MAKING DATA MATTER

esipfed.org | #ESIPfed

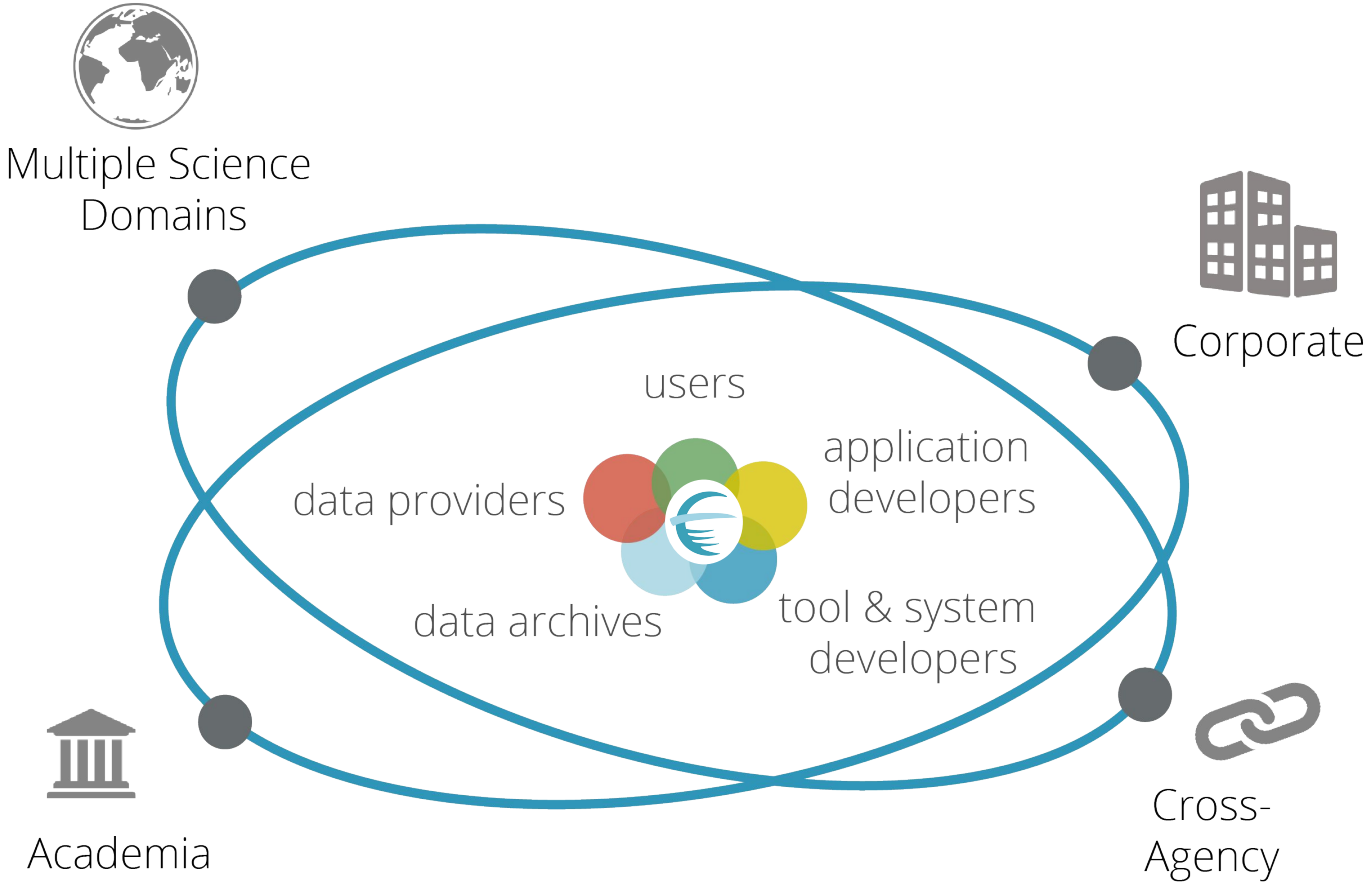
2021 ESIP Winter Meeting

Highlights Webinar

Supported by:

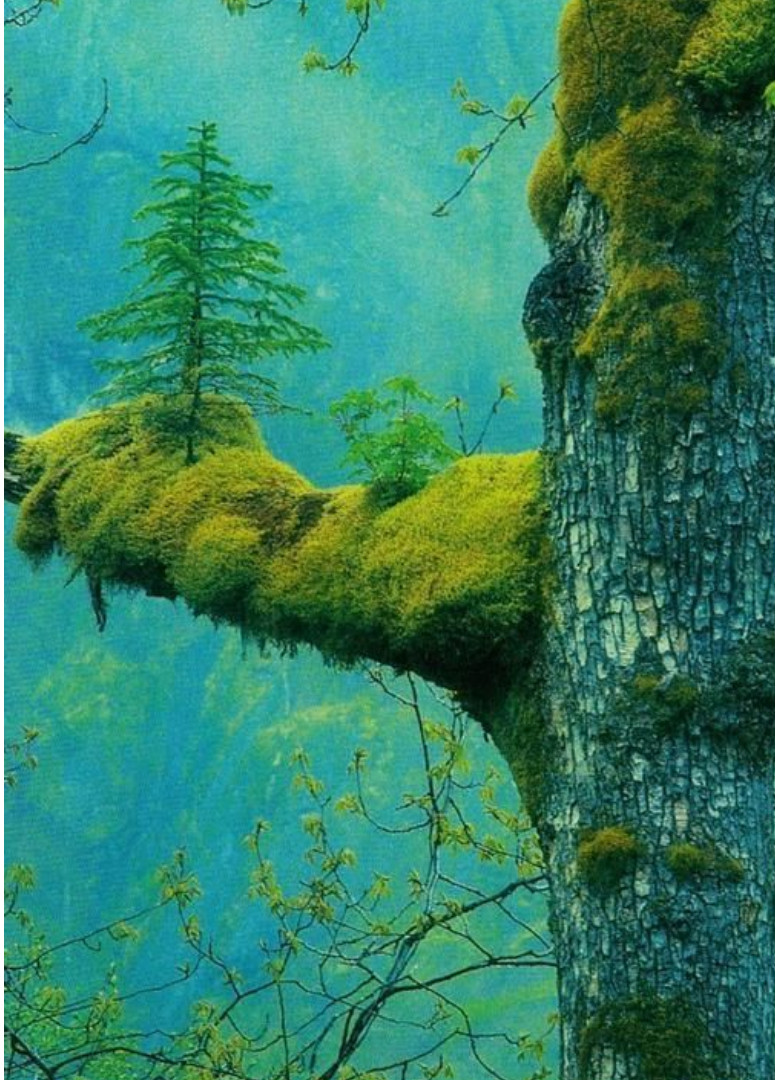
ESIP

Supported by:



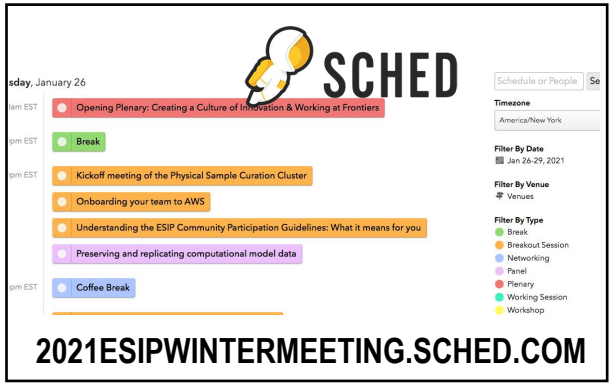
2021 ESIP THEME

Leading Innovation in Earth Science Data Frontiers



MEETING TECHNOLOGY

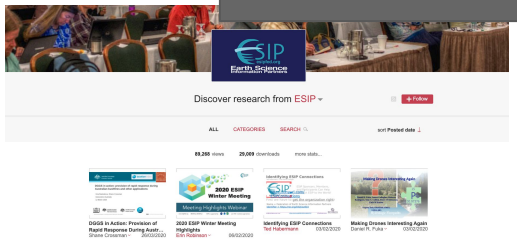
zoom



2021ESIPWINTERMEETING.SCHED.COM

figshare

2020 ESIP Winter
19,470 Views
4,350 Downloads



ESIP.FIGSHARE.COM/SUBMIT

G Suite

Session leads should use this document to work together with session participants to capture up to 3 'take away' points from their 2021 ESIP Winter Meeting Breakout Session (one row per session). Share this document with others → http://bit.ly/wm21takeaways. These points will be shared along with session content in Sched and in Figshare.

