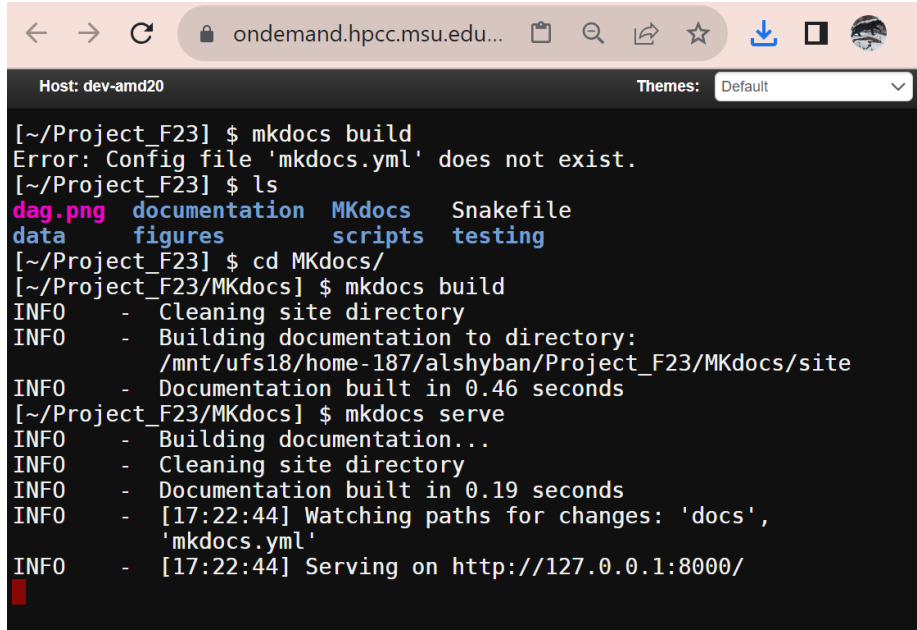


Project Information

Repository URL: https://l4epittmsu.github.io/CMSE890_402_Project/

Building and Deploying the webpage Locally:



```
← → ↻ 🔒 ondemand.hpcc.msu.edu... 📄 🔍 🔗 ☆ ⬇️ 🖱️ 🌐 ⋮
Host: dev-amd20 Themes: Default ▾
[~/Project_F23] $ mkdocs build
Error: Config file 'mkdocs.yml' does not exist.
[~/Project_F23] $ ls
dag.png  documentation  MKdocs  Snakefile
data     figures        scripts  testing
[~/Project_F23] $ cd MKdocs/
[~/Project_F23/MKdocs] $ mkdocs build
INFO - Cleaning site directory
INFO - Building documentation to directory:
      /mnt/ufs18/home-187/alshyban/Project_F23/MKdocs/site
INFO - Documentation built in 0.46 seconds
[~/Project_F23/MKdocs] $ mkdocs serve
INFO - Building documentation...
INFO - Cleaning site directory
INFO - Documentation built in 0.19 seconds
INFO - [17:22:44] Watching paths for changes: 'docs',
      'mkdocs.yml'
INFO - [17:22:44] Serving on http://127.0.0.1:8000/
█
```

Webpage Interface:

