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MEETING

Meeting Date 19-20 May 2011

Ref MoMUG#12

Meeting Place ESAC/XMM-Newton SOC B3

Chairperson Xavier Barcons

Minute's Date 23 May 2011

Participants Xavier Barcons (Chair), Jacqueline Bergeron (Mission Scientist), Richard Mushotzky (Mission Scientist), Massimo Cappi (external); Manuel Güdel (external), Frank Haberl (external), Mariano Méndez (external), Jelle Kaastra (RGS-PI), Matthew Page (OM-PI delegate, May 19 only), Andy Read (EPIC-PI delegate), Mike Watson (SSC-PI), Craig Sarazin (as deputy of Richard Griffiths), Arvind Parmar (Mission Manager), Norbert Scharfel (Project Scientist), Matthias Ehle (Users Group executive secretary). María Santos-Lleó (Science Support Manager), Ramon Muñoz (Instrument Operations Manager), and interested staff from the XMM-Newton Science Operations Centre.
Absent: Bernd Aschenbach (Telescope Scientist). Richard Griffiths (Mission Scientist) & Catherine Cesarsky (OTAC Chairperson) had excused themselves.

Subject
Minutes of XMM-Newton Users Group (UG) Meeting 12

Copy

Description	Action	Due Date
Edited by Matthias Ehle. Approved by voting members on 17-06-2011		

WELCOME:

X. Barcons (Chairperson) and N. Schartel opened the meeting on May 19th at 10:00. New participants (A. Read: EPIC-PI delegate), C. Sarazin (deputy of R. Griffiths) and M. Güdel (as new member of the UG) were welcomed. In his introductory remarks, the Chair highlighted the excellent news since the last meeting that XMM-Newton operations had been extended by a further 2 years period.

ADOPTION OF THE AGENDA:

The agenda of the meeting was presented and approved by the participants.

PRESENTATIONS:

The following presentations were given on May 19th:

- | | |
|---------------------------------------|---|
| 3. Overall Mission Status | (A. Parmar; 10:04-10:30) |
| 4. Instrument Operations | (R. Muñoz; 10:36-10:54) |
| 5. Report of the Project Scientist | (N. Schartel; 10:56-11:31) |
| 6. Calibration | (M. Guainazzi; 11:36-12:37) (End of session at 12:40) |
| 7. Users Support and Mission Planning | (M. Ehle; 13:50-14:10) |
| 8. SAS Developments and Future Plans | (C. Gabriel; 14:15-14:41) |
| 9. Science Archive and Future Plans | (N. Loiseau; 14:47-14:58) |
| 10. SSC status | (M. Watson; 15:02-15:22) (End of session at 15:30) |
| 11. Action Items from Last Meeting | (M. Ehle; 15:50-16:20) |
| 12. Joint Programmes | (N. Schartel; 16:32-17:06) (End of session at 17:45) |

The view-graphs of the presentations are available on the XMM-Newton public web site, under “General User Support” → “Users Group”.

DISCUSSIONS:

During the presentations, several questions were raised and discussions took place:

3. After A. Parmar’s presentation on the “Overall Mission Status”, X. Barcons asked if the fact that all ESA missions in operations were extended at the last review is in line with the recommendation of keeping operational costs below a certain limit. This was confirmed to be the case for 2013-14 when using pre-FINREF¹ figures. In 2014-15, however, significantly higher costs can be expected due to the new ESA accounting system. It was noted that by then Herschel and Planck missions are expected to be no longer in operation.

A. Parmar underlined the special importance of the Science Case when asking for extensions. The formulation of the Science Case is under the responsibility of the Project Scientist who needs strong support and inputs from the UG. The process preparing the next extension will start already in January 2012. The SPC decision will follow in November 2012 in which the XMM-Newton Project will need to get confirmation of approval for operations in 2013-14 and approval to continue in 2015-16.

