



ESIP 101

ESIP Summer Meeting
Thursday July 15th, 2021



esipfed.org | supported by:



ESIP VISION

To be a leader in promoting
the **collection, stewardship and (re)use**
of Earth science data, information, and knowledge
that is responsive to societal needs.

ESIP CORE VALUES

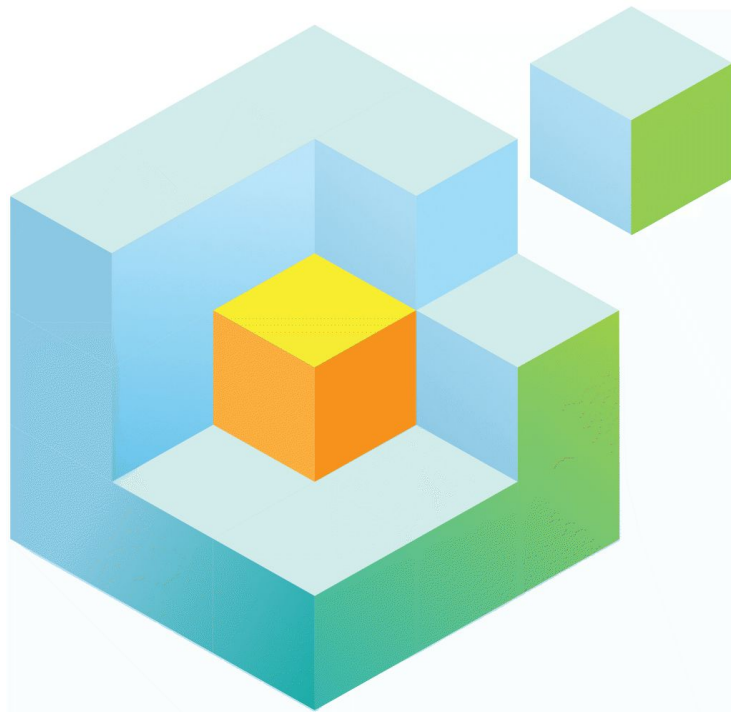
- Agile
- Collaborative
- Collegial
- Community-driven
- Innovative
- Neutral
- Open
- Participatory
- Voluntary



ESIP SHARED AGENDA

2021-2026 Strategic Themes

- Promoting a Healthy and Inclusive Culture
- Leading Innovation in Earth Science Data Frontiers
- Making Earth Science Data Matter
- Increase Collaboration Internally and Externally with Stakeholders/Partners
- Elevating the Role of Earth Science Data Professionals





Supported by:



**Brain trust of Earth
science data professionals**



Multiple Science
Domains



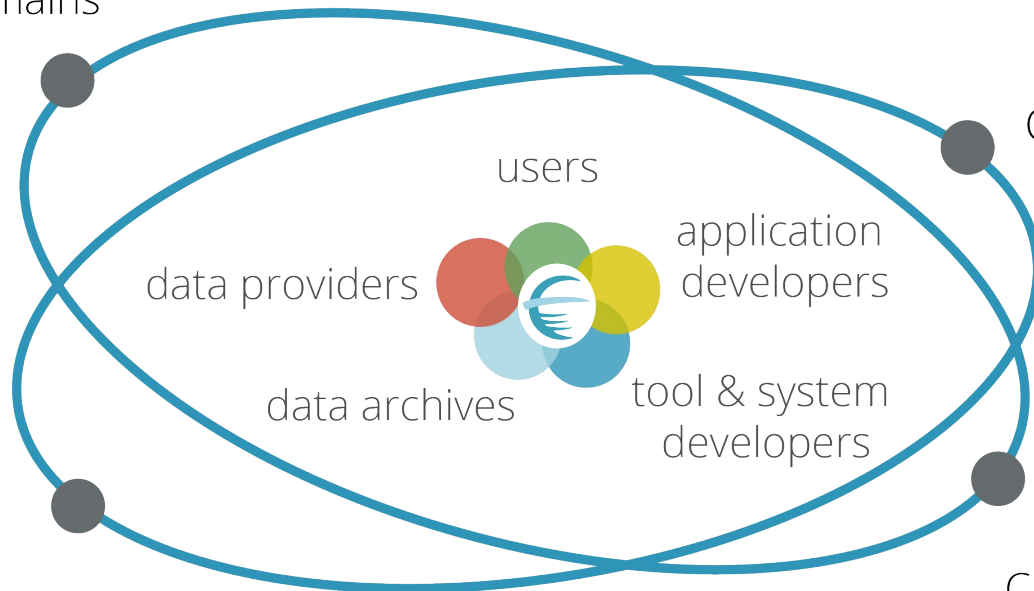
Corporate



Cross-
Agency



Academia



TYPES OF ESIP PARTNERS

TYPE I

DATA AND
INFORMATION
DISTRIBUTORS,
REPOSITORIES, &
ARCHIVE
CENTERS



TYPE II

PRODUCT &
SERVICE
PROVIDERS



TYPE III

EARTH SCIENCE
APPLIED SERVICE
PROVIDERS



TYPE IV

ESIP SPONSORS



TYPE V

COLLABORATIVE
DATA NETWORKS



EARTH CUBE
TRANSFORMING GEOSCIENCES RESEARCH



Plus 150 more...

[ESIPFED.ORG/JOIN](https://esipfed.org/join)

2021 ELECTED LEADERSHIP

BOARD MEMBERS



Nancy
Hoebelheinrich



Cynthia Parr

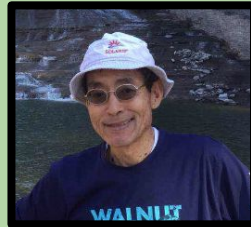


Lesley Wybourn

PROGRAM COMMITTEE



President
Ken Casey



Governance
Bill Teng



Finance
Tracey Pilone



Vice President
Denise Hills



Partnership
Mike Daniels



Nominations
Sarah Ramdeen

Data Stewardship
Amber Budden



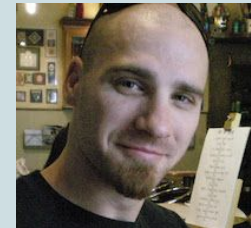
Education
Carla McAuliffe



IT&I
Derek Masaki



Semantic Tech
Brandon
Whitehead



ESIP COMMUNITY FELLOWS



Left to Right:

