



## **Global EM induction studies from ground and space. Challenges and possible solutions**

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Global EM induction studies have advanced significantly over the past decade, in particular due to a growth in the amount and variety of data available, especially from recent geomagnetic satellite missions, like CHAMP and Swarm. For instance, one notable achievement is the emergence of the first global and semi-global 3-D mantle conductivity models. However the family of 3-D models produced to date has yet to reach a consensus – different groups and different trials using different data sets or/and inverse approaches obtain disparate results, complicating quantitative comparison with seismic tomography and geodynamic models. In this contribution we discuss possible reasons for the present discrepancy and outline the ways to further advance global EM induction studies.