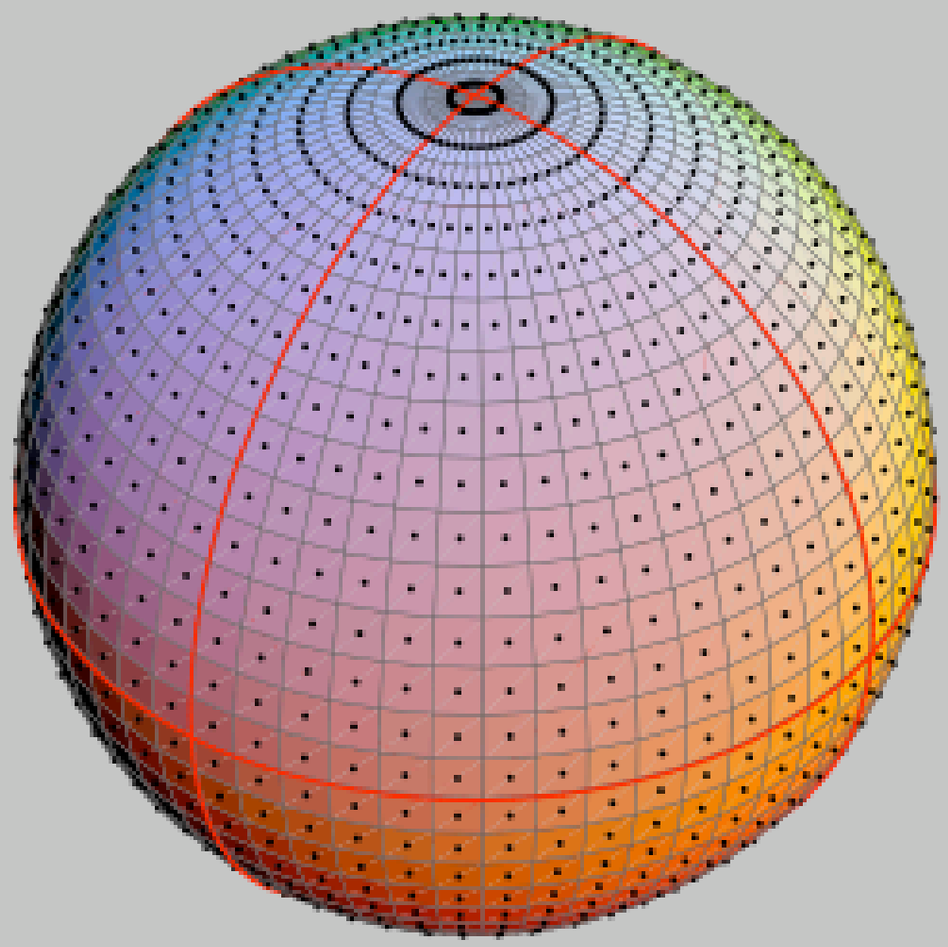
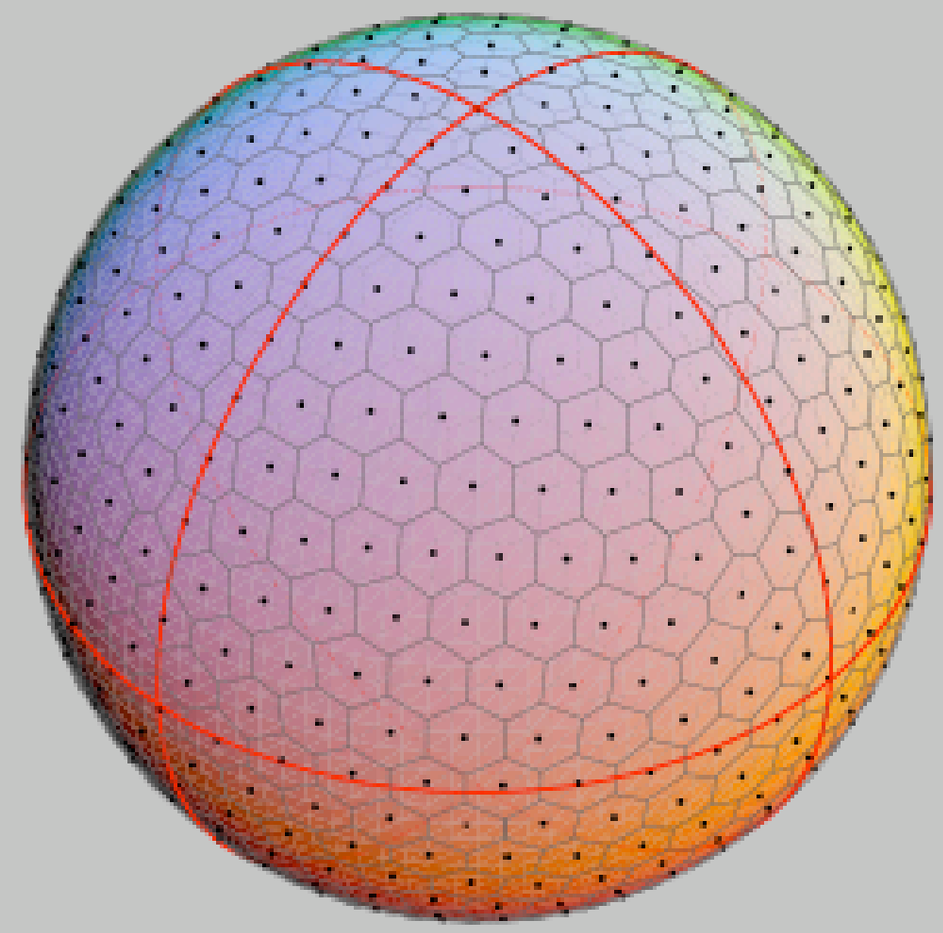
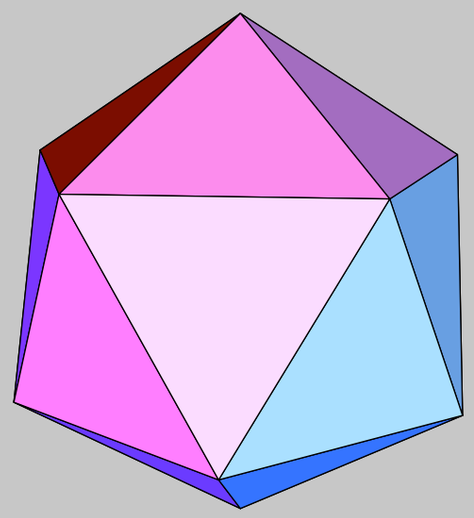
Lat-Lon Versus Geodesic Grids

