

Better Science for Future Us

We believe Open Science can accelerate data-driven solutions and increase diversity, equity, inclusion, and belonging.

We see many different pathways to Open Science, and have been intentional about building inclusion and sustainability into Openscapes as we support research teams and communities.



Erin Robinson & Julia Stewart Lowndes, Co-Directors

NASA Open-Source Science Workshop October 14, 2021

Artwork by Allison Horst

openscapes.org

[@openscapes](https://twitter.com/openscapes)



Empower research

teams Openscapes Champions

A mentorship program that helps researchers move from lonely science by exploring the open science landscape with their teams in a cohort of peers



“This isn’t just about coding & GitHub, it’s about changing the way we do science.” - Dr. Malin Pinsky, Rutgers

“Openscapes has created a new way of thinking about merging empathy and science. That’s an invaluable gift to me.” - Dr. Halley Froehlich, UCSB

“Openscapes gave me a perspective of how all these open data science tools work together and can be used to bring natural resource conservation and ecology into the 21st century.”

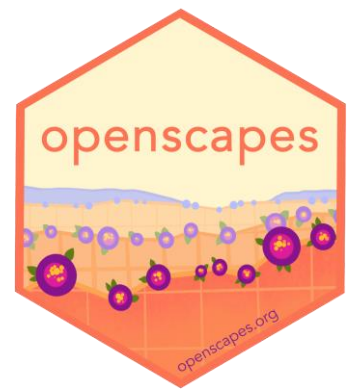
- Researcher, NOAA National Marine Fisheries Service

Biggest impact: research teams work more openly together

Reframe data-intensive research as collaborative effort not an individual burden.

students participate in research faster • grant money goes further • co-creating norms promoting diversity, equity & inclusion • new collaborations • leadership

Biggest lesson: power of research teams & data science to normalize open science



Engage

Mentors

Develop Champions Mentor – professional development and leadership skills

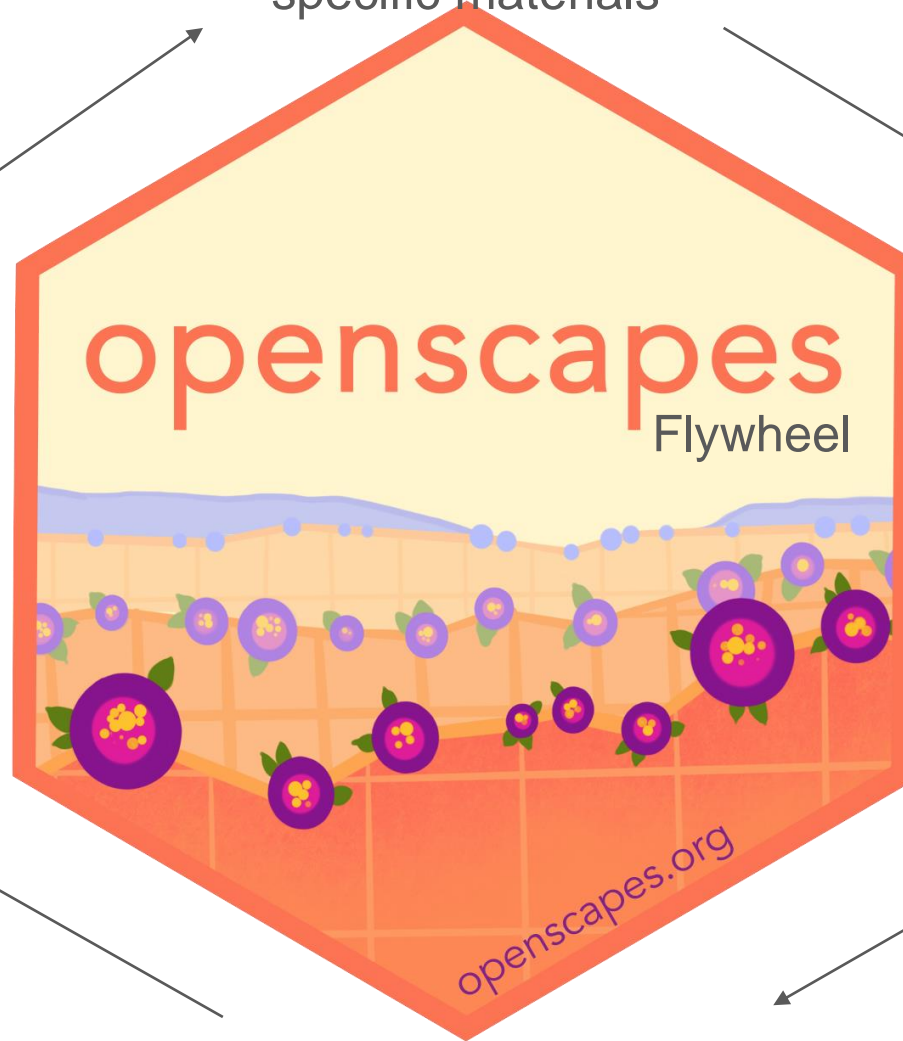


Inspire broader scientific communities through visible examples and leaders – Open science shift

