Subject: SVDC & PCOMP
Posted by Samuel Djavidnia on Tue, 09 Nov 1999 08:00:00 GMT
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Hi,
I am trying to use the SVDC (and the PCOMP) function to calculate the Empirical Orthogonal Functions and the Principal Components of a data set.
The data set is in the following format:
D=fltarr(15,2688)
When I use the SVDC function I end up with 3 matrices:
X=fltarr(15) Eigenvalues (Variances)
Y=(15,2688) Eigenvectors (Empirical Orthogonal Functions)
Z=(15,15) Principal Components
The problem is that the values of X which should be monotonically decreasing are not. X represents the variance (X/tot(X), but it seems that when using a small data set X does not decrease monotonically as it should.
Does anybody know if there is a bug in the SVDC function ?
Also, if I transpose my dataset to DT=fltarr(2688,15) I get completely different eigenvalues. Why ?

If I instead use the PCOMP function, I get totally different values of the variance, eigenvectors and principal components (in this case the variance correctly decreases monotonically).
How can I check if PCOMP is computing the correct calculations ?

Thanks in advance.

Samy

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