# Supporting Information for "Structure and thermal evolution of exoplanetary cores"

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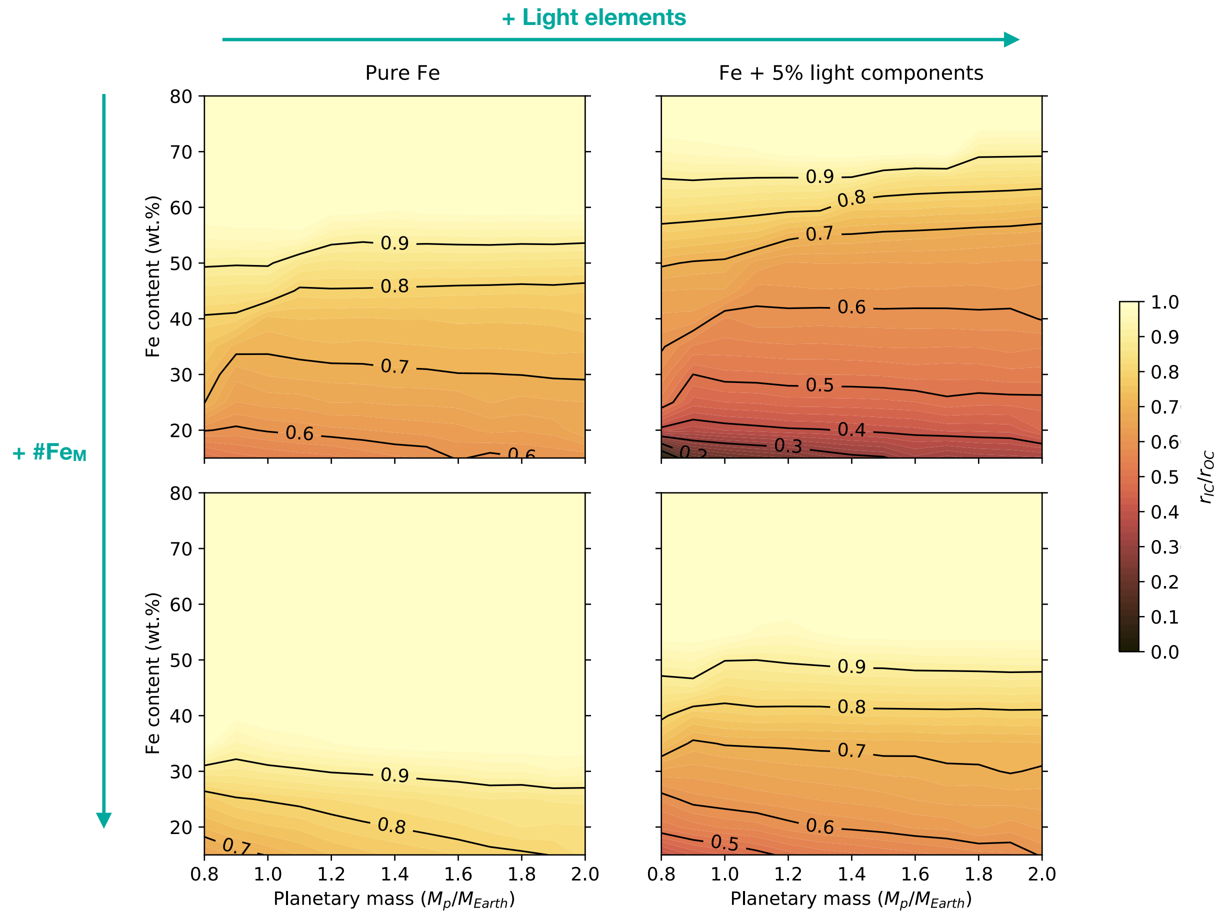
**Figure S1.**

Inner core radius fractions after 5 Gyr of evolution




Radial fraction of the inner core ($r_{\mathrm{IC}}/r_{\mathrm{OC}}$) after 5 Gyr of evolution as a function of planetary mass, bulk iron content, mantle iron number (upper row: $\#Fe_{\mathrm{M}} = 0$, lower row: $\#Fe_{\mathrm{M}} = 0.1$), and core composition (left column: pure iron, right column: iron and 5% light elements).

**Figure S2.**

$L_\rho$ (left) and $A_\rho$ (right) for a range of planetary masses and iron contents. Values for Earth are $L_\rho = 7683$ km and $A_\rho = 0.484$ (Labrosse, 2015).

