
Subject: Help me understand this interpol bug in GDL

Posted by [rjp23](#) on Thu, 08 May 2014 20:04:04 GMT

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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/findex.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.
