
Subject: Re: Help me understand this interpol bug in GDL

Posted by [munka](#) on Tue, 13 May 2014 22:51:55 GMT

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On Thursday, May 8, 2014 1:04:04 PM UTC-7, [rj...@le.ac.uk](#) wrote:

> I realise this is a GDL specific problem but also that there are quite a few experts on here.

>

>

>

> GDL> test=interpol([96395,96406], [74.25, 73.50], 74.25)

>

> 1 2 0

>

> % FINDEX: binary search failed

>

> % Error occurred at: FINDEX 89

/cm/shared/apps/gdl/0.9.4/share/gnudatalanguage/lib/findex.p ro

>

> % INTERPOL 102

/cm/shared/apps/gdl/0.9.4/share/gnudatalanguage/lib/interpol .pro

>

> % BI_INTERPOL 33 bi_interpol.pro

>

> % \$MAIN\$

>

> % Execution halted at: BI_INTERPOL 33 bi_interpol.pro

>

>

>

> If I reverse the order it doesn't give the error:

>

>

>

> GDL> test=interpol([96406, 96395], [73.50, 74.25], 74.25)

>

>

>

>

>

>

> I've tried to simplify it to this and can still reproduce it:

>

>

>

> GDL> test=interpol([1,2], [2, 1], 2)

>

> 1 2 0

>

> % FINDEX: binary search failed

```
>
> % Error occurred at: FINDEX      89
/cm/shared/apps/gdl/0.9.4/share/gnudatalanguage/lib/finindex.p ro
>
> %      INTERPOL      102
/cm/shared/apps/gdl/0.9.4/share/gnudatalanguage/lib/interpol .pro
>
> %      BI_INTERPOL      33 bi_interpol.pro
>
>
>
>
>
> It seems if my x is decreasing and xout is the higher x value then it gives this error.
>
>
>
> Any ideas if I'm doing something wrong or if this is a bug?
>
>
>
> IDL seems to handle either way fine.
```

It works fine in IDL...

```
IDL> test=interpol([1,2], [2, 1], 2)
% Compiled module: INTERPOL.
IDL> print,test
1
```
