What is xarray?

For Python / Numpy users

- xarray handles n-dimensional arrays with labels (dimension names, coordinates) and metadata.
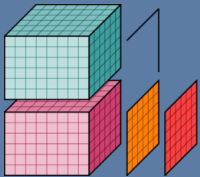
For Python / Pandas users

- xarray is a powerful, pandas-like toolkit for analytics on multi-dimensional arrays.

For scientists familar with the netCDF format

- xarray provides an in-memory representation of a netCDF file with a high level Python API.

For scientists working with big datasets

- xarray supports out-of-core computing (using Dask).

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DataArray

```
>>> import xarray as xr
>>> da = xr.DataArray(a, dims=['lat', 'lon'],
                      coords={'lon':[11, 12, 13], 'lat':[1, 2]})
>>> da
```

```
<xarray.DataArray (lat: 2, lon: 3)>
array([[1, 3, 9],
       [2, 8, 4]])
Coordinates:
  * lon      (lon) int64 11 12 13
  * lat      (lat) int64 1 2
```

outline   dataset