EOF of Geopotential Height Diagnostic Module From NCAR

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Contact info

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This computes the climatological anomalies of 500 hPa geopotential height, then calculates the EOFs using NCL's eofunc. The code is in NCL and requires model input: 1) monthly averaged surface pressure (ps), 2) monthly averaged geopotential height (zg)

Generates a netcdf file of climatological anomalies of 500 hPa geopotential height (compute_anomalies.ncl) Calculates and plot EOFs of North Atlantic (eof_natlantic.ncl) and North Pacific regions using NCL function eofunc

Uses pre-made figures of eofs of NCEP observational data for comparison.

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Functionality

All scripts can be found at: mdtf/MDTF_$ver/var_code/EOF_500hPa

1. Make anomalies (compute_anomalies.ncl)
2. Calculated and plots EOFs in N. Atlantic (eof_natlantic.ncl) and N. Pacific (eof_npacific.ncl)

Preprocessed observational data from NCEP as gif images are located in mdtf/inputdata/obs_data/EOF_500hPa
Place your input data at: mdtf/inputdata/model/$model_name/day
index.html can be found at: mdtf/MDTF_$ver/wkdir/MDTF_$model_name

Required Programing Language and libraries:

All these scripts required NCAR Command Language Version 6.3.0 or higher

Required input data to the module:

1) Monthly averaged surface pressure (ps)
2) Monthly averaged geopotential height (zg)

References:

None

More About the Diagnostic