Key Performance Indicators - NASA Openscapes

Draft Definitions

February 1 - July 31 2024

These are a draft definition of Key Performance Indicators (KPIs) to evaluate the progress of the Enabling Science in the Cloud initiative including the impact on targeted communities. In the subsections below we define the KPIs and thinking behind them (including critique to consider whether these are the best way to capture what we want to), and then provide numbers for February 1 - July 31 2024. For previous work about describing impact of NASA Openscapes beyond-the-numbers, see Communicating impact: NASA Openscapes by Lowndes, Robinson, & Rice, ESDSWG 2023.

Definition

Teaching numbers

- # new participants in the workshops/champions using the Hub this reflects the number
 of hands-on workshops hosted by the NASA Mentors. Note that with the new <u>Shared</u>
 <u>Password Feature we have co-developed with 2i2c</u>, this number will not capture all users
 who interacted with the Hub.
- # new teaching slides and tutorials this reflects the Champions program lessons as well
 as two new tutorial books. Since we focus so much on reuse and adapting, it can be
 difficult to decide what to include. Also, do you could a workshop or the individual
 tutorials within it? Below we have included the number of individual tutorials.
- # talks "imagine what's possible" this reflects talks that are not hands-on (and do not provide access to 2i2c JupyterHub). It's important to share the science and teamwork of what's possible

Engineering numbers

- # contributors to earthaccess this is from GitHub contributor count, which has been
 criticized for not including contributions that are notGitHub commits. For example,
 scientists who have posted Issues/Discussions on GitHub asking questions that have led
 to engineering to fix a bug or add a feature are not included on this list.
- # contributors to Cookbook this is also from GitHub contributor count, with challenges listed above
- # contributors to Hub docker image this is also from GitHub contributor count, with challenges listed above
- # items in workshop-planning GitHub Issues (open cross-DAAC planning) this shows activities proposed and pursued across the community. Does not distinguish between which were completed versus considered but gives an idea of scope
- # cloud infrastructure hackdays (2i2c, environments, etc) this gives an idea of engagement and regular progress across the NASA Openscapes community goals

Numbers & sources

Teaching numbers

- 190 new participants in the workshops/champions using the Hub
 - o source: https://github.com/orgs/nasa-openscapes-workshops/teams (private)



- Note: "WorkshopAccess-2i2c" is a legacy name; going forward we will separate names for each workshop.
- 14 new teaching slides and tutorials
 - 8 from source: (https://nasa-openscapes.github.io/2024-nasa-champions)
 - 5 from source: https://nasa.github.io/VITALS/
 - 1 from source: https://podaac.github.io/2024-SWOT-Hydro-Workshop/
- 4 talks "imagine what's possible"
 - source: SOW deliverables

Engineering numbers

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- 32 contributors to earthaccess
 - source: https://github.com/nsidc/earthaccess, accessed July 8, 2024
- 33 contributors to Cookbook
 - source: https://github.com/nasa-openscapes/earthdata-cloud-cookbook, accessed July 8, 2024
- 10 contributors to Hub docker image
 - o source: https://github.com/nasa-openscapes/corn, accessed July 8, 2024
- 118 items in workshop-planning GitHub Issues (open cross-DAAC planning)
 - o source: https://github.com/NASA-Openscapes/workshop-planning/issues



- 16 cloud infrastructure hackdays (2i2c, environments, etc)
 - source: earthaccess (n=10) https://github.com/nsidc/earthaccess/discussions
 - source: 2i2c (n=3)
 https://github.com/NASA-Openscapes/2i2cAccessPolicies/issues/7
 - source: JupyterHub hackdays led by Tasha Snow (n=3)