

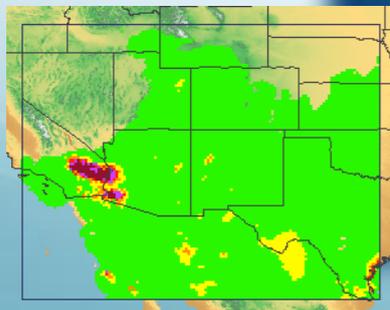
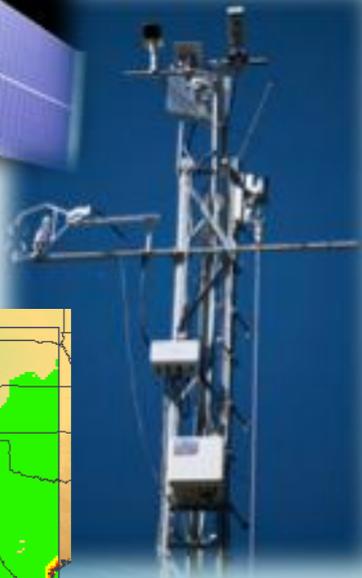
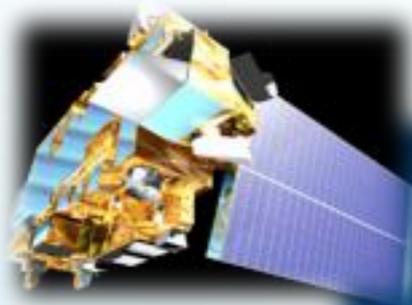


***Discussion on National and  
International Data Science  
Organizations - CENDI***

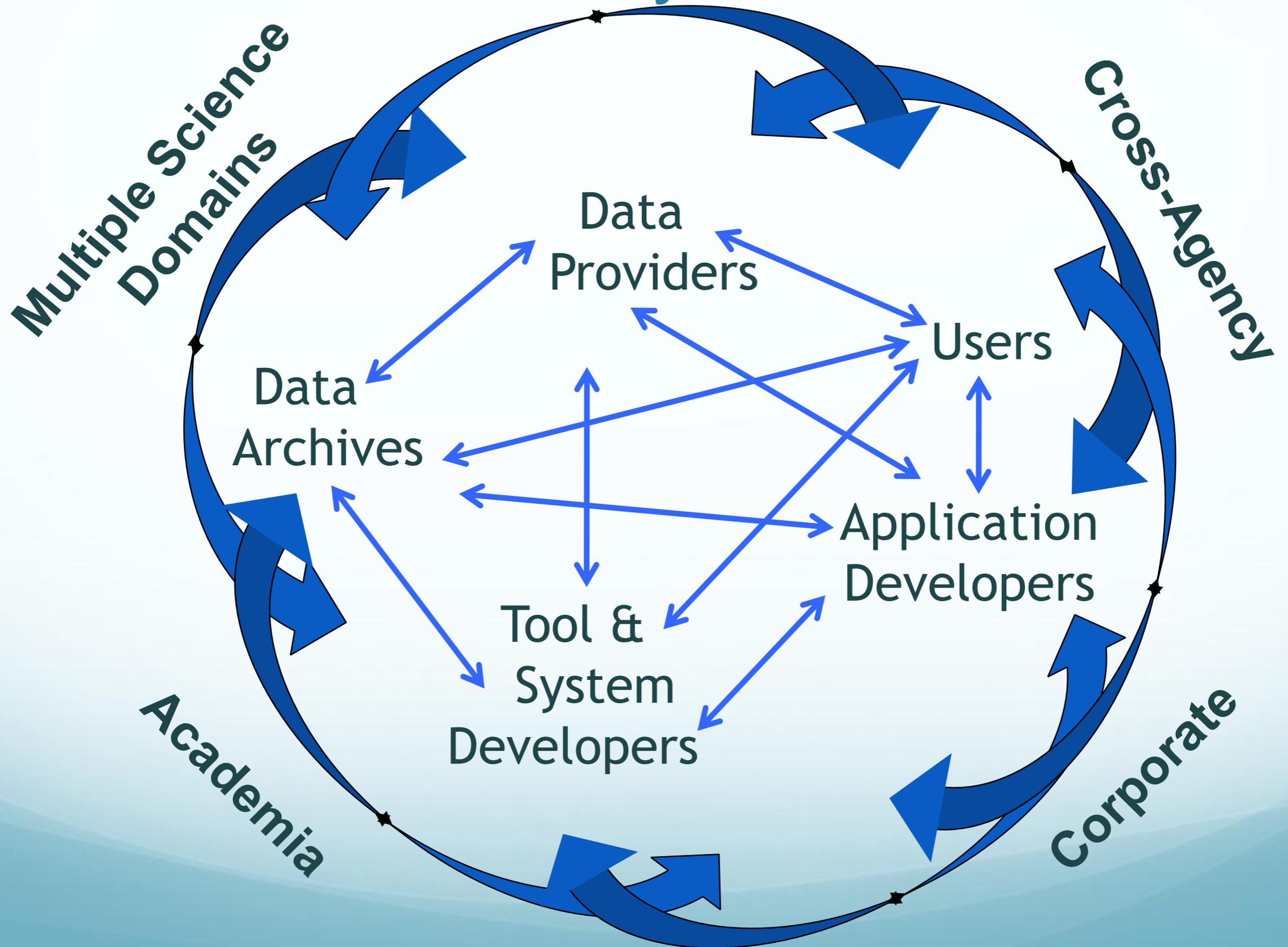
**Peter Fox, ESIP President  
January 8, 2015**