J. Bergeron asked about the additional costs for the potential implementation of the approach to use the 4th reaction wheel to reduce the XMM-Newton fuel consumption. A. Parmar explained that the costs of the study are within current resources. Final costs and the amount of additional work needed to be done both at ESOC and by industries will be

¹ ESA is implementing the FINREF financial management reform that will introduce a fully integrated IT system and a standardised way of working, allowing greater control and visibility of ESA resources.

known as part of the study. Asked about the risks, A. Parmar explained that there are clearly risks because the software of one of the most critical on-board systems, the Attitude and Orbit Control System (AOCS), will have to be modified.

Related to the ongoing study on XMM-Newton bibliography, R. Mushotzky asked about possible duplication of work as the US Guest Observer Facility (GOF) also maintains a list of papers that are based on XMM-Newton observations. A. Parmar explained that the new study is especially aiming to fulfil the benchmarking activity. The publication list compiled by the GOF is the basis of this study. This list is, as always, being cross-checked by the Project Scientist, who is sending feedback to the GOF as already done on two occasions.

X. Barcons asked about the impact of reduced availability of 15m dish ground station antennas for XMM-Newton. A. Parmar replied that due to new science missions being often located at the more distant L2 position in space ESA needs to have access to bigger antennas and some of the smaller ones may not be utilised so much in the future. This could increase the costs for XMM-Newton operations.

M. Watson asked for clarification of the benchmarking recommendation to increase the visibility of nationally funded activities. A. Parmar explained that this comment is probably more appropriate for Solar System missions than for XMM-Newton as the PIs from these missions are directly providing the products for ingestion into the Planetary Archive at ESAC.

4. After the presentation on “Instrument Operations”, M. Cappi asked about any measures being in place to make sure that the non availability of EPIC or RGS science data at the MOC is monitored (as it now is the case for OM). R. Muñoz explained that for these instruments there is no need to introduce such monitoring as for them the delivery of science data is supervised already by other means. For the OM, the corruption of the onboard software resulted in the generation of an empty file that remained unrecognized for a while, especially as there are no longer any instrument controllers checking science data in real time.

Asked about the meaning of the fixed Time Correlation (TCX) files, R. Muñoz explained that they can reduce the scatter of absolute timing measurements in individual observations from 100 to less than 70 micro-seconds (see related Newsletter announcements) and are only needed when absolute timing is crucial.

5. After the “Report of the Project Scientist”, UG members asked about Targets of Opportunity (ToOs) and their data rights. N. Schartel explained that the change of the ToO policies took place (see closed Recommendation 2010-05-12/12): PIs of ToOs accepted in the past and not executed after 3 years were explicitly informed and no complaints were received. M. Watson asked for some improvements of the ToO details page available at http://xmm.esac.esa.int/external/xmm_sched/too/index.php

Updates should happen more frequently and the policy of proprietary periods should be published on that page. N. Schartel explained that the rules are given in the Policies and Procedures document, but that there is of course no problem to outline them on that page as well. Giving data rights to ToOs is a practice being done since a few years. The current rule is to give ½ year of data rights in order to discourage quick publications in circulars (that can block refereed publications in the Science or Nature journals). N. Schartel further explained that (½ year) data rights for the Planck follow-ups are given whenever a requested block of them has been successfully performed. Other TBDs are due to the fact that data rights only start when pipeline products are available. A further discussion of ToOs and data rights was deferred to the next day, and this resulted in Recommendation 2011-05-19/08.

Several UG members asked for further details on ESA’s Public Relations & Outreach activities. N. Schartel understands that the guideline is to have 2 ESA news releases per week. One explanation that there are much less stories about XMM-Newton now is partly understandable as more missions (esp. since the arrival of Herschel and Planck) are competing. A. Parmar explained that ESA news releases are addressing decision makers that do not necessarily have a scientific interest. UG members agreed that XMM-Newton science stories will need to be converted into “general stories” in order to fit in this environment. The importance of a good “Science Writer” who directly talks to the scientists was stressed. Further discussion was deferred to the next day and resulted in Recommendation 2011-05-19/10.

M. Page asked about some further details on the planned restructuring of the Users Group. N. Schartel explained that this is currently an open issue and comments have been received from X. Barcons and M. Arnaud (the former UG chairperson). A general idea is to include members with a high profile in astronomy, recognized also by ESA’s Astronomical Working Group.

