MPASSIT: A scalable tool for MPAS data post-processing Larissa Reames OU/CIWRO/NSSL/FRDD

Data on the native unstructured MPAS mesh can be difficult and expensive to plot and is incompatible with standard operational post-processing utilities such as UPP. To address both of these issues the MPASSIT tool was developed. MPASSIT interpolates MPAS data to a regular grid of the user's choosing, with support for lambert conformal conic or lat-lon specification similar to WPS. Alternatively, the user may provide an external WRF input file and MPAS data will be interpolated onto the same grid. Fields to be interpolated are provided by the user at run time. Integer fields use nearest neighbor interpolation, snow-related fields use conservative regridding, and all other fields use bilinear interpolation. When configured correctly, output is WRF-history-file-identical and is compatible with (a version of) UPP. This presentation will provide a brief overview of these and other MPASSIT capabilities and a short example of usage.