# The NASA Science Explorer: ADS for all NASA Science

Alberto Accomazzi
aaccomazzi@cfa.harvard.edu
and the ADS Team



CENTER FOR

**ASTROPHYSICS** 

HARVARD & SMITHSONIAN











### What is the NASA **Science Explorer?**

SciX is a new literature portal that we just launched as part of the expansion of the NASA Astrophysics Data System (ADS), a digital library focusing on Space Science research.







### WELCOME TO THE

### **SciX Digital Library**



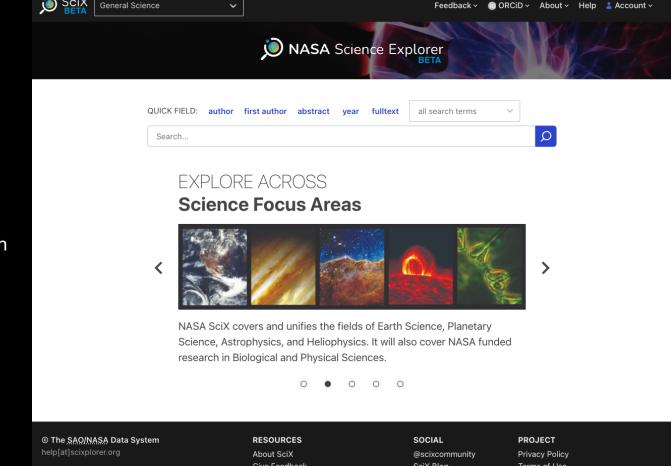
Learn more about the SciX digital library and how it can support your scientific research in this welcome video and brief user tutorial from Dr. Stephanie Jarmak.





### What is the NASA **Science Explorer?**

NASA SciX is a literature-based, open digital information system covering and unifying the research disciplines funded by the NASA Science Mission Directorate.

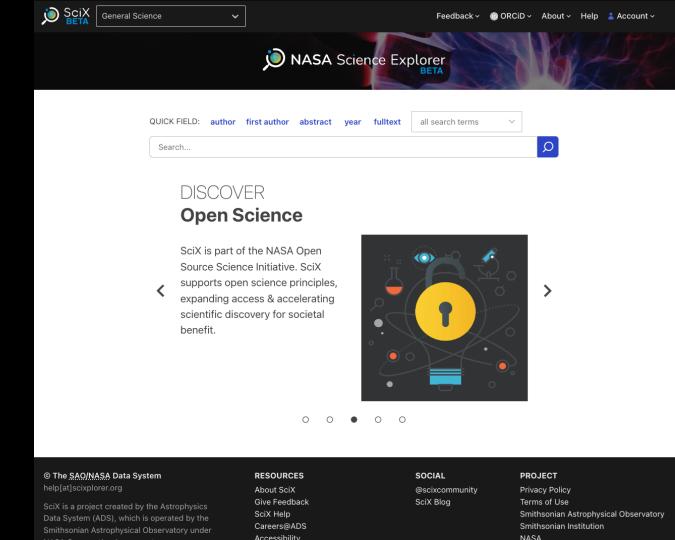


### SciX is a project created by the Astrophysics Data System (ADS), which is operated by the Smithsonian Astrophysical Observatory under NASA Cooperative Agreement

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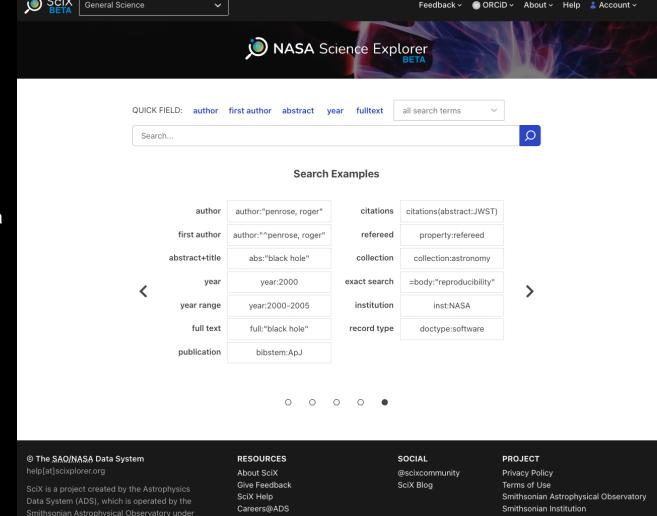
SciX supports NASA's Open Science efforts and enables interdisciplinary research and collaboration.



