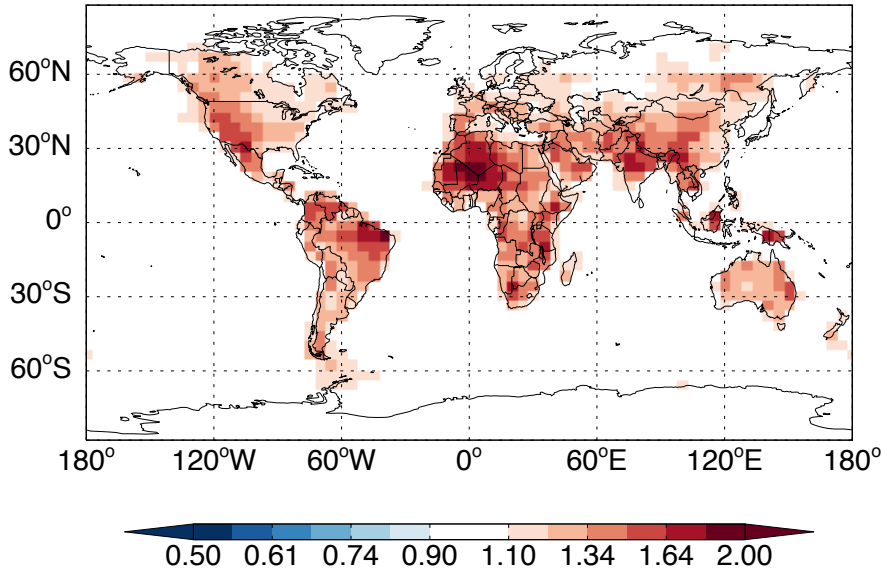
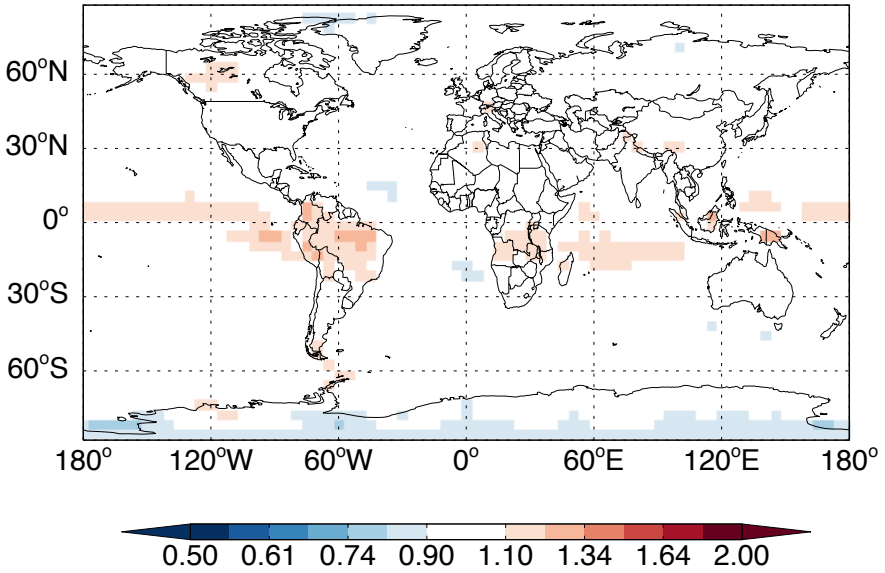
GEOS-Chem surface tracer ratios (Non-local PBL/ full mixing)

