Subject: ** SVD using WAVE-Advantage **
Posted by jhai on Tue, 17 May 1994 14:52:39 GMT
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Hello:
I am doing a SVD of a rectangular array and having problems
understanding the output. (I am no expert on SVD).

```
WAVE> a=fltarr(581,499)
WAVE> info,a
A               FLOAT     = Array(581, 499)
WAVE> s=svdcomp(a,U=u,V=v)
WAVE> info,a,u,v,s
A               FLOAT     = Array(581, 499)
U               FLOAT     = Array(581, 499)
V               FLOAT     = Array(499, 499)
S               FLOAT     = Array(499)
WAVE>
```

According to my understanding of the SVD, the dimensions of U should be
(499, 499) and that of V should be (581, 499)

Actually I am using the SVD to get the principal componenets and pc-scores.
After I have got the U and V matrices, the PC-scores can be obtained by
multiplying the columns of the U matrix by the corresponding singular
value. In the above example I have 499 sv's and U has 581 columns!!
Can somebody correct me where I am going wrong.

Thanks.
the columns of U multiplied by the