

The White House announces The 2023 Year of Open Science

NASA ♦ NSF ♦ NOAA ♦ DOA ♦ DOC ♦ DOE ♦ GSA ♦ NEH ♦ NIH ♦ NIST ♦ USDA ♦ USGS

Along with other organizations, including CENDI,
voluntary collaboration among Federal managers, and
HELIOS, a coalition of 80+ universities

A multi-agency initiative across the federal
government to spark change and inspire open
science engagement through events and activities
that will advance adoption of open science.

Website: <https://open.science.gov/>

WH: <https://www.whitehouse.gov/ostp/news-updates/>

Nature: <https://doi.org/10.1038/d41586-023-00019-y>



NASA is supporting scientists to integrate open science principles into the entire research workflow

Infrastructure

NASA's
Open-Source
Science
Initiative
\$20M/year

Policy

Funding

Community



SMD Scientific Information Policy (SPD-41A)*

Scientific Information Policy Website & FAQ : [Science Information Policy](#) | [Science Mission Directorate](#)

SPD-41a **brings together** existing NASA and Federal guidance on open data, software, and publications

SPD-41a is **forward looking**: Applies to new missions and grants proposed to ROSES23. Existing missions & grants should adopt it consistent with their available resources.

SPD-41a **is compliant** with the new memo from the OSTP on “Ensuring free, immediate, and Equitable Access to Federally Funded Research”

□ SPD-41A Highlights □

Peer-reviewed publications made openly available, without embargo, consistent with the OSTP memo

Data and software shared at the time of publication

Missions data released as soon as possible and unrestricted mission software developed openly

Science workshops and meetings held openly to enable broad participation.





NASA is Leading the Path to Open Science

NASA's Transform to Open Science (TOPS) is a \$40 million 5-year mission to accelerate adoption of open science

TOPS Strategic Goals:

- Support 20K researchers to earn NASA's open science badge
- Double the participation of historically excluded groups across NASA science
- Enable five major scientific discoveries through open science principles



Engagement



Capacity Sharing



Incentives



Coordination



Join us as we embark on the 2023 Year of Open Science with NASA TOPS!

NASA 2023 Year of Open Science



NASA's Transform to Open Science (TOPS)
Priorities:

1. Release an Introduction to Open Science curriculum & have 1000 earn NASA TOPS open science certificates
1. Engage historically underrepresented groups
1. Develop open science incentives

Join
us!



A spark to change the culture of science



Year of Open Science Goals:

1. Develop a strategic plan for open science;
2. Improve the transparency and equity of reviews;
3. Account for open-science activities in evaluations; and
4. Engage under-represented communities in the advancement of open science



Challenges & risks

- Open science is not free science
- Resistance to change (both researchers and organizations)
- Requires a shift in incentives that directly affect researchers
- Social science problem...

Measuring Success....

- 1000+ certified in open science by end of 2023
- Increase in open science practices (ORCID, DOI, software)
- Plan for increasing transparency in reviews
- # of funding elements that ask about open science activities
- Engagement with minority serving institutions

