Subject: Re: Svdc_complex
Posted by Javier Sanchez Gonzal on Fri, 02 Jul 1999 07:00:00 GMT
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Hi all,
if somebody wants to test this I send the procedure to calculate the
singular value of a complex matrix.

```
pro svdc_complex, M, Ew2, Eu2, Ev2

 xdim=(size(M))(1)
 ydim=(size(M))(2)
 Ew2=complexarr(xdim)
 Eu2=complexarr(xdim,ydim)
 Ev2=complexarr(xdim,ydim)
 M2=dblarr(2*xdim,2*ydim)
 M2(0:xdim-1,0:ydim-1)=double(M)
 M2(xdim:2*xdim-1,0:ydim-1)=-imaginary(M)
 M2(0:xdim-1,ydim:2*ydim-1)=imaginary(M)
 M2(xdim:2*xdim-1,ydim:2*ydim-1)=double(M)
 catch, Error_status
 if Error_status ne 0 then begin
  ;   print, !err_string
     Minv=0.*transpose(M)
 end else begin
     svdc, m2,w,u,v,/double
     for i=0, xdim-1 do begin
         Ew2(i)=w(2*i)
         Eu2(i,*)=u(2*i,0:ydim-1)+dcomplex(0,1)*u(2*i,ydim:2*ydim-1)
         Ev2(i,*)=v(2*i,0:ydim-1)+dcomplex(0,1)*v(2*i,ydim:2*ydim-1)
    endfor
 end

end
```

Thanks all

Javier Sanchez Gonzalez