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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Long-term magnetic anomalies and its possible relationship to the latest Greater Chilean earthquakes in the context of the seismo-electromagnetic theory" *by* Enrique Guillermo Cordaro et al.

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The importance of the Earth Magnetic Field to the dynamic of any action, natural or human, on the Earth is beyond any question. The study of any phenomena or the development of technical work should take into consideration the effect of the Geomagnetic field. Therefor National and International Programs are engaged with the monitoring and study of the Geomagnetic field. Thus in the field of the earthquake risk mitigation the study of the magnetic field variations in relation to the tectonic activity constitute a very promising active domain during the last decades. In this

paper the authors analyse the vertical magnetic behaviour close to the latest three main earthquakes in Chile: Maule 2010 (Mw8.8), Iquique 2014 (Mw8.2), and Illapel 2015 (Mw8.3). They try to discriminate the magnetic variations of lithospheric origin from those of planetary origin in the observational data using three methods: The FFT, the Wavelet transform and the daily cumulative number of anomalies, methods. They select quiet space weather days for a time period of one year before and after each earthquake. Their results are very interesting. The paper is very interesting for the earthquake mitigation field scientists, has a very good structure and pay credit to an immense bibliographical bulk of the relative scientific field. It must be accepted for publication in the Journal NHESS. However the submitted manuscript lag a lot in the language quality, due to oversights or English language lag. In the adapted annotated copy I have marked the proper corrections, but I feel that might be more corrections, there for I would suggest that the manuscript should be corrected by a native English speaker, if possible. In concluding I suggest that the paper should be accepted for manuscript should be accepted after minor revision.

Please also note the supplement to this comment:
https://nhess.copernicus.org/preprints/nhess-2020-354/nhess-2020-354-RC1-supplement.pdf

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