users, does not appear to be as critical as other tasks.
- Bibliographic studies are good to have and provide a useful handle to support mission extensions. This activity is also of lower priority with respect to others.