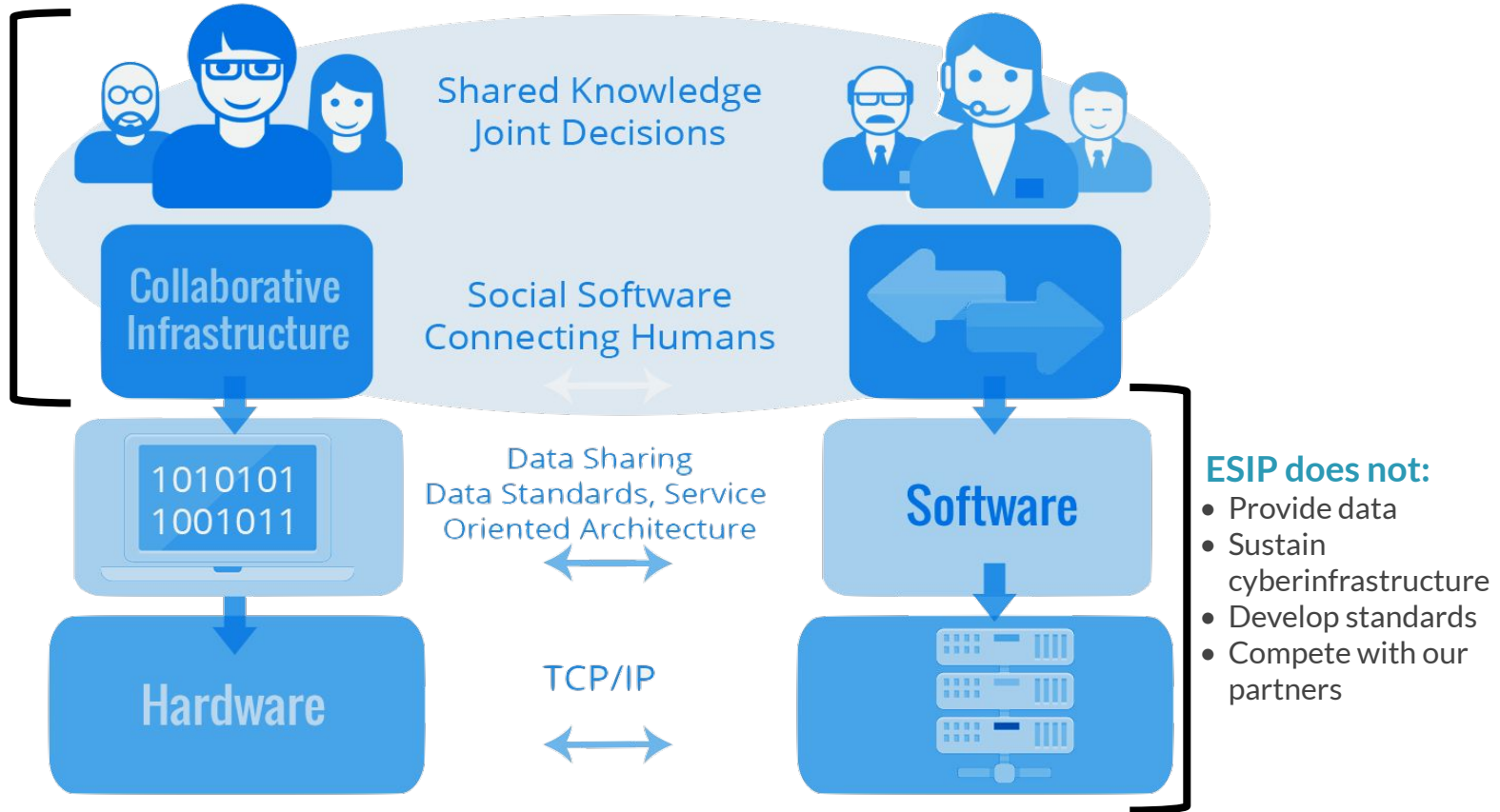
- Kristina Fauss | Univ. of California-Santa Barbara | Envirosensing Cluster
- Christine Gregg | Univ. of Michigan | Community Resilience Cluster
- Qian Huang | Univ. of S. Carolina | Disaster Lifecycle Cluster
- Sara Lafia | Univ. of Michigan | Discovery Cluster
- Cindy Lin | Univ. of Michigan | Machine Learning Cluster
- Marion McKenzie | Univ. of Virginia | Community Data Cluster
- Ned Molder | Univ. of Wisconsin-Madison | Public Private Partnerships Cluster

ESIP IS AT THE LEVEL OF HUMAN CONNECTION

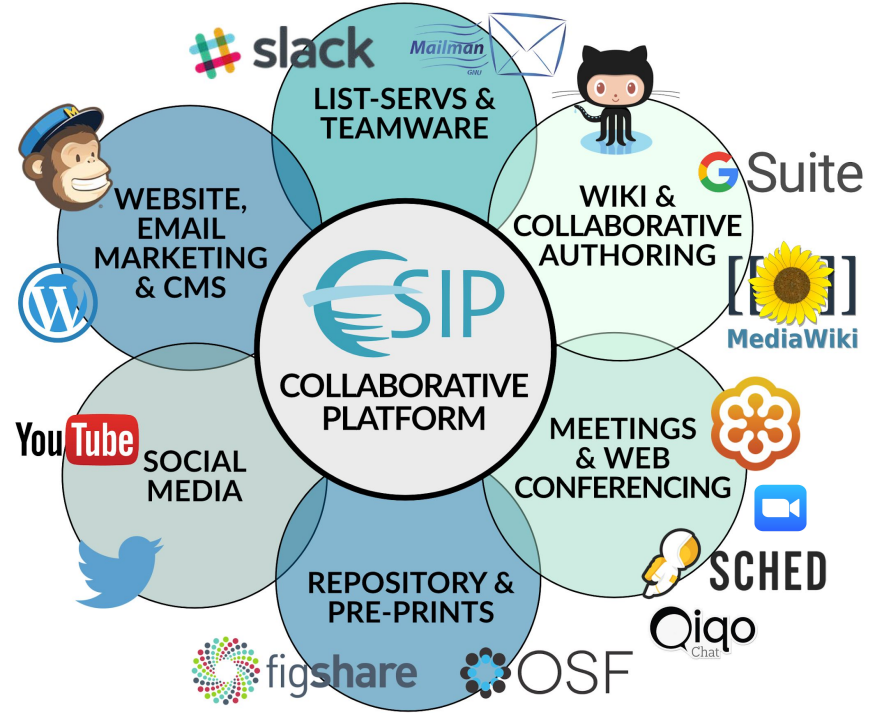


Generate recommendations and work products.