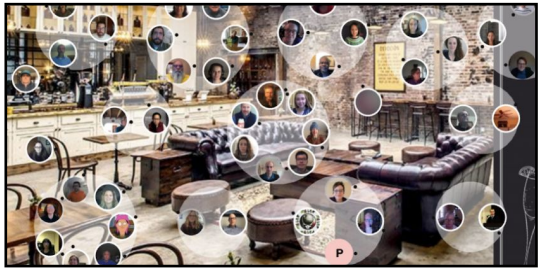
Day	Time	Session Name	Takeaway #1	Takeaway #2	Takeaway #3
Tues. Jan. 26	13:30 ET - 15:00 ET	Understanding the ESIP Community Participation Guidelines: What it means for you	Application of the CPG to not only individuals but groups or individuals or agencies/organizations should be further explored	Additional training should be made available - training for leadership (staff and volunteer) to help infuse CPG into all ESIP spaces; bystander intervention training/resources; ways to handle bad behavior and encourage appropriate behavior with understanding and compassion with an emphasis on leading practices	The connection of ESIP's core values to the CPG is there but should be emphasized and made more explicit
Tues. Jan. 26	16:00 ET - 17:30 ET	Jupyter Notebooks: Harnessing the full potential	Application of JNBs in education, geosciences & publications.	Given the diverse audience, Adoption of JNBs in your respective	

BIT.LY/wm21takeaways

https://2021esipwintermeeting.gigochat.com/

@Esipfed

#ESIPFed



wonder

Find & Access Meeting Content

SCHED

Best Practices & Fundamental Challenges of AI in Earth and Space Sciences

Deriving scientific insights from artificial intelligence methods requires adhering to best practices and moving beyond off-the-shelf approaches" (Imme Ebert-Uphoff et al 2019). Artificial intelligence (AI) has been showing promises to address many challenges associated with Earth sciences, such as remote mapping, prediction, anomaly detection, event classification, and potentially provide high-speed, effortless alternatives for representing vague non-observable processes in Earth system models. However, due to AI's uncertainty and black box nature, there is no consensus on a universal way to correctly use AI. This session calls for best practices of AI utilization and invites the current AI practitioners to present their experiences and workflows on preparing AI-ready data, training AI models, or applying AI in real scenarios, as examples for the community to learn from. The successful use of AI in any domain of Earth and Space Sciences is welcomed for this session.

Ryan McGranaghan
ASTRA LLC
Title: The opportunities and challenges of ML: Trends from the space weather perspective
Slides: https://doi.org/10.6084/m9.figshare.13728070.v1

Ziheng Sun
George Mason University
Title: Earth AI: Formulating ESIP ML Community Effort
Slides: https://doi.org/10.6084/m9.figshare.13721521.v1

View Recording
View Notes

By Session:

https://2021esipwintermeeting.sched.com/

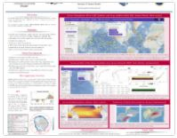
figshare

Advancing collaborative data stewardship with…
Poster posted on 25.01.2021
Jack McNelis

Rich Variable Description with Schema.org
Poster posted on 25.01.2021
Stephen Richard

Supporting Researchers in the Discovery of Data…
Poster posted on 25.01.2021
Amber E. Budden

ESIP Public-Private Partnership Cluster - Maximizing Societal…
Poster posted on 25.01.2021
Crista Straub

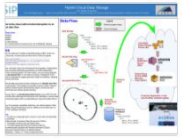


Visualizing oceanic and atmospheric fields on a tile base…
Poster posted on 25.01.2021
Donata Giglio

Analysis Ready SST Data for the Oceans
Poster posted on 22.01.2021
Edward M. Armstrong

Modeling data and information needs for avian conservation…
Poster posted on 22.01.2021
Brian Wee

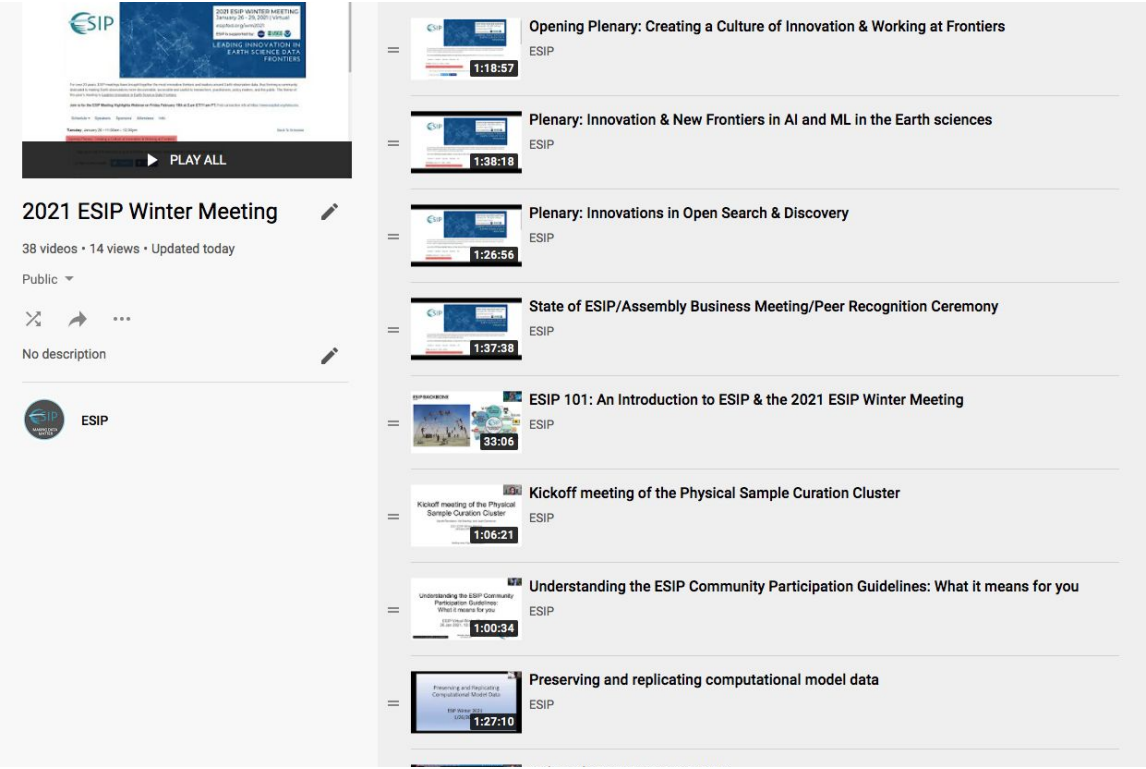
A Roadmap of Workforce Development for the…
Poster posted on 22.01.2021
Yuhan Rao



Browse Presentations:

https://esip.figshare.com/ESIP_Winter_2021

Find & Access Recordings



Browse Recordings on YouTube:

https://www.youtube.com/playlist?list=PL8X9E6I5_i8g8D6Kd11yIr21-e3JZpHEo

ESIP

MAKING DATA MATTER

esipfed.org | #ESIPfed

By the Numbers

Supported by:

