



Heterogeneity length scales

- ♦ Understand scales and shape of reservoirs
- ♦ Understand processes, Earth evolution



Questions

- ♦ Zoo of hybrid models, now add:
- ♦ Peridotite/pyroxenite plum pudding model and p , T dependent melt extraction at MORB & OIB sites
- ♦ Stirring length scales of schlieren compared to melt zone (?)
- ♦ Plum pudding: tectonics & isotopes



More questions

- ♦ How many reservoirs are there? Are those distinct?
- ♦ Should we hunt for EM1, EM2, DMM, HIMU, PM (aka C, aka FOZO)?
- ♦ Reservoirs exist (as processes?)



Do we see the source?

- ♦ Iceland closer to PM than Hawaii
- ♦ Re/Os system, O isotopes argue against lithospheric contamination
- ♦ Do we see lithospheric erosion?



What to do?

- ♦ Test plum pudding as a function of locality
- ♦ Predict effect of melt conditions
- ♦ Model melt conditions and extraction
- ♦ Derive melt conditions from local seismology
- ♦ Regional tomography