



Core surface field evolution models from recent satellite and observatory data

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The availability of almost ten years of accurate satellite magnetic measurements with excellent spatial coverage, together with continued high temporal resolution monitoring carried out by observatories, presents both challenges and opportunities in core field modelling. I will briefly review recent models of short-timescale geomagnetic field evolution at the core surface and discuss what we have learnt in relation to core physics; outstanding problems will also be highlighted. A new model of core field evolution between 2000 and 2008 will be presented and possible implications discussed. Avenues for future progress including more direct links to core dynamics will also be outlined.