Subject: Structure altenatives
Posted by sirvival on Tue, 25 Jan 2011 15:34:53 GMT
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Hi,
I just started to work with structures and so far they are good for what I want to do.

What I do is I readin fitsimages (119 2146 to 4096 pixel) one at a time.
I do this in a loop.
Each loop I do something with each row/y value of the images.
I also extract some strings from the header.

Then at the end of the loop I write the results in the created structure.
When I do plotting later I can do neat things like plot only images with the same string from the header.
etc.

My code looks something like this:

```
data = file_search('*.fits',count=numfiles)

  starty = 1000
  endy = 3700
  startx = 50
  endx = 2095
  yp = endy-starty+1

hwstr = {hwline:dblarr(endx-starx+1,yp)} ; here halfwidth value get written to
valstr = {name:'name',expo:0.D, angle:0,seeingst:0.D,seeingend:0.D}
imstr = {im:dblarr(endx-startx+1,yp)}  ; here all the x values for one y position get written to later on
hwstr = replicate(hwstr,numfiles)
valstr = replicate(valstr,numfiles)
imstr = replicate(imstr,numfiles)

etc.
```

The result lets me do something like:

```
plot, imstr[0].im[*,0]
oplot,hwstr[0].hwline[*,0]
```

which are from the same image and from the same row/ y value.

If numfiles is like 30 it works but larger values throw an error:
"array has too many elements"

Is the another way to do this without structures?

Thanks

PS: link to example image (not nice looking but I hope shows what I mean)
http://img406.imageshack.us/img406/6387/testidl.png

Subject: Re: Structure altenatives
Posted by Andrew Cool on Wed, 26 Jan 2011 07:36:08 GMT
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On Jan 26, 1:34 am, sirvival <fpfei...@hs.uni-hamburg.de> wrote:
> Hi,
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> what I want to do.
>
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> time.
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> Each loop I do something with each row/y value of the images.
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> structure.
> When I do plotting later I can do neat things like plot only images
> with the same string from the header.
> etc.
>
> My code looks something like this:
>
> data = file_search('*.fits',count=numfiles)
>
> starty = 1000
> endy = 3700
> startx = 50
> endx = 2095
> yp = endy-starty+1
>
> hwstr = {hwline:dblarr(endx-starx+1,yp)} ; here halfwidth value get
> written to

> valstr = {name:'name',expo:0.D, angle:0,seeingst:0.D,seeingend:0.D}
> imstr = {im:dblarr(endx-startx+1,yp)} ; here all the x values for one
> y position get written to later on
> hwstr = replicate(hwstr,numfiles)
> valstr = replicate(valstr,numfiles)
> imstr = replicate(imstr,numfiles)
>
> etc.
>
> The result lets me do something like:
>
> plot, imstr[0].im[*,0]
> oplot,hwstr[0].hwline[*,0]
>
> which are from the same image and from the same row/ y value.
>
> If numfiles is like 30 it works but larger values throw an error:
> "array has too many elements"
>
> Is the another way to do this without structures?
>
> Thanks
>
> PS: link to example image (not nice looking but I hope shows what I
> mean)http://img406.imageshack.us/img406/6387/testidl.png

Sounds vaguely familiar.

I think that the magic number 30 relates to the maximum number of
labels/ticks on the axis
or something like that?

Andrew
