Subject: Re: algorithm question. Can I get rid of the for loop?
Posted by Heinz Stege on Fri, 22 Mar 2013 13:25:44 GMT
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On Thu, 21 Mar 2013 14:32:15 -0700 (PDT), Sï¿½ren Frimann wrote:

> FOR i=0,N_Elements(y)-1 DO BEGIN
> index = Where((x GE x[i] - dx) AND (x LE x[i] + dx))
> y0[i] = Median(y[index]) ; Median filtering
> s0[i] = 1.4826*Median(Abs(y[index] - y0[i])) ;estimating uncertainty
> ENDFOR

Hi Sï¿½ren,

I don't know, how to get rid of the loop. However you can make it significantly faster, provided that the x values are monotonically increasing:

Before entering the loop get the indices of the lower and upper limits for all x values by use of the VALUE_LOCATE function. Then you can use this pre-calculated indices instead of the index array from the WHERE function.

Cheers, Heinz