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# Regional jerks in the 20th century

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The spatial distribution, at the Earth's surface, of the regional geomagnetic jerks, i.e. rapid changes in the secular variation that are not observed worldwide, is here investigated. These events are pointed out using a method of analysis based on the wavelet transform applied to geomagnetic monthly means time series of the three magnetic field components of about 40 worldwide observatories. The spatial distribution of these regional events displays interesting features. In particular, the areas where regional jerks are observed seem to correspond to the areas characterized by the presence of active upwellings from the core-mantle boundary.