GEOS-57

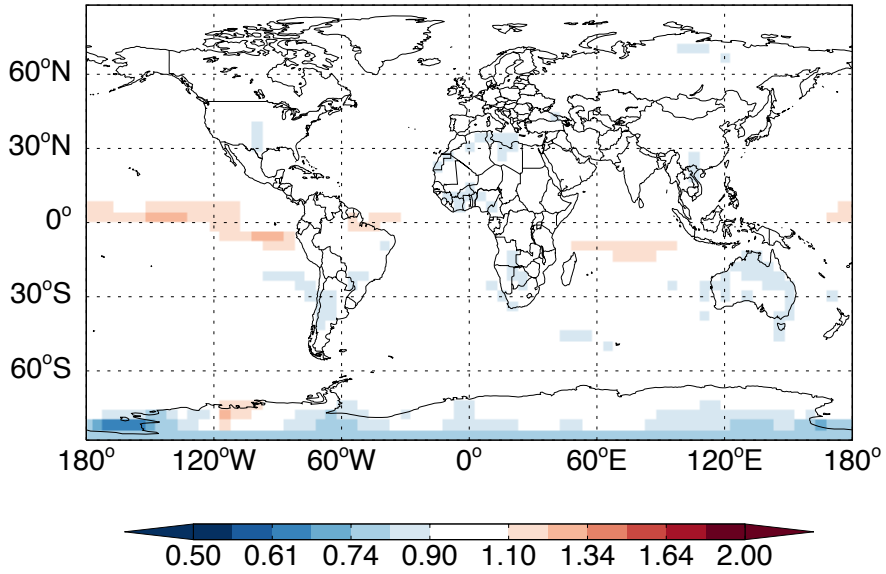
Ratio @ Surface for Rn



Ratio @ Surface for Pb



Ratio @ Surface for Be7

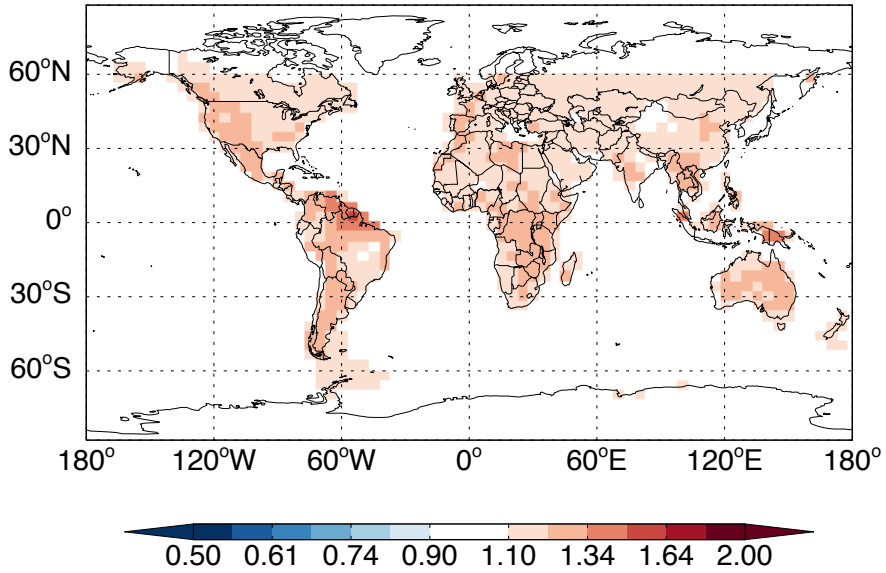


- Non-local PBL mixing produces higher surface concentrations of radon.
- Lead and Beryllium do not have large differences
- No difference at 500 hPa

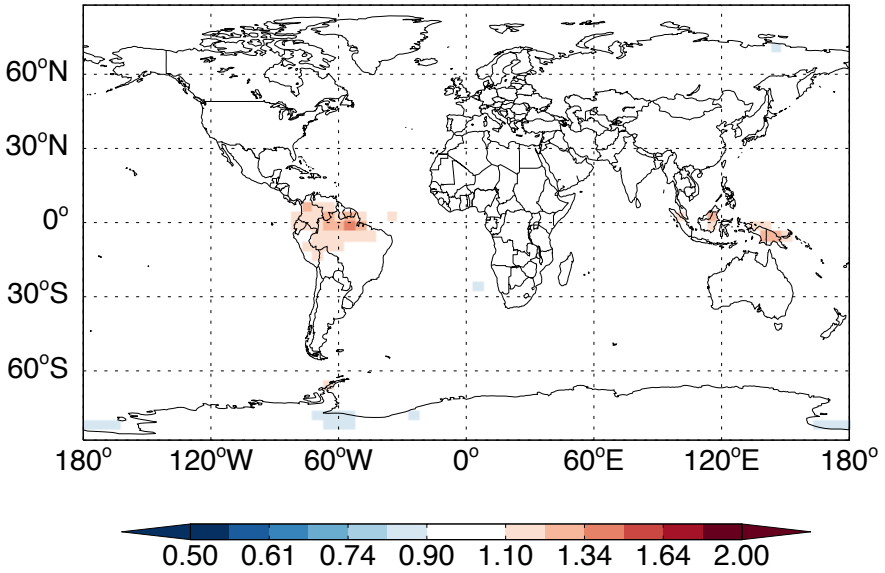
GEOS-Chem surface tracer ratios (Non-local PBL/ full mixing)

