Subject: Re: IDL inverse matrix problem??
Posted by chris_torrence@NOSPAM on Fri, 23 Jan 2015 18:56:54 GMT

On Friday, January 23, 2015 at 11:32:44 AM UTC-7, Amin Farhang wrote:
> Dear Chris,
>
> I wonder that why IDL could not handle this, therefore check the inversion with matlab and
Python but both of them return correct values. I think it is necessary that IDL developers consider
this kind of issues, since I'm seeing that the Astronomer's community are slowly shift to Python or
other languages.
>
> Best,

Amin,

I just tried your original matrix, and it didn't work in Python. For example, here's IDL:

IDL> m1 = 9.5d15 + 0.5d18*randomu(1,1,5,/double)
IDL> m2 = -1d0 + 2d0*randomu(2,5,1,/double)
IDL> Am = m1 ## m2
IDL> result = LA_INVERT(Am)
% LA_INVERT: Singular matrix encountered, STATUS=5.
% Execution halted at: $MAIN$

Now let's try the Python numpy.linalg package:
IDL> linalg = Python.Import('numpy.linalg')
IDL> result = linalg.inv(Am)
% PYTHON_CALLMETHOD: Exception: Singular matrix.
% Execution halted at: $MAIN$

Could you please post an example of a small matrix that works in Python but not in IDL?

Thanks!
-Chris