Report of the ADS Users Group (ADSUG)
December 5-6, 2024

Attendance: Matthew Graham (Chair), Alex Akins, Vandana Desai, Ryan Mcgranaghan, Brian Mason, Silvia Meakins, Licia Verde, John Wu

This report is broken in topic section based areas in which the ADS team requested advice and feedback:

- [Prioritization of planned work](#)
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Introduction

The ADS Users Group (ADSUG) advises the ADS on the operations of the project and recommends changes and improvements to both its services and procedures in order to maximize the scientific productivity of the community it serves. The ADSUG will advocate for the user community and provide suggestions regarding content curation, technical infrastructure, management, and priority setting.

The report below is broken into sections outlined above but we begin the report with a summary.

Summary

ADSUG commends the excellent ongoing work of the ADS team and the stable footing that it now appears to have. We acknowledge that ADS has addressed the recommendations of the ADSUG 2023 report.

The NASA ADS continues to serve its community and the excellent ADS service continues to be a key part of the astronomy and astrophysics research cycle. ADS accelerates discovery and dissemination in the areas of knowledge it covers. We commend the high satisfaction of the users base.

We were pleased to see the developments on SciX and are keen to see it transition out of beta in the first half of 2025. The Ambassadors Program seems to have prepared the expansion communities for this new service and we look forward to hearing about initial user experiences at our next meeting. Awareness of SciX within the existing ADS community is less clear and we would like to hear what the roadmap for harmonizing the two communities is.

The increasing prevalence of AI is noted and we recommend a clearer prioritization of effort as well as a more focused solicitation of the user community on the use of AI. The community would also benefit from education material on the use of AI with ADS/SciX resource. It is also unclear whether AI might make UAT efforts redundant and we recommend a review of the benefits of the UAT to the user community.

Finally, we note that the awarded budget for SciX does not match what was proposed and we are quite concerned about the impact of this on the realisability of the full SciX vision. We strongly endorse this vision and encourage the appropriate parties to commit to complete financial support of SciX. We also support exemptions for existing remote workers to enable continued remote working so that the current staffing can be maintained.

Prioritization of planned work

We appreciate ADS's response to the request in the ADSUG 2023 report for a clarification of development priorities. Greater detail in the development plan regarding the effort required for specific items and dependencies between them would aid the general ADSUG review of the prioritization of planned work.

We understand that budgetary last minute changes affect the prioritization and that the ADS team might be in the process of rearranging priorities.

The creation of performance standards is also acknowledged and future annual reviews of these will help prioritization recommendations but it was unclear what baseline references were used for the standards.

We agree with the high prioritization of moving SciX out of beta development and request a presentation at the next ADSUG meeting on the plan for transitioning the Astrophysics community from ADS to SciX, including any dependencies on progress on particular features needed for the expansion communities. Harmonization of the use of

SciX and ADS across communities is crucial and consistent messaging is important. We are concerned how the flat SMD budget might affect this.

We felt that the specific AI/ML plans seemed somewhat fragmented. We request a clearer distinction between what is exploratory work and what is actually being proposed and the resourcing level for these. We recommend prioritizing: (1) ML Data Sets; (2) Data Enrichment; and (3) Data Discovery. LM fine-tuning should be deprioritized in favor of LLMs and we suggest expanding the User Community Survey to include questions about AI/ML. We were also wondering about the status of the SciX Brain AI/ML development program that was presented to us in the 2023 ADSUG meeting.

Value of UAT concept/keyword search to community

We recognize that changes in the community support for the UAT have created uncertainty over its future. The creation of a new AAS Working Group with a 5 year mandate to develop a strategic plan for the UAT is encouraging but we are concerned that this is not as secure or rapid a response as is required. We wonder as well how this would mesh with SciX development/ADS phaseout on this timescale. While UAT seems to have internal utility to ADS, it is not clear what its relative importance is to the community, particularly in the rapidly evolving AI ecosystem. We request a presentation at the next ADSUG meeting reviewing the community value of the UAT compared to AI alternatives to inform an ADSUG recommendation.

Community outreach and education

We commend the development of the Ambassadors Program for engaging and educating members of the expansion communities about SciX. We recommend stressing the unique features of SciX over competitor systems, e.g., Google Scholar, to these audiences and developing case studies which highlight these to advantage. ADSUG was surprised by the low awareness (25%) of those surveyed in the ADS User Survey who were aware of SciX and feel that greater effort is needed to ensure that the ADS community is as aware of SciX as the expansion communities are. We recommend a set of short tutorial videos for ADS users on SciX as well as a stronger presence overall of SciX in ADS materials. We encourage the development of a strategy for when and how this should be done to ease the transition for ADS users, particularly identifying a representative group of ADS → SciX early adopters for clear feedback and experience review.

Introducing chatbots to community

ADSUG acknowledges the increasing prevalence of chatbots in information and knowledge systems and we support ADS efforts in this arena, e.g., the SciX assistant in ChatGPT. We encourage ADS to draw on available experience, both locally and within the ADS community, to assist in the development of cookbooks and similar teaching resources to aid in introducing the community to such chatbots and ensuring their appropriate usage. We would also be interested to hear how broader plans for chatbot assistants and how these will integrate with ADS/SciX.

Community feedback

The 2024 User Survey Results focused on user satisfaction within a core group of ADS users but a detailed demographics breakdown was not available. We recommend that this information is collected in the 2025 User Survey to better inform what feedback, both positive and negative, is coming from which sections of the community. This will help inform prioritization recommendations. We recognize that while SciX is still in beta, it is difficult to solicit feedback about it in any broad manner but we strongly encourage user community feedback for it from both the expansion communities and the ADS communities before the next ADSUG meeting. This may be more effectively achieved on the timescales involved through a targeted survey of specific users than a broader community survey, which we would expect to see in 2026. This would also be of benefit to the new SciX Advisory Committee.

Funding strategies and opportunities

ADSUG was quite concerned to hear about the relative funding status supporting astronomy and other divisions of SMD. It does not seem that what is being provided to ADS/SciX matches the vision of what is being requested from them and it is difficult to see how a unified interface serving all user communities can be developed with the proposed resourcing. We strongly encourage the appropriate parties to take all measures necessary to ensure that adequate funding is available to ensure the success of this expanded project. We also recommend that ADS investigate additional funding for SciX-specific components from foundations active in the expansion communities and seek further guidance and assistance from the SciX Advisory Committee on this.

Revisions to the ADSUG charter

This was not discussed in the meeting but we recognize the need to revise the following items in the ADSUG charter and this was taken as an action to address in the next couple of months:

- Term for the chair and role of vice-chair
- Role of ex-officio members in meetings
- Participation of SciX Advisory Board chair to meetings