M. Watson commented that in order to maintain the expertise for the project the currently non-voting members should continue to participate in the UG meetings.

6. After the talk on “Calibration” given by M. Guainazzi, X. Barcons on behalf of the UG thanked everybody involved in the calibration (project and instrument teams) for all the work done: calibration is seen as an important and complex issue and a lot has been achieved. Any detailed discussions were deferred to the next day.

7. After the presentation on “Users Support and Mission Planning”, X. Barcons on behalf of the UG thanked everybody in the team for the excellent work done. The preparation and publication of the SAS Inverse Index requested by the UG last year (see Recommendation 2010-05-12/08), was highly appreciated.

M. Watson asked about the impact of the increased number of Mosaic mode observations. M. Ehle explained that there are about 16 Revs in AO-10 that will be filled completely with Mosaic pointings (and the VLP is continuing into AO-11). This is important to know also for SSC as it impacts on the pipeline processing: currently, no EPIC source detection is performed by the pipeline on Mosaic observations.

8. After the presentation by C. Gabriel on “SAS Developments and Future Plans”, X. Barcons on behalf of the UG thanked the SAS team (both at the SOC and at the SSC), especially for their fast response times even with limited manpower.

R. Mushotzky asked about how to get access and how to use RISA. C. Gabriel explained that beta-testers will receive an e-mail with all the details. He remarked that the RISA infrastructure might also be used for other projects than XMM-Newton, see Recommendation 2009-05-07/08.

X. Barcons asked about the impact of the non-availability of the originally requested additional 2 FTEs related to the pipeline transfer to ESAC. A. Parmar explained that as part of the austerity plan, there is currently a limit put on the number of people working at ESAC. C. Gabriel explained that in order to prepare the transfer synergies staff from the SAS team and others at the SOC are used. M. Santos-Lleó added that if at the end of 2011 the situation is unchanged other SOC activities will have to be reduced or dropped to cope with the workload. M. Watson commented that the transfer plan includes a 12 month margin for contingencies. Users do not care when the handover of the pipeline processing actually is done but that the switch is done smoothly.

9. The “Science Archive and Future Plans” talk was given by the XMM-Newton Archive Scientist N. Loiseau. X. Barcons thanked her for the presentation and planning.

M. Cappi asked about downloads of ODFs and PPSs: Why is there a large increase since 2010? N. Loiseau replied that the figure on the right of page 6 just gives the number of tar files downloaded, but not the amount of data. The figure on the left displays Gbytes downloaded using the interface (XUI) or direct download (AIO), showing a more constant data volume for XUI downloads. M. Cappi further asked if the increase could be due to single users downloading the full archive. N. Loiseau replied that we know of a few cases of full archive downloads through AIO, and of some heavy AIO usage by external users. With AIO the users are not identified, only IP addresses are recorded, and classified as internal (project related) or external. Only the new XSA will have the functionality to provide more detailed statistics.

J. Bergeron asked about the percentage of publications that are based on public data obtained from the archive versus PI data. N. ScharTEL explained that the number of publications based on public data from the archive is indeed increasing.

10. M. Watson presented the “Status of the Survey Science Consortium” (SSC). The next major update of the Serendipitous EPIC Source Catalogue, 3XMM, is planned by the end of 2012. The impact of 2XMM is considered pretty high with currently 108 citations of the catalogue paper (Watson et al., A&A 493, 339-373) since its publication in January 2009.

11. ACTION ITEMS FROM LAST MEETINGS:

6 action items, 18 recommendations and one endorsement were pending since last meeting. Their disposition grouped by topic is as follows:

Related to the Background Working Group (BGWG):

Recommendation 2008-05-07/05: XMM-ESAS should allow the analysis of all extended sources, i.e. it should also accept pn data as input. If possible, XMM-ESAS should also be made easier or simplified, especially wrt the fitting

process. **Implemented & Closed:** SAS v11 allows the processing of pn data; the cookbook has been updated; an analysis thread is available. Note that the spectral analysis is done with XSPEC: improvements wrt the fitting process hence are considered being out of scope.

