
Subject: Re: How 2 extract LOCAL Max?

Posted by [Peter Clinch](#) on Fri, 04 Dec 2009 11:59:42 GMT

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Dave_Poreh wrote:

> Folks

> I have a signal with few peaks (local maximum). I need to extract the

> x and y of these Peaks programmatically. The input data is an array

> whit 2 column (x&y). What is the best way to do this?

"best" is a loaded word...

/A/ way is to move along the array comparing values to their neighbours and see if things are going up/down, but you need to be quite careful about thresholds that will constitute a real peak (i.e., there can be plenty of false peak-lets caused by noise) and account for the fact that the signal might not really start to drop for several x increments.

If you find a peak then x will be whatever the count increment is and y will be whatever the value is.

Pete.

--

Peter Clinch Medical Physics IT Officer

Tel 44 1382 660111 ext. 33637 Univ. of Dundee, Ninewells Hospital

Fax 44 1382 640177 Dundee DD1 9SY Scotland UK

net p.j.clinch@dundee.ac.uk <http://www.dundee.ac.uk/~pjclinch/>

Subject: Re: How 2 extract LOCAL Max?

Posted by [greg.addr](#) on Fri, 04 Dec 2009 12:12:40 GMT

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> about thresholds that will constitute a real peak (i.e., there can be

> plenty of false peak-lets caused by noise) and account for the fact that

> the signal might not really start to drop for several x increments.

You could apply a boxcar filter (e.g. median) with a width chosen to

exclude your interpretation of noise in the signal (or define your notion of local), then search for points with adjacent lesser values (possibly beyond adjacent equal values).

Greg

Subject: Re: How 2 extract LOCAL Max?

Posted by [jeffnettles4870](#) on Fri, 04 Dec 2009 19:12:34 GMT

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On Dec 4, 5:52 am, Dave_Poreh <d.po...@gmail.com> wrote:

> Folks
> I have a signal with few peaks (localmaximum). I need to extract the
> x and y of these Peaks programmatically. The input data is an array
> whit 2 column (x&y). What is the best way to do this?
> Any help highly appreciated
> Cheers
> Dave

Have a look at this thread:

http://groups.google.com/group/comp.lang.idl-pvwave/browse_frm/thread/d70f405993359066/cc11ef2037032c6f?lnk=gst&q=local+max#cc11ef2037032c6f

(or search for "Local max filter" in this newsgroup)

The stuff I found there worked very nicely for me as I recall.

Jeff

Subject: Re: How 2 extract LOCAL Max?

Posted by [d.poreh](#) on Wed, 09 Dec 2009 14:11:09 GMT

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On 4 Dez., 11:12, "Jeff N." <jeffnettles4...@gmail.com> wrote:

> On Dec 4, 5:52 am, Dave_Poreh <d.po...@gmail.com> wrote:
>
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> Jeff

Thanks Guys.
Cheers