GEOS-5

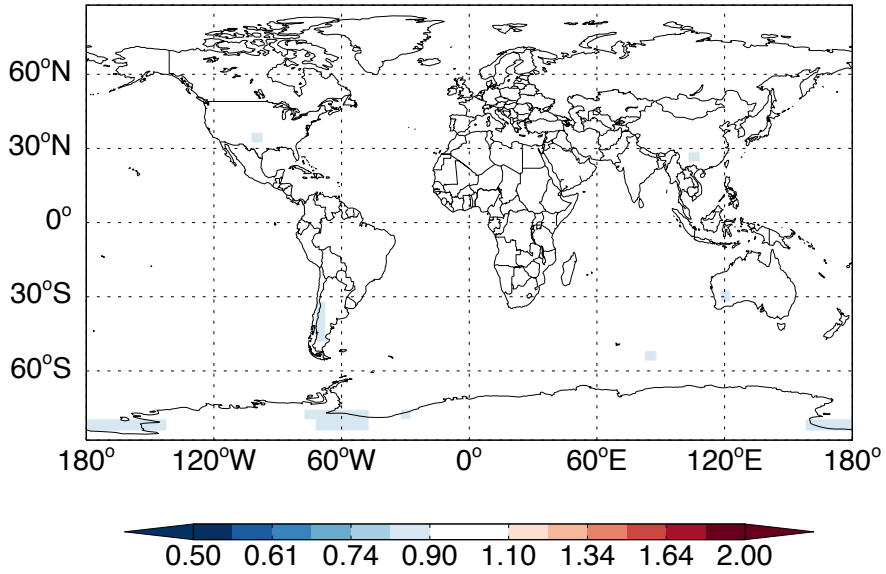
Ratio @ Surface for Rn



Ratio @ Surface for Pb

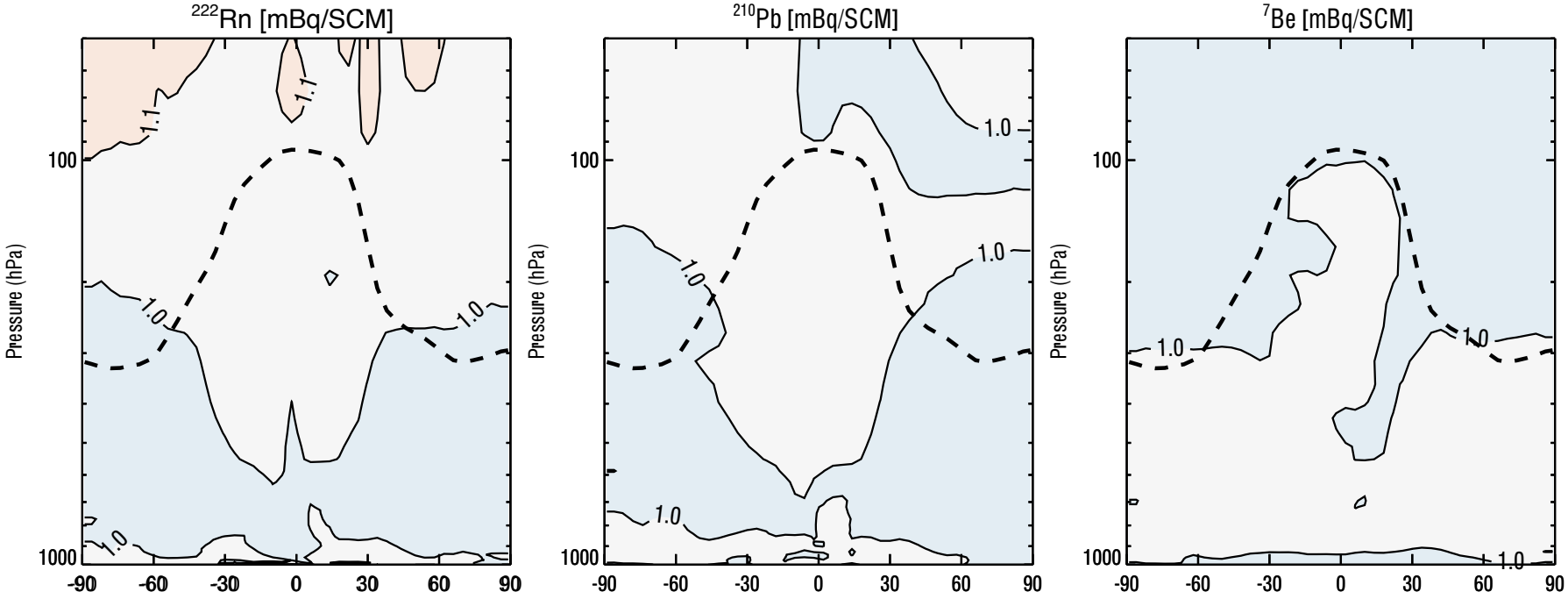