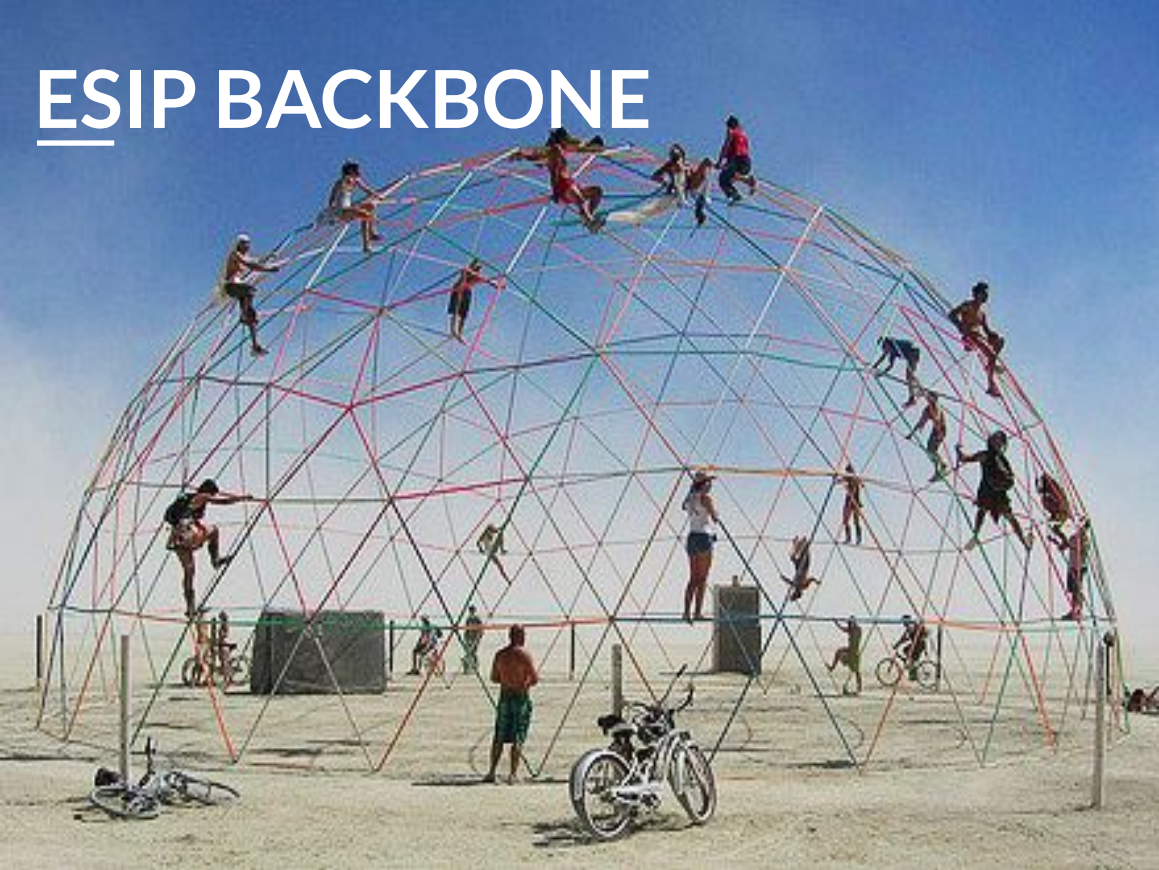
Have a lasting impact in the recommendation of standards.



ESIP BACKBONE



ESIP BACKBONE



Susan Shingledecker
Executive Director



Annie Burgess
Lab Director



Megan Carter
Community Director



Patty Allen
Operations Director



Lindsay Barbieri
Agriculture & Climate Information Fellow

THREE APPROACHES

VIRTUAL
COLLABORATION

- ▶ Facilitate professional development, outreach, and collaboration opportunities.

MEETINGS

- ▶ Seed innovation, community-generated best practices, and

- ▶ Provide funding for prototyping, experimentation, and skill development.

ESIP LAB

COLLABORATION AREAS

STANDING COMMITTEES

- Data Stewardship
- Education
- Information Technology and Interoperability (IT&I)
- Semantic Technologies

CLUSTERS

- Ag & Climate
- Air Quality
- Biological Data Standards
- Cloud Computing
- Community Data
- Community Resilience
- COPDESS
- Community Ontology Repository (COR)
- Data Readiness
- Disaster Lifecycle

- Discovery
- Drones
- E2SIP
- EnviroSensing
- Information Quality
- IM Code Registry
- Machine Learning
- Marine Data
- Physical Sample Curation
- Public-Private Partnerships
- Research Object Citation
- Schema.org
- Semantic Harmonization
- Soil Ontology & Informatics
- Sustainable Data Mgmt

[ESIPFED.ORG/COLLABORATE](https://esipfed.org/collaborate)



WHAT COLLABORATION AREAS DO

WORK TOGETHER ON COMMON DATA CHALLENGES
WHERE DO THEY MEET?

- Virtual telecons
- At ESIP and other meetings

WHAT ARE THEIR GOALS?

- Host webinars, develop outputs, maintain resources, lead open discussion
- Plan ESIP meeting sessions

ESIPFED.ORG/COLLABORATE





Data Management Training Clearinghouse

[Mailing List](#) | [Learn More](#)

Building a registry for online learning resources about research data management (developed in collaboration with ESIP, now supported with other funding).



Data Readiness

[Mailing List](#) | [Learn More](#)

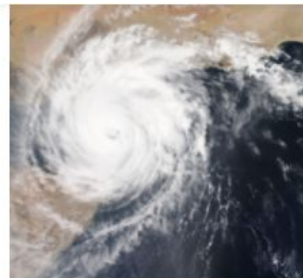
Discussing advancements, defining recommendations, and developing tools for open environmental data for artificial intelligence (AI) applications.