MEETING BY THE NUMBERS

4
Plenary Sessions

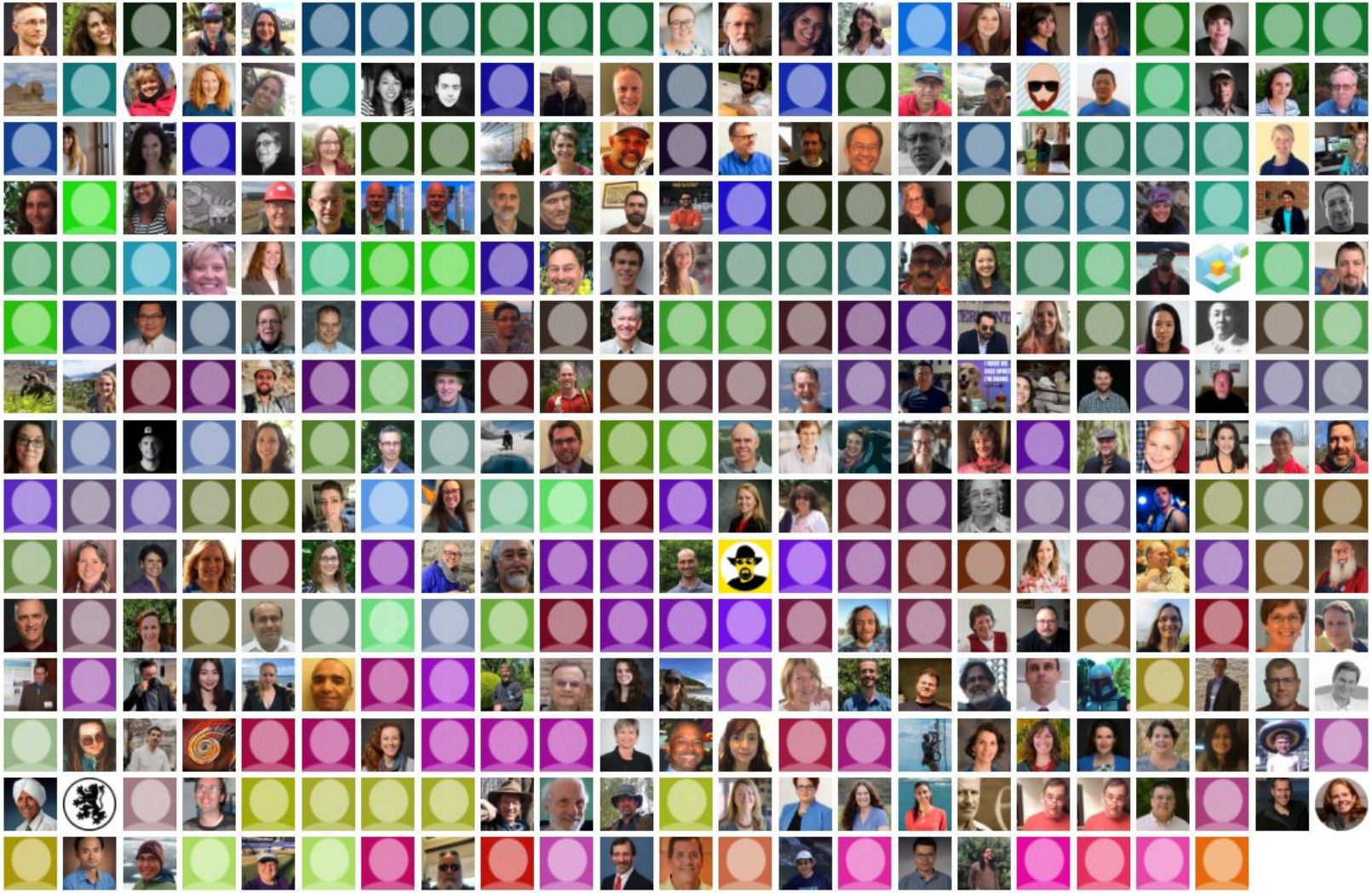
32
Research Showcase Presentations

29
Breakout Sessions

124
First Time Attendees

367
Attendees

110+
Speakers



Our Virtual Photo!

ESIP

MAKING DATA MATTER

esipfed.org | #ESIPfed

Leadership Highlights

Supported by: NASA NOAA USGS

Opening Plenary: Creating a Culture of Innovation & Working at Frontiers

Kicked off the meeting with a focus on building a culture of innovation through taking risks and working at the “edge”...

Takeaways:

- **Shingledecker: Led with her fearless example**
- **Kontgis: Failing forward leads to inspired innovation (in Vietnam and everywhere!) and surround yourself with yea-sayers, not nay-sayers**
- **Moon: ... gonna need a bigger boat!**

Speakers

Susan Shingledecker

Executive Director, ESIP

I am excited to be here as the Incoming Exe
attracted them to ESIP, what they see as the
and any other feedback to help me learn an

Caitlin Kontgis

Head of Science, Impact Observatory

Caitlin Kontgis is the Head of Science at Imp
that uses satellite imagery and machine lear
Caitlin was the Director of Scientific Progran

Twila Moon

Dr. Twila A. Moon is the Deputy Lead Scienti
the University of Colorado Boulder’s Coope
world leader in Earth science. Dr. Moon is ar

Tags:

Innovation, agile, growth mindset

Plenary: Innovation & New Frontiers in AI and ML in the Earth sciences

Three great examples of using AI/ML at the frontiers of earth science data

Takeaways:

- **Yang: 5m res leads to 100 trillion pixel challenge, every day. GeoAI in disaster response and focus on forward looking issues like physical/spatial consistency to achieve xExplainable AI (XAI)**
- **Estes: Highlighted the critical nature of good data, and how labels matter (and are hard!) for small-scale crop-land management**
- **Kerner: Global food security using ML, highlighted several key challenges***

Speakers

Lexie Yang
Oak Ridge National Laboratory
H. Lexie Yang is a Research Scientist in GeoAI
high performance computing and machine lea
scholars for NASA AIST, NSF... Read More →

Lyndon Estes
Associate Professor, Clark University

Hannah Kerner
Assistant Research Professor, NASA Harvest/U

Tags:
Disaster response, AI, ML, food security

*See notes panel for the list!

Plenary: Innovations in Open Search & Discovery

Structured data on the web and open ecosystems for dataset discovery

Takeaways:

- **Brickley: schema.org has big impact on the everyday lives of web users, and we are just at the beginning of structured data on the web**
- **Noy: 93% of data is “available upon request” and only 7% “shared publicly” (Nature Materials, 2019)**
- **Noy: three key steps: Publish Data; Make Data Discoverable (thru schema.org and structured metadata); tools to Discover, Organize, Search (g.co/datasetsearch) - 28 million datasets, 10% have DOIs, 34% have a license, 84% are free/open**

Speakers

Dan Brickley

Schema.org, Google

Dan Brickley works on structured
Previously he helped create web
team that launched W3C's Sema

Natasha Noy

Senior Staff Scientist, Google

Natasha Noy is a senior staff scie
leads the team building Dataset
Stanford Center for Biomedical...

Tags:

Structured data, data graphs, data publishing

ESIP Community Participation Guidelines

The ESIP Community Participation Guidelines (CPG) were drafted to outline acceptable and expected behaviors for participants in ESIP projects, events, and spaces, and incorporate principles of justice, equity, diversity, and inclusion.

Takeaways:

- **JEDI principles are important because the heart of ESIP is the people engaged.**
- **The CPG help the ESIP community understand how we strive to ensure JEDI principles are upheld.**
- **The CPG also outlines potential consequences of unacceptable behaviors.**

Tags:

Justice, equity, diversity, inclusion, community participation guidelines, ethics

Want to learn more?

