



ALFRED-WEGENER-INSTITUT
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AWI-CM3 hands-on-course:

Part 5: Visualizing AWI-CM3 output

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Visualization is no different from AWI-ESM2.
Unstructured mesh, recommended tools are:

Pyfesom2: <https://github.com/FESOM/pyfesom2>

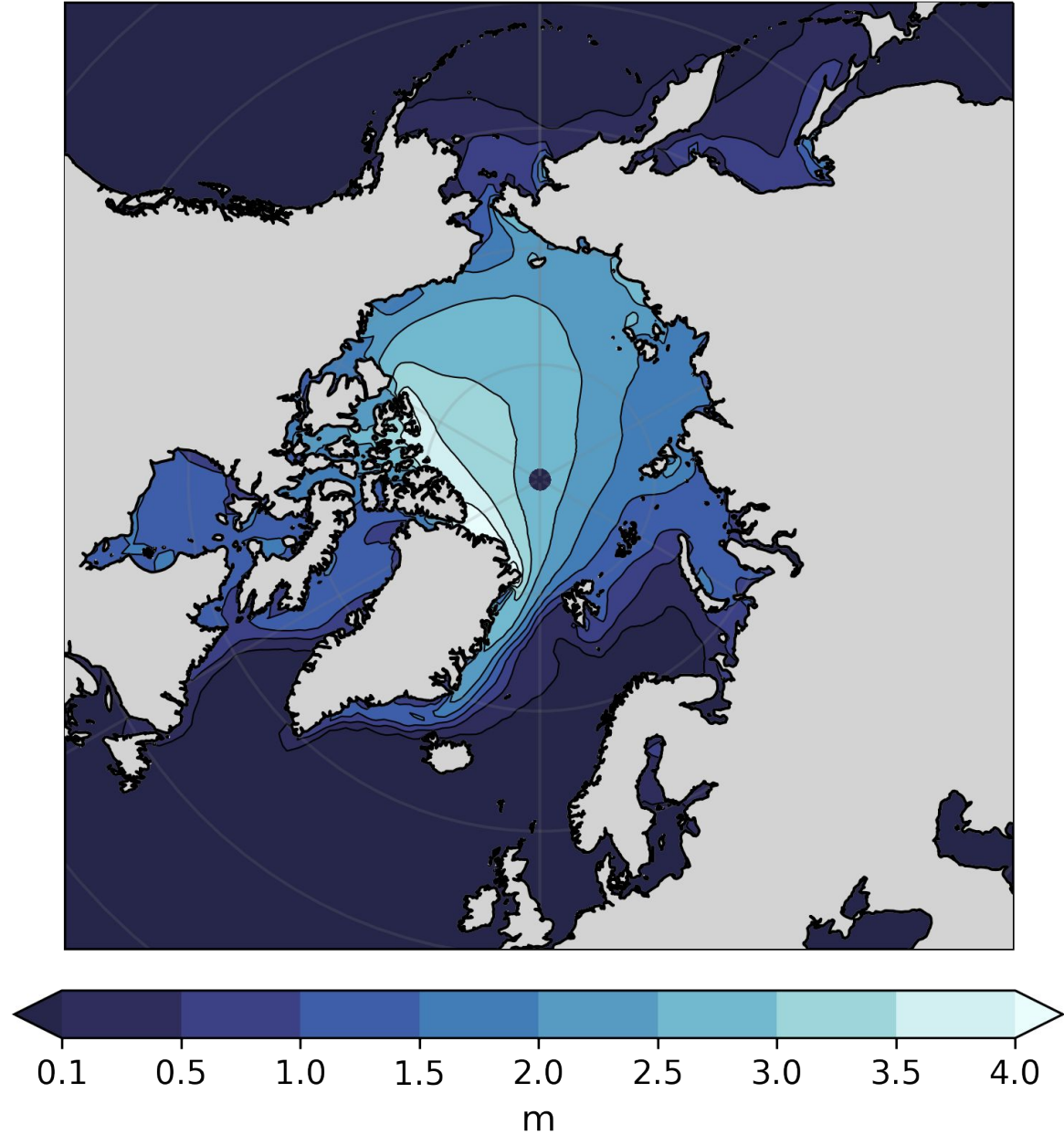
SpheRlab: <https://github.com/FESOM/spheRlab>

For a first quick glance at the data FESOM2 output can be interpolated:

