



MSSA of globally gridded AM

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Multichannel singular spectrum analysis (MSSA) was applied to 111 years of Atmospheric Angular Momentum (AAM) grid data from ECMWMF 20th Century Reanalysis (ERA-20C) model. Components of zonal atmospheric circulation influencing Length of Day (LOD) were separated. Some of them are related to El Nino Southern Oscillation (ENSO) global circulation modes, others represent possible trends. Meridional AAM components were processed by complex MSSA. Annual, semiannual components were separated. The maps of influence in the Chandler and annual bands on Polar Motion (PM) were obtained. The regions where the torques come from, influence of friction in the mountains was also analyzed.