The NASA Science Explorer, or SciX for short, is available as a beta release at the following website:

### https://SciXplorer.org

While the system is still under development, it already provides a wealth of information and functionality ready for use.



NASA

Accessibility

NASA's Science Mission Directorate in 2019 calls for the creation of interdisciplinary literature portal spanning across SMD in support of Open Science.



https://SciXplorer.org

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ADS has been selected for its support of open science goals: facilitating discovery and dissemination of OA publications, data, and software by aggregating and linking them.

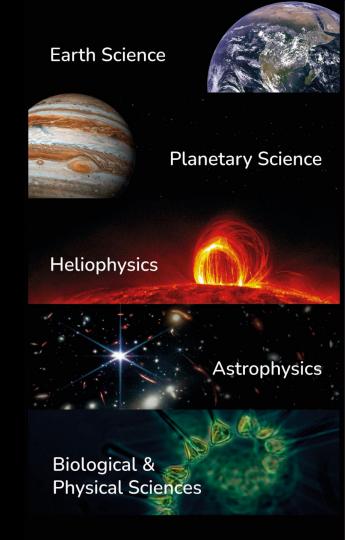


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Over the next three years, the ADS team will be developing and expanding the **NASA Science Explorer** to include all relevant NASA SMD content.



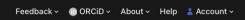
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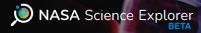
## How is SciX similar to ADS?

SciX is built on the same database and search engine, so no need to learn new search syntax or workflows:

- Type your query
- Filter the results
- Rank, analyze, visualize, refine
- Find citations, software, data products









### WELCOME TO THE

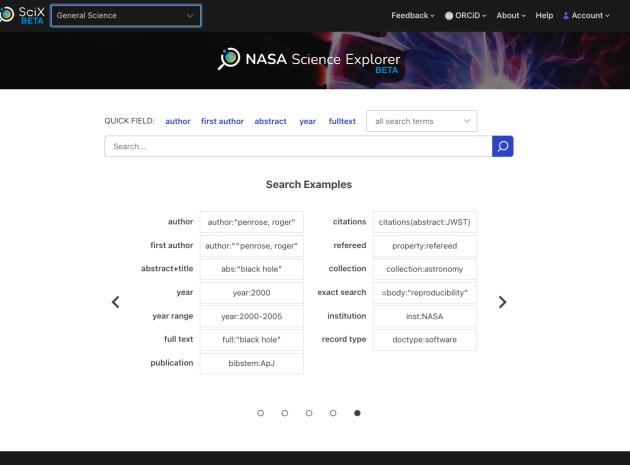
### **SciX Digital Library**



Learn more about the SciX digital library and how it can support your scientific research in this welcome video and brief user tutorial from Dr. Stephanie Jarmak.



SciX is built on top of the same database and API, but has a few different features:



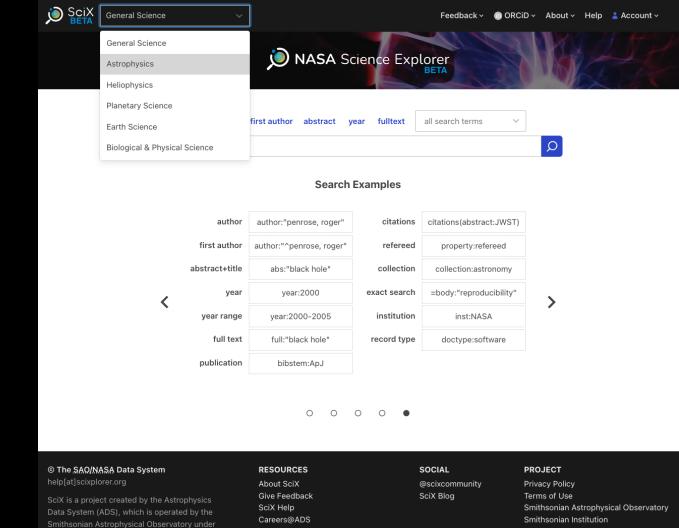
# © The SAO/NASA Data System RESOURCES help[at]scixplorer.org About SciX SciX is a project created by the Astrophysics Data System (ADS), which is operated by the Smithsonian Astrophysical Observatory under NASA Cooperative Agreement NASA Cooperative Agreement RESOURCES Give Feedback SciX Help Careers@ADS Accessibility