Data Stewardship Committee

[Mailing List](#) | [Learn More](#)

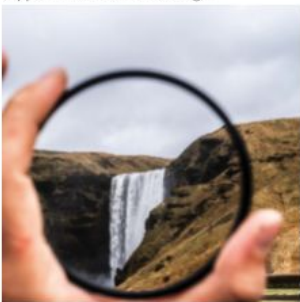
Developing and fostering practices and standards in the field of Earth science informatics.



Disaster Lifecycle

[Mailing List](#) | [Learn More](#)

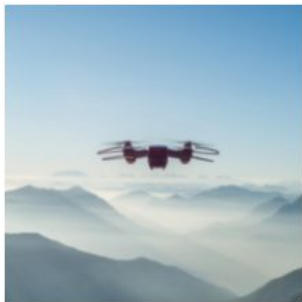
Facilitating connections among data providers, managers and developers of disaster response systems and tools, and end-user communities.



Discovery

[Mailing List](#) | [Learn More](#)

Exploring usage-based discovery, including relationships between datasets and types of usage, from publications to applications to policy-making.



Drones

[Mailing List](#) | [Learn More](#)

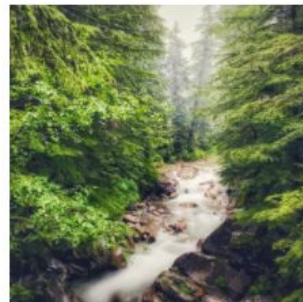
Furthering the development and use of drones as tools for Earth science applications and research and as instruments with unique data management and standardization challenges.



Education Committee

[Mailing List](#) | [Learn More](#)

Promoting the development and dissemination of Earth science educational products, information, and tools to a broad user community including educators and learners at all levels in both formal and informal settings.

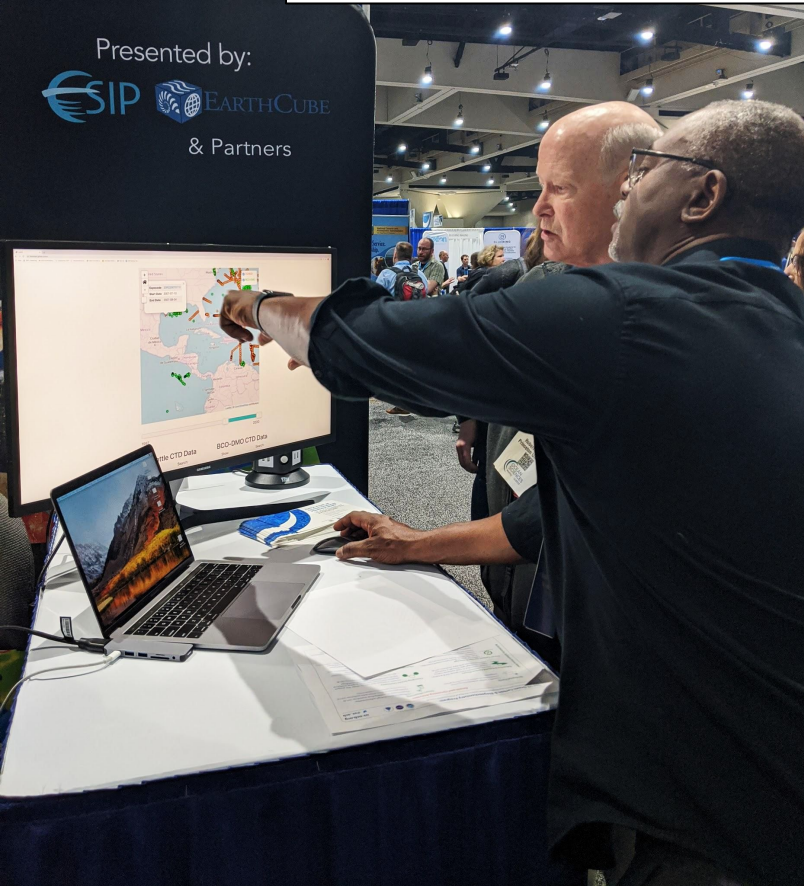


Enviro Sensing

[Mailing List](#) | [Learn More](#)

Sharing and developing best practices for real-time sensor network data quality and deployment strategies.

DATA HELP DESK (IN-PERSON & VIRTUAL)



Provides researchers with opportunities to engage with informatics experts familiar with their scientific domain and learn about skills and techniques that help further research and make data and software open and FAIR.



Data FAIR is a program of ESIP, EarthCube, AGU, EGU & their partners.

THANK YOU CLUSTER LEADERS!!

ESIPFED.ORG/COLLABORATE

Scotty Strachan

Renée Brown

Ge Peng

David Moroni

Yaxing Wei

Kristin Vanderbilt

Colin Smith

Anne Wilson

Mark Parsons

Adam Shepherd

Doug Fils

Ruth Duerr

Gary Berg-Cross

Margaret O'Brien

Beth Huffer

Mike Little

Karl Benedict

Crista Straub

Carl Shapiro

Bill Teng

Brian Wee

Carolina Berys-Gonzalez

Chris Olson

Patrick Quinn

Arika Virapongse

Kerstin Lehnert

Lewis McGibbney

John Graybeal

Karen Moe

Dave Jones

Ted Habermann

Jane Wyngaard

Lindsay Barbieri

Steve Diggs

Andrea Thomer

Chris Lynnes

COLLABORATION AREAS

PRESIDENT & VICE PRES

ADMIN COMMITTEES

TECHNICAL COMMITTEES

ACTIVE CLUSTERS

- Ag & Climate
- Air Quality
- Cloud Computing
- Community Data
- Community Resilience
- COPDESS
- Discovery
- Community Ontology Repository
- Disaster Lifecycle
- Discovery
- Documentation
- Drones
- EnviroSensing
- Information Quality
- IM Code Registry
- Machine Learning
- Marine Data
- Research Data Mgmt
- Research Object Citation
- Schema.org
- Semantic Harmonization
- Sustainable Data Mgmt

