

# Unit Conversions

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- Unit support is a longstanding problem
- Pint integrates with the NumPy array to create a quantity with units and conversion mapping
- Implemented in MetPy as `metpy.units`

```
from metpy.units import units  
temperature = (temp * units('degF')).to('kelvin')
```

- Robust support for NumPy-based workflows
- Xarray and Dask are not currently supported (yet)



# Space and Time Conversions

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- Datasets should be aligned in space and time for analysis
- For unprojected data, this can be easily done within Xarray

```
import xarray as xr
data = xr.open_dataset('datafile.nc')
ws = data['wind_speed']
ws_1min = ws.resample(time='1Min').mean(dim='time')
ws_10m = ws.interp(height=10)
```