Subject: Request for guidance/advice related to time series analysis and forecasting using MODIS imagery

Posted by Mattijn van Hoek on Mon, 04 Feb 2013 12:05:51 GMT View Forum Message <> Reply to Message

Hello folks,

I have read in my recently acquired IDL books (from Fanning, Bowman and Gumley) that this Google group is they number one place to be on the internet. By far. I've followed this group for a month and a half and today, I'm going to change my position from being an observor to a participant (yeah!).

With the use of Harmonic Analysis, I have computed 6 time-series with different, but related, anomalies based on the MODIS imagery from the last 10 years.

I would like your opinion/guidance/advice on the following:

- 1. What type of spatio-temporal analysis on 6 time-series are possible? And what would you sugest? Cross-dimensional wavelet analysis, multi-dimensional Fourier transform or something else?
- 2. Based on these anomalies I would like to do some short-term spatio-temporal forecasting (1 week). And again, my question what type of time-series forecasting method would you suggest? Wavelet aided time series forecasting, Artificial Neural Networks, Autoregressive models, Wavelet Neural Network or something else?

Hopefully I have been able to make myself clear. If not, please punch me in the face, and I will try to do it again.