Subject: How to find the pixel position
Posted by sid on Tue, 27 Apr 2010 05:16:56 GMT
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Hi,
My data is in fits format. The is of 1024 * 1024 array. The counts vary from 5000 to 6000 and I know that 5500 counts is there in my data, but I need to know at which pixel this 5500 counts occur exactly, without displaying the image, because I need to do this for several files. So each time I can't display and check for the pixel position. please helpout in this regard.
regards
sid

Subject: Re: How to find the pixel position
Posted by d.poreh on Thu, 29 Apr 2010 07:06:46 GMT
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On Apr 28, 11:40 pm, sid <gunvicsi...@gmail.com> wrote:
> On Apr 27, 11:24 am, Aram Panasenco <panasencoa...@gmail.com> wrote:
>
>
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>> sid wrote:
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>> You can use the WHERE function:
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>> Note that the WHERE function returns one-dimensional subscripts. You can
>> convert them back to two-dimensional subscripts (if you need to) using
>> the ARRAY_INDICES function:
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>> rectIndices = array_indices([1024,1024],findIndices,/dimensions)
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> raw=readfits('filename.fits')
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> so now if I do
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> it should print 5, since where function returns one dimensional
> subscripts.(am I right, correct me if it is wrong)
> but instead it is printing -1. Please help me out.
> regards
> sid

Look at the data type: float double integer?

Subject: Re: How to find the pixel position
Posted by sid on Thu, 29 Apr 2010 08:50:51 GMT
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On Apr 29, 12:06 pm, Dave Poreh <d.po...@gmail.com> wrote:
> On Apr 28, 11:40 pm, sid <gunvicsi...@gmail.com> wrote:
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data type is float

Subject: Re: How to find the pixel position
Posted by Timm Weitkamp on Thu, 29 Apr 2010 09:49:19 GMT
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On Apr 29, 10:50 am, sid <gunvicsi...@gmail.com> wrote:
> On Apr 29, 12:06 pm, Dave Poreh <d.po...@gmail.com> wrote:
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Trying to find "equality" between two float expressions is like trying
to put a pencil upright on its tip and hoping that it will not fall
over. It will hardly ever work. One solution could be to replace the
line "b=where(...)" in your code by

```
myval = 2832.90
epsilon = .05
b = where(ABS(raw-myval) LE epsilon)
```

Timm

Subject: Re: How to find the pixel position
Posted by d.poreh on Thu, 29 Apr 2010 10:22:08 GMT
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On Apr 29, 2:49 am, Timm Weitkamp <weitk...@esrf.fr> wrote:
> On Apr 29, 10:50 am, sid <gunvicsi...@gmail.com> wrote:
>
>
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>
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>> On Apr 29, 12:06 pm, Dave Poreh <d.po...@gmail.com> wrote:
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> Timm

Or fix(myval*100) then search for data with where(...)

Subject: Re: How to find the pixel position
Posted by jeanh on Thu, 29 Apr 2010 15:18:16 GMT

On 29/04/2010 2:40 AM, sid wrote:
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on top of what the other have said, b should not be equal to 5.
It should be equal to 5 * dim_X + 5
So if your image is 100*100, the index of position 5;5 is 505

Jean

Subject: Re: How to find the pixel position
Posted by Aram Panasenco on Thu, 29 Apr 2010 18:42:09 GMT

Chris wrote:
>
>> Note that the WHERE function returns one-dimensional subscripts. You can
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>> the ARRAY_INDICES function:
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>
>
> Can anyone enlighten me about whether there's any advantage to using
> the /dimensons keyword in array_indices? I hear people claim it's to
> prevent passing big arrays around, but those big arrays would be
> passed by reference, yes? In which case that wouldn't be a problem
>
> chris
>

In IDL, it is _usually_ a bad idea to pass a variable that you don't
want modified into a routine, because it is so easy for the routine to
change it. Now, array_indices() does not do that for a fact, but for me
personally it's just a matter of consistency.

~Aram Panasenco

Subject: Re: How to find the pixel position
Posted by Aram Panasenco on Thu, 29 Apr 2010 19:46:37 GMT
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sid wrote:
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> sid

Hey sid, other people have explained what your problem is already (can't compare float-point values in IDL). If you want to read a more detailed discussion on the subject, check out this article by David Fanning:

http://www.dfanning.com/code_tips/comparearray.html

~Aram Panasenco

Subject: Re: How to find the pixel position
Posted by sid on Fri, 30 Apr 2010 06:30:17 GMT
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On Apr 30, 12:46 am, Aram Panasenco <panasencoa...@gmail.com> wrote:
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> ~Aram Panasenco

Thanks a lot for everybody's help and suggestions.
regards
sid
