

Time-series analysis of gauss coefficients by the use of wavelet

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A time-series analysis of Gauss coefficients using wavelet is performed to detect geomagnetic jerk-type variation and to distinguish the source of the variation. Such variations are detected in external coefficients as well as in internal coefficients at the same time. However, the variations in external coefficients are considered to be artificial because they appear in non-zonal modes. Improvement in determining the Gauss coefficients is necessary. The results of wavelet analysis and some trial to calculate better-determined Gauss coefficients will be presented.