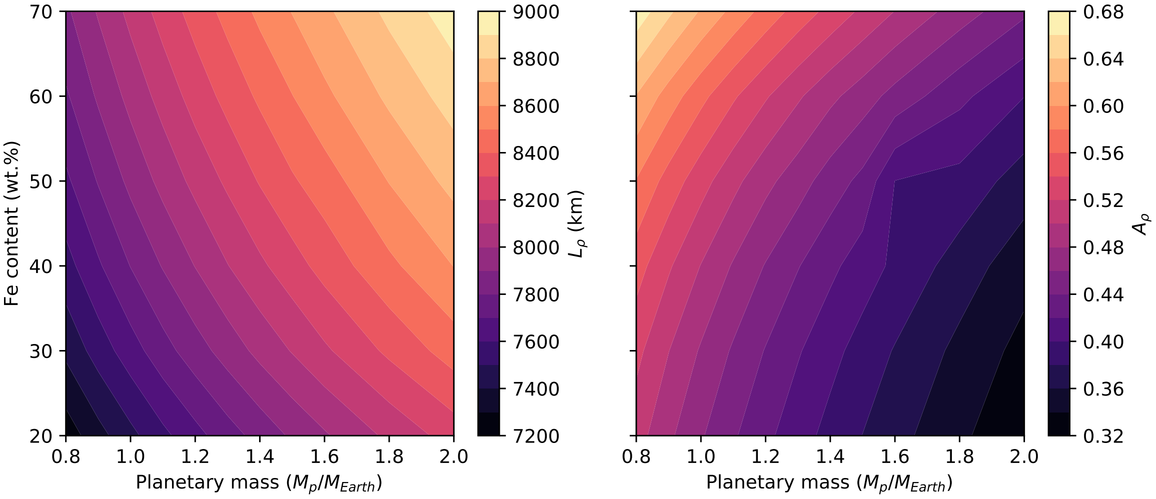
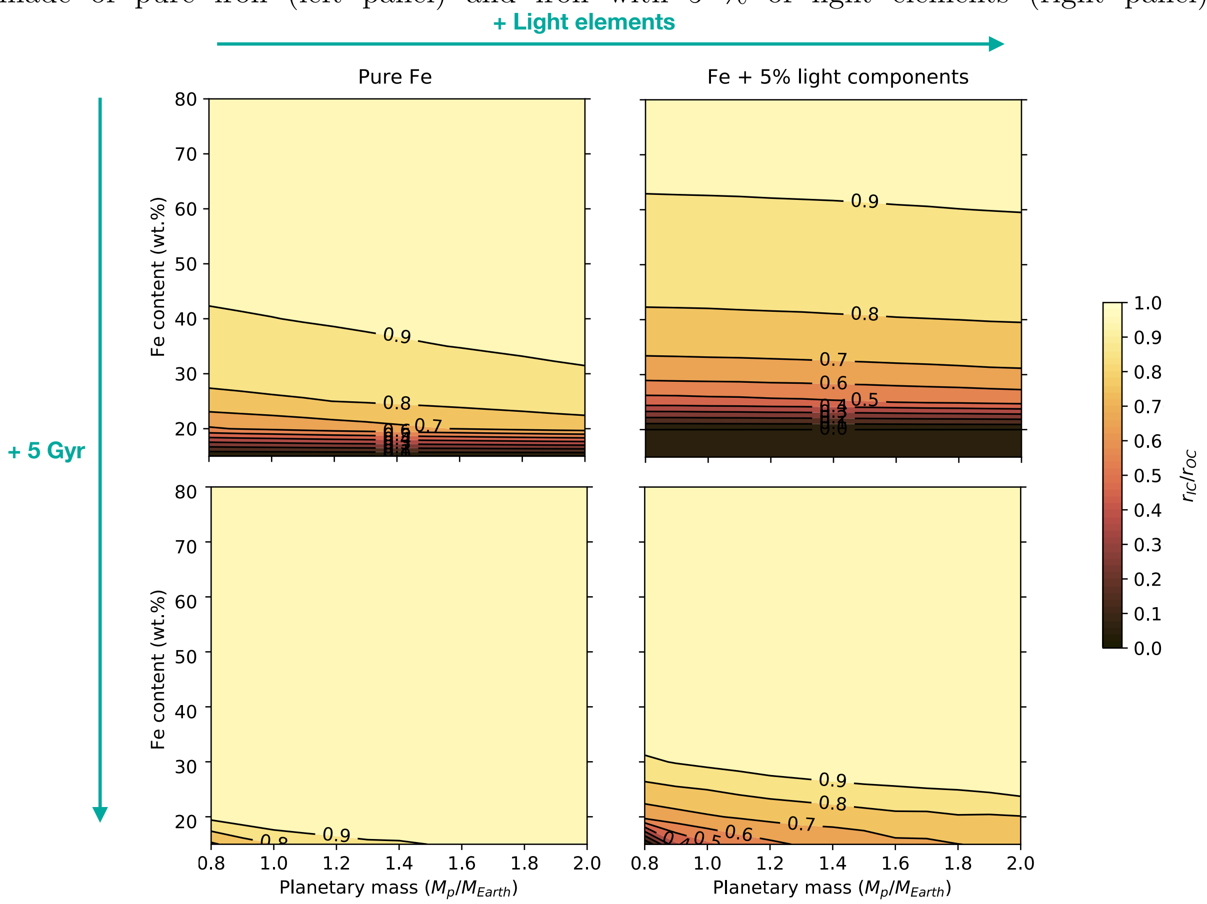



**Figure S3.**

Inner core radius fractions at the beginning (end of accretion) and at the end (5 Gyr later) for planets with a mantle iron number $\#Fe_{\mathrm{M}} = 0.2$. The core is made of pure iron (left panel) and iron with 5 % of light elements (right panel)




## References

Labrosse, S. (2015). Thermal evolution of the core with a high thermal conductivity. *Physics of the Earth and Planetary Interiors*, *247*, 36–55.