
Subject: Structure alternatives

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-startx+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 there 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 alternatives
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,
> I just started to work with structures and so far they are good for
> what I want to do.
>
> What I do is I read in 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-startx+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 there 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