# ESIP Vision

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



# ESIP Community

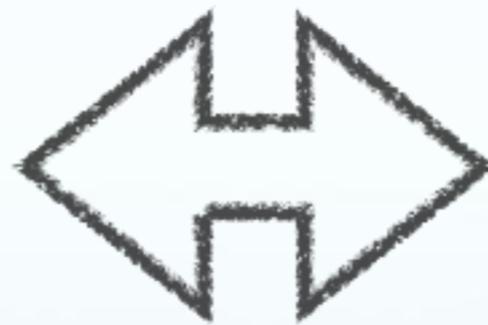


# Two Organizations: ESIP Federation & Foundation for Earth Science

ESIP Federation is the community and is all volunteer.

Foundation for Earth Science provides management, operational and logistical services to the ESIP Federation.

ESIP  
Federation



Foundation for  
Earth Science

Executive Director: Erin Robinson

ESIP Community Manager: **Open**

# Defining Collective Impact Initiatives

## Definition

The commitment of cross-sector actors to come together around a shared agenda and change their behavior in order to solve a complex problem

## Characteristics

- Social problems & solutions arise from multiple interacting factors
- Organizations actively coordinate actions and share lessons learned
- Backbone organizations necessary to support the coordination

# Defining a Backbone Organization

## Definition

A Backbone Organization

- maintains overall strategic coherence,
- coordinates day-to-day operations, and
- manages the implementation of work.