←

→

↺

127.0.0.1:8000

🔍

🔗

☆

⬇️

🖼️

👤

⋮

REPRODUCIBLE WORKFLOW PROJECT

☰

Home

workflow documentation

Functions ▾

Results ▾

🔍 Search

← Previous

Next →

▼

Welcome to MkDocs

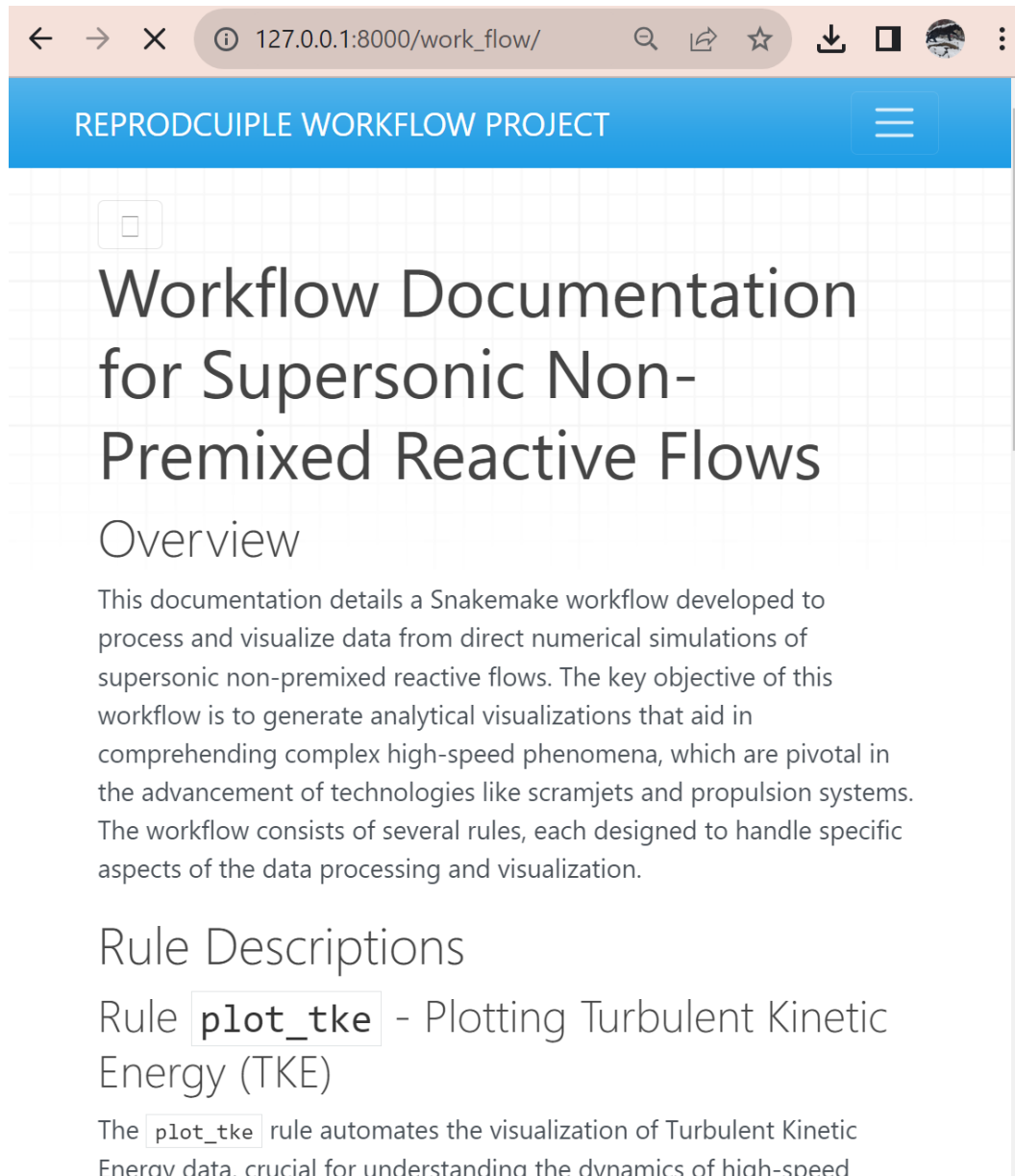
For full documentation visit mkdocs.org.

Commands

- `mkdocs new [dir-name]` - Create a new project.
- `mkdocs serve` - Start the live-reloading docs server.
- `mkdocs build` - Build the documentation site.
- `mkdocs -h` - Print help message and exit.