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NASA

SciX is built on top of the same database and API, but has a few different features:

Improved accessibility

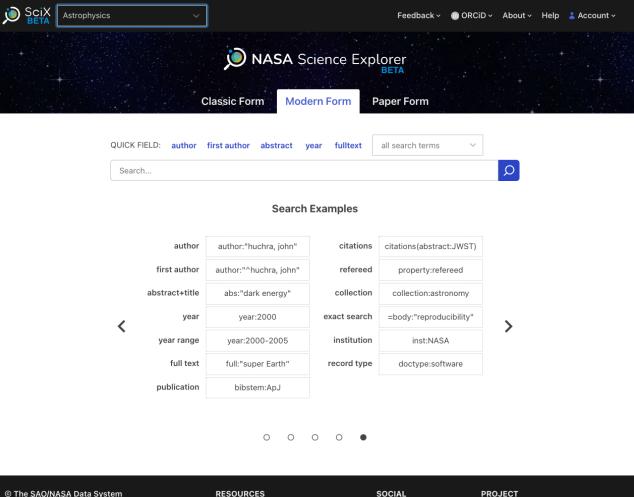


NASA

Accessibility

SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific "skins"



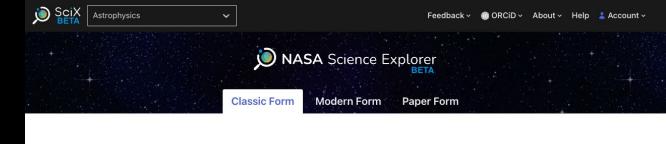
The SAD/NASA Data System
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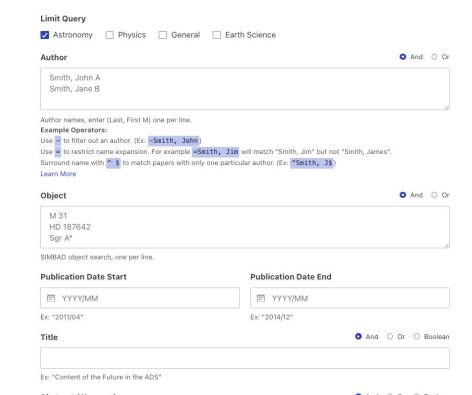
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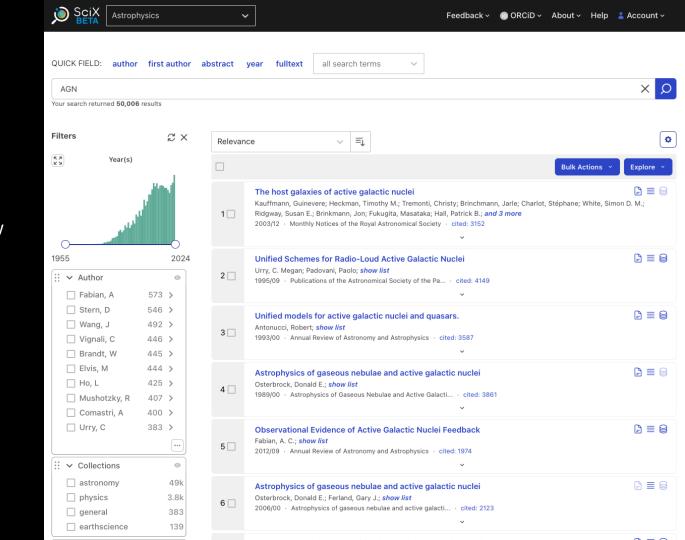
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- Improved accessibility
- Discipline specific "skins" (including the "Classic Form")