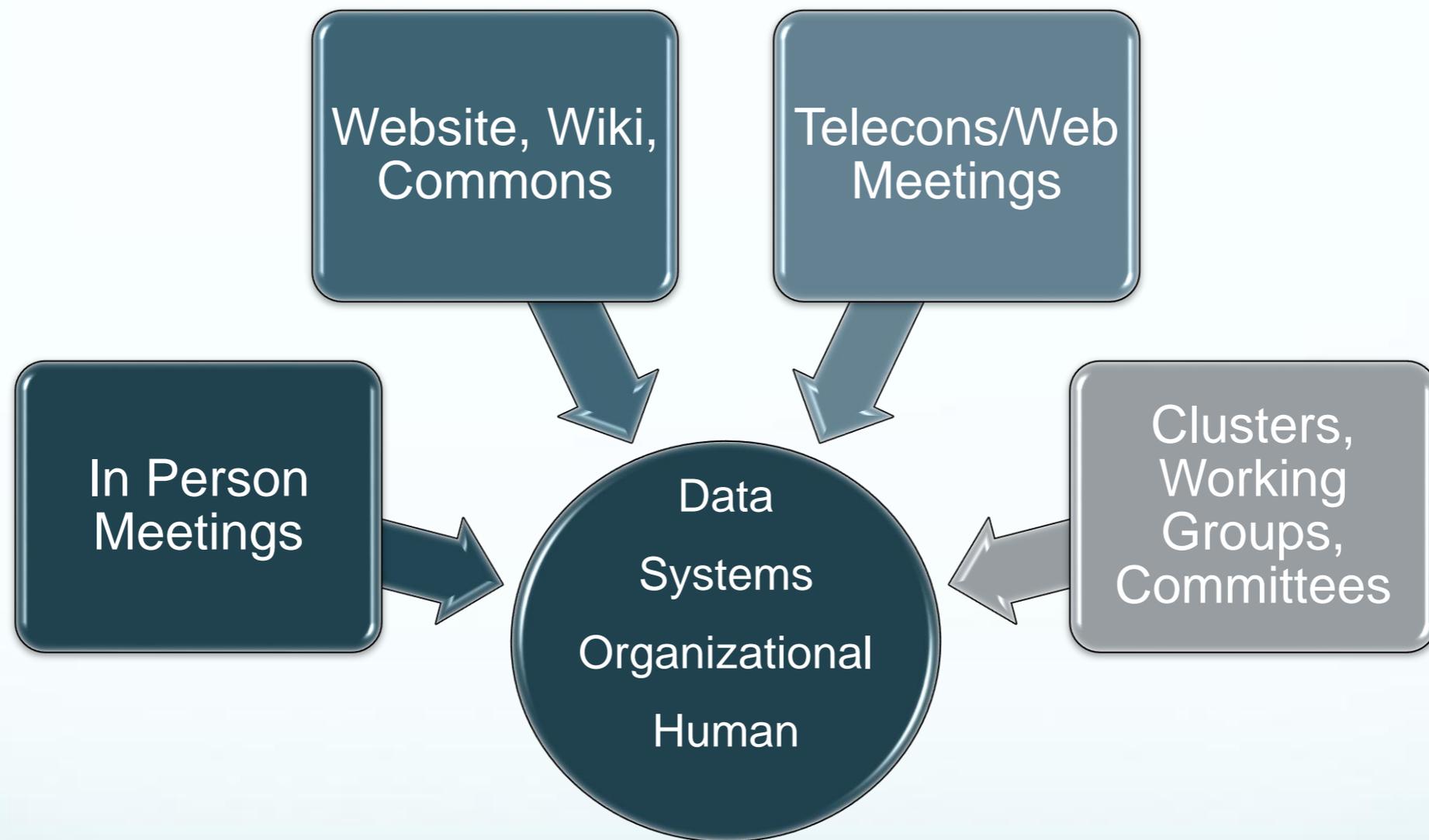
## Functions

- Community Engagement
- Communication & Outreach
- Evaluation
- Meeting Planning
- Project Management/Facilitation
- Fundraising
- Other Responsibilities

# ESIP Core Values – Shared Agenda

- Agility
- Collaborative
- Collegial
- Community-driven
- Innovative
- Neutral (Convening) Organization
- Open
- Participatory
- Voluntary

# FES Coordination for ESIP



Facilitating Connections

# Types & Governance

- Type I: data centers (21/24)
  - NASA DAACs
  - NOAA (NGDC, NODC, NCDC)
- Type II: researchers and tool developers (46/74)
  - Academia
  - Government labs
- Type III: application developers (28/62)
  - Commercial
  - Nonprofit
  - Educational
- Type IV: strategic partners (2/2)
  - NASA
  - NOAA

