



Comparison of Denoising Multi-algorithms for the MODIS NDVI Time-Series Signal

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Cloud clutter is the most important noise in NDVI time series data signal; hence to remove the cloud noise is prerequisite for the normal use of NDVI data. In this paper, the MODIS NDVI data of Second Songhua River Basin and Songhua River Trunk Stream Basin is adopted as the experimental region, to conduct a comparative analysis of noise reduction effect for the HANTS algorithm, the Moving Average method and the Asymmetric Gaussian function fitting method. The results show that the HANTS algorithm and the Asymmetric Gaussian function fitting method can effectively remove the noise, while the denoising effect of the Moving Average method is inferior. In general, the HANTS algorithm can provide the best denoising effect, but the algorithm is more difficult in setting parameters.