Subject: Re: Piecewise curve fitting in idl
Posted by pgrigis on Thu, 31 Jul 2008 14:41:19 GMT
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d.po...@gmail.com wrote:
> 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 Iplot?

how can we tighten a screw with a toothbrush?