## **ESIP Assembly**

- 1 partner, 1 vote
- Annual Business Meeting at ESIP Winter Meeting
- Leadership elected from Assembly representatives

# ESIP Groups

- Standing Committees
  - Data Stewardship
  - Education
  - Information Technology and Interoperability
  - Products and Services
- Administrative Committees
  - Constitution and Bylaws
  - Finance and Appropriations
  - Partnership
- Working groups
  - Air Quality
  - Climate Education
  - Energy & Climate
  - Visioneers
- Clusters
  - Cloud Computing
  - **Data Science and Analytics**
  - Decisions
  - Discovery
  - Documentation
  - Drupal
  - Earth Science Collaboratory
  - Geospatial
  - Open Source
  - Semantic Web
  - Visualization

# Strategic Plan

- Revisited 2009 strategic plan and goals, documented accomplishments [http://wiki.esipfed.org/index.php/2009-2013\\_Strategic\\_Accomplishments](http://wiki.esipfed.org/index.php/2009-2013_Strategic_Accomplishments)
- Revised strategic goals based on community inputs
- Drafted action and performance oriented roadmap <https://docs.google.com/spreadsheets/d/16f8heiZX3KoLCPfxMKTbROiG-es6y2I7m9zkuXP-964/edit#gid=0>

# Data Stewardship Committee

- First results from ESIP's participation in the Data Citation Implementers Group available for review
  - Achieving human and machine accessibility of cited data in scholarly publications. PeerJ PrePrints 2:e697v2  
<http://dx.doi.org/10.7287/peerj.preprints.697v2>
- 2015
  - [http://wiki.esipfed.org/index.php/Interagency\\_Data\\_Stewardship/Citations/editor\\_reviewer\\_guidelines](http://wiki.esipfed.org/index.php/Interagency_Data_Stewardship/Citations/editor_reviewer_guidelines)
  - Data Stewardship Maturity Matrix
  - Defining data publication
  - Continued Provenance work, incl Eos and D-Lib articles
  - Dynamic data citation

# Products & Services

- Testbed ([testbed.esipfed.org](http://testbed.esipfed.org)), April RFP
  - Evaluating the ESIP Ontologies for Mapping and Reconciliation
  - ToolMatch Service Testbed Project Proposal
- Testbed, October RFP
  - Disaster Life Cycle: Establishing a Collaborative Common Operating Picture
  - ToolMatch Service Project to Expand Community Engagement
  - An entity linking service for documents and datasets in Earth and environmental sciences
  - Connect, Share and Discover ESIP Research and Expertise using VIVO
- FUNding Friday
  - Working Group Syndicated Content Tool
  - Rich Semantic Annotation for Science Media Repositories
  - Leveraging the Power of Google Earth Engine to Derive High Quality Water Reference Data for Flood Disaster Decision Support
  - Enhancing and Educating with the WxSat Mobile App
  - HDFCRAFT – Making Earth Data Fun!
  - ToolMatch Extension

# Agriculture and Climate Cluster

- Cluster session at Summer meeting; developed Cluster Wiki
- Explored collaborations with USDA Long-Term Agroecosystem Research (LTAR) Network and Regional Climate Hub.
- Began compilation of NASA and other satellite data for LTAR and Climate Hubs (<http://bit.ly/1CSEDpp>)
- Contributed ideas & contacts for Plenary sessions & two breakout sessions on topic of Food Resiliency for Winter 2015
- 2015
  - With LTAR and Climate Hubs, collaboratively develop use cases for satellite and ground data
  - Develop Survey for ESIP membership and outside collaborators to ascertain pressing issues to which Ag & Climate Cluster can contribute analyses & problem solving
  - Expand Cluster membership & develop collaborations with other ESIP or Earth science-focused groups

# Disaster Life Cycle Cluster

- Established cluster objective and mission
  - Explored other related activities (e.g., CEOS/WGISS) and available data products (e.g., E-DECIDER)
  - Co-convened oral and poster session with AGU Natural Hazards
  - Establishing a “Collaborative Common Operating Picture” testbed
- 
- 2015
    - Deliver and exercise “Collaborative Common Operating Picture” testbed
    - Connect with GOESS Architecture Implementation Pilot
    - Develop Disaster Life Cycle Information Architecture

# Energy & Climate WG

- Re-established support for **Group on Earth Observations energy work plan** tasks, bringing together multiple Federal agency data providers at the ESIP Summer Meeting to discuss EO energy application successes and challenges.
- 2015
  - Data provenance, access, transparency issues for energy apps
  - Stakeholder engagement and observation gap identification (upcoming NCSE meeting in late Jan.)
  - Support 2<sup>nd</sup> USGEO Earth Observation Assessment energy Societal Benefit Area

# Semantic Web Cluster

- ToolMatch effort to link data and tools in discussion with national agencies to create production systems outside of ESIP - <http://wiki.esipfed.org/index.php/ToolMatch>
- Earth science ontology portal now available and serving as community hub - <http://semanticportal.esipfed.org/>
- 2015
  - Focus on ontology governance efforts and reuse
  - Increase semantic infrastructure available to community
  - Semantic Technology Expo, Winter meeting

# Other things ESIP Does

- Community-generated Best Practices (e.g. Citation)
- Testbed (e.g. Identifiers, Ontology)
- Community Conventions (e.g. Discovery)
  
- Professional Development
  - Technical Workshops
  - Non-technical Workshops (e.g. Evaluation, Communication)
  - Data Management Short Course/Workshops
- Outreach
  - Education (e.g. annual teacher workshop on climate change)
  - Professional Societies (e.g. AGU, GSA)
  - International Efforts (e.g. GEO, ISRSE)
- Provide Venue for Collaboration and Connections
  - Both virtual and in-person
  - Support with suite of collaboration tools
- Provide mini-grants to make stuff happen

# Get ESIP'ed

- Ongoing activities
  - Clusters
    - start a new one!
  - Working groups
  - Committees
- Twice-yearly meetings
  - Attend
  - Next: July 14-17, 2015 in Asilomar, CA
  - Present a talk or poster
  - Submit/Chair a session
- Partnership
  - Join
  - Invite your colleagues

# ESIP Online

- Home page
  - <http://esipfed.org>
- Wiki
  - <http://wiki.esipfed.org>
- Commons
  - <http://commons.esipfed.org>
- Facebook
  - <http://tinyurl.com/esip-facebook>
- Twitter
  - [#esipfed](#), @ESIPFed, @ESIPPres

# Questions



Peter Fox (2014-2015), [president@esipfed.org](mailto:president@esipfed.org)  
Erin Robinson (Exec Dir,  
[erinrobinson@esipfed.org](mailto:erinrobinson@esipfed.org))

**President & Vice President**

**Peter Fox**

**Emily Law**



**ESIP Type Reps**

**Dani Kinkade**

**Steve Richard**

**Ted Haberman**

**Administrative Committee**

**Bill Teng** **Chairs**

**Ken Keiser**

**Tyler Stevens**



# ESIP Leadership 2015

**Standing Committee Chairs**



**Justin Goldstein**



**LuAnn Dahlman**



**Ethan Davis**



**Christine White**

# DRUPAL Working Group

- 6 webinars from Drupal experts (YouTube: <http://goo.gl/B0t57T>)
- 2 ESIPers supported to attend Drupalcon Austin 2014
- Growing **ScienceOnDrupal** community (<http://goo.gl/w4KBJY>)
- Saw Drupal recognized as **Top-10 Open Source project** by *opensource.com* (<http://goo.gl/1MqP7B>)