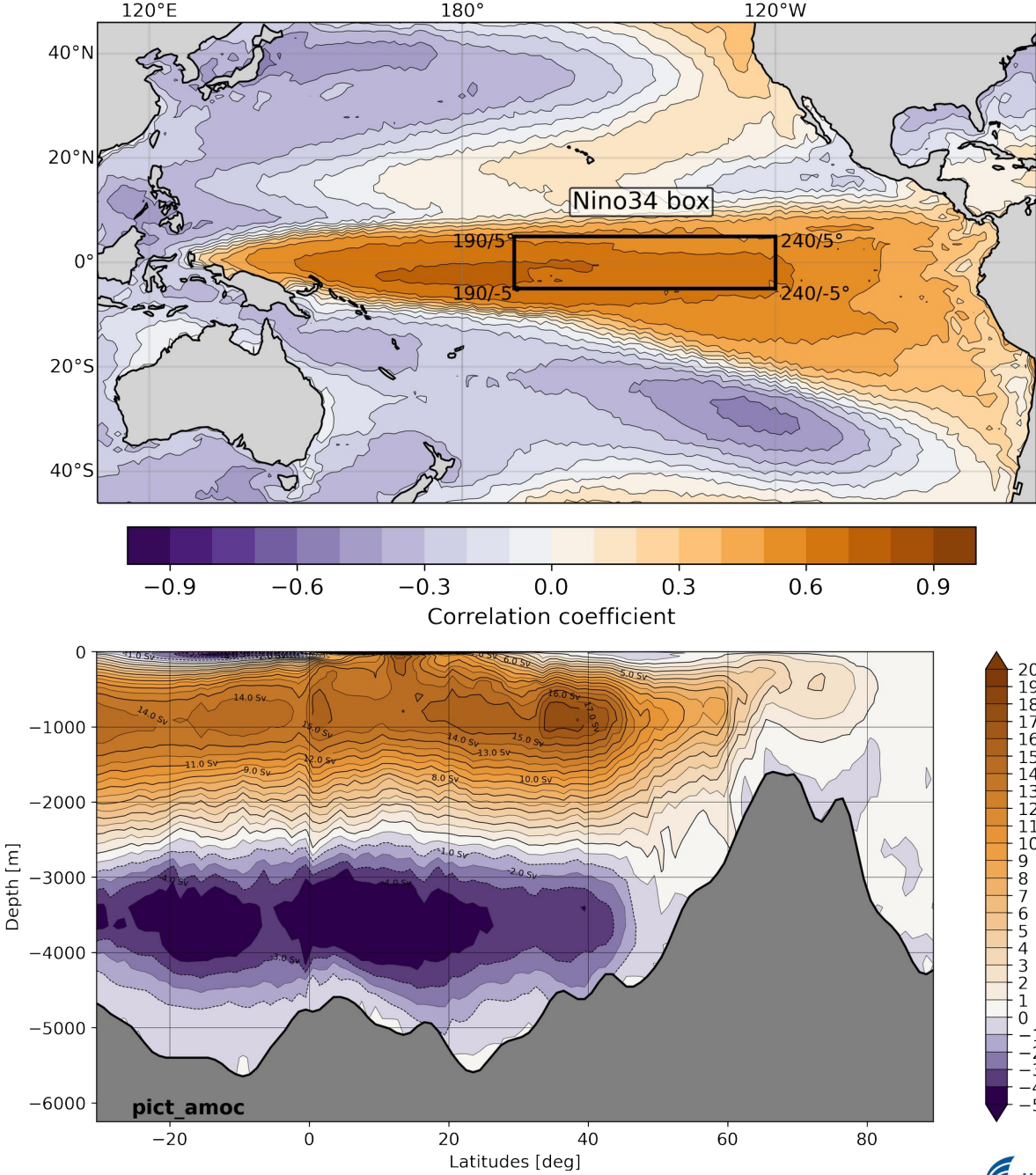
- 1 Export gridfile=*/work/ab0246/a270092/input/fesom2/core2/core2_griddes_nodes.nc*
- 2 `cdo genycon,r180x91 -selname,sst -setgrid,{gridfile} sst.fesom.2000.nc weights_sst_unstr_2_r180x91.nc`
- 3 `cdo -L -remap,r180x91,weights_sst_unstr_2_r180x91.nc -setgrid,{gridfile} sst.fesom.2000.nc sst.fesom.2000_r.nc`
- 4 `ncview sst.fesom.2000_r.nc`

