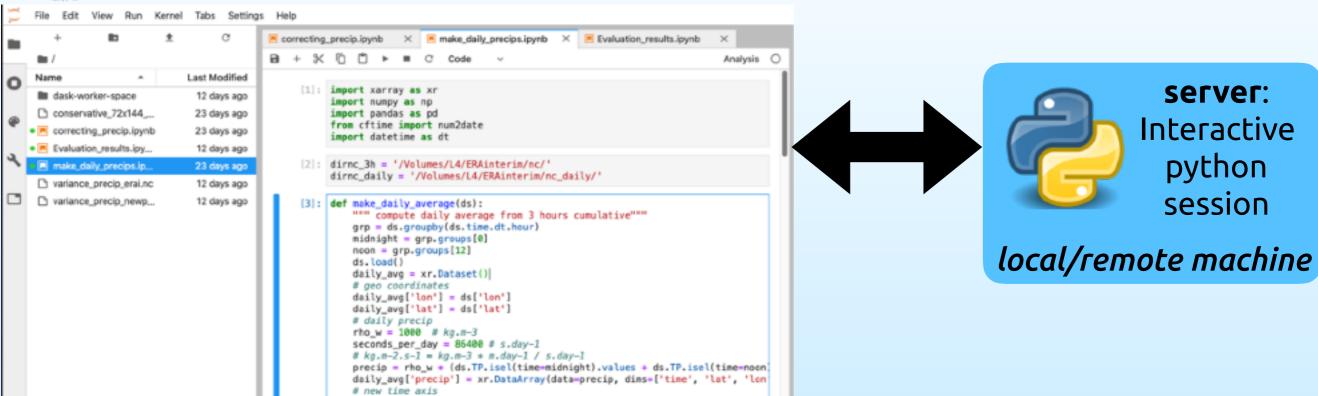


3 @ Analysis | Idle

## Jupyter ecosystem





Mode: Edit Ln 7, Col 29 make\_daily\_precips.ipynb

client: local web browser

year = ds.time[0].dt.year.values
ndays = len(ds.time) / 8.

dateref = dt.datetime(1900,1,1,0,0,0)
datestart = dt.datetime(vear.1.1.12.0.0)

Jupyterlab = more functional IDE

Jupyterhub = multi-user Jupyter server e.g. jupyterhub.ucar.edu, ocean.pangeo.io

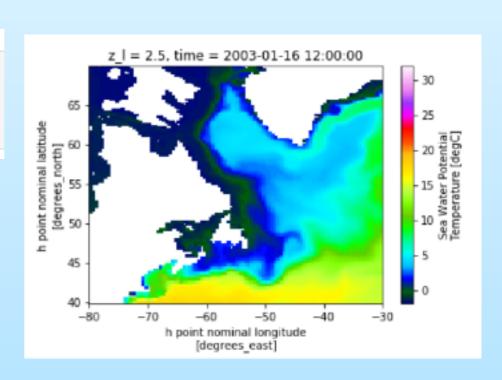


## xarray: "label-aware" arrays



- Philosophically similar to netcdf data model
- Dataset = set of DataArrays
- Datasets can be build from N files
- DataArrays have labelled dimensions/coords
- We can use methods working on these labels

```
clim = ds.mean(dim='time')
```



xgcm: adds staggered grid awareness to xarray