



Taking into account recent geodetic and mineralogical constraints on seismological models of the Moon.

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This study is integrating the new constraints on the internal structure models of the Moon coming from recent improvements in the determination of gravity field, Love numbers, and elastic parameters of iron alloys at Moon core temperature and pressure. 3D crust models compatible with GRAIL gravity field variations and an improved description of mantle elastic structure are integrated in the inversion of body wave travel times and quake relocations. Core elastic models are constructed according to core volume and mass. The recent constraints coming from mineralogical models of liquid and solid iron alloys are used to exclude unphysical models. Finally, a new search of core reflected phases is performed to constrain core radius.