Subject: Re: SVDC - singular values not in decreasing order?
Posted by Andy Sayer on Wed, 28 Nov 2012 19:22:04 GMT
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Hi Lajos,

Thanks for the suggestion; I can confirm it gives the expected behaviour (i.e. same vectors and singular values, but ordered largest to smallest). So, I'll change to use that.

So now I have a new question: for what purpose might I want to use svdc instead of la_svd?

Andrew

On Wednesday, November 28, 2012 2:12:11 PM UTC-5, fawltyl...@gmail.com wrote:
> On Wednesday, November 28, 2012 7:58:51 PM UTC+1, AMS wrote:
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>> Hi all,
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>> I am interested in singular value decomposition in IDL, using the svdc routine.
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>> I had been under the impression that the singular values in such an analysis were given in descending order (order of importance of the singular vectors); see e.g. http://alias-i.com/lingpipe/demos/tutorial/svd/read-me.html So, the first vector explains the largest portion of variance, the second the next, and so forth.
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>> However, from my own analysis and also the example in the IDL help page (http://idlastro.gsfc.nasa.gov/idl_html_help/SVDC.html), this is not the case (they are not in decreasing order). So, my questions are:
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>> 1. Is this intentional?
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>> 2. What does it mean? To find the 'n' most significant vectors, should I be taking the first 'n' returned by IDL, or the 'n' with the largest singular values?
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>> Any advice would be appreciated!
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>> Andrew
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> Use LA_SVD, it works as you expected.
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>
> regards,
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> Lajos
