
Subject: Re: IDL inverse matrix problem??

Posted by chris_torrence@NOSPAM on Fri, 23 Jan 2015 15:25:49 GMT

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On Thursday, January 22, 2015 at 11:58:37 PM UTC-7, Amin Farhang wrote:

> Dear Craig,

>

> Since my original matrix, which is a positive-definite 1000x1000 matrix, before sending my post, I try to solve the linear equations using Cholesky decomposition, but again IDL could not handle the precision. On the other hand since IDL is widely used in Astronomy and you know the values in Astronomy are huge, I think it is very important to be sure that IDL is reliable for this kind of computations. Anyway thanks and I try to re-write my code in Python or matlab.

>

> Best,

Hi Amin,

I don't think this is a problem with IDL. You will have a problem with *any* scientific software package that uses IEEE arithmetic, including Python and Matlab. The only package which could have a hope of doing this is a symbolic language like Mathematica or Maple.

You really need to either scale your data to a more reasonable range, or use different linear algebra techniques, such as Craig suggests.

Cheers,

Chris

IDL Project Lead

Exelis