Project layout

Workflow documentation and purpose:



← → × ⓘ 127.0.0.1:8000/work_flow/ 🔍 ↗ ☆ ⬇️ ◻️ 🌐 ⋮

REPRODUCIBLE WORKFLOW PROJECT ☰



Workflow Documentation for Supersonic Non- Premixed Reactive Flows

Overview

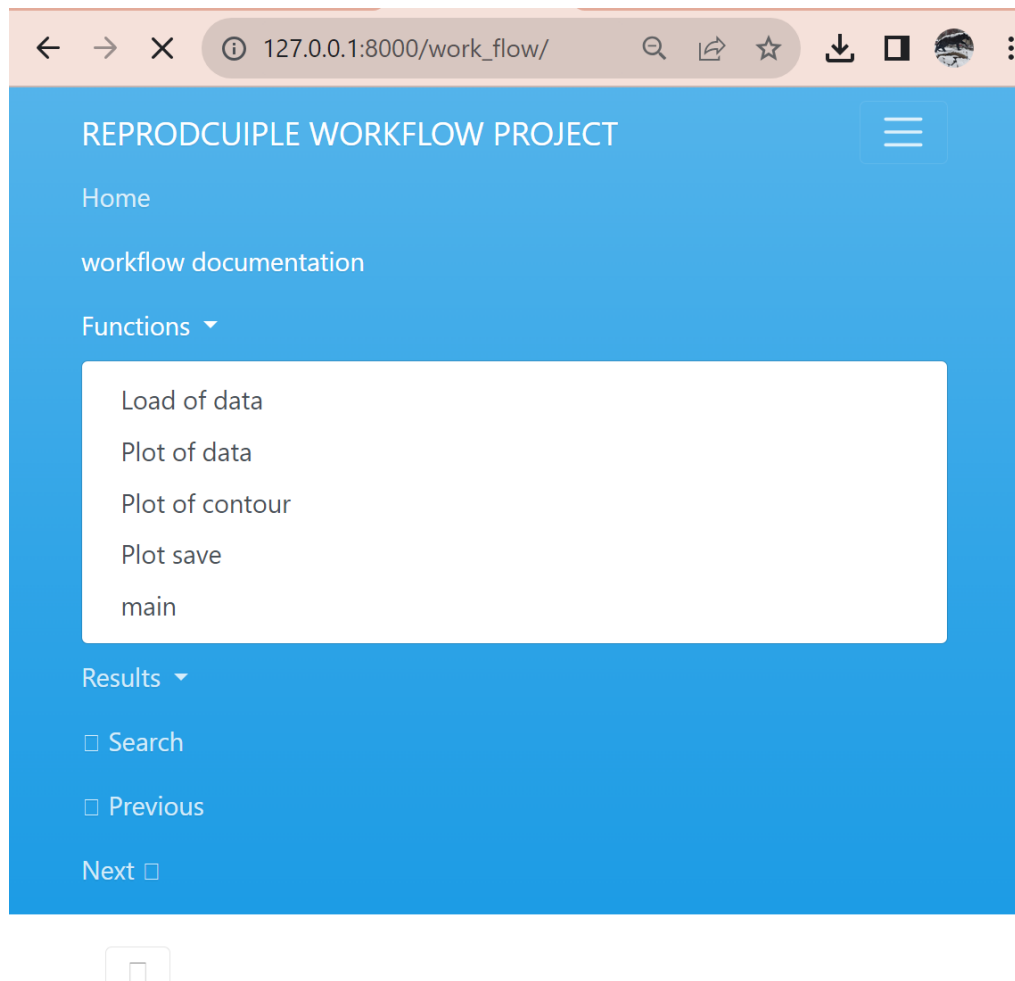
This documentation details a Snakemake workflow developed to process and visualize data from direct numerical simulations of supersonic non-premixed reactive flows. The key objective of this workflow is to generate analytical visualizations that aid in comprehending complex high-speed phenomena, which are pivotal in the advancement of technologies like scramjets and propulsion systems. The workflow consists of several rules, each designed to handle specific aspects of the data processing and visualization.

Rule Descriptions

Rule `plot_tke` - Plotting Turbulent Kinetic Energy (TKE)

The `plot_tke` rule automates the visualization of Turbulent Kinetic Energy data, crucial for understanding the dynamics of high-speed

Function documentations



Results of the workflow:

