

yt_xarray: Facilitating Software Reuse Between Space and Earth Sciences

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- Recent improvements to `yt`, `yt_xarray`
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Abstract

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Introduction

Overview of the project.

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Overview of the primary software pieces:

xarray

xarray: words: geo, NASA, cloud-native formats (zarr)

yt

more words

yt_xarray

more words

Recent improvements to `yt`, `yt_xarray`

- Geo-friendly improvements to yt
- yt_xarray: yt api access
- more

Embedded Transformations within yt_xarray

words

Utilizing Cloud Native data formats with yt_xarray

zarr via xr

xr backend allows zarr access: simple demo?

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zarr with yt

zarr with yt paragraph or two

Summary

In summary

Technical Appendix

notebook requirements, notes on use of development branches, etc.

building this book

<https://jupyterbook.org/en/stable/advanced/pdf.html>

```
$ pyenv virtualenv 3.10.11 yt_NASA_SMD  
$ pyenv activate yt_NASA_SMD
```

from top level

```
$ pip install -r requirements.txt  
$ jupyter-book build yt_xr_2024/ --builder pdflatex  
$ cp yt_xr_2024/_build/pdf/book.pdf ./yt_xr_2024.pdf
```