Recommendation 2009-05-07/03: The BGWG should continue their study of the evolution of the FWC data with time: **Closed:** The monitoring has become a SOC activity which includes regular updates of the repository of FWC data and the provision of plots.

Recommendation 2009-05-07/04: The BGWG should provide the community with a tool that allows to select FWC data from the repository based on the time when the data was collected. **Closed:** a tool and recipe is available from the FWC repository web page.

Related to EPIC-pn Timing and burst Mode Calibration:

Recommendation 2010-05-12/01: The calibration of the EPIC-pn timing and burst mode should be assessed: what are the limitations of these modes, what can be done to improve the calibration? The calibration should be tried to be good within the limitations dictated by the special readout modes. **Closed:** see presentation M. Guainazzi

Recommendation 2010-05-12/02: It should be checked if EPIC-pn timing mode observations for possible background generation exist and can be made available to the community. **On-going**

Recommendation 2010-05-12/04: Major calibration efforts should now be devoted to modes used for bright sources, e.g. the timing and burst mode calibration (see **Recommendation 2010-05-12/01**). **Superseded:** being part now of **Recommendation 2011-05-19/01**

Action Item 2010-05-12/02: The status of the calibration of the EPIC-pn timing mode shall be clearly documented. Limitations of this mode shall be made very clear to XMM-Newton users, proposers and OTAC members. **Closed:** status is documented in XMM-SOC-CAL-TN-0083

Related to Cross Calibration:

Recommendation 2010-05-12/03: The XMM-Newton project should aim to an XMM-Newton common calibration across all instruments. However, the UG does not see the need to recommend adjusting MOS to pn at this stage. Project resources should continue to monitor instrumental changes with the aim to maintain current agreement. **Closed:** Cross-calibration activities and monitoring are standard SOC tasks

Recommendation 2010-05-12/05: The XMM-Newton project shall continue with its active involvement in IACHEC with the aim of allowing users to fit simultaneously data from different X-ray missions. **Closed:** Involvement in IACHEC does continue.

Recommendation 2010-05-12/06: As the application of RGS rectification factors allows to bring the current few percentage level average agreement of the RGS/pn calibration down closer to 0%, it should be offered to the users. **Closed:** the option `rgsproc withrectification=yes` is available in SAS

Recommendation 2010-05-12/07: The current rectification method should be improved in order to provide smooth corrections, for example via linear interpolation between rectification factors. **Dropped:** a simple step function was found to be the appropriate approach

Related to SAS:

Recommendation 2008-05-07/09: RISA should be evaluated some time after the first public release: **Open**

Action Item 2008-05-07/01: On the SAS team, to check the possibility of improving the SAS wrt processing speed and allocatable memory. **Closed:** a 64 bit release took place with SAS v11

Recommendation 2009-05-07/08: The SAS team should investigate if coordinated efforts can be done to maintain current (X-ray) scientific analysis software packages and prepare for the future with colleagues from Chandra, HEASARC,

Suzaku and other interested projects (maybe in the form of a workshop). **Closed:** a meeting (teleconference) took place with colleagues from HEASARC and CXC; SAS team presented current planning (virtualization and RISA)

Recommendation 2010-05-12/08: XMM-Newton SOC should prepare an ‘inverse’ SAS task index that allows identification of individual SAS packages needed to be executed in order to allow performing a specific scientific analysis task. **Closed:** see presentation by M. Ehle: The SAS Inverse Index is available at http://xmm.esac.esa.int/sas/current/sas_inverse_index/sas_inverse_index.shtml

Action Item 2010-05-12/01: UG members should make use of the new SAS thread “Combining the spectra of the 3 EPIC cameras” in order to check its functionality and documentation. **Closed:** The thread is available, functional and includes the necessary comments in a ‘caveat’ section

Action Item 2010-05-12/03: on UG members to consider if any additional tools are necessary to be implemented into SAS related to the 2D-PSF model (or if existing task ‘radial’ is sufficient?). **Closed**

Related to Funding and Mission Extension:

Action Item 2010-05-12/04: on UG members, to provide N. Schartel with input on the science case for the mission extension, specifying scientific highlights in their research areas achieved during the last two years and giving perspectives for the future; Due date: May 28th, 2010. **Closed**

