Subject: Re: Curve Fitting to timeseries using a set of 8 sine and cosine functions
Posted by siumtesfai on Tue, 28 Oct 2014 02:16:05 GMT
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On Monday, October 27, 2014 11:52:36 AM UTC-4, Craig Markwardt wrote:
> On Saturday, October 25, 2014 7:00:08 PM UTC-4, siumt...@gmail.com wrote:
>> I do not use FFT because I have missing data . I provided you with monthly timeseries which does not have missing data. But generally, I use monthly datasets that have missing values.
>>
>> That is why I used multiple regression.
>
> You can still use an FFT for regularly sampled data, but with some missing points. Just replace the missing points with zero. A sample value of 0 does not contribute power to a Fourier transform. (this is why zero-padding works)
>
> Actually, it's better to first subtract the mean value of the time series (ignoring missing values), then replace missing values with zero. This minimizes the chances of an alias of the DC term from getting into your data.
>
> Craig

thanks both

I will trying to extract seasonal cycle from my timeseries. Eventhoug I do not have seasonal cycle for the data I provided, it does not mean that there is no seasonal cycle. Please consider I have temperature timeseries which shows cold winter and warm summer seasonal cycle. So I should be able to represent my seasonal cycle using the four sines and cosine function (harmonics). All I am asking is why is it that I do not get the seasonal cycle coefficients right when I use multiple regression. Let me know if I am becoming stagnant with the idea that I have to change to fourier series analysis.

Best regards,

Sorry guys if I do not understand you