Subject: Re: Interpolation routines
Posted by wlandsman on Tue, 02 Feb 2016 20:17:03 GMT
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On Tuesday, February 2, 2016 at 12:34:17 PM UTC-5, Craig Markwardt wrote:

>
> I found most of the built-in IDL interpolation routines to be kind of a joke.  The one I use often is
SPL_INIT and SPL_INTERP, which are based on the Numerical Recipes interpolation routines.
You will have to screen out your NANs manually with WHERE(), but that should not be a big deal.


I don't believe this is true anymore.    INTERPOL() used to be biggest problem but  since IDL 7.0,
it is a professional level interpolation routine (and certainly more powerful than QUADTERP).

I do agree that you best bet is  to probably remove the NAN values (using WHERE and FINITE()
).   I would use INTERPOL() without the /NAN keyword.

g = where(finite(y))
result = interpol( y[g], x[g], xinterp, /spline)


> The IDL Astronomy library has some other nice routines like QUADTERP.  I have developed
some specialized interpolators for IDL (example: Chebyshev).  If you have known explicit
derivatives at each sample point, then my CUBETERP or QINTERP might be of use.
>
> Craig