Contact: ESIP Staff or Volunteer Leadership

ESIP Community Participation Guidelines

The Governance Committee continues to refine the process for what happens after a report is made and will revise the CPG as gaps are discovered.

Takeaways:

- **Third-party reporting service, Integrity Counts, allows for anonymous or semi-anonymous reporting to ensure privacy and protect against retaliation.**
- **Ensuring transparency of process will build trust that ESIP truly embodies the CPG.**
- **We are always learning and adapting. Comments are always welcome.**

INTEGRITY COUNTS

Tags:

Justice, equity, diversity, inclusion, community participation guidelines, ethics

Want to learn more?

Contact: ESIP Staff or Volunteer Leadership

ESIP Community Participation Guidelines

Improving the understanding of what is included in the CPG and how it is implemented will be the focus in the coming months.

Takeaways:

- **Reporting of even seemingly minor violations is encouraged, as those reports can shine light on negative culture or may highlight patterns of behavior.**
- **Unintentional violations should be addressed from a place of compassion, but need to be addressed fully.**
- **Additional training (e.g., bystander intervention) is encouraged, to infuse the CPG into all ESIP spaces.**

Tags:

Justice, equity, diversity, inclusion, community participation guidelines, ethics

Want to learn more?

Contact: ESIP Staff or Volunteer Leadership

ESIP

MAKING DATA MATTER

esipfed.org | #ESIPfed

Breakout Session Highlights

Supported by: NASA NOAA USGS

Designing Hands-On Sensor Training *in the post-COVID-19 world*

Takeaways:

- **A strong need exists for hands-on technology & data crosstraining, including design & deployment best practices**
- **Video "micro-tutorials" in the YouTube vlogging style are achievable – need templates & branding guidelines**
- **How can video creation be streamlined & incentivized for early-careers? What are the publishing options? Funding/resources?**
- **This will be an EnviroSensing Cluster focus for 2021-22: the Chairs are facilitating the development & we are recruiting community volunteers!**

Tags:

Virtual workshop; video tutorials; training; best practices; environmental sensors & data

Want to learn more?

Contact: Scotty Strachan, Renée Brown, Joseph Bell
strachan@unr.edu

Join: esip-envirosensing@lists.esipfed.org

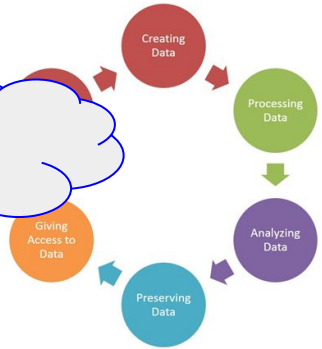
Kickoff meeting of the Physical Sample Curation Cluster

The community aims to support needs of a diverse group of physical sample curators, scientists, and data managers across disciplines. The goal of our inaugural session was to review potential activities and plan next steps. Potential activities included developing a webinar series to highlight tools and services, and working groups to address topics such as metadata interoperability, resources and infrastructure, and identifiers and citations.

Takeaways:

- Community support for the ~~3~~ **4** WG areas
  - Literature review/previous efforts
  - FAIR Metadata for Samples
  - Linking and Citations
  - **Sample infrastructure/Access**
- We have a first task! Develop high-level, sample identifier and metadata recommendations for journal publishers. The goal is author guidelines to make samples more FAIR across disciplines.

Emerged from discussions



Want to learn more?

Contact: Sarah Ramdeen, Val Stanley, Joan Damerow

Join Cluster list serv → https://bit.ly/3iLKqWN

Review Winter meeting notes: https://bit.ly/36ayzwc

Tags:

Physical samples, curation, metadata, FAIR data

Biological Data Standards Cluster

Explore innovative approaches to biological data informatics and build linkages and community around biological data standards.

Takeaways:

- **Emerging Standardized Portal and Network Frameworks for Biological Data Mobilization**
- **Enhancing discoverability and interoperability**
- **Exploiting Images and Video as a Source for Biological Observations**

Living Atlases

Retro-PIDs: making historic Platypus Infinitely Discoverable (PID)

Symbiota2 Mobilizing Biodiversity Data

MBARI Monterey Bay Aquarium Research Institute

FathomNet

Tags:

Biodata, Standards, Discoverability, Interoperability, Image Annotation, Knowledge Graphs

Want to learn more?

Contact: Abby Benson (albenson@usgs.gov)

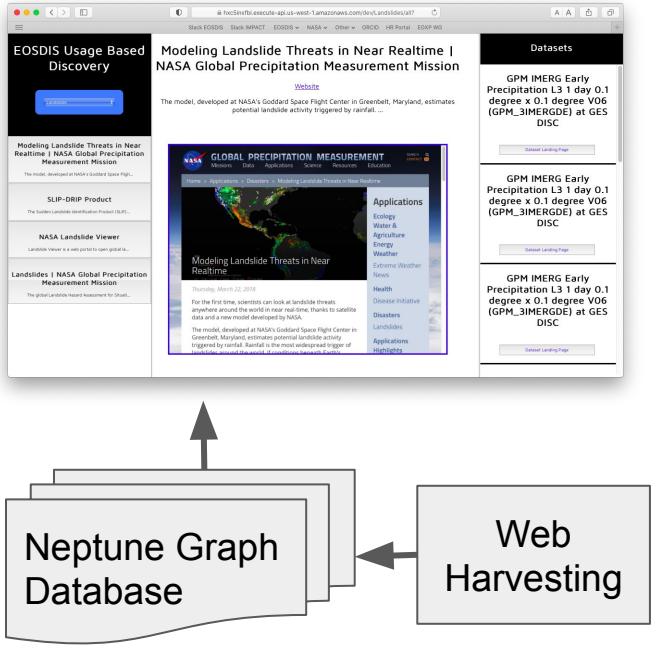
Join: # bio-data (slack channel)

Usage-based Discovery: Next Steps

Explore ideas for taking Usage-based Discovery to the next level

Takeaways:

- Associating data with the ways they are used resonates across multiple ESIP clusters
- We should look more closely at links between data and publications (e.g., application-related pubs)
- We should find a way to enable the graph of interpersonal collaborations to materialize, looking for the “super-nodes”
- Use case “bundles”--encompassing many different, but related use cases, and thus possibly more than one cluster--may be productive.



Tags:

Discovery data usage, applications, publications

Want to learn more?

Contact: Sara Lafia, slafia@umich.edu

Join: https://lists.esipfed.org/mailman/listinfo/esip-discovery

California Burning...Putting Data to Work

Describe key features of Trusted Data and identify opportunities to accelerate public-private data sharing for decision-makers.

Takeaways:

- **Collaborate across Agencies before data need becomes urgent. Effective inter-agency and stakeholder communication is key.**
- **Collaborate with Community Resilience cluster on developing credible communications with the public.**
  - **Accurate, timely info based on trusted data.**
- **Extend "Research to Operations" to "Operations to Access" and work with end-users to quantify impact.**
  - **Who is using data? How? How useful is it?**
- **Work with ESIP clusters to accelerate an "Ecosystem of innovation"**

Tags:

Disasters, trusted data, operational readiness levels, sensitive information sharing, data driven decision making

Trusted Data - Key Features

Want to learn more?