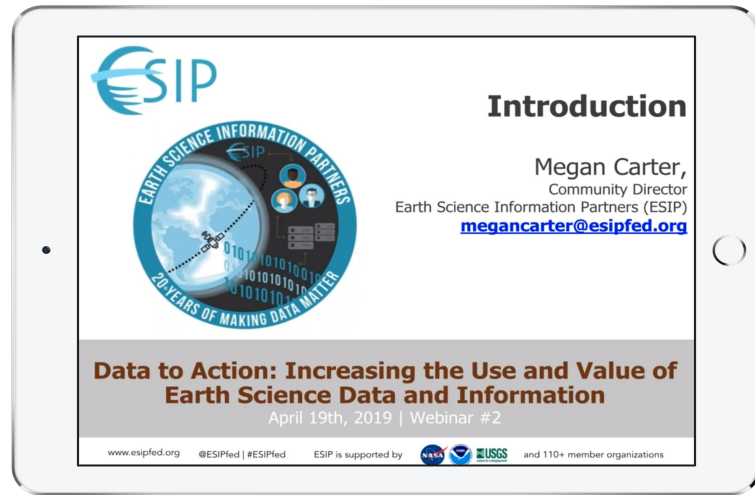
AT-LARGE BOARD

ESIP STAFF

COLLABORATION AREA HIGHLIGHTS WEBINAR

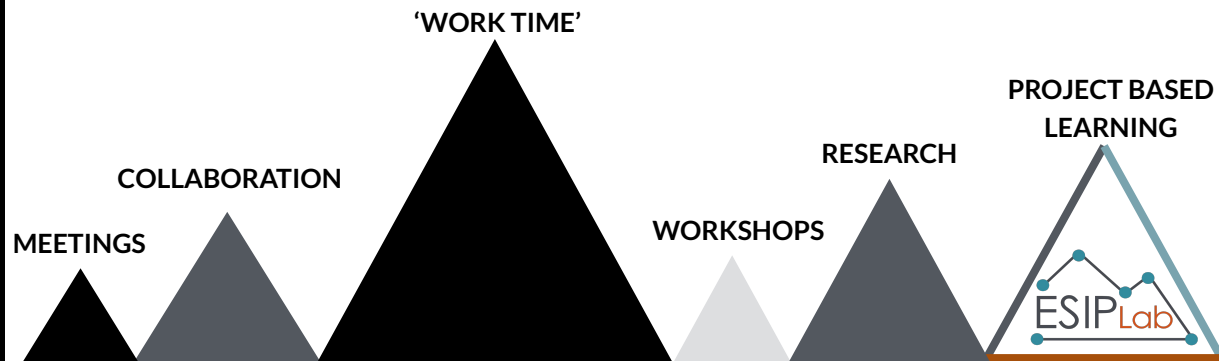
Annual webinar featuring lightning talks from ESIP collaboration areas.

[ESIPFED.ORG/COLLABORATE](https://esipfed.org/collaborate)



ESIP LAB

WE FACILITATE
PROJECT-BASED LEARNING
OPPORTUNITIES FOR EARTH
SCIENTISTS TO INCREASE
THEIR TECHNICAL SAVVY,
WHILE INCREASING OUR
COLLECTIVE KNOWLEDGE
OF EARTH SYSTEM SCIENCE.



ESIP LAB



ABOUT ESIP ON MEDIUM | WEBSITE

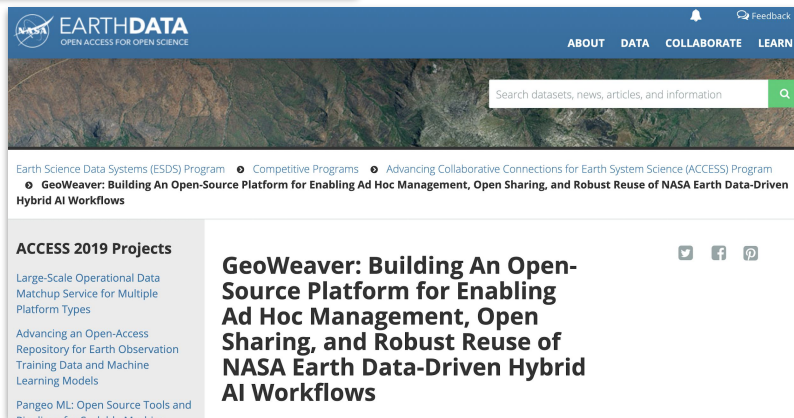
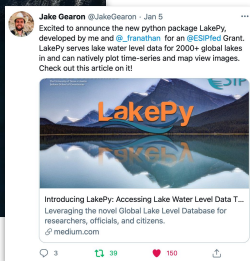
Introducing LakePy: Accessing Lake Water Level Data Through a Python API

Leveraging the novel Global Lake Level Database for researchers, officials, and citizens.



Jake Gearon

Jan 4 · 5 min read



Soil Data Models: a review

K Todd-Brown (ktoddbrown@ufl.edu)

UF team: L. Heran, K. Frederick, M. Younger

Contributors: L. Nave, N. van Gestel, C. Scheadel, C. Sierra, C. Lawrence, A. Hoyt, S. Stoner, J. Beem-Miller, K. Heckman, S. von Fromm, A. Kuhnen, J. Holmquist, W. Wieder, S. Earl, T. Crowther, N. Batjes, E. Ribeiro

2020 November 23

1 Introduction

The overall goal of the project is to develop, implement, and test best practices for compiling transparent, reproducible, harmonized, and extendable data collections for meta-analysis. In this document there is 1) an examination of current meta-analysis efforts in the soil community though short reviews developed in collaboration with the research group, 2) a general interview to the soils community, and 3) a structural summary of the data models available.

The results from this project have spawned an upcoming manuscript and future ESIP Cluster

https://wiki.esipfed.org/Soil_Ontologies_and_Informatics.

(NASA), National Oceanic and Atmospheric Administration (NOAA) and the United States Geological Survey (USGS).

