

# 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
- Search by author and year

author:"kurtz, m"



author:"kurtz, m" year:2010



# You can still...

- Search by author
- Search by author and year
- Search by first author

author:"kurtz, m"



author:"kurtz, m" year:2010



^kurtz, m



# But now also...

- Search by author
- Search by author and year
- Search by first author
- Search fulltext

author:"kurtz, m"



author:"kurtz, m" year:2010



^kurtz, m



full:(HST or JWST)



# But now also...

- Search by author
- Search by author and year
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- Search affiliations

author:"kurtz, m"



author:"kurtz, m" year:2010



^kurtz, m



full:(HST or JWST)



aff:(Harvard or HCO or SAO)



# But now also...

- Search by author
- Search by author and year
- Search by first author
- Search fulltext
- Search affiliations
- Search ORCID IDs

author:"kurtz, m"



author:"kurtz, m" year:2010



^kurtz, m



full:(HST or JWST)



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orcid:000-0002-4110-3511

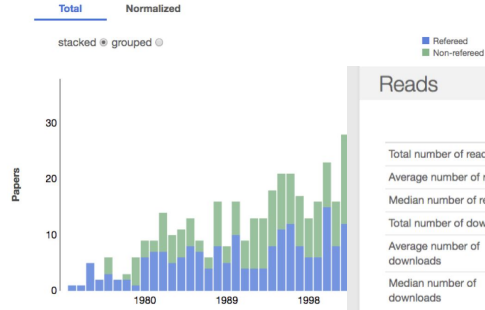




# And easily compute metrics...

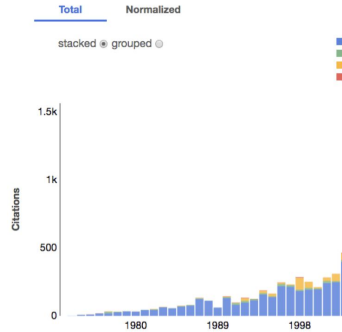
## Papers

	Totals	Refereed
Number of papers	649	350
Normalized paper count	237.6	98.8



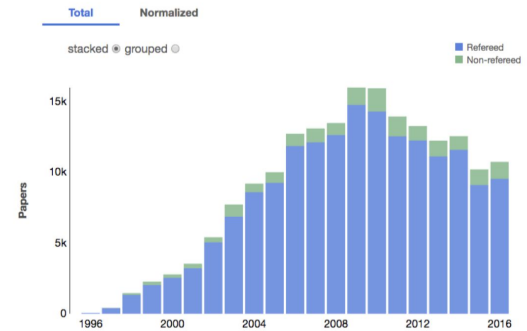
## Citations

	Totals	Refereed
Number of citing papers	11490	10906
Total citations	19993	19094
Number of self-citations	1830	1744
Average citations	30.8	54.6
Median citations	4	17
Normalized citations	2409.0	2283.7
Refereed citations	17738	17019
Average refereed citations	27.3	48.6
Median refereed citations	3	15
Normalized refereed citations	2182.3	2070.8



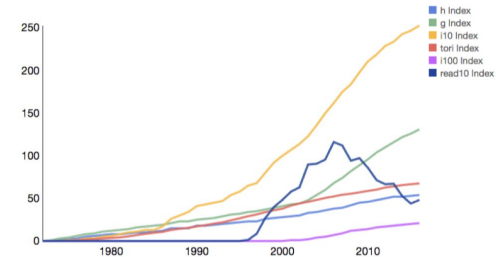
## Reads

	Totals	Refereed
Total number of reads	186844	170973
Average number of reads	289.2	488.5
Median number of reads	88.5	265
Total number of downloads	99471	94901
Average number of downloads	154.0	271.1
Median number of downloads	43	43



## Indices

	Totals	Refereed
h-index	54	54
m-index	1.2	1.2
g-index	132	129
i10-index	253	243
i100-index	21	20
tori index	67.6	64.0
riq index	182	177
read10-index	481.8	397.9





# 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

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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:

Alberto Accomazzi <[aaccomazzi@cfa.harvard.edu](mailto:aaccomazzi@cfa.harvard.edu)>

ADS Help <[ads@cfa.harvard.edu](mailto:ads@cfa.harvard.edu)>