Ratio @ Surface for Be7



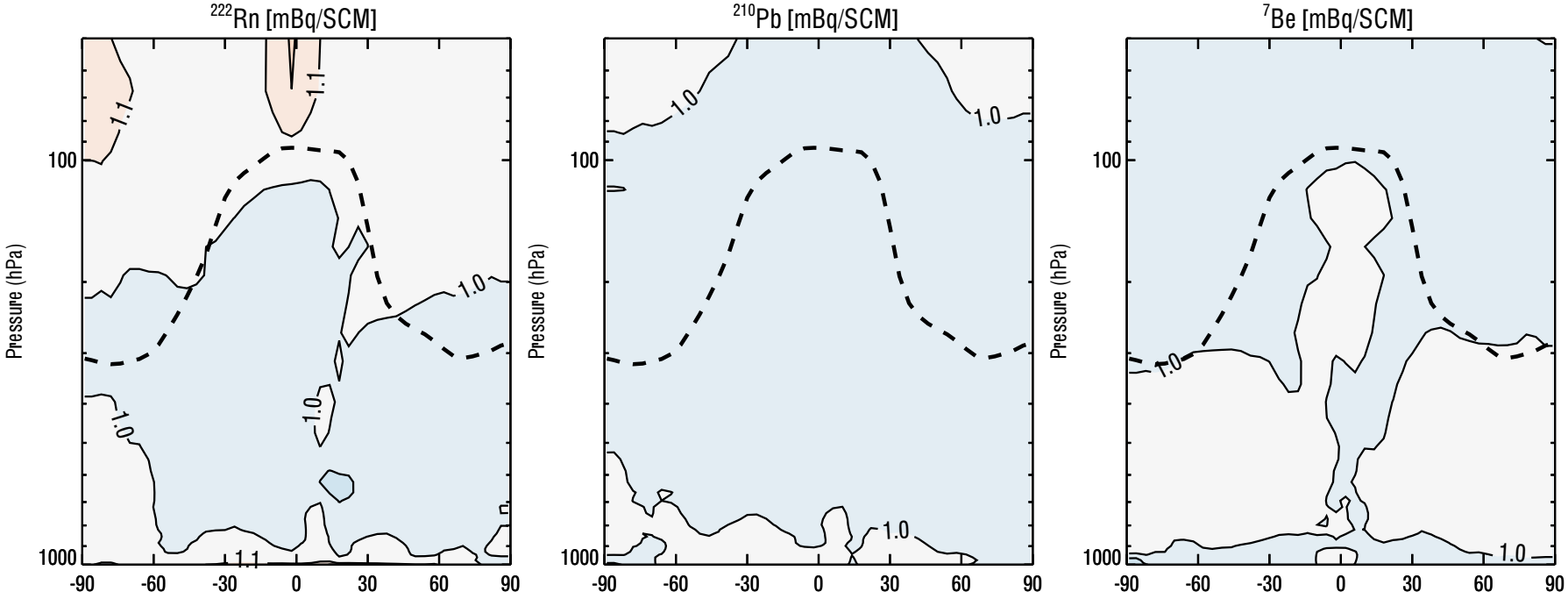
- Differences are less pronounced for GEOS-5
- Again, no differences at 500 hPa

