Regridding

Unlike many other climate and numerical weather forecasting models ICON uses an unstructured triangular grid. Field variables which would be 2 dimensional on a regular latitude-longitude grid are stored in 1 dimensional vectors. This has certain advantages and also disadvantages. One of the main advantages of a triangular lattice is that meridian convergence does not exist at the poles. Hence no area weighting has to be applied when computing spatial averages. On the other hand the data can not be easily plotted on maps. This tutorial shows how to remap the ICON output to a regular latitude-longitude grid using either shell scripting combined with CDO (approach a) or jupyter notebooks and python (approach b).

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