
Subject: Re: data criteria

Posted by [Jean H.](#) on Mon, 24 Aug 2009 15:14:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

anil wrote:

```
> Hi all,
> I do not have much information about programming or algorithms
> (actually IDL is my first programming language), so my question may
> rather be simple but i could not figure it out , so here we go:
> .....
> So I want to take the lines from the first line up to 12.654200(since
> the difference is more than 0.3)
> What i have done so far is :
>
> pro a
> ;window, 0, retain=2
>
> file_array=file_search('/home/...../0587', '0587.*.txt',
> count=num_file)
> for i=0,num_file-1 do begin
> file=file_array(i)
>
> nrows = File_Lines(file)
>
> data=fltarr(5,nrows)
>
> OpenR, lun, file, /GET_LUN
> ReadF, lun, data
> Free_Lun, lun
>
> p=data(0,*)
> t=data(1,*)
> s=data(2,*)
> q=data(3,*)
> d=data(4,*)
> close,lun
> free_lun, lun
>
> 1st try
> ;for k=1,nrows-2 do begin k=k+1
> ;ml=where((d(k+1)-d(k)) gt 0.3,ss)
> ;endfor
>
> 2nd try
> ;k=1
> ;repeat begin ml=(d(k)-d(k-1))
> ;k=k+1
> ;endrep until (ml gt 0.3)
```

```
> ;print,d(0:k)
>
> free_lun,lun
> endfor
>
> close,/All
> end
>
> Neither of them work ! I used an if-then-else statement too but could
> not solve my problem.
> I would really appreciate any help. Thanks in advance,
> ANIL
```

Hi Anil,

the problem with your code is that you are not using not saving ML... so you erase it in each loop.

You could do it this way:

```
toKeepIDX = where(d - shift(d,-1) ge 0.3)
goodData = data[:,toKeepIDX]
and/or: goodA = a[toKeepIDX] goodB = b[toKeepIDX] etc
```

In the first line, you compare each entry with its previous one and you select ALL entries according to your criterion. Next, you extract the data itself.

This will bring a problem for the first entry of course. Also, keep in mind the case where you don't have the .3 of different between 3 consecutive values (1, 1.01, 1.02, 1.03 etc)

Jean

Subject: Re: data criteria

Posted by [anil](#) on Wed, 26 Aug 2009 08:00:29 GMT

[View Forum Message](#) <> [Reply to Message](#)

wrote:

> anil wrote:

>> Hi all,

>> I do not have much information about programming or algorithms

>> (actually IDL is my first programming language), so my question may

>> rather be simple but i could not figure it out , so here we go:

```

>> .....
>> So I want to take the lines from the first line up to 12.654200(since
>> the difference is more than 0.3)
>> What i have done so far is :
>
>> pro a
>> ;window, 0, retain=2
>
>> file_array=file_search('/home/...../0587', '0587.*.txt',
>> count=num_file)
>> for i=0,num_file-1 do begin
>> file=file_array(i)
>
>> nrows = File_Lines(file)
>
>> data=fltarr(5,nrows)
>
>> OpenR, lun, file, /GET_LUN
>> ReadF, lun, data
>> Free_Lun, lun
>
>> p=data(0,*)
>> t=data(1,*)
>> s=data(2,*)
>> q=data(3,*)
>> d=data(4,*)
>> close,lun
>> free_lun, lun
>
>> 1st try
>> ;for k=1,nrows-2 do begin k=k+1
>> ;ml=where((d(k+1)-d(k)) gt 0.3,ss)
>> ;endfor
>
>> 2nd try
>> ;k=1
>> ;repeat begin ml=(d(k)-d(k-1))
>> ;k=k+1
>> ;endrep until (ml gt 0.3)
>> ;print,d(0:k)
>
>> free_lun,lun
>> endfor
>
>> close,/All
>> end
>
>> Neither of them work ! I used an if-then-else statement too but could

```

>> not solve my problem.
>> I would really appreciate any help. Thanks in advance,
>> ANIL
>
> Hi Anil,
>
> the problem with your code is that you are not using not saving ML... so
> you erase it in each loop.
>
> You could do it this way:
>
> toKeepIDX = where(d - shift(d,-1) ge 0.3)
> goodData = data[:,toKeepIDX]
> and/or: goodA = a[toKeepIDX] goodB = b[toKeelDX] etc
>
> In the first line, you compare each entry with its previous one and you
> select ALL entries according to your criterion. Next, you extract the
> data itself.
>
> This will bring a problem for the first entry of course. Also, keep in
> mind the case where you don't have the .3 of different between 3
> consecutive values (1, 1.01, 1.02, 1.03 etc)
>
> Jean

I see you are right about the ML. Thanks a lot for replying
