yt is a tool for querying, analyzing and visualizing objects or regions of interest to identify emergent properties in data available in a variety of real-world research data formats.

A Python library for the analysis and visualization of volumetric data providing uniform, physically motivated API for performing inquiry and visualization of data defined on particles and regular, adaptive, and unstructured meshes.

APPLICATIONS

yt has been used for every aspect of computational astrophysics

Columbia University and the University of Wisconsin for seismology visualization and tornadogenesis simulations respectively

University of Colorado-Boulder to visualize turbulence structures of simulations of large scale fires

PLANNED FEATURES

+ Modularize yt into separate domain-specific analysis routines into separate, project-hosted packages

+ Build support for dask in yt data structures; eventually using dask as a dependency for performant parallelism

+ Build stronger integration/support for data transfer between other analysis libraries, including astropy, glue (in astro), matplotlib, napari and other scientific libraries like cartopy and xarray
## PROJECT NEEDS

<table>
<thead>
<tr>
<th>Task</th>
<th>Cost/Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing data integration with other scientific python libraries</td>
<td>$30,000</td>
</tr>
<tr>
<td>Infrastructure maintenance (website, CI infrastructure, data hub)</td>
<td>5 hours/week</td>
</tr>
<tr>
<td>Community management (hosting triage, sprints, new feature planning)</td>
<td>10 hours/week</td>
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For more information on yt, including our governance structure and project roadmap, please visit

http://yt-project.org/

For more information: info@numfocus.org | +1 (512) 831-2870.