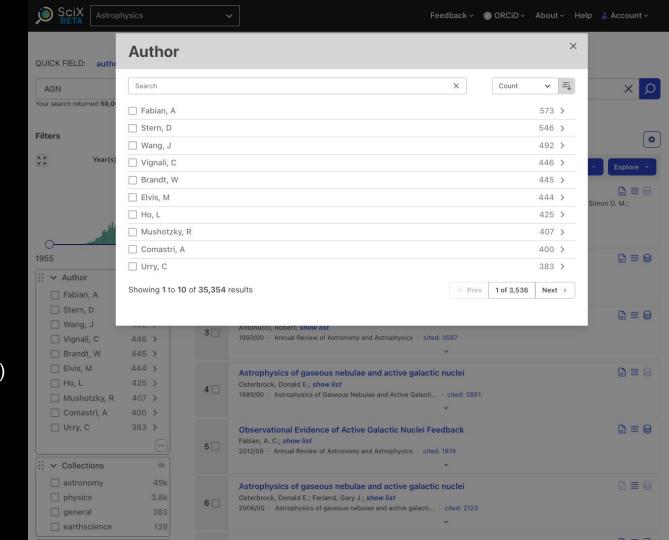




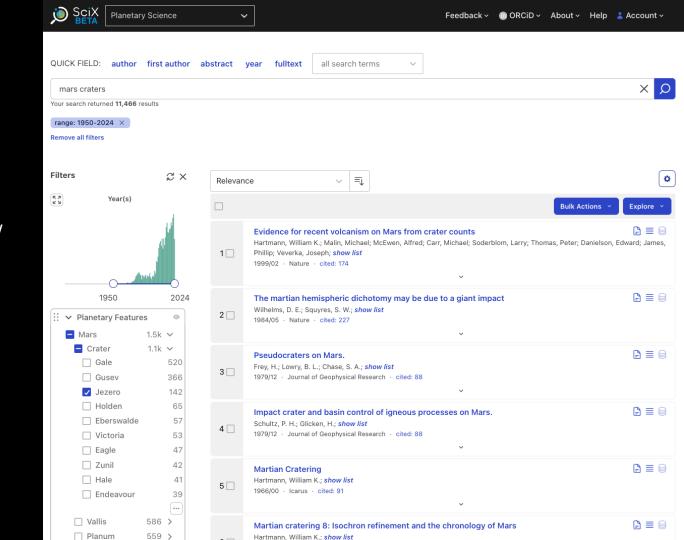
- Improved accessibility
- Discipline specific "skins"
- Better handling of filters



- Improved accessibility
- Discipline specific "skins"
- Better handling of filters (paging, sorting & searching)



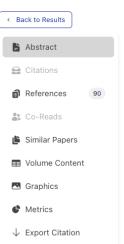
- Improved accessibility
- Discipline specific "skins"
- Better handling of filters
- Discipline-specific enhancements



SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific "skins"
- Better handling of filters
- Discipline-specific enhancements (with links to additional resources)





### Ma'adim Vallis, Mars: Insights into episodic and late-stage water activity from an impact crater

Tuhi, S.; Harish; Kimi, K. B.; Vigneshwaran, K.; Sharini, K. S.; Priya, R. K. S.; Vijayan, S. show list

Alluvial fans, a form of sedimentary deposit reported on Mars, offer insight into the evolution and nature of fluvial activity on the planet. Additionally, the region's preserved mineralogy can also be used to study its hydrological history. In this context, we discuss

olivine and Mg-rich smectite. Mg smectite was plausibly transported through water or formed in situ while the underneath terrain was rich in Mg olivine. The crater retention age on the ejecta of the unnamed crater is 3.7 Ga which suggests that the crater likely formed during the Noachian-Hesperian period boundary or earlier. This unnamed crater probably witnessed the last episode of water activity in the Vallis, which was most likely fed by water overflowing from a resurged early Hesperian water activity in Eridania Basin. This study substantiates episodic, late- stage water activity in Ma'adim Vallis, and the unnamed crater formed on the floodplains of the

Vallis providing an excellent opportunity for future landing missions to explore astrobiological significance of the region.

the diverse geomorphology and mineralogy of an unnamed crater that formed on the eastern wall of Ma'adim Vallis, Mars. Ma'adim

Vallis is an irregular-shaped, flat-floored valley incised due to the outflow of water from the Eridania basin. The rim of the unnamed

crater is breached at multiple locations and it hosts an alluvial fan of an area ~ 50 km<sup>2</sup>. The CRISM spectral signatures show Mg-rich



