
Subject: Re: fast svdc for Singular Value Decomposition?

Posted by [ivitseva](#) on Mon, 03 Dec 2012 18:10:26 GMT

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Hi David,

I did not only look at it but implemented it as well. Then I compared your script with mine on a very small subset, and indeed the leading modes are very similar. However, only the leading modes, i.e. the first dimension, are the same, all the others are different. Your script is great, it is extremely fast, and is very useful if only the first dimension is of interest but I need to extract several dimensions.

I've written Excelsis or whatever the name now to ask for help, they are looking at it now. There must be a fast solution, don't hate me but I've run it in Idrisi that took about a minute. Or, as I wrote, Envi does it as well very fast if your time series is a layersstack of the two input series.

Anyway, thanks for your answer, I hope for a positive feedback from the company.

Cheers,
Eva

On Monday, December 3, 2012 6:28:45 PM UTC+1, Coyote wrote:

> Have you had a look at this article:

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> http://www.idlcoyote.com/code_tips/eof_analysis.html

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> There is a trick described there for creating the covariance matrix that makes calculating the eigenvalues extremely fast (25 minutes the conventional way, verses seconds the fast way). It has been a LONG time since I did that, so I'm not sure I can help very much. About all I remember is that the Wilks book mentioned there, where I learned the trick, was worth about 10 times what I paid for it! :-)

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> Cheers,

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> David
