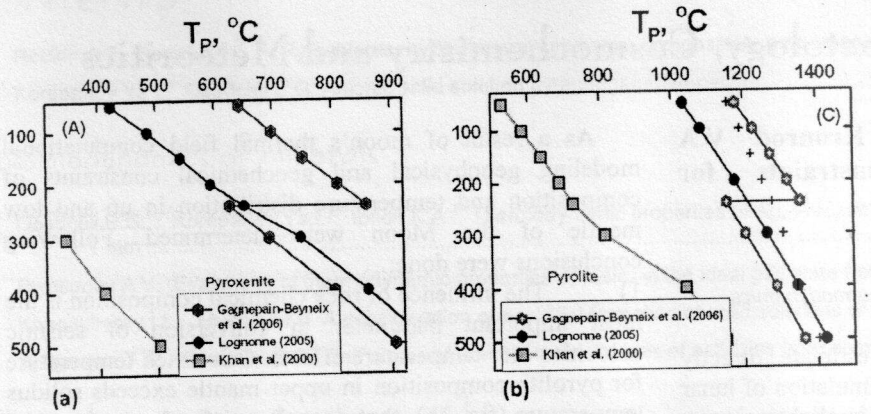

Fig. 1. Temperature distribution in the upper mantle of the Moon, derived from recent seismic data [*Кронрод* и *Кусков*, 1999; *Кронрод* и *Кусков*, 1999; *Kuskov et al.*, 2002] and geochemical constraints for pyroxenite composition. Seismic models for temperature calculation were taken from [*Кронрод* и *Кусков*, 1999]. Temperature variations on parts with the same velocity depend on density changing with depth.

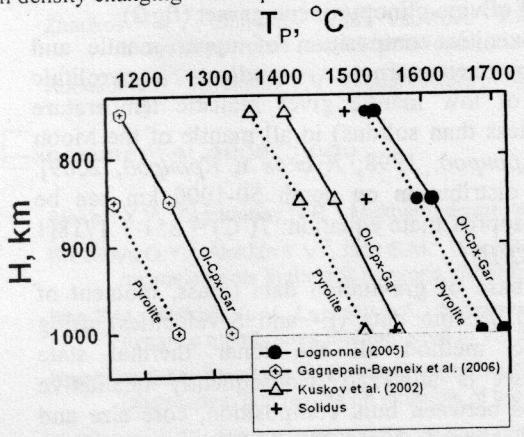

Fig. 2. Temperature distribution in low mantle of the Moon from seismic models [*Кронрод* и *Кусков*, 1999; *Кронрод* и *Кусков*, 1999; *Kuskov et al.*, 2002]. Compositional models are: pyroxenite, olivine-clinopyroxene-garnet and pyrolith. Solidus (crosses) marks data for pyroxenitic [*Kuskov et al.*, 2002] and peridotitic [*McDonough*, 1995] composition.

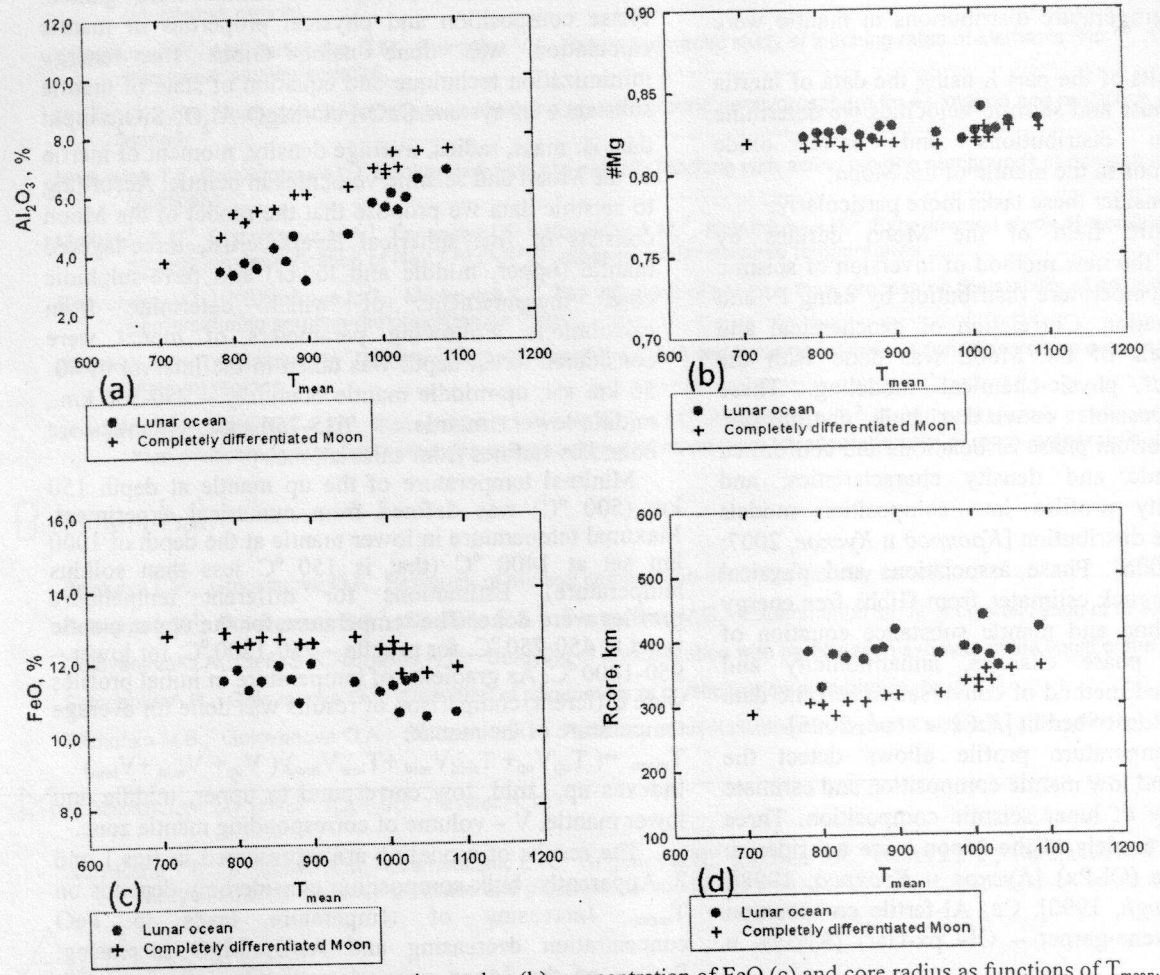

Fig.3. Concentration of Al_2O_3 (a) magnesia number (b), concentration of FeO (c) and core radius as functions of T_{mean}. Middle-lower mantle bound is 625 km.