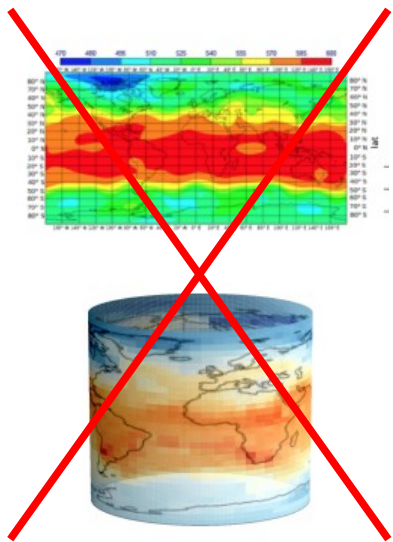# Learning on the sphere

Topology and geometry of the Earth

Any (unstructured) grid: no interpolation!

Reduced Gaussian Grid   Equiangular Grid   Icosahedral

Z500

Scalable

Computing time of Forward + Backward Pass
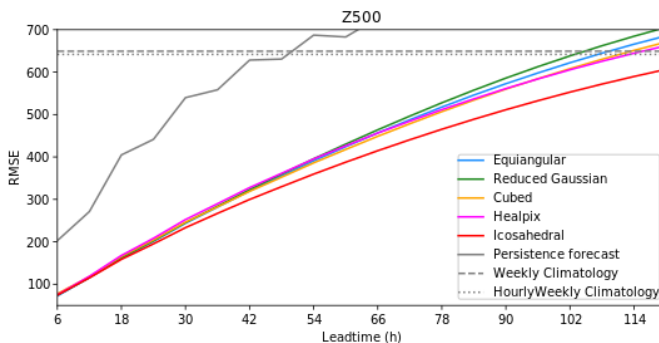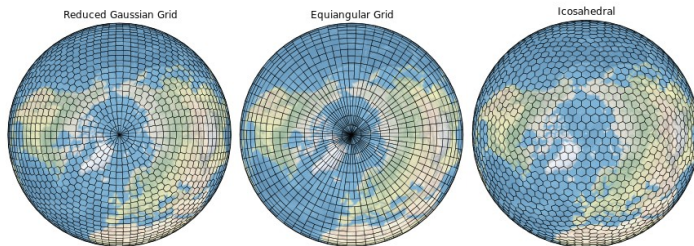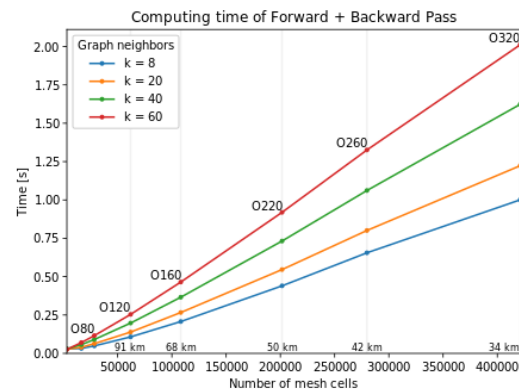
convolution $\quad y = \sum_k w_k L^k x$

pooling $\quad y = Px$

non-linearity $\quad y = \sigma(x)$

https://github.com/deepsphere/deepsphere-weather