Preface

This special issue of Earth, Planets and Space presents papers on modelling the Earth's magnetic field, in particular, the 10th generation of the International Geomagnetic Reference Field. The IGRF is an internationally-agreed reference model of the Earth's magnetic field and is produced under the auspices of the International Association of Geomagnetism and Aeronomy, one of seven constituent associations of the International Union of Geodesy and Geophysics. For this and the previous generation of the IGRF also reported in these pages, we have been in the extremely fortunate position of having plentiful satellite magnetic survey data from Ørsted and CHAMP, and having more digital observatory data than ever before. It is therefore an interesting time for modelling the Earth's magnetic field, and the papers presented in this issue reflect this.

The IGRF is the product of a huge collaborative effort between magnetic field modellers and the institutes involved in collecting and disseminating magnetic field data from satellites and from observatories and surveys around the world. For this we would like to thank the authors of the papers presented here, and the many individuals behind the organisations involved in operating magnetic survey satellites, observatories, magnetic survey programmes and World Data Centres. We would also like to thank the reviewers of the papers, in particular Nils Olsen who performed the duties of guest editor for two papers.

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