What our PIs have said about working with the ESIP Lab:

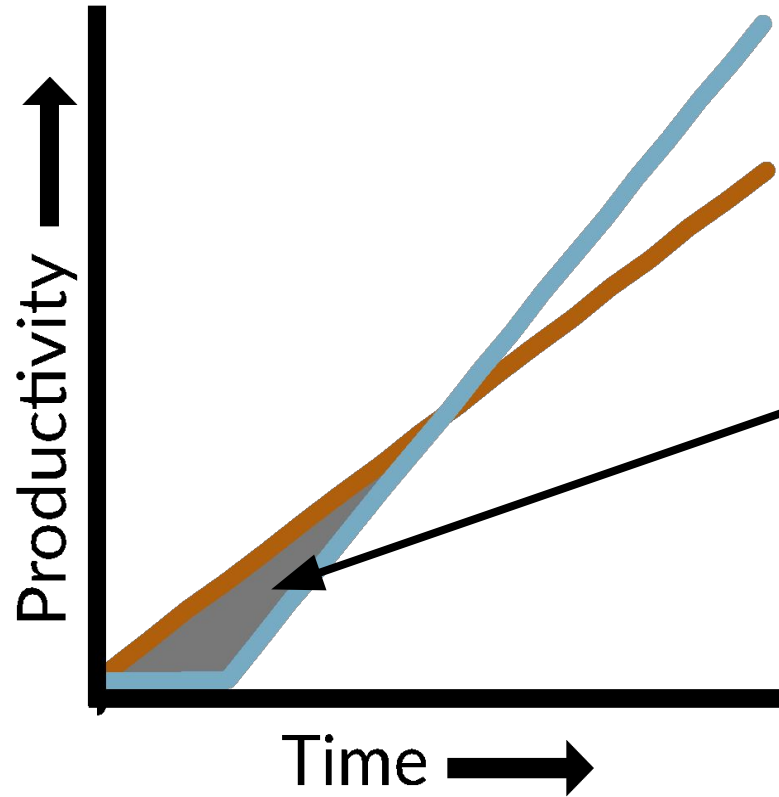
“ESIP Lab has been phenomenal in kickstarting projects that would otherwise not have sufficient funds to begin.”

“This has been so fun and thoroughly engaging.”

“I thought ESIP did a great job supporting this project and I appreciate the support.”

“The ESIP Lab award is wonderful for developing synergistic projects with researchers from different disciplines and interests.”

OUR EXPERIENCE IN PROJECT BASED LEARNING



Increasing cloud skills through project-based learning avoids the perception of lost productivity while developing new skills.

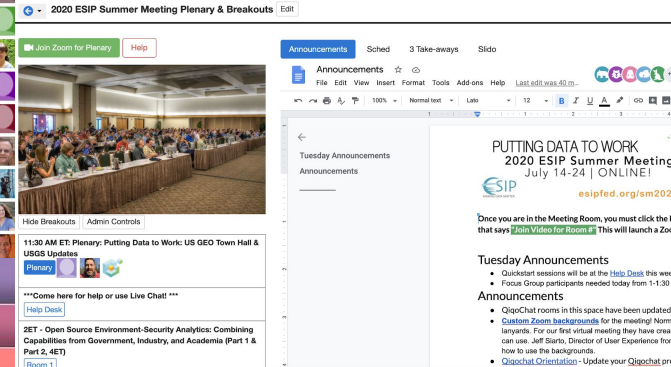
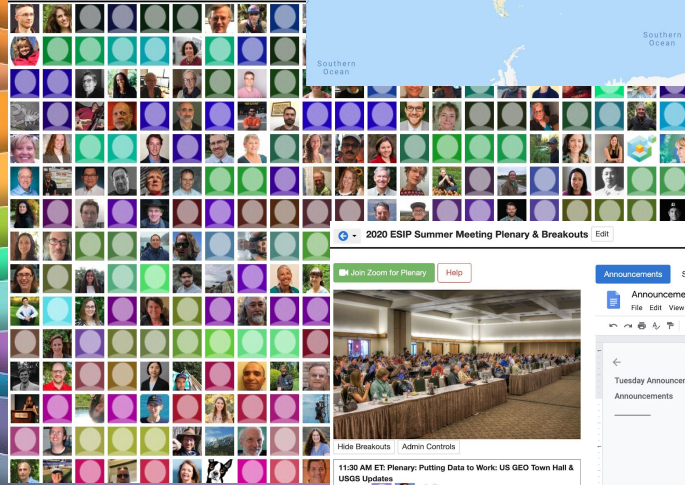
TRADITIONAL MEETINGS



ESIP MEETINGS



- ❑ Plenaries
- ❑ Breakouts
- ❑ Networking Time
- ❑ Unconference Time
- ❑ Co-located Events



WHAT MAKES ESIP MEETINGS DIFFERENT

[← 2021 ESIP Summer Meeting Plenary & Breakouts](#) [Edit](#) [Invite](#) Megan Carter | EN ▾

Plenary Room


[Join Video](#) [Help](#)

[Announcements](#) [Slido Q&A](#) [Sched](#)

[Welcome! Click the pink button on top left to launch Zoom.](#)

⏪ - + [Admin Controls](#)

11 AM ET: Opening Plenary Innovate@ESIP

[Plenary Room](#) 

Come here for help or use Live Chat

[Help Desk](#)


1:30 PM ET: Delivering Trusted Data to Real Users & Decision Makers

[Room 1](#)

1:30 PM ET: Assessing the Research Data Management Landscape Through Practice and Education

[Room 2](#)




1:30 PM ET: Emerging best-practices for publishing non-tabular, complex, and special-case ecological datasets



ESIP
SUMMER
MEETING




JULY 19 - 23 2021
esipfed.org/sm2021

LEADING INNOVATION
IN EARTH SCIENCE
DATA FRONTIERS

Thanks to our meeting sponsors:
 Microsoft  

Menu

Timezone

ESIP is supported by:
 


Monday, July 19 • 11:00am - 12:30pm

[Back To Schedule](#)

[⚙ Edit](#) [🔊 Speaker Tools](#)

[🔍 Opening Plenary: Innovate @ ESIP](#)

[🐦 Tweet](#) [f Share](#)