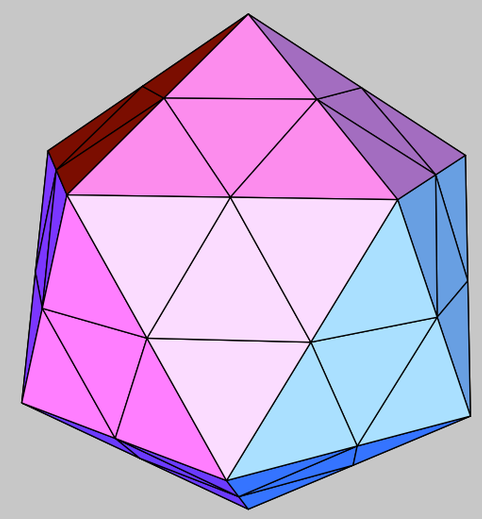




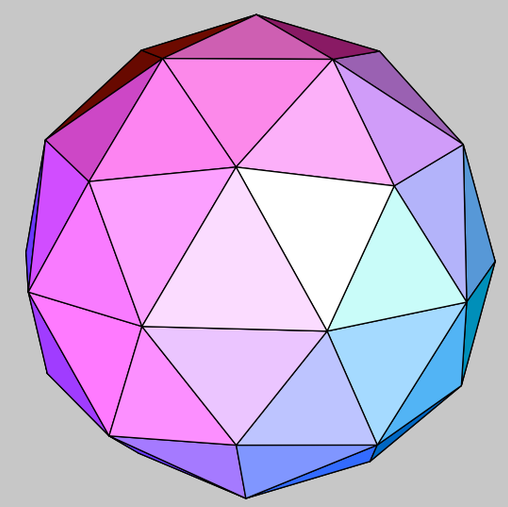
Geodesic Grid



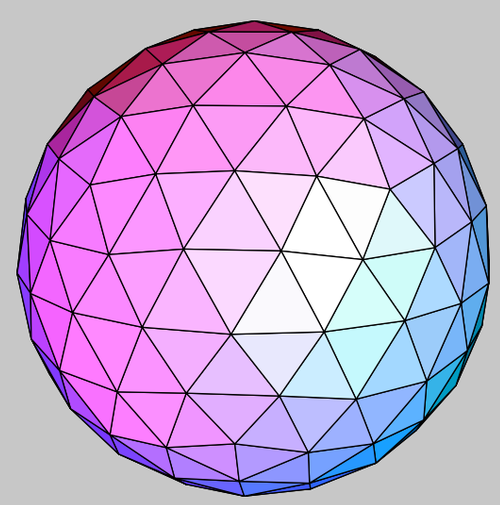
Icosahedron

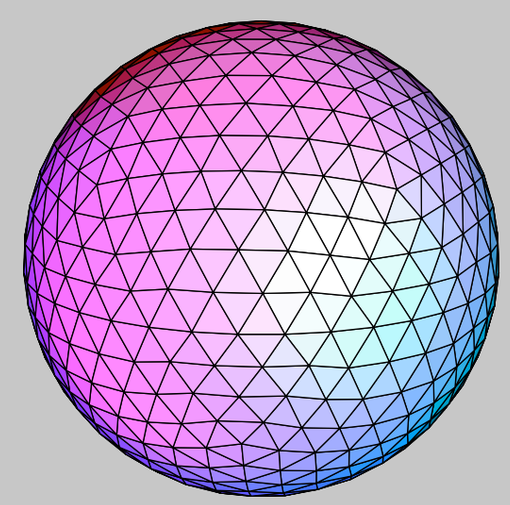


