

American Geophysical Union Data (and software) Sharing Status

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AGU's position statement on data affirms that

“Earth and space science data are a world heritage, and an essential part of the science ecosystem. All players in the science ecosystem—researchers, repositories, publishers, funders, institutions, etc.—should work to ensure that relevant scientific evidence is processed, shared, and used ethically, and is available, preserved, documented, and fairly credited.”

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AGU Data (and software) Sharing Timeline

1997 - AGU adopts a data position statement

2013 - AGU Council adopts the new data policy for AGU publications that states data must be available upon publication, availability statement, citation, encourages code sharing.

2014 - Coalition on Publishing Data in the Earth and Space Sciences established (COPDESS.org)

2015 – Signatory of Statement of Commitment for COPDESS around data in publication

2017 – 2019 Enabling FAIR Data project, funded by Arnold Ventures, 300+ international stakeholders focused on data being preserved in an appropriate repository and cited in the paper.

August 2019 – Publication Policy fully aligned with the Enabling FAIR Data Common Author Guidelines for Publishers:

- Data must be preserved in a FAIR-aligned repository.
- There must be an availability statement and a citation.



Must share data in a repository

COPDESS: Connecting Earth Science publishers and Data Facilities to help translate the aspirations of open, available, and useful data from policy into practice. AGU's Brooks Hanson is co-I.

<https://copdess.org/enabling-fair-data-project/>

<https://www.agu.org/Publish-with-AGU/Publish/Author-Resources/Data-for-Authors>

Data for publication

Guidelines to support author compliance with open data standards

WHAT IS NEEDED

The data that supports your research and the visualizations in your paper must be deposited in a trusted repository that practices the FAIR principles. When identifying the most appropriate repositories for your data, please consider the following prioritization. We recommend a repository that specializes in the data for your scientific domain as this will maximize the probability that the deposited data will be interoperable and reusable. If that is not available for your data type, next is your institutional repository, your computing center, and finally a general repository.

[Data availability statements](#) [Data citations](#) [Repository selection](#) [Modeling data](#)

Data availability statement examples

For each dataset that supports your research, both a citation and a data availability statement must be present. The data availability statement for each data set must be included in the Acknowledgments section of your paper indicating where readers can access the data. See the information on data citation for additional guidance. The availability statement should include an in-text citation, licensing information, and access restrictions. Statements to the effect of 'data available from authors' are not acceptable.



In development...

- Journal Specific Guidelines based on collaboration with our editors
 - detailing specific information for data types and domain repositories
- Software Availability Statement and Citation Guidance
 - based on Force11 working group and recent publications



Current Publisher Signatories...

(as of 27 April 2020)