ESIP Meeting QiqoChat Training:
<https://youtu.be/t--kBwwM4DI>

FUNDING FRIDAY AT THE SUMMER MEETING

← → ↺ 🏠 🔒 qiqochat.com/breakout/0/NvDczLZrDnITQHCzckzKPSqUj ☆ ⚙️ R

Apps | Other Books

← 2020 FUNding Friday Edit Erin Robinson 0

📺 Join Video for FUNding Friday

Help



Hide Breakouts

Admin Controls

FUNDing Friday



Add your Idea | Find Collaborators | Get Feedback

Ideas Page

Announcements

Rules



FF20 Announcements ☆ ⓘ ☁

File Edit View Tools Help

Request edit access



Share

R

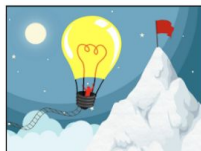


2020 ESIP Summer Meeting | Putting Data to Work | #ESIPFed

FUNDing Friday

Thanks to: **Element** 84

Here's how it works:



Come up with an Idea



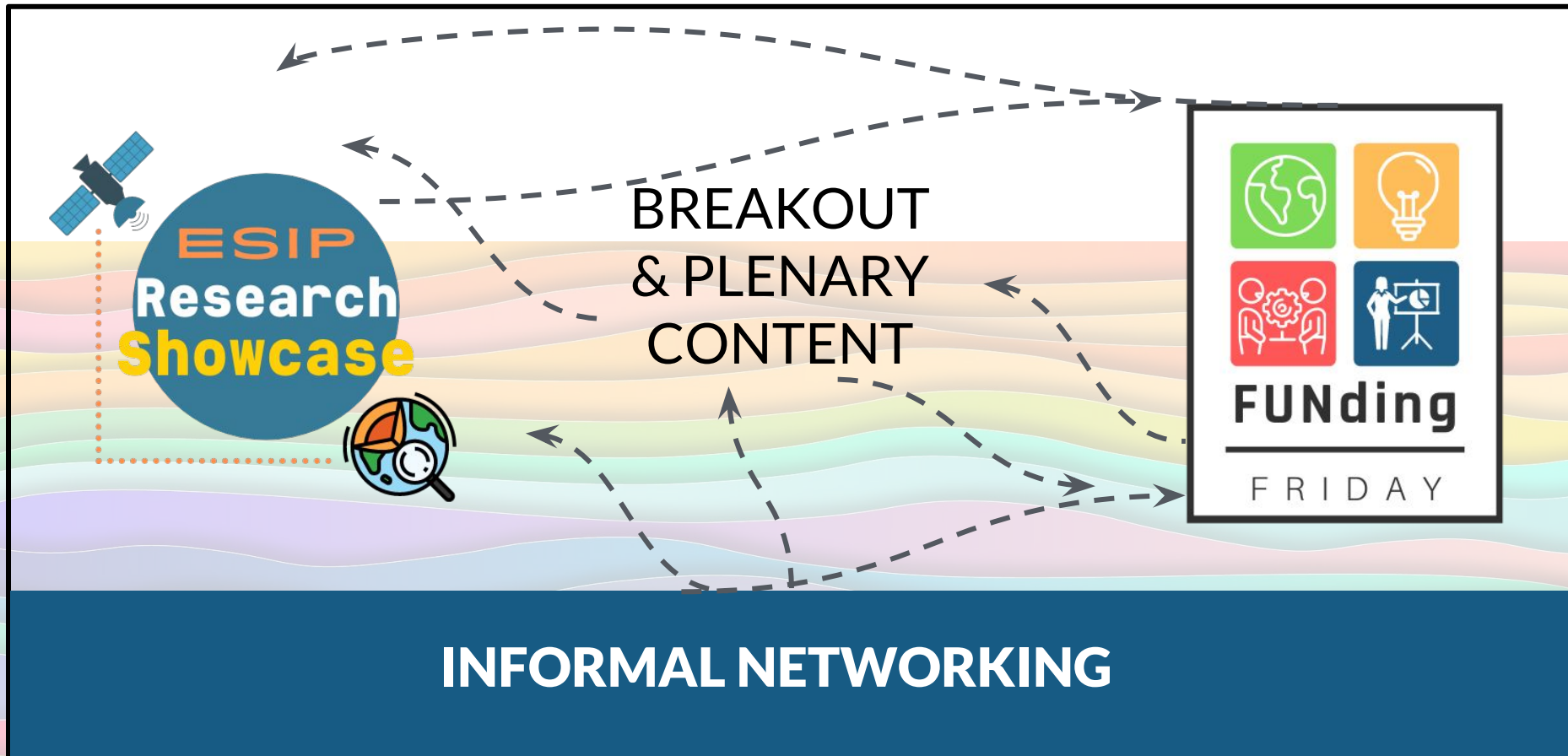
Make a poster with peers



Pitch
your idea

Guidelines

WHAT MAKES ESIP MEETINGS DIFFERENT



RESEARCH SHOWCASE


[← 2021 ESIP Summer Meeting Research Showcase \(OPEN ALL WEEK\)](#) [Edit](#) [Invite](#) Megan Carter | EN

Main Room


[Join Video for Main Room](#) [Help](#)

[Overview](#) [Table of Contents](#) [Code of Conduct](#)


↶ ↷ 🖨️ 🔍 100% Normal text



⏪ - + Admin Controls

Research Showcase - Join here 7/21 at 6 pm ET!
[Main Room](#) 

Come here for help or use Live Chat
[Help Desk](#)

HoloViz.org tools for Earth Science | Bednar, James
[Presentation 1](#) 

Radiant MLHub: An Open Repository for Geospatial Machine Learning Training Data | Booth, Kevin
[Presentation 2](#)

Graphing the USGS | Bristol, Sky

WELCOME TO THE Research Showcase

The Research Showcase is a **virtual gallery of posters and recorded demos and tutorials** from ESIP Meeting attendees. You can **view all contributions at any time during the meeting** and leave questions or comments for the contributors in the 'Learn More & Comment' tab. We encourage you to **attend the live Research Showcase event (Wednesday July 21st at 6 pm ET) to speak to presenters or contact them to schedule another time.** The presenters may also choose to set up additional live time where you can interact with them as designated in the program. Check out the full program listing in the Table of Contents tab above.