Bisect each edge
and connect the dots

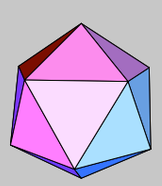


Pop out onto
the unit sphere

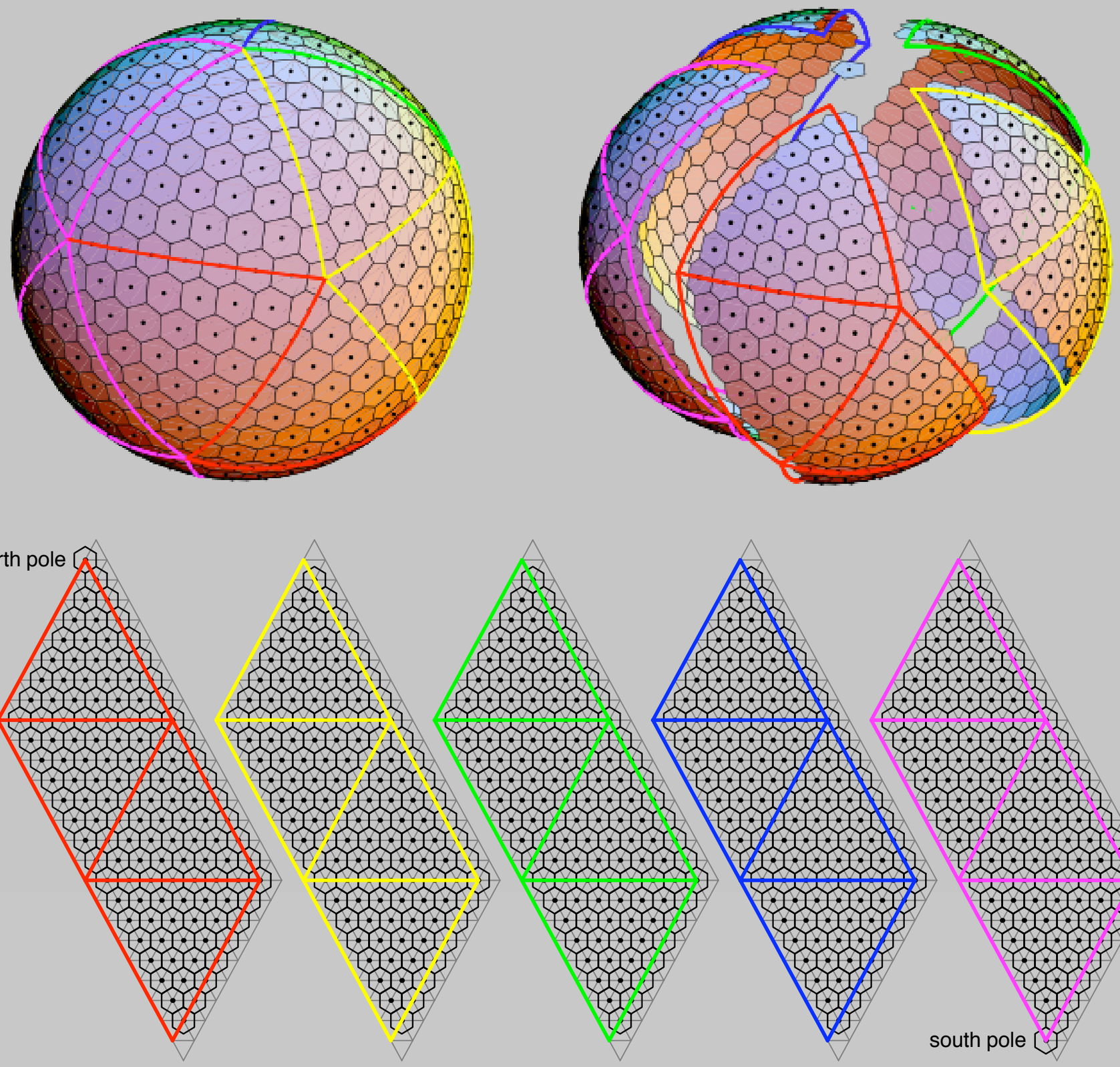




