Subject: Re: Fourier analysis of the Data with some gaps Posted by duxiyu@gmail.com on Wed, 15 Apr 2009 07:36:29 GMT

View Forum Message <> Reply to Message Thank you very much. It is very helpful. Best wishes, idu On Apr 15, 12:39 am, "R.G. Stockwell" <noemai...@please.com> wrote: > <dux...@gmail.com> wrote in message > news:55d7a5d9-0fc3-462d-a680-3be22f337271@k19g2000prh.google groups.com... > Thank you for your explanation. > I am very intertesting in the local spectral technique you mentioned. Could you recommend some references about it? > > Best regards, jdu There is a lot. A straight forward Short Time Fourier Transform is simple and easy to understand. Simply parse the time series into small overlapping regions and FFT it. > > There are wigner type transforms, that in my opinion are very useful > for real data with noise. > > There are wavelets (two disctinct branches, you'd want the CWT with morlet > wavelets or perhaps mexican hat wavelets if you are interested in local > spectra. > Orthogonal wavelets are not directly related to the fourier spectrum) > And there is the S-transform, which is combination of STFT and Wavelets, and has several advantageous characteristics. > > http://www.cora.nwra.com/stransform/ > > cheers. > bob PS disclaimer, the ST stuff is mine, so I may be a bit biased when I > say it is superior to all other methods for the analysis of transient > quasimonochromatic

> signals in geophysical data. :)

> Source code is available on that website.