LIVE EVENT 7/21:

Join us on **July 21st from 6-7:30 pm ET** to interact live with poster and demo contributors in a fun fast-paced format. Don't miss this chance to meet others, learn about their research, and seed ideas for future collaboration. *NOTE: If you are dialing in from the phone you can find phone numbers for each poster under the 'Help' for each presentation room.*


6 PM ET on 7/21 Start **HERE** in the Main Room of Research Showcase → **CLICK green [Join Video for Main Room Button](#)** on top left of this page

6:06 PM ET Presenters move to specific rooms associated with their presentations

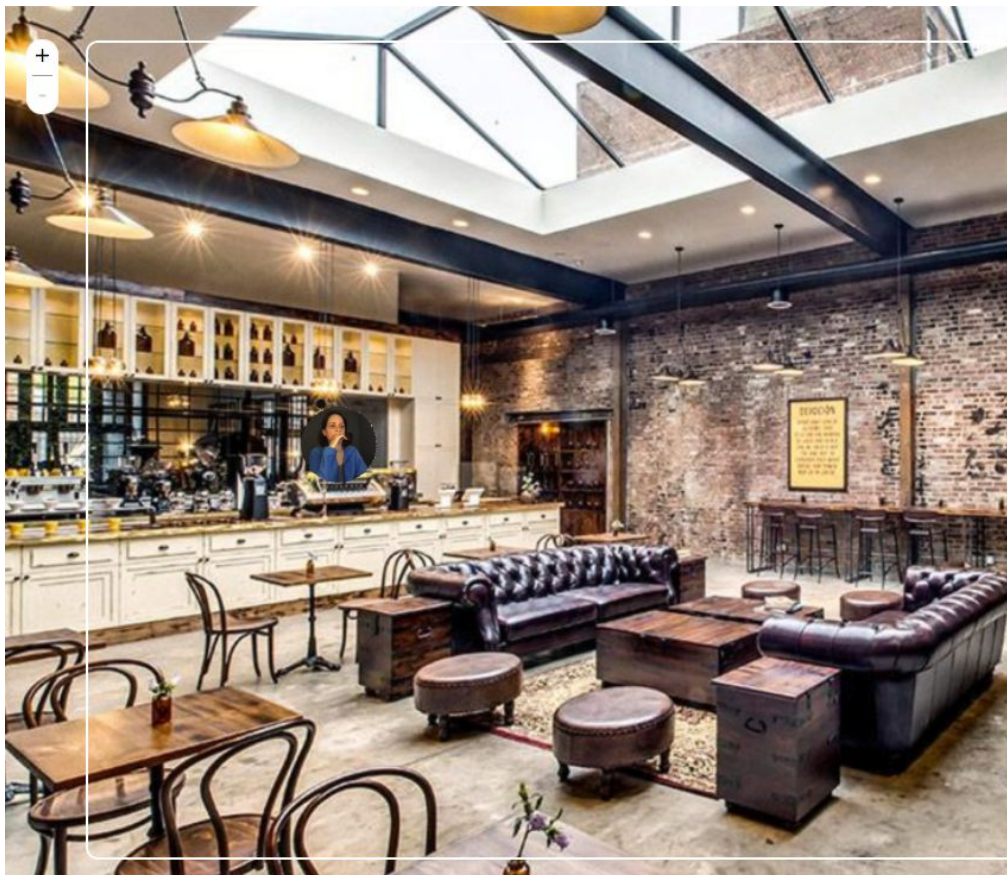
6:10 PM ET Attendees move to a presentation of their choice

6:10 PM ET Presenter gives 3 min intro to their presentation

6:13-6:18 PM ET Q&A

 Live Chat!

COFFEE BREAKS & HAPPY HOUR



Start Here!

INTERACTIVE SLIDE DECK NEW
bit.ly/esiphappyhour

Visit the interactive slide deck to learn more about Esip
Collaboration areas, edit the slides to add your knowledge,
create memes, or ask questions!

Instructions and templates start on the second slide.

8.00

EDIT YOUR NAME

If you are affiliated with a collaboration area - edit your
name to reflect it. Easily find people from collaboration
areas you would like to chat with!

6.00

VIRTUAL BARTENDER

Need to make a drink? Visit the bartender to create
something with what you have on hand!

Schedule


times are in EST

HAPPY HOUR BEGINS	6:00
1ST RAFFLE WINNER ANNOUNCED	6:30
2ND RAFFLE WINNER ANNOUNCED	7:00
HAPPY HOUR ENDS!	7:30

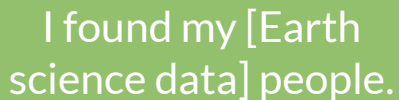
FREE!



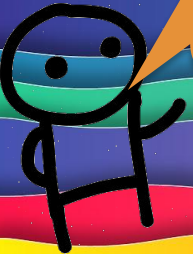
WHAT THE ESIP COMMUNITY SAYS ABOUT OUR MEETINGS



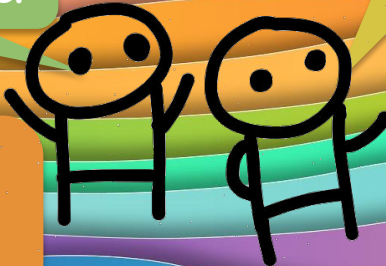
A serious meeting that actually performs a function- the data are slightly more interoperable at end of the meetings.




I found my [Earth science data] people.




Highly skilled people who are a good sounding board for ideas.



ESIP is a gathering place for other groups to convene and co-locate their meetings. Co-located meetings are coveted slots!



Hardest questions I ever got were at ESIP.



Clear professional 'home' for earth science data people.

MEETING HIGHLIGHTS WEBINAR

Thursday August 12th at 12 pm ET

DIDN'T GET A CHANCE
TO ATTEND ALL THE
SESSIONS YOU
WANTED TO?



ESIP ENGAGEMENT OPPORTUNITIES



Discover

Find people and tools to make your data findable, accessible, interoperable, and reusable.



Collaborate

Join-in or create a new collaboration area around your Earth science data challenges.



Innovate

Utilize small-grant funding to build or expand Earth data technologies.



Network

Build connections across federal agencies, the private sector, and academia.



MAKING DATA MATTER
esipfed.org | #ESIPfed

Questions?
staff@esipfed.org

Join the Monday Update Mailing List:
eepurl.com/cFmghz



ESIP Meetings
ESIPFED.ORG/MEETINGS



ESIP Collaboration Areas
ESIPFED.ORG/COLLABORATE



ESIP Lab
ESIPFED.ORG/LAB

Supported by:

