ESIPHub

Services and infrastructure to support
computational geosciences
education, research and collaboration
with JupyterHub
Winter 2019 Incubator Project Update

Keith E. Maull, PhD

ESIPHub | Project Goals

BROAD PROJECT GOALS

1 **provide** ESIP **community** with **shared resources** based on current tools, platforms and workflows to support computational geoscience inquiry for experimentation, collaboration, education and research

2 develop skill and capacity for **workshop support** and expansion of platform at 2018 ESIP summer meeting and beyond

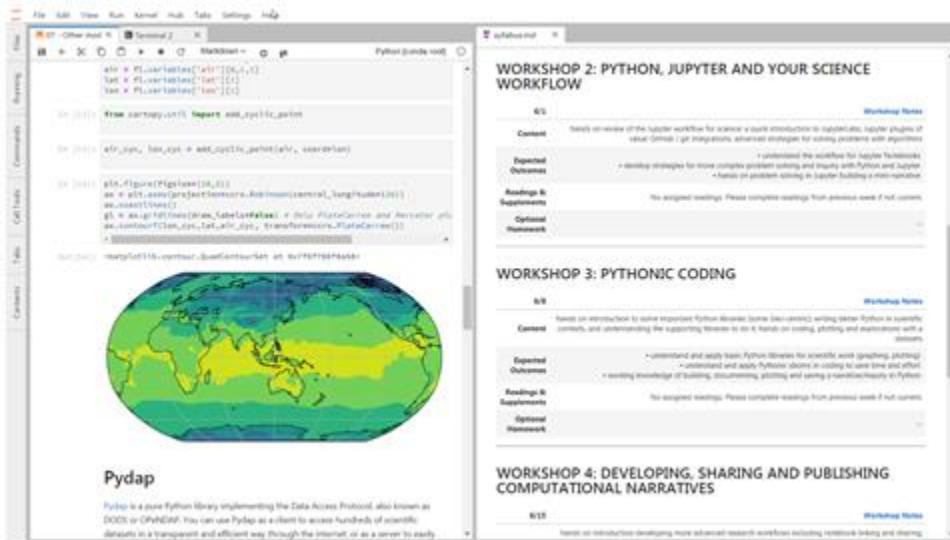**3** **sustain** stable **long-term platform** for continued use in varied ESIP projects and communities

ESIPHub | Project initialization

Summer 2018

ESIPHUB PILOT WITH UCAR SOARS

- ESIPHub piloted at UCAR summer research programs
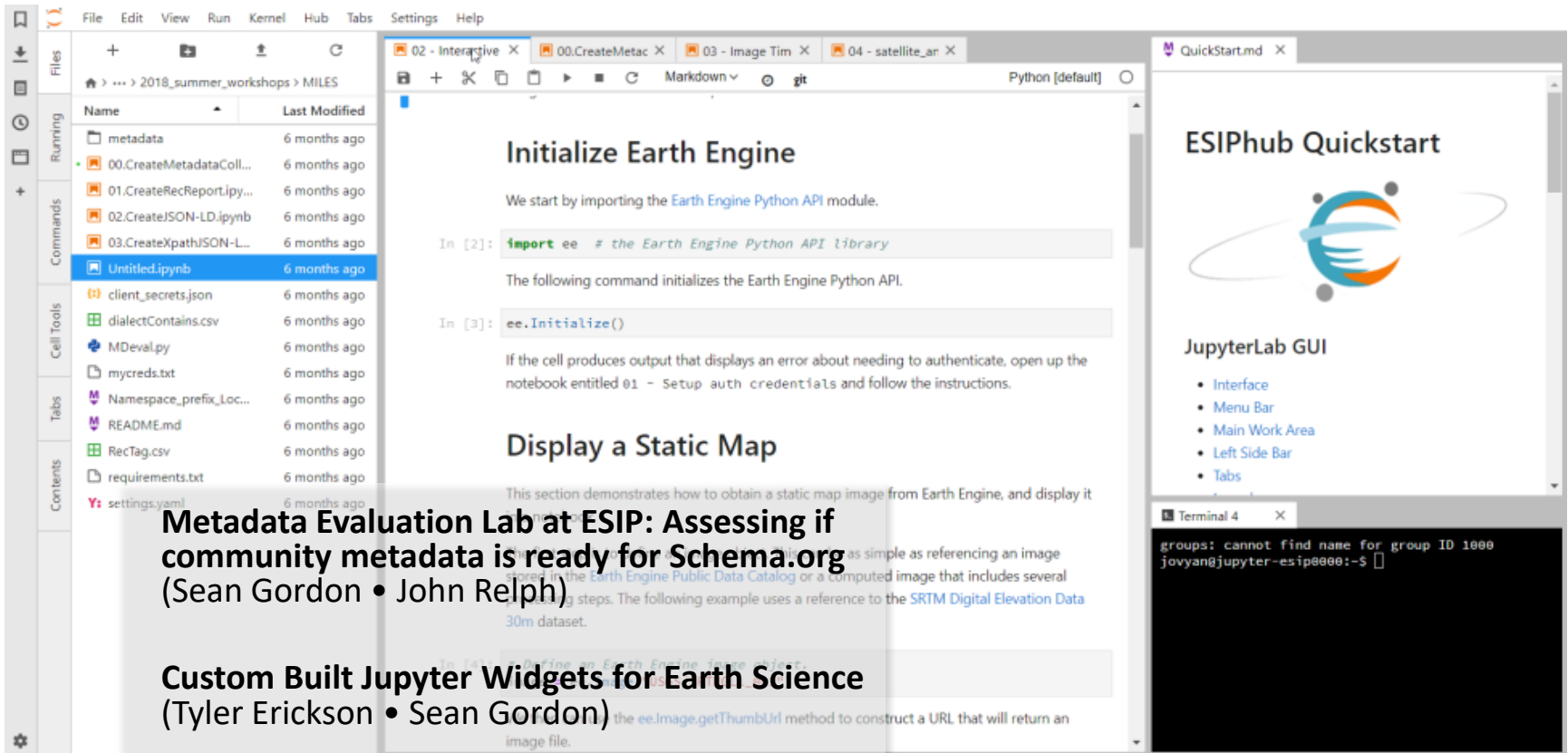- Computational thinking and data science workshops