And so on, until we reach our target resolution...

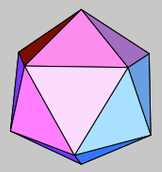


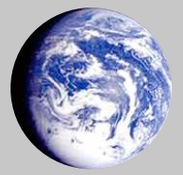
Laying it out



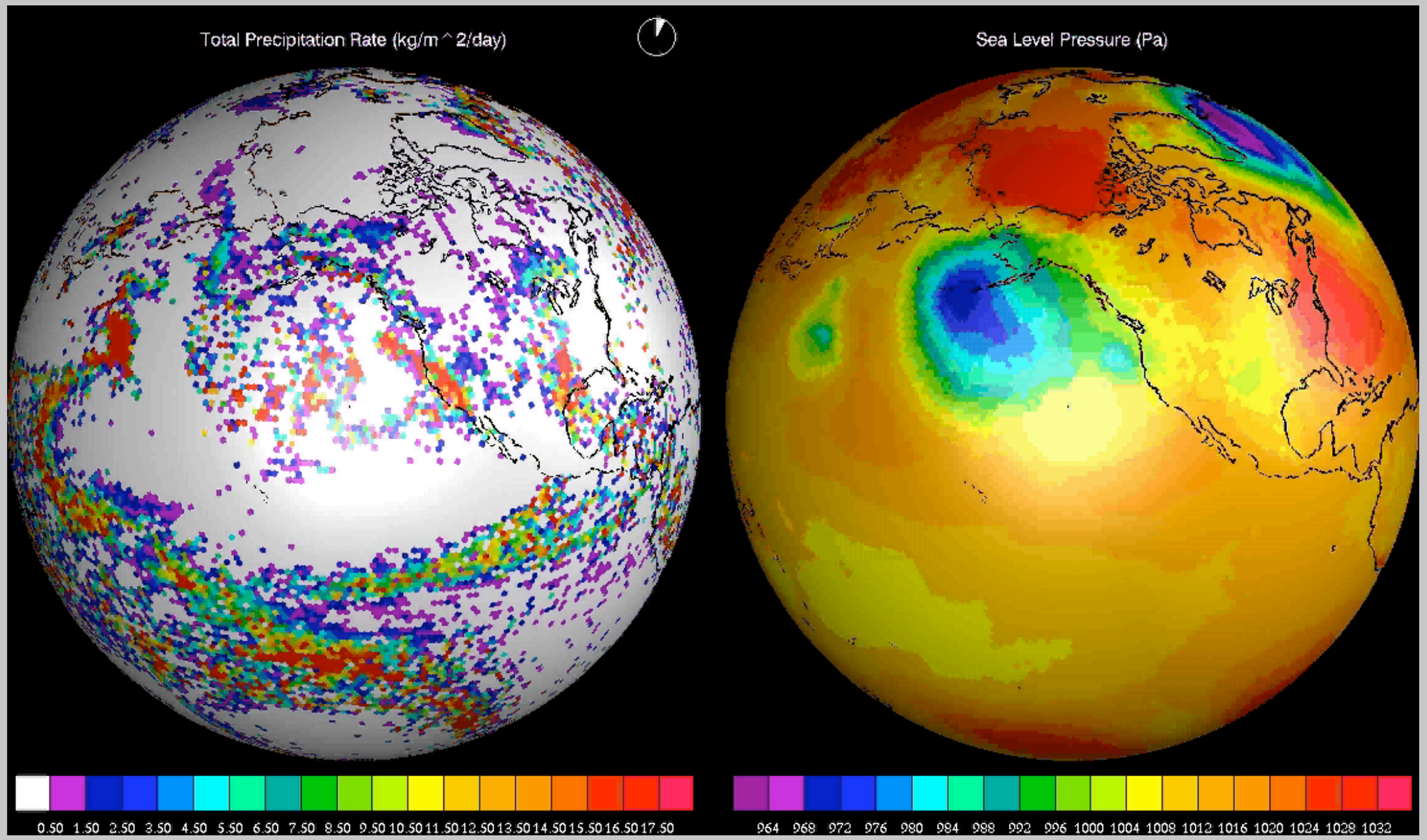
It’s a trend.

