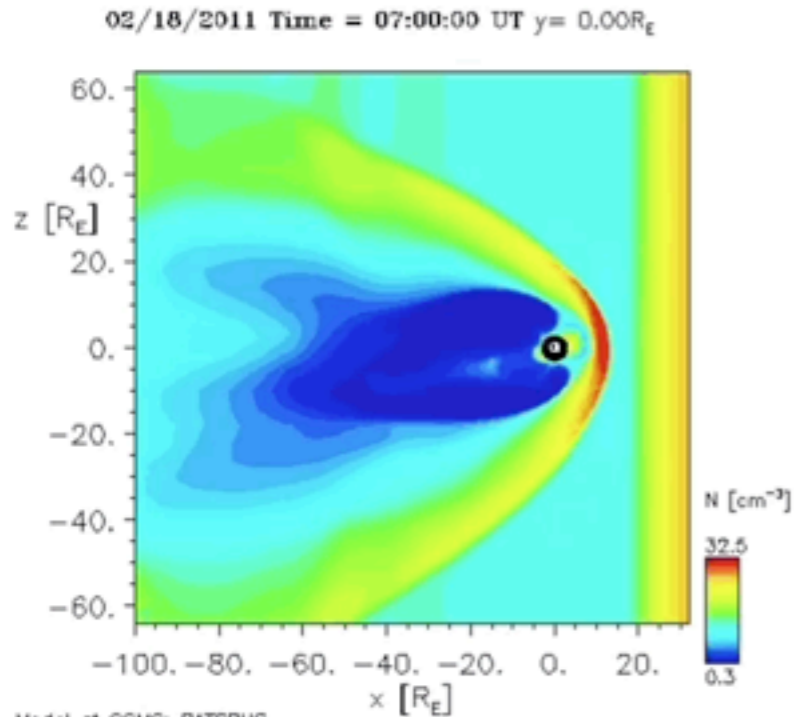# Kameleon Live

An Interactive 3D Web Analysis Tool for CCMC-hosted Models
Asher Pembroke

ROR visualization

Current Options:
1) Offline:
    1) download/store data cube
    2) Use low-level access tools including Kameleon
    3) Roll your own analysis

2) Online:
    1) RoR vis for "quick" view
    2) Generates static plots
    3) Computation can be slow

Kameleon Live Features

RoR Database Integration

- Select run ID from drop down
- Retrieves run and available timesteps
- Access and interpolation through Kameleon

Offline Options

- Run application with your own CDFs
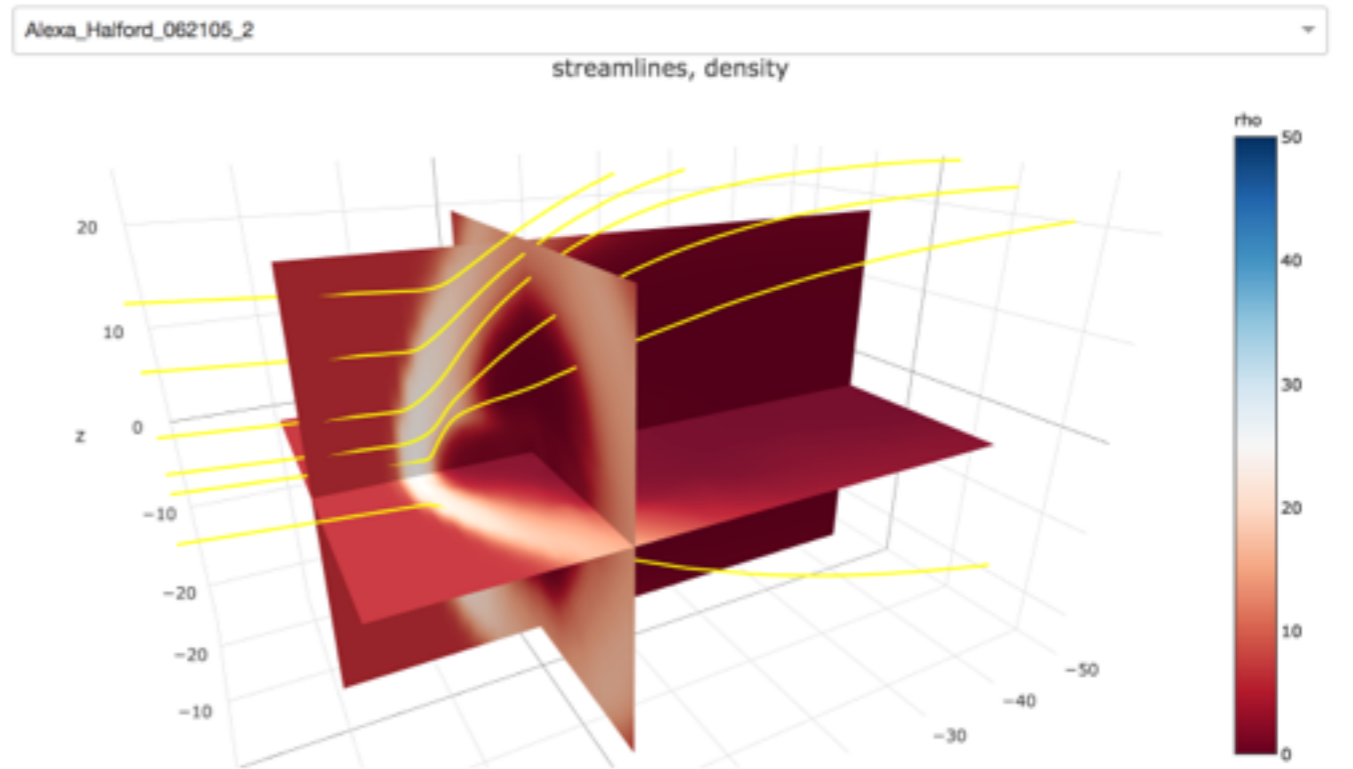- Save graph objects as plotly json

Cut-Plane selection

- Customize up to 10 cut-planes
- position, scaling, colormap, tags
- Slices generated on the server
  and visualized on the client

Seed Point Picker

- Trace multiple vector fields
- Pick points from any scene object
- traces update automatically
- modify pick points in table

Region-of-interest tags

- Appear as metadata on hover
- Used for server-side caching

DEMO

Conclusions

KameleonLive…
- provides an interactive, intuitive interface into your models
- no hassle of downloading/installing power tools
- speed and flexibility can enable science discovery
- publication-ready graphics

In the works:
- Save/Load/Share workspaces
- Support more domains (solar, heliosphere, etc)
- Animations
- Suggestions?