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Dear Dr. Patrick Alken and Dr. Erwan Thébault,

please, find enclosed our contribution to the 13th generation International Geomagnetic Reference Field (IGRF-13). We have developed the following products:

- 1) Internal field (main field) for 2020.0 to spherical harmonic (SH) degree and order 13. File: *IGRF_2020.0_Gauss_Coefficients_UCM-IGEO-OE-ROA-IGN.txt*
- 2) Predicted average secular variation for 2020.0-2025.0 to SH degree and order 8. File: *VS_2020.0-2025.0_IGRF_Gauss_Coefficients_UCM-IGEO-OE-ROA-IGN.txt*
- 3) Internal field (main field) for 2015.0 to SH degree and order 13. File: *DGRF_2015.0_Gauss_Coefficients_UCM-IGEO-OE-ROA-IGN.txt*

We also include a document (File: *Technical Notes - DGRF - IGRF - Spanish Team.pdf*) with an extensive description of our products to provide useful information about the input data, data filtering, methodology, etc.

Sincerely,

F. Javier Pavón-Carrasco, on behalf of the rest of authors.