SciX is built on top of the same database and API, but has a few different features:

- Improved accessibility
- Discipline specific "skins"
- Better handling of filters
- Discipline-specific enhancements
- Improved ORCID integration



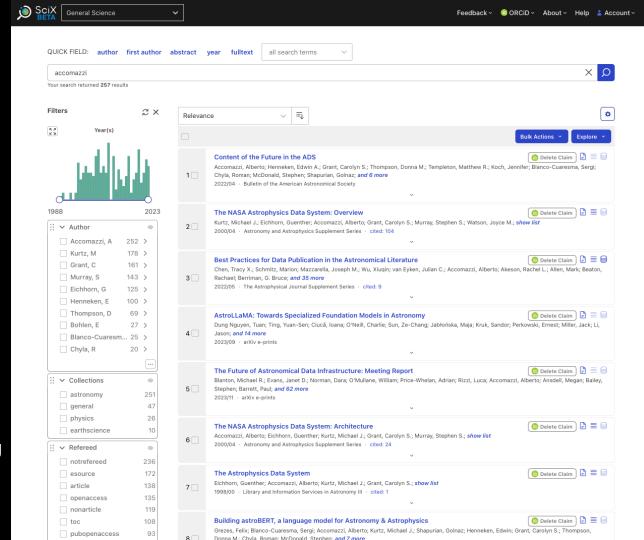
#### My ORCiD Page

Learn about using ORCiD with NASA SciX

Claims take up to 24 hours to be indexed in SciX

Il my papers				
TITLE	SOURCE	UPDATED ▼	STATUS	ACTION
The Future of Astronomical Data Infrastructure: Meeting Report	NASA SciX	2 months ago	Verified	0
AstroLLaMA: Towards Specialized Foundation Models in Astronomy	NASA SciX	3 months ago	Verified	0
Expansion of the NASA Astrophysics Data System to Earth and Space Sciences	Crossref NASA SciX	3 months ago	Verified	Ф
Expansion and Enhancement of FAIR Content in the ADS	Crossref NASA SciX	3 months ago	Verified	Ф
Expansion and Enhancement of FAIR Content in the ADS	Crossref NASA SciX	3 months ago	Verified	0
Best Practices for Data Publication in the Astronomical Literature	NASA SciX Crossref	3 months ago	Pending	Ф
Expansion and Enhancement of FAIR Content in the ADS	NASA SciX	3 months ago	Verified	401
Building the UAT as a Community	NASA SciX	3 months ago	Verified	401
Content of the Future in the ADS	NASA SciX	3 months ago	Verified	Ф
Automatically detecting facilities in the scientific literature using Deep Learning techniques	NASA SciX	3 months ago	Verified	401
Introducing the New ADS OpenAPI Exploration Tool: Making API Access More User- Friendly	NASA SciX	3 months ago	Verified	-QF
Asclepias: Software Citations Enter the Scholarly Literature World	NASA SciX	3 months ago	Verified	Ф
ADS Support of Open Science in Heliophysics	NASA SciX	3 months ago	Verified	0
The Earth and Space Science Knowledge Commons: Building capacity and community	NASA SciX	3 months ago	Verified	Ф
ADS Support of Open Science in Heliophysics	NASA SciX	3 months ago	Verified	₽
Improving astroBERT using Semantic Textual Similarity	NASA SciX	3 months ago	Verified	40-
Proceedings of the first Workshop on Information Extraction from Scientific Publications	NASA SciX	3 months ago	Verified	Φ
ADS Machine Learning and Deep Learning Efforts	NASA SciX	3 months ago	Verified	0
Software Citation and Discoverability in ADS with the Citation Capture Pipeline	NASA SciX	3 months ago	Verified	-tột
Advancing Space Science Requires NASA Support for Coordination Between the Science Mission Directorate Communities	NASA SciX	3 months ago	Verified	0

- Improved accessibility
- Discipline specific "skins"
- Better handling of filters
- Discipline-specific enhancements
- Improved ORCID integration
- New default for search ranking (customizable)





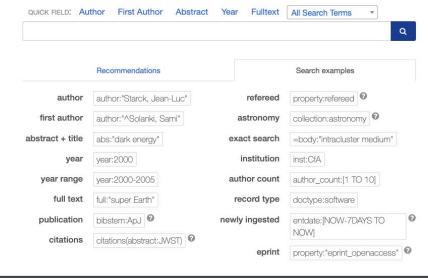
### ADS is not going away!

