Subject: Re: failed matrix inversion returns input-- interesting
Posted by mmeron on Fri, 14 Jul 2006 07:30:57 GMT
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In article <1152860961.931059.317520@35g2000cwc.googlegroups.com>,
"m_schellens@hotmail.com" <m_schellens@hotmail.com> writes:
>
> Ed Hyer wrote:
>> Can someone explain this behavior?
>> IDL> testm=[[0,0,0,0],[0,1,0,0],[0,0,1,0],[0,0,0,1]]
>> IDL> testmi=invert(testm,status)
>> IDL> print,status; 0=success, 1=fail, 2=pivot used
>> 1
>> IDL> print,testmi
>> 0.00000 0.00000 0.00000 0.00000
>> 0.00000 1.00000 0.00000 0.00000
>> 0.00000 0.00000 1.00000 0.00000
>> 0.00000 0.00000 0.00000 1.00000
>>
>> Is there any reason in creation why IDL simply copies the input into
>> the output if it cannot do the inversion? That seems, well, malevolent,
>> unless I'm missing something.
>
> Well, what do you suggest is better?
>
Well, nearly anything would be better.

I've a routine, called SVD_INVERT, which returns a regular inverse
when one exists, else it returns and inverse in the "SVD sense".
Would the IDL routine have been doing this, that would be fine (though
it should've been documented). But, it is not doing this either.
So IMO, it would've been preferable to return an array of NANs in such
case.

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"