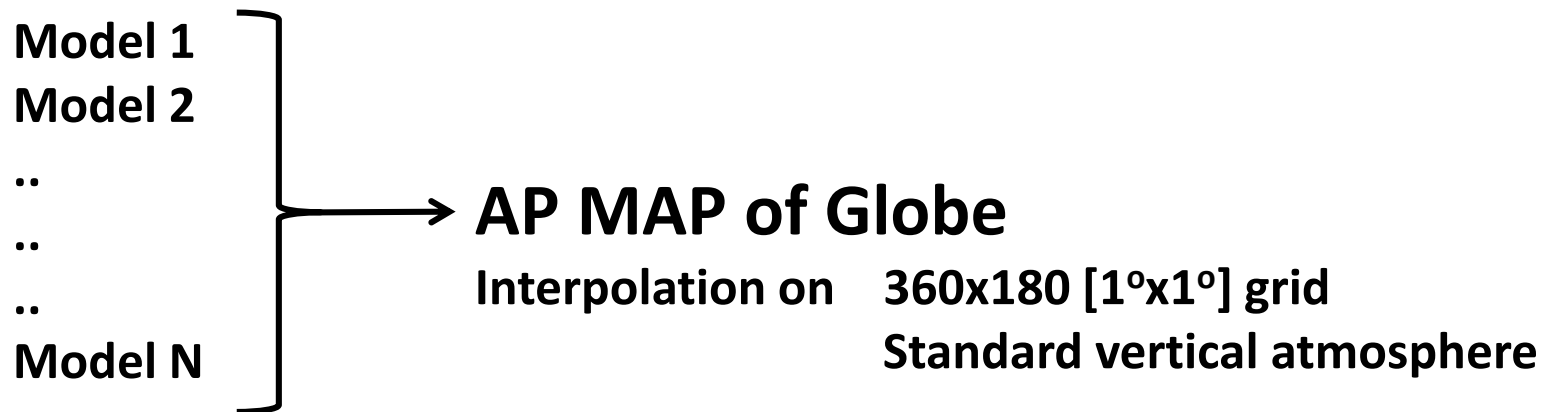# AQ mapping exercise

- 28 potential contributors (regions), 17 countries
- Data format: Ascii, ESRI, hdf5, netCDF, csv, GRIB
- Different projections: UTM33N, Lamb conf, ETRS89, Belgian Lambert, Lon/Lat, UTM32, Polar Stereo, GKM31, Estonia1997, Gauss-Krueger, JTSK, Sweref99TYM, DutchAmersfoort, WGS84, BritishNatGrid

Map1
Map2
..
..
..
MapN

→ **AQ MAP of EUROPE**

HTAP projects

- Hemispheric Transport of Air Pollutants
- 40 model configurations
- Different grids: resolutions, different projections

                                 lon [0,360], [-180, 180]

                                 lat [-90,90], [90,-90]

                                 Z [topDown, BottomUp]

                                 Z levels [km, pressure, etha]

Intercomparison of model results

Model 1
Model 2
..
..
..
Model N

$\longrightarrow$ **AP MAP of Globe**

Interpolation on   360x180 [1ºx1º] grid

                                  Standard vertical atmosphere

How to combine the patches into a Patchwork

GISS option:

- All maps need to be converted into ESRI shape files

- Using **GISS** techniques to combine all the shapes

May be the best solution, however:

- Considerable amount of work

- Not all of us are GISS specialists

- Since no central funding, need to keep it simple

Interpolation option
- All maps need to be converted into **netCDF** format (lon/lat)
  (using utility programs)
- Cell coordinates, AQ species
- All maps are projected/interpolated on the same grid over Europe (or
  the domain of interest), using region/country shapefiles

This could be done centrally using techniques similar to the ones used in
CiyDelta, EuroDelta, HemiTap, Emission Benchmarking, and making use of
DELTA infrastructure.