
Subject: Re: interpolating missing data
Posted by [R.Bauer](#) on Wed, 06 Jun 2001 11:33:01 GMT
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Martin Schultz wrote:

>
> ignore_this_adress <ignore_this_adress@fgg.eur.nl> writes:
>
>> Hello,
>>
>> I just came across a problem that should be relatively easy to solve. I
>> read a time series of a slowly varying scalar. However, in my original
>> data, some timepoints are missing. My read routine fills them up with
>> zeroes (all normal values are well above 0). When the routine finishes
>> I would like to automatically correct the data for the missing
>> timepoints. When using interpolate with the MISSING value, I end up with
>> the original dataset (syntax: pip = INTERPOLATE(p1, INDGEN(8197),
>> MISSING=0); where p1 is a float array[8197] with incidental zero
>> values).
>>
>> Am I using wrong syntax, or should I try a different approach. I
>> understand that I could do (linear) fitting around the missing data,
>> however, that would require more or less arbitrary choices on what data
>> to use, etc. I would greatly appreciate any suggestion for a more
>> wholistic approach :-).
>>
>> Mika
>>
>>
>
> Oh! Holistic! Great! There are plenty of (thick) books available how to
> interpolate time series, and I am sure several people will not talk to
> you any longer if you don't use wavelets or some other fancy technique
> to do this ;-) But, seriously, you have to admit that you will have to
> make some assumptions about the data if you are going to interpolate
> them, and you should really know how your data behave before doing so.
> Choosing the best interpolation technique depends on whether
> (1) the data are more or less linear (at least piecewise)
> (2) the data show a quasi-periodic signal (or you have to fill in minima
> and maxima)
> (3) you have a few or many small gaps that are more or less regularly
> distributed
> (4) you have a few or several large gaps and no idea what is going on
> in between
> (5) ...
>
> I seem to recall that there is a special section on interpolation
> in the online help. Why not give that a glimpse?

>
> Cheers,
>
> Martin
>

If you have correctly answered Martin's question you are allowed to use our time_series_sync routine.

http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/time_series_sync.tar.gz

For further routines and licensing please have a look at
http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html

regards

Reimar

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<http://www.fz-juelich.de/icg/icg1/>

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a IDL library at Forschungszentrum Jülich

http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html

<http://www.fz-juelich.de/zb/text/publikation/juel3786.html>