Contact: Dave@Stormcenter.com
Karen.Moe@earthlink.net

Join: esip-disasters@lists.esipfed.org

Meets 1st Thursdays at 4:00 pm eastern

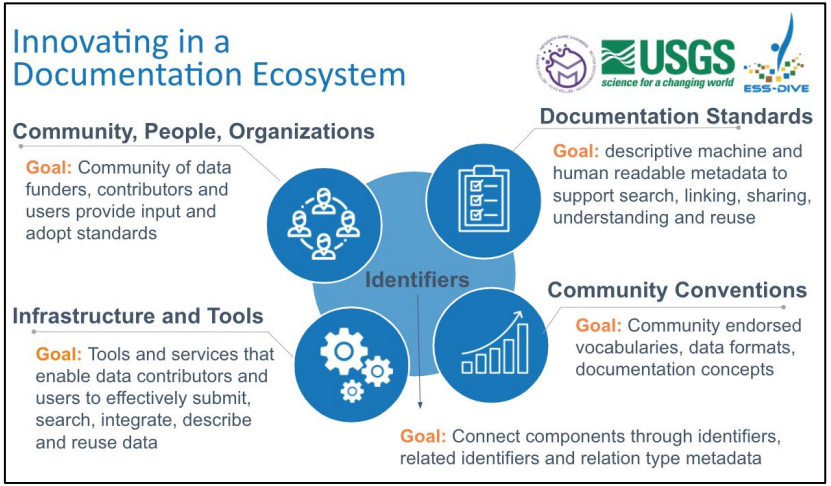
Innovating in a Documentation Ecosystem

Leveraging audience experience to identify needs and approaches to more effectively link related data within and across agencies and organizations.

Takeaways:

- Challenge: Different funders – different schedules and priorities
- Approach: Look for patterns in current ecosystems as examples, Goal: Finding, implementing, developing tools that work for the whole system
- Next: Developing and communicating the value proposition to all stakeholders, increasing communication, outreach, and training.

Tags: Collaboration Documentation Identifiers mdTools ESSDive IHDS NGGDPP NDC



Want to learn more?

Contact: mrjohns@usgs.gov, JoanDamerow@lbl.gov, ted@metadatagamechangers.com

Join: esip-documentation@lists.esipfed.org

Seeking Solutions: Improving the Application of Earth Science Data for Community Resilience

Meeting Goal: Review the challenges outlined in our problem statement and identify recommendations

Listen: Engage in conversations across ESIP and beyond

Reinforce: Assess how to incorporate community frameworks

Apply: Solidify our cluster goals and distill our problem statement

Want to learn more?

Contact: Arika Virapongse (av@middlepatheco.com) | **Meetings:** Every 3rd Weds at 4 PM US ET

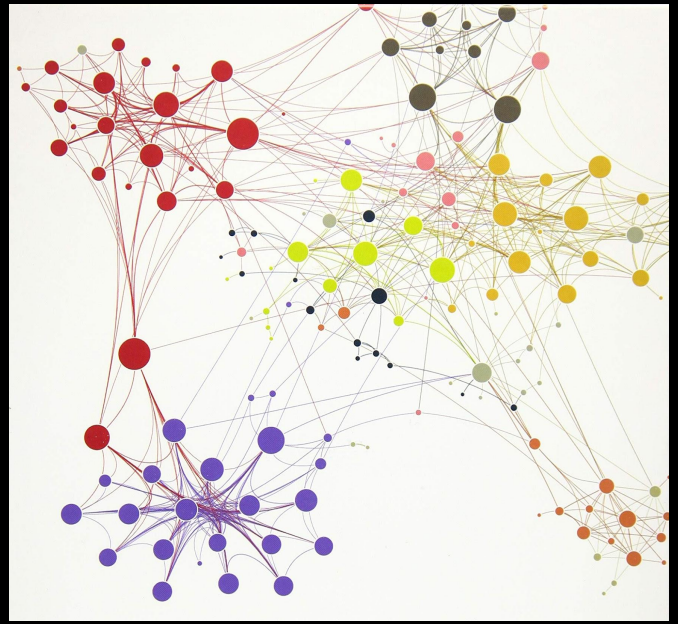
Listserv: https://lists.esipfed.org/mailman/listinfo/esip-communityresilience | **Slack:** #communityresilience

Tags: Listen, Bridging, Collaborate, Accessibility, Communicate

Linking Knowledge in the Earth and Space Sciences: Knowledge Graphs/Networks connecting data and individuals

Ryan McGranaghan (ASTRA; NASA GSFC)
Emily Law (NASA JPL)
Lewis McGibbney (NASA JPL)
Barbara Thompson (NASA GSFC)

***Uncommonly* cross-disciplinary:**



Takeaways

1. Beautiful data are understandable data & A new role to achieve understandable data:
   The Knowledge Scientist
2. Knowledge Graphs dissolve the boundary/distinction between metadata and data; Relations are first class citizen
3. Value of knowledge graphs is clear, but challenging to achieve

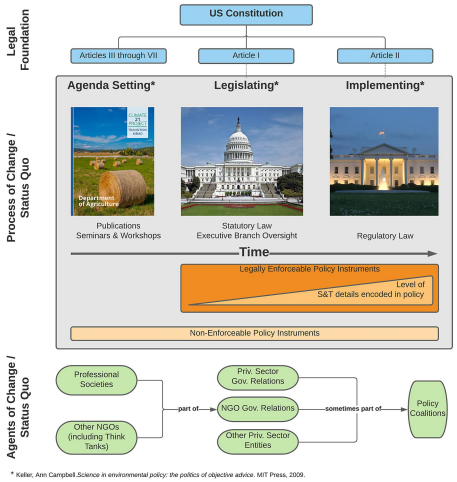
Key questions: What are the tools and approaches to actually build a knowledge graph? How do I get started? Recommendation to form smaller working groups focused on KGs around specific use cases

Science and the US Government: Where does your contribution fit into the picture?

How is science and technology incorporated in the US government through a combination of policy instruments, legal requirements, and structural constraints? How does one navigate the myriad landmarks in a complex science-technology-policy landscape?

Takeaways (http://bit.ly/3assoq3):

- **Incorporate science and technology expertise in policy via your professional societies.**
- **ESIP to explore how to highlight and communicate its science and technology contributions to policy?**
- **Science and technology also has a role in state, local, tribal, territorial, and international policy.**



Want to learn more?

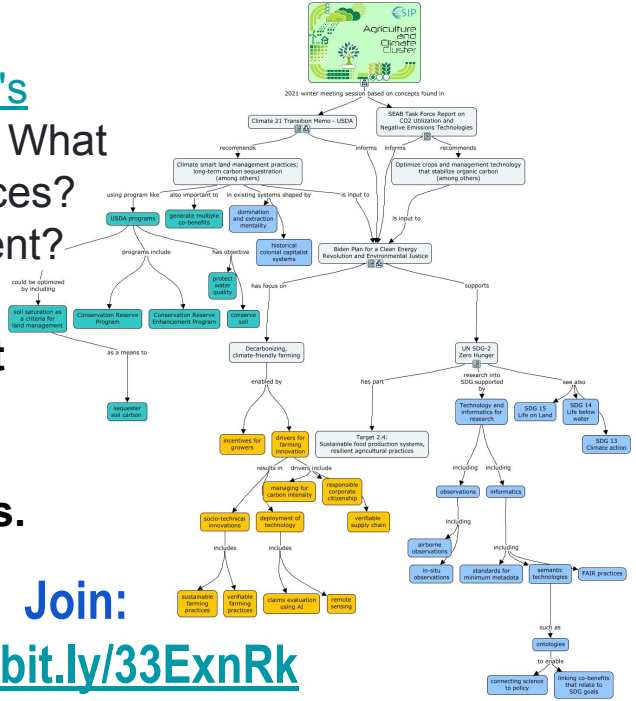
Contact: Brian Wee (bwee@massiveconnections.com) & Bill Teng (william.l.teng@nasa.gov)

Join: https://bit.ly/33ExnRk

Tags: US Legislative Branch, US Executive Branch, scientific assessments, national policy, statutes, regulations

Carbon Management, Food, Agriculture, Human well-being: Using informatics to connect the climate action dots

How do Sustainable Development Goals relate to President Biden's goals for managing U.S. contribution to the global carbon budget? What is the role of the farming sector and crop management best practices? How can your work as a research scientist inform farm management?



