Solar Data Analysis Center (SDAC)



SDAC is seeking feedback from the heliophysics research communities to improve the usefulness of our resources. Here we focus on the SHINE community.

The feedback we receive from you is not just







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Solar Physics Community Feedback on the Solar Data Analysis Center

Abstract

The Solar Data Analysis Center (SDAC), part of the Heliophysics Digital Resource Library (HDRL), is seeking feedback from the solar and heliophysics research communities to improve the accessibility of our resources. The SDAC aims to reduce barriers between new and seasoned researchers and the needed resources by improving the FAIRness (Findability, Accessibility, Interoperability, Reusability) of those resources. Researchers' input will be crucial in prioritizing the needed improvements to serve the community better.

SDAC is presenting this poster at the SHINE 2024 meeting to gather feedback. We have chosen SHINE 2024 because it allows for more direct interaction with and feedback from the solar/heliospheric physics community.

HDRL **Heliophysics Digital Resource Library**

The Heliophysics Digital Resource Library (HDRL) provides open-access gateways to thousands of datasets from current and historic NASA Heliophysics missions while enabling sophisticated cross-mission analysis and observation-model comparison.

What are we asking of you?

We value your input about your experience with the HDRL resources. In particular, at SHINE, we would like the input for primarily the SDAC resources.

Our primary way to obtain that is through a survey asking you to try a few tasks and tell us your experience. After that we welcome and encourage any general input you would like to provide. This includes comments, questions, suggests, and criticisms.

After you try the anonymous survey at your pace:

We have provided two videos. The first shows an overview of the basic resources at the SDAC in particular the Virtual Solar Observatory.

The second video is a tutorial of the HelioCloud resource for cloud computing and the software tool using python to analyze data on HelioCloud, SunPy.

Next Steps

While it is okay to do the steps in any order, our request is to follow these steps.

- Step 1: User Survey
- Step 2: SDAC Overview Video
- Step 3: HelioCloud/SunPy Demo Video

QR and Links to the survey and videos



tinyurl.com/SDAC-SHINE24

sites.google.com/view/shine2024-sdac-poster/home



1-User Survey

The user survey is straightforward. All the data is anonymous. We would like to know the main areas of your research (very general) and how long you have been in the field. We are very interested in your experience with SDAC and what additional resources would help your science. There is a request for you to try a few actions, share your experience, then answer some specific questions about your needs ending with space for open comments.

What are we doing with your feedback?

HDRL plans to use these and previously obtained results to inform and direct the progress of HDRL moving forward. The feedback gathered will be used to directly influence the development of ongoing projects at the HDRL and prioritize future improvements. The feedback we receive from you is not just valuable; **it's crucial**. Please plan to stop by and give us your opinion. Our ears are open wide!

2 - SDAC Overview Video

After providing your feedback about the SDAC we have created a short video about the SDAC and its resources.

HDRL embraces NASA's commitment to an inclusive, open science community and has adopted community standards, such as SPASE and the VSO metadata guidelines, to unify heliophysics datasets, analysis tools, and other resources with consistent descriptions for easy access. Two of the key members of HDRL are the SDAC and SPDF (Space Physics Data Facility). This presentation is part of several undertakings to gather user input for the SDAC, SPDF, and other resources within the larger HDRL.

3 - HelioCloud/SunPy Demo Video

To wrap things up, we created a video demoing the HelioCloud, cloud computing platform, how to gain access and how to use it to perform analysis of SDAC datasets using python and the SunPy package. This includes using some of the unique benefits of the cloud such as being able to analyze 1 year of SDO in 24 minutes by automatically scaling the processing resource from a simple laptop to multiple computers.

Thank You!

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