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Comparison of data products of the upgraded and extended Graz VLF/LF facility

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Methods based on electromagnetic wave propagation are generally important in order to identify and characterize seismic activity and closely related phenomena (Molchanov and Hayakawa, 2008).
To further strengthen the quality of our long-term (very) low frequency (VLF/LF) amplitude and phase measurements of the Graz facility, we present the upgraded and extended receiver system.
A major goal in this study is the cross comparison of amplitude and phase measurements of the individual sub-ionospheric paths to each receiver. In this case a single path is sampled with at least two receivers, therefore systematic effects of antennas, preamplifier, and electronics can be better constraint. The findings are equally important for the upcoming China Seismo-Electromagnetic Satellite (CSES) mission and further combined observations, e.g. physical processes related to ultra low frequency (ULF) magnetic field measurements from the South European GeoMagnetic Array (SEGMA).

Reference:
Molchanov, O. A. and Hayakawa, M., “Seismo-electromagnetics and related phenomena. History and latest results.”, 189 p., Terrapub, 2008. ISBN 978-4-88704-143-1