



Spectrum vs Climacogram

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Two common stochastic tools, the spectrum and the climacogram are compared. Using time series from (a) a couple of simple harmonic functions, (b) synthetic data generated using a complex stochastic model, (c) a large-scale paleoclimatic reconstructions and (d) laboratory-scale measurements of turbulent velocity, we estimate the spectra (using fast Fourier transform) and climacograms. Both original and smooth versions of the spectra are used. The spectrum and the climacogram tools are compared to each other giving emphasis to each advantages and disadvantages and also, some questions regarding the interpretation and inference from the above methods, are discussed.