Pyfesom2 Examples

AWI-CM3.1_SPP_historic
March NH sea ice thickness



EOF1 as correlation between PC1 time series and the input data



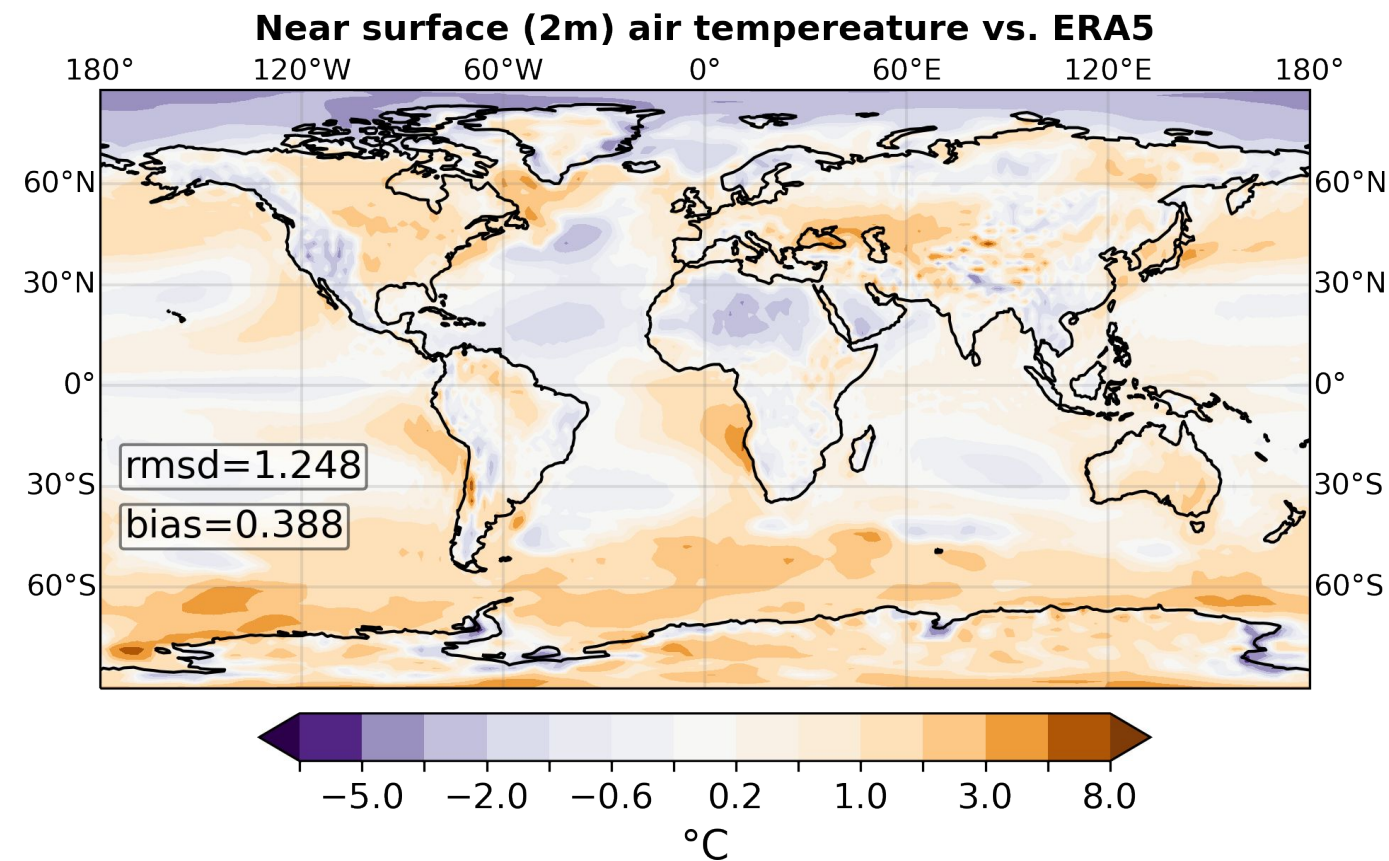
OpenIFS

Data comes on **regular lat/lon** grid in NetCDF files

→ Pretty much any tool for visualization of gridded data will work

- Ncview
- Python e.g. `xarray.open_mfdataset` + `cartopy`
- R
- NCL
- GrADS
- Panoply
- ArcGIS

Etc. etc.



OpenIFS Python Examples