Takeaways (http://bit.ly/3qxVZUu):

- **Carbon sequestration via climate-smart land management practices.**
- **Climate-friendly farming via science and socio-technical innovations satisfying needs of consumers and producers.**
- **Technology and informatics enables agro-ecosystem research to span spatial scales and science disciplines.**

Join: https://bit.ly/33ExnRk

Want to learn more?

Contact: Bill Teng (william.l.teng@nasa.gov) & Brian Wee (bwee@massiveconnections.com)

Tags: Climate, data-to-decisions, SDGs, disasters mitigation, soils data harmonization, biodiversity, food security, carbon management

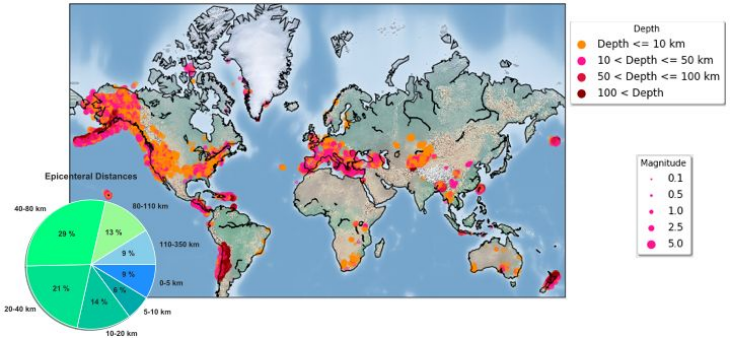
Best Practices & Fundamental Challenges of AI in Earth and Space Sciences

We invited 6 speakers to talk about their practical experiences of using AI techniques in solving Earth system science problems.

Takeaways:

- **A quick poll shows that ESIP community is most concerned about interpretation, data preparation, uncertainty of AI.**
- **Although there are tremendous use cases for ML in Earth system sciences, realistic expectations should be in place for what AI can achieve.**
- **ML-ready cyberinfrastructure is the key to achieve ML models with good generalization behavior.**
- **There are 2 ESIP-ML led activities: Awesome-Earth-AI & drafting a review paper for Earth AI.**

1.2 M Labeled Waveform. **450 k** Earthquakes. **19,000** Hours of Data.



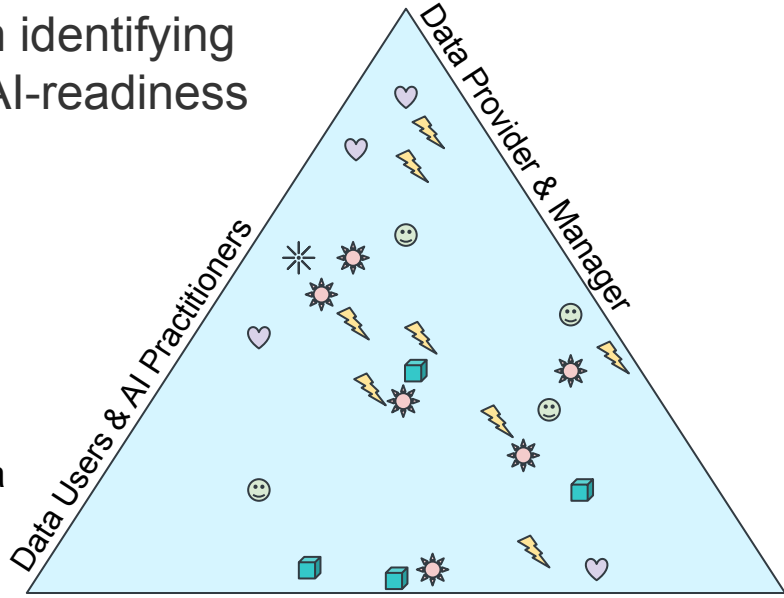
Want to learn more?
Jensen Ziheng Sun; zsun@gmu.edu
Join: Machine Learning cluster
https://wiki.esipfed.org/Machine_Learning

Tags:
AI; machine learning; earthquakes; snow mapping; sensor calibration; space weather;

Accelerating Artificial Intelligence Applications at Scale with AI-ready data

Conveners: E. Kihn, R. Redmon, T. Christensen, Y. Rao

A community input gathering and sharing session on identifying the community priorities on defining and assessing AI-readiness for open data.



Takeaways:

- Need coordinated effort to define “AI-readiness” & related tools/services for assessing AI-readiness;
- Need integrated understanding of data AI-readiness from the whole data ecosystem;
- Provide training materials/guides for different roles in the data ecosystem

We are planning to set up a cluster to coordinate the work! Join us!

Tags:

AI; data readiness; open data

Contact: Yuhan (Douglas) Rao (yuhan.rao@gmail.com)

Sign-up: bit.ly/AIready-signup

ARD for Science and Industry

To explore the current landscape of Analysis Ready Data (users, producers) and strategize ways to harmonize activities and definitions. Through presentations plus breakouts.

Poll Result !

Takeaways:

- ARD definition/approach (or use case) is often community/discipline/application dependent
  - Research/Applications, Space/Earth, Satellite/GIS/Model
- ARD linked to data formats, services, and metadata
  - Metadata conventions important for cloud-optimized formats
  - Services for on-the-fly ARD from L1/L2 data
- How can we best leverage ESIP community and others
  - Cloud computing cluster (i.e., ARCO work)
  - “Test bed” approach with datasets (OGC model - data + recipes) sponsored by ESIP providing data in a standard way
  - Explore “HDF Zoo” concept for analysis ready data

Tags:

Analysis Ready Data, ARD, ARCO, cloud optimized, metadata, CEOS, ARDZone, NASA ESO, Machine Learning, AI

Want to learn more?

Contact: Edward.m.armstrong@jpl.nasa.gov

Join: TBD

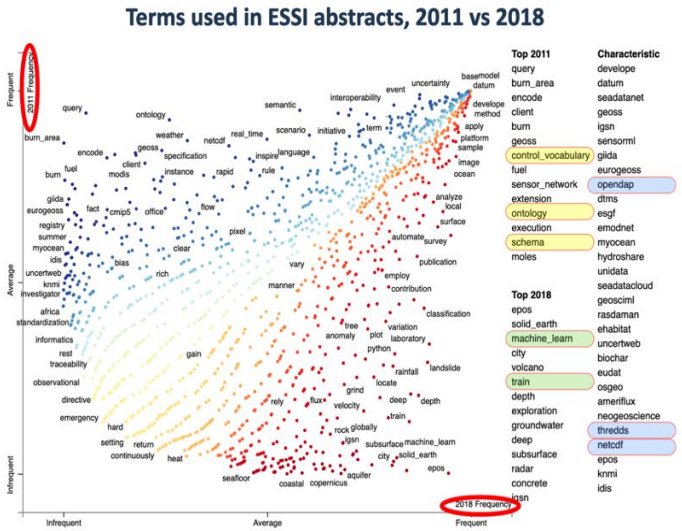
Determining the Current and Future Earth Science Data Frontiers

ESIP Strategic Plan Theme 5 is "*Leading Innovation at Earth Science Data Frontiers*".
The goals of the session were to ask how do we :

1) Determine the current and future Earth Science Frontiers?
2) Know if ESIP is at them?

Takeaways:

- **ESSI has a long history of liaising with groups at the frontiers (GEO, ESIP/RDA ESES-IG, OGC, etc): see here**
- **There are tools for tracking the changing focus of an Organisation: see Siri Jodha's & George Percival's slides here**
- **Through collaboration we can help determine both the frontiers of innovation and of adoption**
- **Session Consensus: ESIP is at the frontiers!**



Tags:

Frontiers, Collaboration, GEO, RDA, OGC, Innovation, Adoption

Want to learn more?

