PyHC: answering the call for open-source software needs within Heliophysics Julie Barnum Laboratory for Atmospheric and Space Physics (LASP)

Shawn Polson, LASP

Oral

The Python in Heliophysics Community (PyHC) has been at the forefront of supporting open science by addressing the need for a unified community of open source Heliophysics package developers and software. Formed in 2018, the core mission for PyHC is to facilitate scientific discovery by promoting the use and development of sustainable open-source Python software across the solar and space physics community; improve communication and collaboration between disciplines, developers, and users; establish and maintain development standards; and foster interoperability and reproducibility. PyHC continues to strive for improvement; leadership efforts from LASP and PyHC core package developers resulted in the collection of a large swath of Python packages in Heliophysics under one umbrella. Additionally, a set of software standards (based on the Astropy package standards) was created and adopted by the community, and project have graded themselves against those to see how well they comply. However, this is only the beginning in terms of what PyHC intends to do to further the community and provide one piece of the foundation of the open science movement. This submission will briefly introduce PyHC, our current efforts, and further paths we're engaging.

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