Action Item 2010-05-12/05: on UG Chair, to write a letter to the Astronomy Working Group (AWG) of ESA, stating their strong support for the XMM-Newton mission extension. **Closed**

Related to Catalogue Production:

Recommendation 2006-05-19/33: As far as possible, the UG recommends regular updates of 2XMM catalogue in an incremental fashion plus periodic reprocessing of the archive: **Closed:** see presentation by M. Watson

Related to Large & Very Large Programs; OTAC; ToO validity:

Recommendation 2010-05-12/09: Guest observers should be provided with more information about the handling of VLPs by OTAC. - Done for AO-10. **Closed**

Recommendation 2010-05-12/10: During the VLP pre-selection there should be a separate limitation to each panel on the number of VLP programs to be put forward to the chairperson session for discussion. – Implemented since AO-10. **Closed**

Recommendation 2010-05-12/11: OTAC chair and Project Scientist should consider, as far as possible, the introduction of deputy chairs to attend the chairperson’s meeting in case of conflict of interests of the panel chair. **Closed:** OTAC chair took note: recommendation was deemed to be not practical

Recommendation 2010-05-12/12: The Policies and Procedures shall be changed such that OTAC can approve ToOs and triggered target observations either as being valid for triggering for three consecutive AOs or such that they expire after one AO. This change of Policies and Procedures shall also be applied to ToOs and triggered observations that were accepted in the past. - Implemented since AO-10. **Closed**

Related to ESA Press Releases:

Endorsement 2010-05-12/01: UG considers it important that public relation work for XMM-Newton continues to be done by ESA with sufficient manpower. **Converted into Recommendation 2011-05-19/09.**

12. The final presentation on “Joint Programmes” was given by N. Schartel explaining the existing joint programmes and a proposal by S. Komossa and the Hubble Space Telescope (HST) Users Committee to start an XMM-Newton – HST programme. After some discussion on the amount of time to be given out by XMM-Newton and HST, UG approved the plan and formulated Recommendation 2001-05-19/03 on the next day.

Some UG members asked if, as joint programmes are undersubscribed, it is worth the effort, e.g. because of special results. N. Schartel explained that for example joint XMM-Newton Chandra proposals to monitor M31 are important as both satellites fill visibility gaps that would exist otherwise when using a single observatory. This programme has produced scientific results of highest relevance.

M. Watson suggested checking if XMM-Newton time approved by other projects is given out wisely by these TACs as well. N. Schartel explained that measuring the impact of joint programmes, e.g. by checking resulting publications and their citations, is difficult as many proposals need several years before results are published (and citations are even more delayed).

INPUT FROM THE COMMUNITY AND GENERAL DISCUSSION:

(This part of the meeting started at 17:10 on May 19th, and finished with the end of the 1st day of the meeting at ~17:45. The discussion continued then on May 20th at 09:10.)

UG members reported on received input from the community: although the Newsletter text announcing the UG meeting was changed explicitly inviting for feedback and although UG members actively asked their groups of colleagues, hardly any reply was received. UG therefore discussed other ideas to obtain feedback (questionnaires, chats during conferences, contacting PIs after ½ year since data delivery, asking for a wish list ...). It was commented that some ground based facilities force their users to fill in questionnaires after an observation but the usefulness of this activity was strongly doubted. In the end, the UG recognized that lack of feedback can most probably be interpreted as a good sign (see below).

X. Barcons received one user request, asking the UG to keep pushing for improving the calibration of modes used for bright sources: this is done both by UG (see Recommendation 2011-05-19/01 below) and recognized as on-going activity in the Project, see presentation M. Guainazzi.

J. Bergeron summarized that one of her received three replies just stated that the user was very satisfied with the Project and the wish that XMM-Newton has to be extended. It was underlined that in the past and in the early years after launch, the situation was very different: at that time many more complaints had been received. The UG mentioned that this was a very good sign that the bulk of project activities is going smoothly and that users are happy with XMM-Newton.

