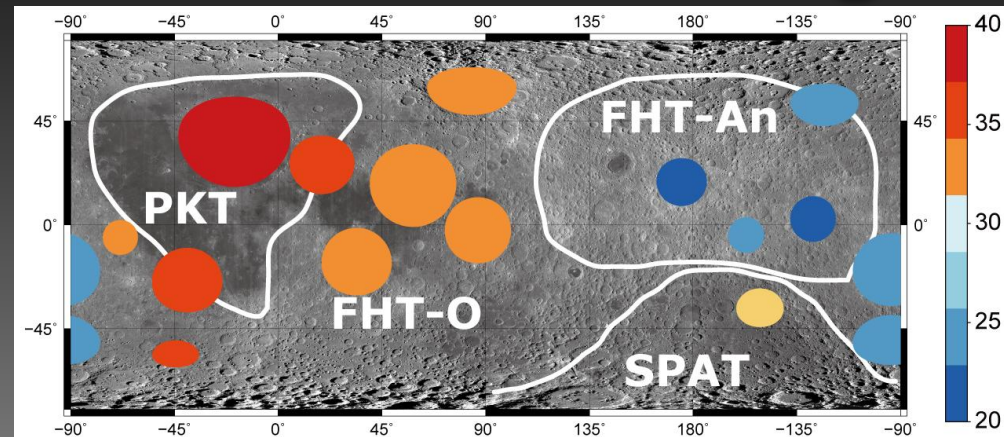


Viscoelastic deformation of major lunar impact basins: Implications for concentrations of heat-producing elements in the lunar crust

Shunichi Kamata (Univ. Tokyo)

- ◆ We calculate both **the thermal evolution** and long-term **viscoelastic deformation** of major lunar impact basins under a wide variety of parameter conditions
- ◆ We estimate crustal structure around impact basins at the basin formation age
- ◆ Based on non-negative crustal thickness condition, we **constrain the thermal structure at the basin formation age**
- ◆ Thermal constraints varies widely region by region, suggesting strong heterogeneity in radioactive element concentration



Upper limit of surface temperature gradient (K/km)