
Subject: A question about cross-spectral analysis

Posted by duxiyu@gmail.com on Mon, 13 Apr 2009 10:19:48 GMT

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Dear all,

I want to use the method in Means et al., JGR, 1972 to analyse some waves.

I have a 3 component signal with components, x, y and z.

How do I get the covariance matrix?

I searched the group for the topic about 'cross-pectral analysis' and found an answer.

"take FFT of each component then calculate spectral matrix terms, eg:

$S_{xy} = X(w) * \text{conjugate}(Y(w))$ "

But I am confused that in this statement S_{xy} should be an array rather than a scalar.

Best regards,

jdu
