
Subject: Re: Piecewise curve fitting in idl
Posted by [d.poreh](#) on Thu, 31 Jul 2008 14:00:21 GMT
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On 31 Jul., 05:39, James Kuyper <jameskuy...@verizon.net> wrote:
> d.po...@gmail.com wrote:
>> On Jul 31, 1:21 pm, Wox <nom...@hotmail.com> wrote:
>>> On Thu, 31 Jul 2008 03:30:22 -0700 (PDT), d.po...@gmail.com wrote:
>>>> Folks
>>>> How we can do the piecewise curve fitting in idl. Say we have an array
>>>> that this array has got 2 or 3 trends in data and we want to fit a
>>>> liner curve for each trends. In MATLAB curve fitting tool, we can
>>>> easily exclude or include a part of data and then fit a curve. How we
>>>> can do this in IDL
>>>> Cheers
>>>> Dave
>>> Euhm, just do the fitting on the different parts? Or do you mean
>>> fitting with a piecewise polynomial (i.e. spline: see e.g. IMSL_BSLSQ
>>> or IMSL_CONLSQ)
>
>> just doing the fitting on the difrent part. how we can select this
>> parts and how we can fit a curve to these parts separatly?
>> Cheers
>
> Identifying the different parts is up to you. How do you know that there
> are 2-3 different trends? Whatever method you use to reach that
> conclusion will have to be adequate to identify where the different
> trends start and end. However, once you have identified the different
> parts you want fit separately, fitting each one separately is trivial:
> pass x[trend_start[i]:trend_end[i]] and y[trend_start[i]:trend_end[i]]
> to the curve-fitting routine.
>
> If you want a curve fitting routine that automatically figures out where
> each trend starts and ends, then it gets a LOT more complicated. You
> could do that by using a non-linear curve fitting routine, and make the
> transition point between the two trends be one of the parameters of your
> fitting curve. However, I would strongly recommend trying to understand
> why you see 2 or 3 different trends, and then try to come up with a
> single mathematical model for the entire curve that reflects that
> reason. Then fit that model to your data.- Zitierten Text ausblenden -
>
> - Zitierten Text anzeigen -

how we can do this in lplot?