ADS will remain accessible online in its current, familiar format. All links to ADS will remain valid forever



adshelp[at]cfa.harvard.edu

ads



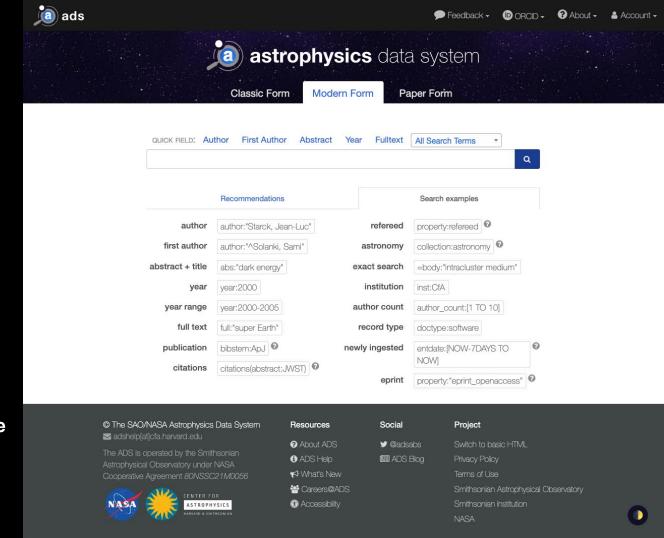


© ORCID → ? About →



## ADS Support will continue

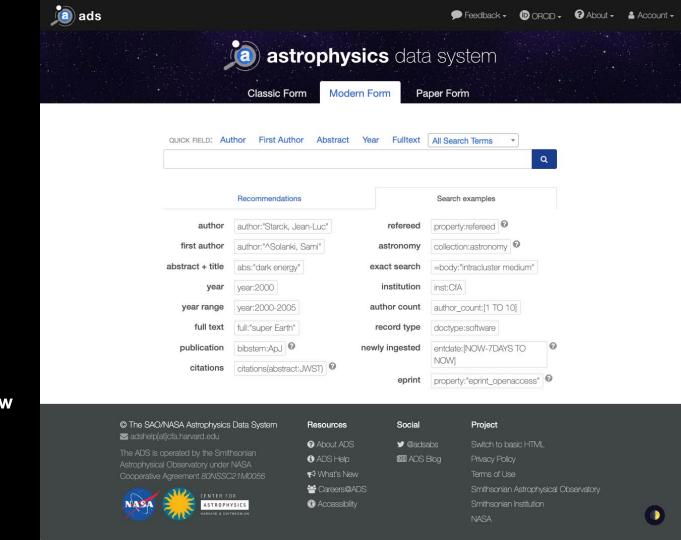
Existing ADS support will continue throughout the transition, ensuring you have the assistance and resources you need whether you stick to ADS "as is" or explore SciX



### What happens to ADS?

# Astrophysics remains a key focus

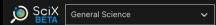
SciX will retain a strong emphasis on astrophysics. New services will continue to be designed for astrophysics, providing models for other disciplines

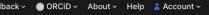


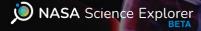
### Why should I use SciX?

# New Features will be developed in SciX

The SciX platform is our development focus and the place where new capabilities and new content will be rolled out









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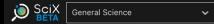
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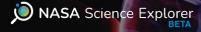
### Why should I use SciX?

### Disciplinary focus in an **Interdisciplinary context**

We are committed to making sure the transition will increase, not decrease, research productivity and enable interdisciplinary research









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- All of NASA Science
- Connected to the data
- Linked to the code





## **NASA** Science Explorer

Accelerating the discovery of NASA Science.

- All of NASA Science
- Connected to the data
- Linked to the code

### Better than the rest...

- Open
- Trustworthy
- Complete
- Innovative
- Interdisciplinary
- Developed by scientists, for scientists





## **NASA** Science Explorer

Accelerating the discovery of NASA Science.

### **Thank You!**



For more information:

https://SciXplorer.org @SciXCommunity

Visit us at booth #315





## **NASA** Science Explorer

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