Non-local PBL mixing / Full PBL mixing for Geos-5 4x5



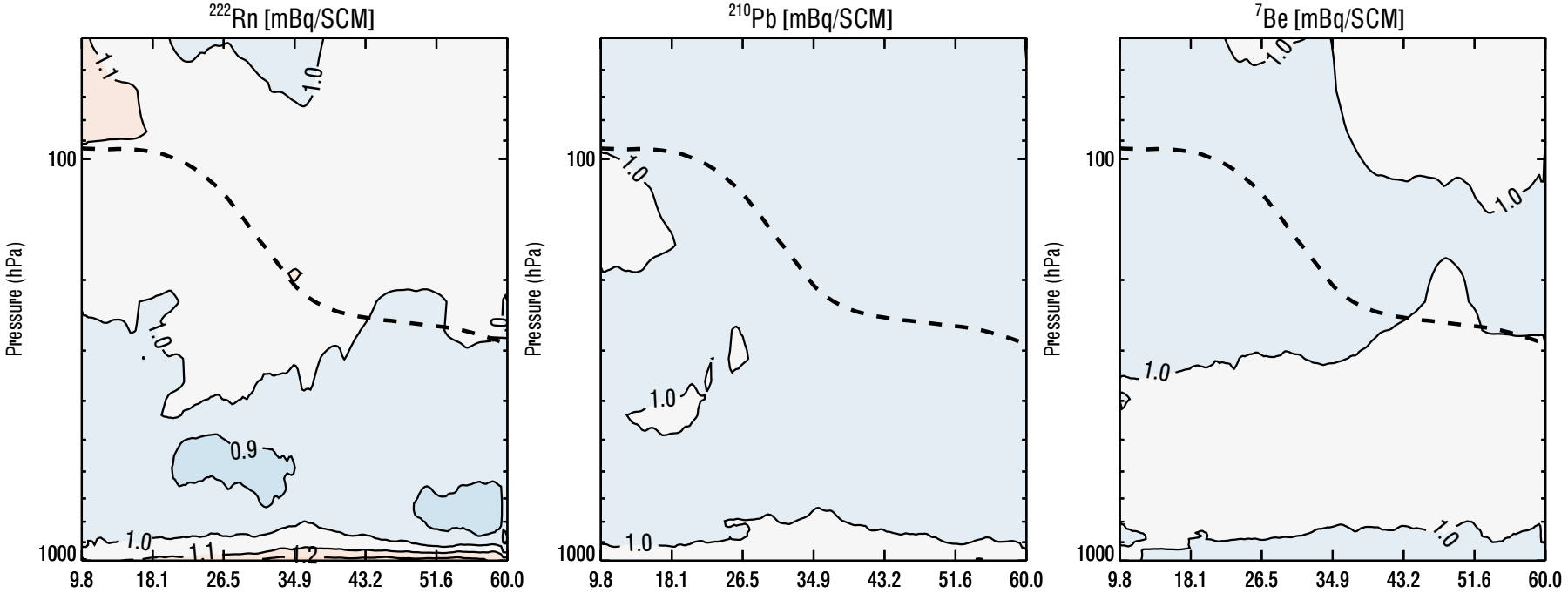
- No appreciable differences in vertical profile for any of the tracers

Non-local PBL mixing / Full PBL mixing for Geos-57 4x5



- Again, no appreciable differences in vertical profile for any tracer

Non-local PBL mixing / Full PBL mixing for North America 0.25x0.3125 degree



- Same over North America: non-local PBL mixing does not produce noticeable differences in vertical profile