All session resources are here.

Contact: Lesley Wyborn (ESIP/RDA ESES-IG)
Karl Benedict, Kathy Fontaine (GEO)

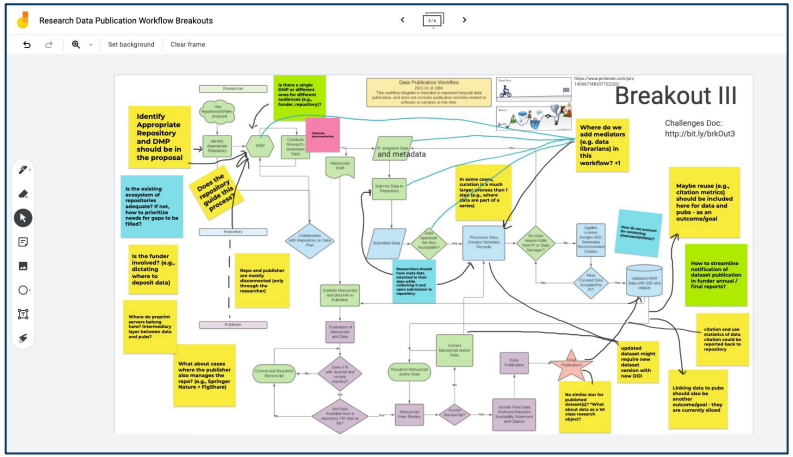
Join: This was a one off - there will not be another

Calling all research data publication stakeholders: researchers, repositories, publishers, and funders… We need a workflow model!

GOALS: Promote a common understanding of the **long-tail research data** publication workflow and **stakeholder roles; Collect sample use-cases** of workflow variations; Document **stakeholder challenges/needs** regarding touchpoints between stakeholders

Takeaways:

- **Lots of interested in this topic**
- **The role of DMP's perceived as very important**
- **Timing of actions important**
- **Improved communications across all stakeholders necessary**
- **Overwhelmed by interest, planning a workshop prior to RDA**



Want to learn more?

Contact: Danie Kinkade (dkinkade@whoi.edu)

Join: ESIP/RDA ESES IG:
https://www.rd-alliance.org/groups/esiprda-earth-space-and-environmental-sciences-ig

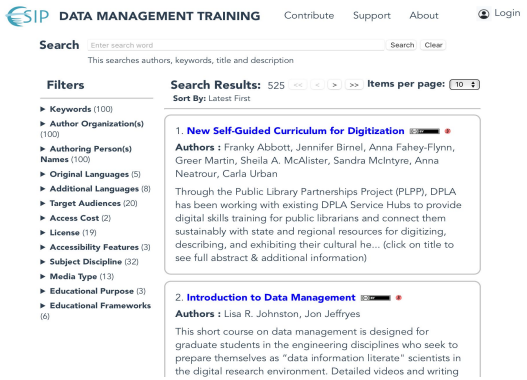
Tags:

Repositories, Publishers, Data Publishing, Workflows

You are Invited! A VIP Preview of the Newly Enhanced ESIP-hosted DMTC

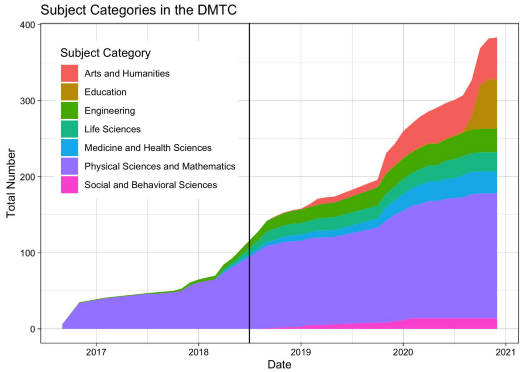
Tags:
Data Stewardship, Education

Goal: ESIP Community members tried out the Search page using structured usability testing procedures.



Takeaways:

- Session attendees enjoyed providing actionable feedback on 1) search tasks, 2) the paths taken to fulfill specific searches, and 3) the results (utility & understandability) as well as the look and feel of the search page
- Feedback led to immediate action by the UI developer
- Session attendees were very pleased with the range of learning content in the DMTC & eager to go back & search more!



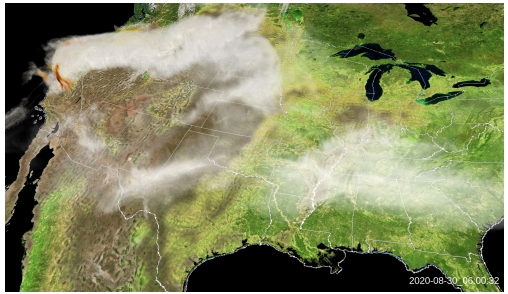
Stay tuned for other opportunities to provide UI feedback
Contact: Karl / Nancy at: clearinghouseEd@esipfed.org

Preserving and replicating computational model data

Participants discussed what artifacts should preserved to support replicability of simulation based experiments.

Takeaways:

- Sharing software might be preferred to sharing model outputs, but in many cases there are IP concerns or cultural issues that might prevent researchers from sharing software.
  - Researchers need to be rewarded for following open science practices.
    - Update the metrics used for institutional rewards
  - Discuss workflow or logic in the paper that doesn't reveal the codes themselves if there are IP concerns.
- Model data tends to lose value over time, but the data deaccession process is still challenging. How is a determination made to retire model output datasets, and who makes this determination?
- Transparency is the goal for data and software citation amongst journals



https://visgallery.ucar.edu/hrrr-smoke-in-the-summer-of-2020/

Tags:

model, simulation, data, software, preservation, access, replicability

Want to learn more?

Contact: Doug Schuster

See: https://modeldatarcn.github.io

Jupyter Notebooks: Harnessing the full potential

Conveners: Ahmed Eleish, Brenda Thomson, Shweta Narkar

Session takeaways:

- There is a need to match resources with community needs to make effective use of Jupyter and open-source Python tools in research
- The Jupyter software ecosystem provides many opportunities to facilitate data-intensive activities in research, education, etc.
- The publishing use case demonstrates the versatility of open-source software and standards and presents a way forward.

Contact: Ahmed Eleish (eleisa@rpi.edu)
Brenda Thomson (thomsb@rpi.edu)
Shweta Narkar (narkas@rpi.edu)

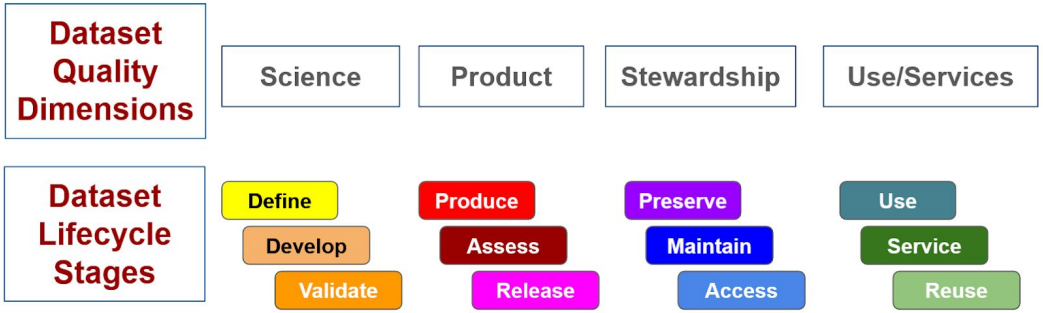
Toward Improving Representation of Data Quality Information

The Information Quality Cluster (IQC) shared the current status of three IQC efforts and received community feedback on dataset lifecycle stages.