UG discussed the need to help preparing the next XMM-Newton extension extremely well. One important item is the study of the impact of large programmes. Several UG members expressed difficulties in finding information on LP and VLPs on the web. They would like to see a summary of such programmes not only per AO and as part of the full OTAC approved programme. Such large programmes and their PIs should be clearly highlighted. UG summarized their requests in Recommendation 2011-05-19/05 (see below).

The following Action Items based on requests from N. Schartel were taken by the UG:

Action Item 2011-05-19/01: On UG members, to think about possible topics for the annual XMM-Newton Science Workshop in 2012 and inform N. Schartel about their proposals **by June 6, 2011.**

As the mandate of the current OTAC chairperson, C. Cesarsky, will end with AO-12 in 2013, the project scientist is collecting suggestions for a successor: the chairperson does not necessarily have to be an X-ray astronomer but should have a wide overview about the important topics in astrophysics, should be of high recognition in the scientific community and has to be from an ESA member state. This request resulted in

Action Item 2011-05-19/02: On UG members, to think about potential successors to the current OTAC chairperson. Proposals should be communicated to N. Schartel **by October 2011**; N. Schartel agreed to send a reminder on this Action Item in September 2011.

The following Recommendations were formulated by the UG members:

On Calibration

The UG welcomed and applauded the efforts conducted by the project to improve the XMM-Newton calibration, and noted the qualitative step forward achieved in various fronts during the last year. The UG made the following

Recommendation 2011-05-19/01: The XMM-Newton Project should continue its efforts on the following fronts with highest priority:

- a. Improve the calibration of bright source mode observations (timing and burst mode)
- b. Cross calibration between XMM-Newton instruments and cross-mission calibration
- c. Improve the full 2-dimensional characterisation of the Point Spread Function
- d. Improve the absolute wavelength scale calibration in the RGS and the characterisation of the Line Spread Function

UG also discussed the strategy to avoid negative effects from warm pixels in the RGS CCDs: J. Kaastra explained that a strategy is already in place: the usage of the RGS Multipointing Mode which is a good choice in case of WHIM-type proposals. M. Santos-Lleó noticed that experienced RGS team member PIs were offered the possibility to use this mode, and the offer was rejected. Although publicly offered, the RGS Multipointing Mode has, up to now, only been used by PIs from the RGS team. N. Schartel asked for other methods and J. Kaastra explained that the identification of warm pixels could be improved significantly based on the full archival RGS data set and by improved software algorithms which would have to be developed. M. Santos-Lleó commented that there is currently no single recommendation available: good documentation including a full description of the advantages of each mode or methodology is still needed from the RGS team. Results of experience gained should be explained to the community. The paper(s) in preparation by the RGS team will certainly be helpful and might be sufficient.

In preparation for the forthcoming calls for observing proposals the UG made

Recommendation 2011-05-19/02: The XMM-Newton Project should prepare a list of clear strategies for RGS observations that can help to exclude any negative effects from the existing warm pixels in the RGS CCDs on the observations.

On the Observing Programme

With respect to the joint XMM-Newton observing programmes (see presentation N. Schartel), the UG issued

Recommendation 2011-05-19/03: The XMM-Newton Project should agree with the HST Project to issue a joint XMM-Newton/HST pilot programme for the next AO, which would include up to 30 HST orbits to be allocated by the XMM-Newton OTAC and up to 150-200 ks to be allocated by the HST TAC in terms of programmes using both facilities. The UG will review the subscription and allocation of proposals of this pilot programme in its 2012 meeting.

UG noted that XMM-Newton Large Programmes (LP) and Very Large Programmes (VLP) represent major investments of observing time in an Astrophysical observatory whose oversubscription factor has ranged between 6 and 10 since its launch. Significant scientific impact is expected from these programmes, whose proposing teams should be able to fully exploit and deliver the results of this scientific exploitation to the community. In regard to these programmes, the UG made

Recommendation 2011-05-19/04: The XMM-Newton Project should closely monitor the scientific output of the LPs and the VLPs in terms of their publications and any other deliverables that the proposing teams committed to. In upcoming Calls for Proposals it is expected that teams proposing LPs and VLPs make explicit their plans to exploit the granted data and deliver whatever products they commit to.