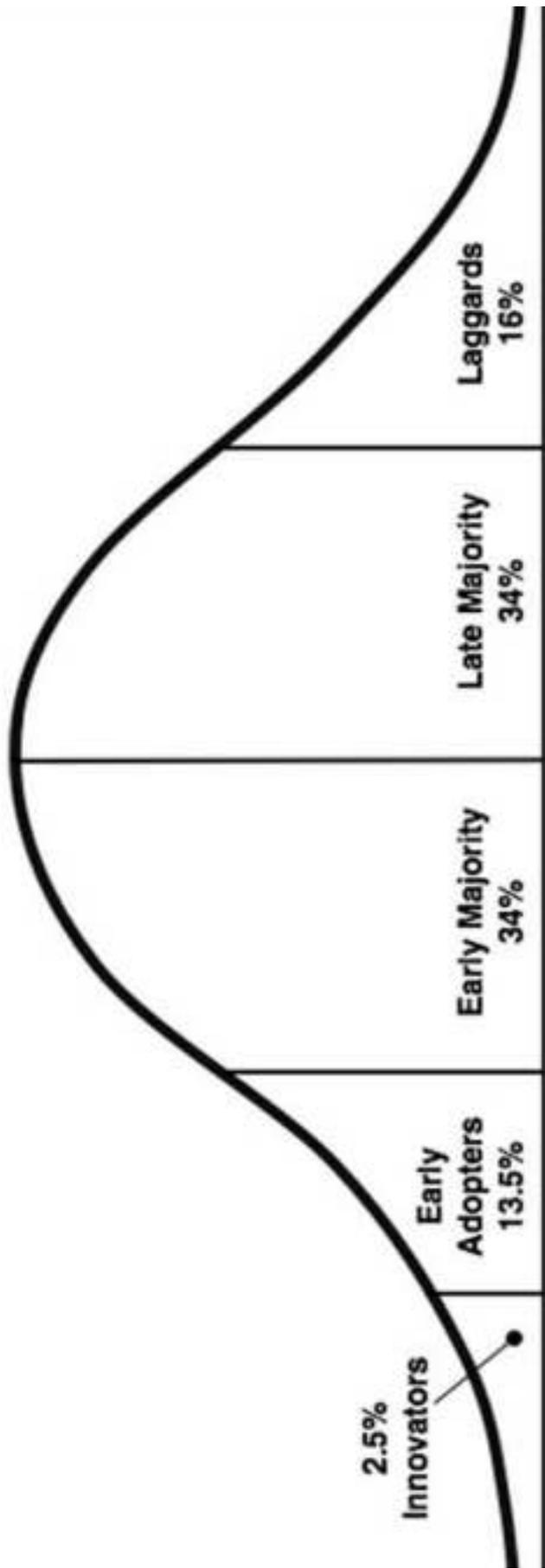
- American Geophysical Union
- Copernicus Publications
- Ubiquity Press
- California Digital Library – CDL
- Wiley
- PANGAEA, Alfred Wegener Institute, Helmholtz Center for Polar and Marine Research (AWI), Center for Marine Environmental Sciences, University of Bremen (MARUM)
- WDC Climate, Deutsches Klimarechenzentrum (DKRZ)
- *Science*
- *Science Advances*
- PLOS

Over 225 signatories to date!

- Elsevier
- F1000
- *Nature*
- *Scientific Data*
- Taylor & Francis Group
- Hindawi Ltd.
- *Nature Geoscience*

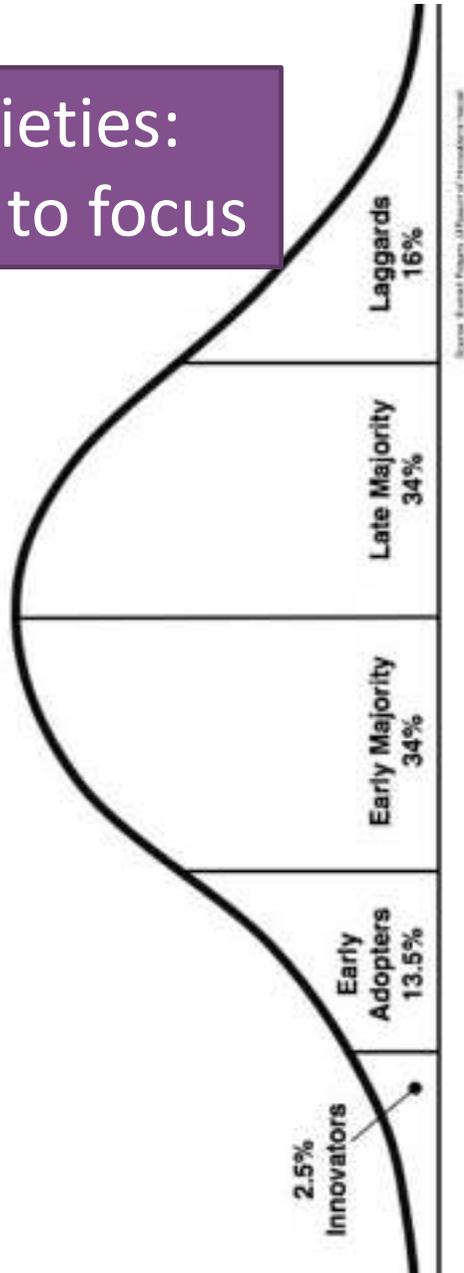


Changing a Research Culture



Source: Everett Rogers, *Diffusion of Innovations*, 1962

Societies:
areas to focus



Adapted from Brian Nosek (COS) by Marcia McNutt,
President of the National Academy of Science

Make it required – with policies

Society Journals

Make it rewarding – with incentives

Societies

Make it accepted – by building communities

Societies

Make it easy – with user interface

Make it possible – with infrastructure