

## **EMD, EEMD, JTFA APPLIED TO GEOMAGNETIC TIME SERIES**

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However the Empirical Mode Decomposition (EMD) was invented one decade ago, we can find few papers yet from its application in geomagnetism. Ensemble EMD or EEMD is a noise assisted data analysis developed on the basis of the EMD. EMD and EEMD both are empirical and the elaboration of their mathematical background can take several years. The paper presents the decompositions of daily, monthly and annual means of geomagnetic elements recorded in selected observatories and decomposition of Sunspot Numbers to enrich the experiences. On the actual level of development the EEMD is an interactive but very effective noise-reducing technique. Short-term Fourier Transform (STFT), a linear variant of the Joint Time Frequency Analysis (JTFA) was applied after EEMD to visualize the results in the frequency domain.

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