In order to allow for a clearer overview about the requests and approval of LPs and VLPs, and their scientific output, the UG further requests to follow

Recommendation 2011-05-19/05: The XMM-Newton Project should prepare a report on the statistics of Time Allocation across the various AOs, which shows the distribution and oversubscription by science categories, and lists the titles and PIs of LPs and VLPs. Should any information on the publications for each scientific category be available in the timeframe of the next UG meeting, this would also be very interesting to be included in this report.

On the Extension of XMM-Newton

The UG notes that XMM-Newton is likely to continue being a unique observatory to explore the X-ray Universe for many years to come. Its potential successor within ESA, Athena, will not be launched before 2022 and therefore XMM-Newton will need to have its very productive life extended beyond the currently technically possible timeframe of 2018-2020. Since there are no indications that the performance of the on-board instruments will degrade to a non-usable status before 2025, the UG strongly supports all actions taken by the project in exploring scenarios that could make the extension of XMM-Newton technically feasible beyond 2020. With regard to the preliminary studies addressed by the project in trying to make use of the 4th reaction wheel, which could extend XMM-Newton's life to beyond 2025, the UG strongly requests to follow

Recommendation 2011-05-19/06: The XMM-Newton Project should make sure that all tests needed for the exploration of scenarios extending XMM-Newton's lifetime are conducted as soon as possible, with the hope that a positive outcome will open the door to having one of the most productive ESA mission ever continuing to deliver top science to around 2025.

The UG noted with concern that the XMM-Newton mission operation costs will be subject to new accounting schemes within ESA, which might nominally increase the cost charged to the project. The UG therefore asks to follow their

Recommendation 2011-05-19/07: ESA management should ensure that new accounting system does not jeopardise possible future extensions of XMM-Newton.

On Information about DDT and ToO Observations

The UG requests to follow their

Recommendation 2011-05-19/08: The DDT and TOO observation web page should be updated on a weekly basis to have the community duly informed about the progress on the programmes. That page should also contain a brief statement about the standard proprietary period policy.

On the Transfer of the Pipeline Processing

The UG noted with concern that the moving of the Pipeline Processing from the Survey Science Centre in Leicester University to ESAC within 2012 might be suffering from ESA's overall restrictive policy in hiring new people. The UG strongly recommends to follow their

Recommendation 2011-05-19/09: ESA management should make sure that ways are found to secure that the Pipeline Processing continues to be successfully operated when at ESAC, as the scientific data products it delivers are key to the very high scientific impact of XMM-Newton. This should be achieved without compromising the rest of the activities conducted by the Project in any significant way.

On ESA Press Releases

The UG noted with concern the very sharp decrease in the number of ESA/SRE public releases related to XMM-Newton compared to 3 years ago, despite the sustained scientific impact of XMM-Newton. The UG urges ESA management to follow their

Recommendation 2011-05-19/10: ESA management should ensure that the results that XMM-Newton continues to deliver are properly publicised, for which it is necessary having professional support and the right channels to reach the public.

On the XMM-Newton Science Archive (XSA)

The UG noted that data archives are a major outcome from all successful observatories. Astronomical research makes good use of these archives many years after the data were taken and even after the observatories are no longer operational. ESA's archives of missions like EXOSAT, Hipparcos, IUE and ISO, which keep generating tens of scientific

papers many years after the lifetime of these missions ended, are good examples of this. For this to be secured, not only the data themselves need to be properly saved and preserved, but also the software tools to analyze them should be maintained. The UG therefore made

- Recommendation 2011-05-19/11:** The XMM-Newton Project and ESA management should make sure that
1. Measures are taken now and in the future to secure that the XMM-Newton archive is to be available permanently, well after XMM-Newton operations finish.
 2. The specific XMM-Newton Science Analysis Software (SAS) is maintained during a sufficiently long time scale after XMM-Newton ceases operations to ensure that the maximum scientific return from the archive is extracted.

The discussion ended at ~13:00 on May 20th.

Date of next meeting: April 19 (Thursday) and 20 (Friday) 2012, starting at 10 am at ESAC.