The Astronomy Archives Users Group (AAUG)



AAUG MEMBERS (2018 - 2020)

You are invited to contact the User Group for specific questions or comments you may have.

Beate Stelzer (Chair) *Tübingen University, Germany*

Christopher Conselice University of Nottingham, UK

Søren Larsen *Radboud University Nijmegen, The Netherlands* Hervé Bouy Bordeaux University, France

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Eva Villaver

Madrid Autonomous University, Spain

Available on the ESA AAUG website: https://www.cosmos.esa.int/web/esdc/archives-user-groups/astronomy

MEETINGS

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|---------|----------------|--------------------------|----------|-----------------------------|
| Meeting | Date | Agenda and Presentations | Location | Minutes and Recommendations |
| 4 | 17 Apr 2020 | Agenda and Presentations | WebEx | - 👋 |
| 3 | 14-15 Oct 2019 | Agenda and Presentations | ESTEC | Minutes and Recommendations |
| 2 | 12-13 Feb 2019 | Agenda and Presentations | ESTEC | Minutes and Recommendations |
| 1 | 11-12 Jun 2018 | Agenda and Presentations | ESAC | Minutes and Recommendations |

FORMER AAUG MEMBERS

• Marc-Antoine Miville-Deschenes, AIM laboratory, CEA-Saclay, France (June 2018 - Jan 2020)

Current composition is short of 1 member; Chair will resign end of 2020.

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From my last report to the AWG (Jan 2019)



Actions considered by ESA to maximize the use of the archives:

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→ attract young scientists through funding possibilities
Visitor program for archive research ready to go (1<sup>st</sup> call in fall, Covid-19 allowing..)
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→ identify the priorities of potential archive users e.g. through a User Survey

<u>Role of the AAUG:</u> Help ESDC in defining an appropriate format for the above activities.



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User Survey done:

summer 2019

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European Space Agency

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Meetings since last report to the AWG (Jan 2019)

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Main activities:

- Funding for Archive Research
- User Survey
- Long-term preservation of non-ESA data products

All aimed at optimizing development and exploitation of the ESA AA.

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Funding for archive research

Recommendation 2019-02-13/02 (#Meeting No.2):

Among the possible schemes considered by ESA to enhance the visibility and scientific exploitation of the astronomy archives with funded initiatives a specific visitor program is favored and the "design" of such a program encouraged.

Recommendation 2019-10-15/01 (#Meeting No.3):

"The AAUG welcomes the decision to implement an Archival Research Visitor Programme (along the lines previously discussed with this advisory group)."

Opening of the first call is encouraged.

The AAUG members declare they are available to contribute to the selection process.

Recommendation 2020-04-17/01 (#Meeting No.4):

The fact that the Archive Visitor Program is "ready to go" is appreciated.

The call should be advertised through appropriate channels.

ESA should ensure the participation of future AAUG members in the selection process.

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User Survey

Recommendation 2019-02-13/03 (#Meeting No.2):

It was noted that the last User Survey dates to 2011, before many major developments of the astronomy archives, and it is timely to carry out a new survey.

ESDC is invited to take steps towards implementation of a User Survey with support from the AAUG.

User Survey: Summer 2019

Recommendation 2019-10-15/02 (#Meeting No.3):

User survey showed strong appeal to broad range of users (academics, school teachers, amateur astronomers).

PhD students and post-docs appeared underrepresented w.r.t. staff astronomers; ways should be found by ESA to reach this important (potential) group of users.

Overall satisfaction level of survey participants is high; features suggested for improvement should be studied.





Long-term preservation of non-ESA data products

Recommendation 2018-06-12/03 (#Meeting No.1):

Higher-level science data products and pipelines developed from ESA data based on EU funded programs (e.g. FP7 and H2020) would be valuable additions to the astronomy archives; ESDC should explore ways to preserve them.

Recommendation 2019-02-13/05 (#Meeting No.2):

"The AAUG recommends that ESA reaches an agreement with the EU ensuring that data products from EU funded projects specifically addressing research making use of ESA data are ingested into the ESA archives."

Current status:

- "evaluation" of relevant identified FP7 and H2020 programs by individual AAUG members ongoing
- repeated discussions in AAUG meetings: large diversity of projects make systematic assessment and consideration for long-term preservation difficult

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Meetings since last report to the AWG (Jan 2019)

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Additional activities/recommendations:

- ESDC Long-term Data Preservation plan
- ESA Sky and other archive developments
- Participation of ESA mission staff in AAUG meetings
- Presentation of the AAUG at EWASS 2019 / Lyon

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ESDC Long-Term Data Preservation Plan (LTDP)

Recommendation 2019-02-13/01 (#Meeting No.2):

Strong use of data from missions in legacy phase is realized.

The update of the archive infrastructure is encouraged, in order to preserve the full data exploitation capabilities.

Recommendation 2019-10-15/03 (#Meeting No.3):

Science Exploitation and Preservation Platform (SEPP) project is recognized as a cornerstone of the LTDP.

Possible inclusion of science user provided data should be explored; Pro: added value, attractive for the community; Cons: security risks.

ESA Sky & other archive developments



Recommendation 2019-02-13/04 (#Meeting No.2):

Substantial evolution of ESA Sky following previous recommendations by the AAUG is acknowledged.

The attractiveness and user friendlyness should be further enhanced, addressing needs of both professional astronomers and the public,

e.g. providing additional access modes, setting up citizen science projects.

Recommendation 2019-10-15/04 (#Meeting No.3):

The Hubble Catalog of Variable (HCV) stars is an excellent example of added scientific value from data archiving.

Suggestions for an extended version of the HCV are made.





Recommendation 2019-10-15/05 (#Meeting No.3):

The AAUG welcomes stronger participation by ESA staff scientists of the individual astronomy missions in the open sessions of the AAUG to share their experiences and ideas on archival developments.

Overwhelmingly embraced by ESA staff:

20 ESA staff members attended the subsequent (WebEx) AAUG meeting No.4 in Apr 2020.

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Upcoming activities



- Presentation of the AAUG at EWASS 2020 / Online
- Further evaluation / discussions on the long-term preservation of EU-funded astronomy projects by ESA
- Next AAUG meeting: Fall 2020 (participation of new chair !)

Selection of new chair is time-critical.

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