Amplify

Leaders

Invest in Champions Program curriculum: NASA Earthdata cloud-specific materials



Attract research teams interested in better practices for data-intensive science

Empower research teams

Deliver Champions Program for a Cohort of research teams

Transform research teams workflows towards kinder, inclusive open

Engage

Mentors



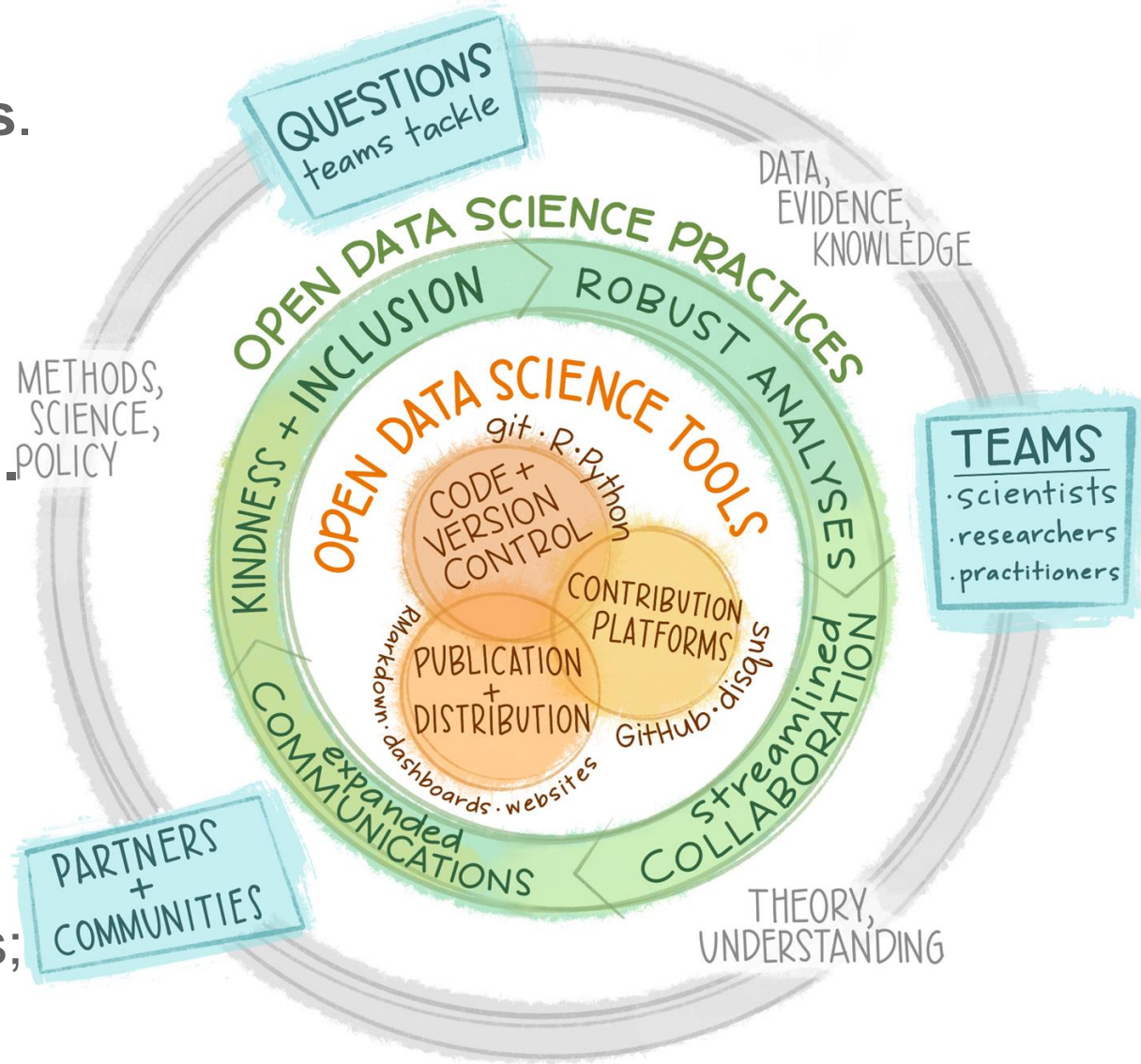
- **People:** Building community, trust, normalizing talking about tutorials
- **Process:** Identifying common parts and shared needs for NASA Earth Science Cloud workflows
- **Technology:** shared skills & practices to co-create tutorials:
 - Carpentries Instructor Training
 - GitHub
 - 2i2c
 - Quarto



<https://nasa-openscapes.github.io>

Openscapes approach

- **Researcher-centered, focused on teams.**
Practice and feel safe working openly with yourself and your team; then ease into more.
- **Create space & place to explore & learn.**
Cohort Calls, Seaside Chat, Co-Working; GitHub, R, Python, Google Drive, Slack; Efficiency Tips & Inclusion Tips.
- **Cultivate relationships & real connections.**
Welcoming folks with diverse backgrounds; meeting where they are; skills to empower immediate work; kinder science.



<https://openscapes.org/approach>

Thank you

We're looking forward to working together!



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Join us:

Twitter: @openscapes

Web: openscapes.org

December: Community Call

Early 2022: NASA Openscapes

Champions nasa-openscapes.github.io

Further background:

Entryways to open data science and the power of welcome

Lowndes 2020, plenary at Earth Science Information Partners (ESIP) Meeting

Putting Data to Work

Robinson 2020, Leptoukh Lecture at the American Geophysical Union (AGU) Conference

Openscapes: Better Science for Future Us

Lowndes, Robinson 2021, plenary at SORTEE Meeting

Better Science for Future Us: Supporting NASA Earth science research teams' migration to the cloud with Openscapes

Robinson, Lowndes 2021, Pangeo Showcase, June 2021

slides: <https://nasa-openscapes.github.io>

Openscapes artwork by Allison Horst