OUTCOMES

- Refined operating environment
- Developed experience with infrastructure scaling

ESIPHub | Project initialization

Metadata Evaluation Lab at ESIP: Assessing if community metadata is ready for Schema.org (Sean Gordon • John Relph)

Custom Built Jupyter Widgets for Earth Science (Tyler Erickson • Sean Gordon)

Interactive Data Analysis on Cloud Environment (Frank Greguska • Thomas Huang • Joe Jacob • Rich Signell)

ESIPHub | Lessons learned
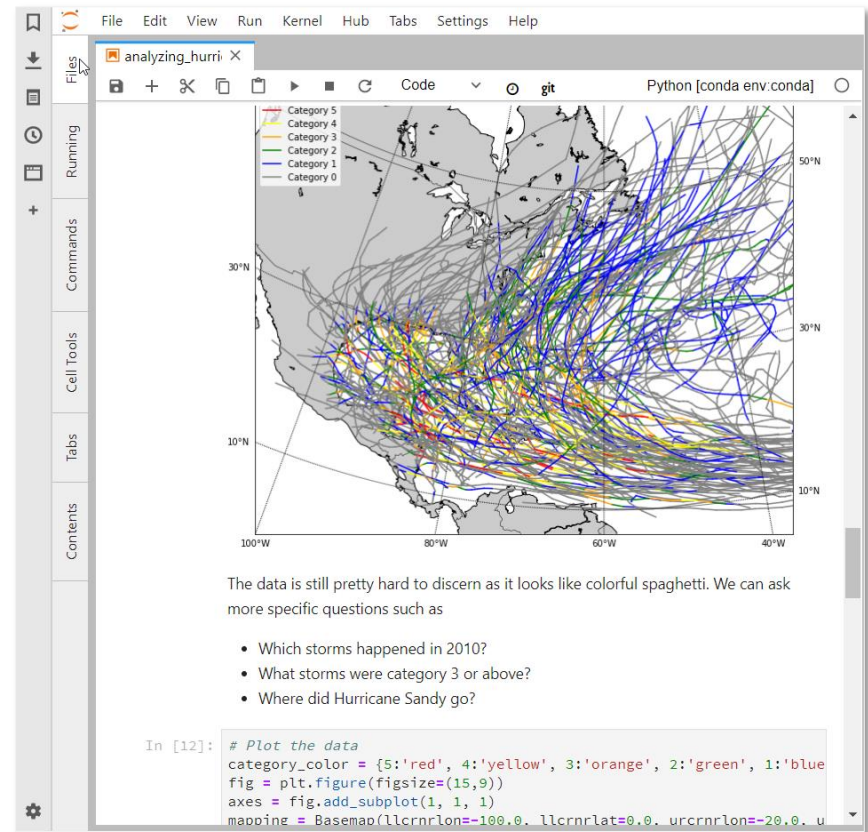
- **Scalability** should be a principal concern
- Platform more compelling in **directed contexts** (workshops)
- Sharing and **collaboration model** still **needs refinement** (e.g. /shared, etc.)

- **Ongoing support necessary** to guarantee service quality
- Hub visibility requires more **marketing and promotion**
- More work needs to go into understanding **supportable use cases**

ESIPHub | Refinement Iteration

- ESIP Education committee taking interest in using the **Hub in middle and high school geoscience**

- **Committee working session** (yesterday 1/15) provided feedback for summer 2019 meeting goals for Hub

ESIP Hub | Next Steps

- Hub **sustainability** is a priority:
  - What is the operating model?
  - How will it be paid for?
  - How can ongoing operational budget develop to support a broad array of needs?

- Hub **service model** needs development:
  - Who can you the Hub within the community (and for what)?
  - Will education/training be the primary role of the Hub?
  - When will access requests be rejected or suspended?

Thanks!

ESIPHub Team

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