Our team (since 1994),
DWD,
Peltier,
Thuburn,
Frontier Project,
MPI and COSMOS
NASA/GSFC,
GFDL



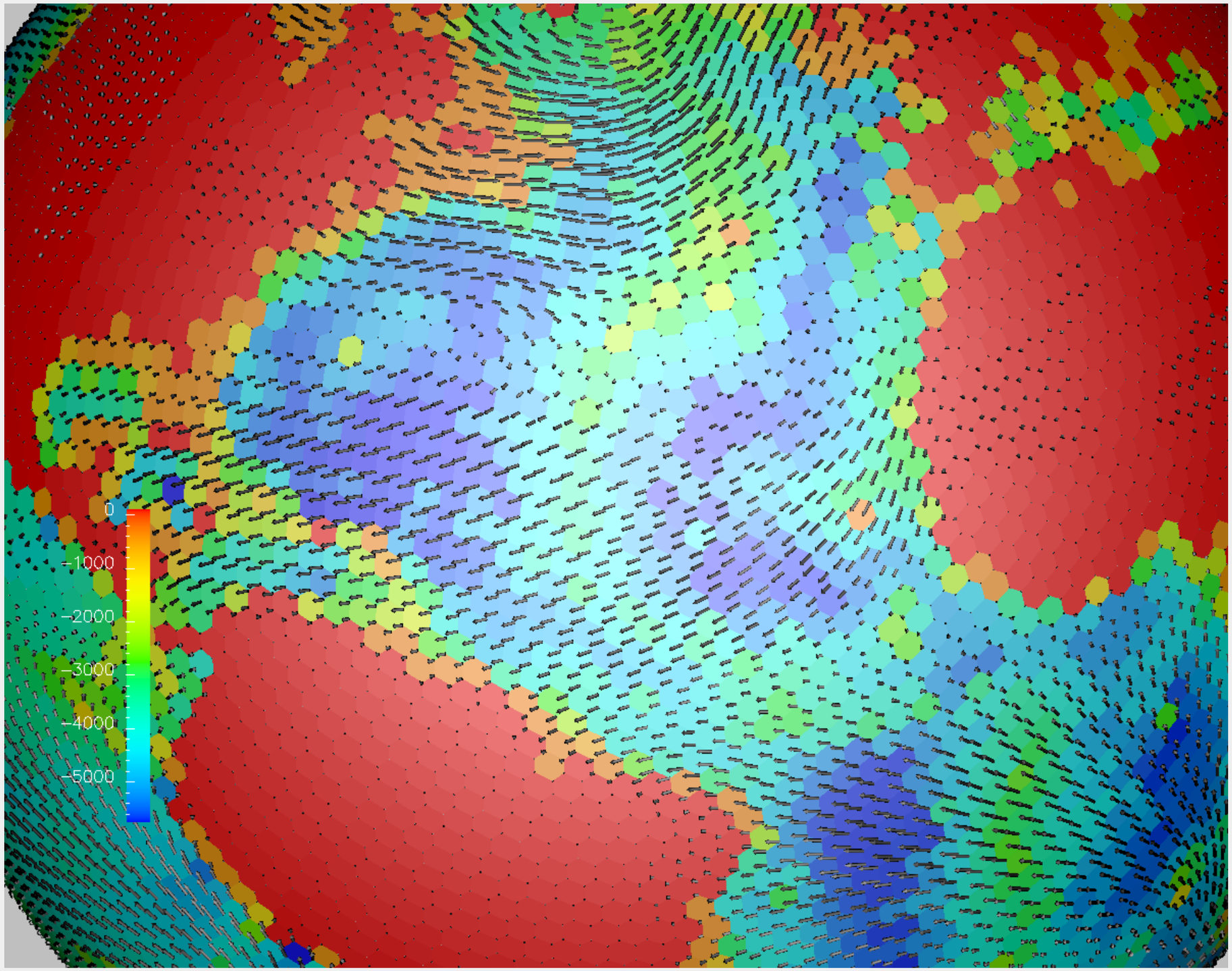


Voila



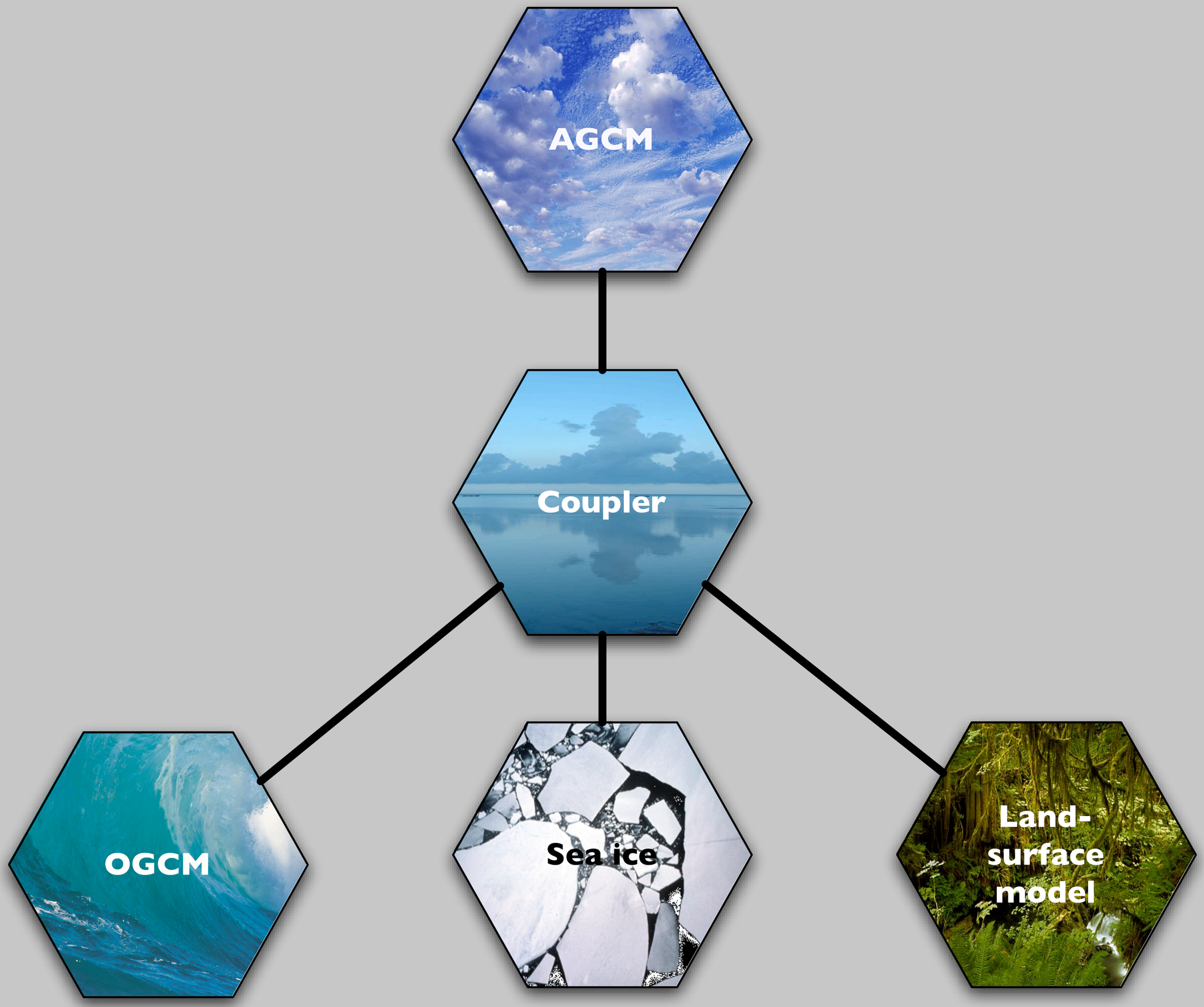
cells ~ 120 km wide

Bathymetry and wind stress



Coupler

- Designed to take advantage of similar grids for all components.
- Uses SCRIP.


AGCM
Coupler
OGCM
Sea ice
Land-
surface
model