The NASA Astrophysics Data System: Capabilities and Roadmap for the 2020s

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First the News...

- ADS “Classic” is going away
  - Old technology hard to maintain
  - Not compliant with standards
  - Drain on resources

- Long Live ADS!
  - New interface up and running
  - Same content as ADS Classic
  - More functionality and features

- Transition plan:
  - Oct 18: ADS Classic use discouraged
  - Jan 19: ADS Classic deprecated
  - May 19: ADS Classic shut down
You can still...

- Search by author

author:“kurtz, m”
You can still...

- Search by author
  - author:“kurtz, m”
- Search by author and year
  - author:“kurtz, m” year:2010
You can still...

- Search by author
  - author: “kurtz, m”

- Search by author and year
  - author: “kurtz, m” year: 2010

- Search by first author
  - ^kurtz, m
But now also...

- Search by author: `author:“kurtz, m”`
- Search by author and year: `author:“kurtz, m” year:2010`
- Search by first author: `^kurtz, m`
- Search fulltext: `full:(HST or JWST)`
But now also...

- Search by author: `author:“kurtz, m”`
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- Search by first author: `^kurtz, m`
- Search fulltext: `full:(HST or JWST)`
- Search affiliations: `aff:(Harvard or HCO or SAO)`
But now also...

- Search by author
  - author:“kurtz, m”

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- Search ORCIDs
  - orcid:000-0002-4110-3511
And easily compute metrics...
As well as analytics
ADS Program for the next two years

Complete System Transition

● Achieve complete functional parity of new Platform and User Interface
● Update remaining services and infrastructure: myADS (notifications), citation processing, fulltext archive, API access to crawlers and applications

Improve content and Curation

● Ingest software records, track software citations
● Enable collaborative curation of ADS Libraries
● Improve coverage of exoplanet literature, data products
● Enrich records with normalized affiliations, keywords, ORCID mappings
Opportunities and Challenges in the 2020s

Content and Curation

- Data Citation: Index (high-level) data products as cited in the literature
- “Big Data” challenges: hyper-authorship (large collaborations), rapid publications (transients), living papers (versioning)

New functionality

- Scale up networks, metrics, analytics to support studies at institutional level
- Leverage machine learning for search, recommendations, citation analysis
- Support community-based text mining efforts vs. copyright restrictions
- Become a clearinghouse for text-based search on both literature and data
Feedback sought

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● What functionality is missing from ADS? What would you like to be able to do but can’t because of lack of data, access, integration with other systems?
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- What should ADS do about the deluge of rapid publications coming from the Transient Name Server and others? How does this scale with ZTF and LSST?
- What other data products should be indexed in ADS? Do data and software citations matter if they are not reflected in ADS citation counts?
Talk to us!

In person:
AAS 232, Collaboration and Hacking Space, Plaza Court 6

Online:
https://twitter.com/adsabs

Through the ADS Users Group:
https://ui.adsabs.harvard.edu/about/adsug/

Email:
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ADS Help <ads@cfa.harvard.edu>