Ge Peng, Robert R. Downs, David F. Moroni, Hampapuram K. Ramapriyan, and Yaxing Wei

Recent IQC Efforts:

Data uncertainty white paper;
International collaboration on data quality;
FAIR Dataset Quality Information Guidelines.



Takeaways:

- Representing dataset quality information is critical for enabling diverse data uses.
- Need to assess dataset quality information throughout dataset lifecycle stages.
- Quality feedback loops occur among dataset lifecycle stages.

Tags:

Data Quality, Data Lifecycle

CC BY

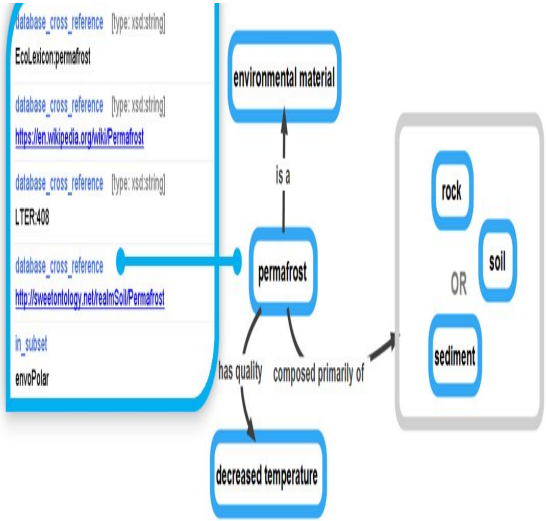
Want to learn more?

Contact: https://wiki.esipfed.org/Information_Quality

Join: https://lists.esipfed.org/mailman/listinfo/Esip-infoquality

Advances in Semantic Harmonization: from the Cryosphere, to the Earth System

Examples integrating vocabularies showing lessons learned for "good enough"/"working practices" from our efforts to harmonize the glacial and crosphere terminology between SWEET & ENVO.



Takeaways:

- **Semantic harmonization is hard but worthwhile (Ruth)**
- **With ENVO/SWEET extensions we can build global digital ecosystems for the UN Decade of Ocean Science for Sustainable Development and other initiatives like Soil & Marine (Pier)**
- **We have a set of guiding principles and templating tools to help the harmonzation work (Mark and Kai)**

Tags:

Semantics, harmonization, semantic gradient, Cryo, SWEET, EnvO, principles, templates, vocabulary,

Want to learn more?
Contact: Gary Berg-Cross/Ruth Duerr
Join: : https://lists.esipfed.org/mailman/listinfo/esip-semanticharmonization

ESIP

MAKING DATA MATTER

esipfed.org | #ESIPfed

Community Fellow Highlights

Supported by: NASA NOAA USGS

Community Data Cluster Ideation and Gap Analysis Session

This session had focus groups ideate around 4 main topics related to our data curation efforts for Flint, Michigan, using the work conducted at the Summer 2020 landscape analysis as a starting point.

Takeaways:

- Ideation: the four session ideation topics, related to the crisis in Flint, include: FOIA and public data curation, map integration, community buy-in, and utilizing ESIP resources
- Audience: refocusing on who our audience is and how we can support them: thinking about curating data for journalists, public policy makers, and utilizing third party data sources
- Scope: this session set the stage for future discussions related to the scope of this project and what our goals are for this project

Tags:
data curation, community resources, Flint, water quality

Want to learn more?
Contact Cluster Chairs: Andrea Thomer and Steve Diggs or ESIP Fellow: Marion McKenzie (mm8dt@virginia.edu) | Join our next telecon: March 10 4PM EST

ESIP Winter Meeting 2021

Ned Molder - ESIP Community Fellow

Takeaways:

- **Huge breadth/depth of expertise within ESIP**
- **The Earth science community is thinking + planning for the future**
- **Earth science is a social practice**

P3 Cluster Monthly Telecon - 3rd Wednesday, 10AM ET

Crista Straub (cstraub@usgs.gov) (co-chair)

Carl Shapiro (cshapiro@usgs.gov) (co-chair)

Ned Molder (nedmolder@gmail.com)

https://lists.esipfed.org/mailman/listinfo/esip-public-private-partnerships

Community Fellow Takeaways

Christine Gregg, Community Resilience Fellow

Welcoming: Newcomers will find a welcoming community and lots to learn

Collaborative: Many clusters are highly focused on finding opportunities to connect

Spirited: Clusters are passionate about their work and enjoy bringing new people and perspectives into the conversation

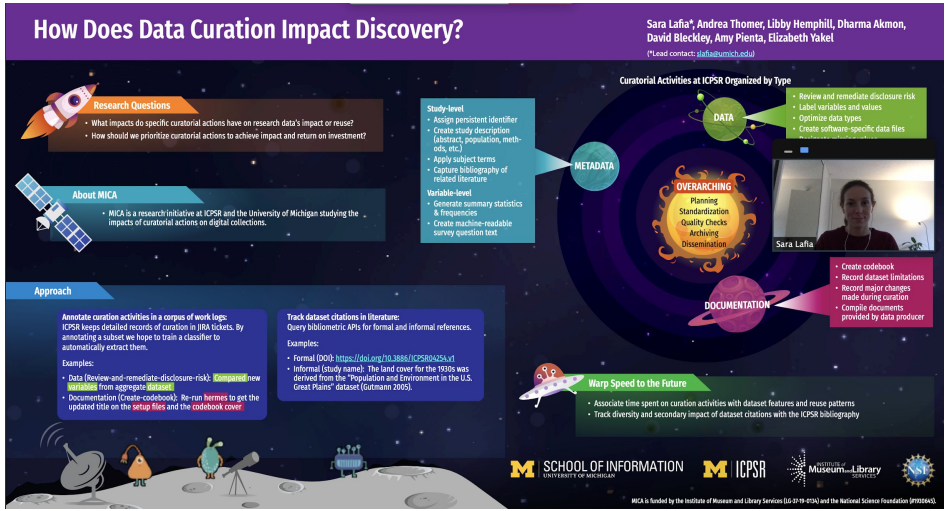
Tags: *Community Fellow, New to ESIP*

Research Showcase

A fast-paced, dynamic opportunity to connect with new ESIP clusters and exchange ideas!

Takeaways:

- Virtual setting gave me many ways to **connect** with new people and **gather feedback** on early work
- Great opportunity to introduce my postdoctoral project with ESIP data **stewardship** and **metadata** community
- Next steps: exploring synergy between **discovery** and **community data** clusters



Tags:

Data curation, data discovery, metrics

Want to learn more?
Contact: Sara Lafia (slafia@umich.edu)
View more posters:
https://esip.figshare.com/ESIP_Winter_2021

MAKING DATA MATTER

esipfed.org | #ESIPfed

State of ESIP Highlights

Supported by:

STATE OF ESIP

https://doi.org/10.6084/m9.figshare.13490274.v1

- ESIP released its FY20 annual report & shared plans for upcoming year
- ESIP Sponsors presented on agency-specific news from NASA, NOAA & USGS
- Annual Peer Recognition Ceremony

Meeting SPONSORS

Premium Silver Sponsor

SAIC®

Research Showcase Sponsor

AGU®
American Geophysical Union

Social Sponsor

Element 84

In-Kind Sponsors

amazon web services

figshare

ESIP ENGAGEMENT OPPORTUNITIES

Discover

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

Innovate

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

Collaborate

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

Network

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

MAKING DATA MATTER

esipfed.org | #ESIPfed

Thank you for attending!

Keep up on all things ESIP:
bit.ly/ESIPmondayupdate

ESIP Meetings

ESIPFED.ORG/MEETINGS

ESIP Collaboration Areas

ESIPFED.ORG/COLLABORATE

ESIP Lab

ESIPFED.ORG/LAB

Supported by: