Subject: Re: reading header and manipulating according to the header information
Posted by Gray on Sat, 15 May 2010 15:02:37 GMT
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On May 15, 10:21 am, sid <gunvicsi...@gmail.com> wrote:
> Hi,
> Since I am using huge data of several years, different kind of
> ccds are used on different days. I need to trim the data to a size
> which depends on ccd size, is there any method to read the header
> information and take the ccd size from there and then to proceed
> further, instead of giving the ccd size manually. Because it is really
> very tedious to check for the ccd size each time and then to proceed.
> Please help out.
> For example,
> in one of my data the ccd size that is 1K by 1k is given in header as,
> NAXIS =
> 3
> NAXIS1 =
> 1024
> NAXIS2 =
> 1024
> NAXIS3 = 1
> regards
> sid

You can use STREGEX to search for those header lines and GETTOK to
pick out the value.

Subject: Re: reading header and manipulating according to the header information
Posted by Craig Markwardt on Sat, 15 May 2010 16:02:40 GMT
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On May 15, 10:21 am, sid <gunvicsi...@gmail.com> wrote:
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> Please help out.
> For example,
> in one of my data the ccd size that is 1K by 1k is given in header as,
...

Anything you can do "manually," you can do in a program. The hard
part is usually to make it robust.

Based on the headers you provided, it looks like you have FITS image
files. If you don't already have it, get the IDL Astronomy Library.
It has many routines for reading FITS images and tables. The easiest
one to use is MRDFITS(). MRDFITS() returns the image array which you
can query using SIZE() and then trim as needed.

Simple example:
filename = 'myfile.fits'
img = mrdfits(filename) ;; Read image
sz = size(img, /dim)   ;; Determine size of image
szx = sz(0) ;; Number of columns
szy = sz(1) ;; Number of rows
img = img((0+2):(szx-3) , (0+2):(szy-3)) ;; Remove outermost two
rows and columns

Good luck,
Craig

Subject: Re: reading header and manipulating according to the header information
Posted by Craig Markwardt on Sat, 15 May 2010 16:21:07 GMT
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On May 15, 12:02 pm, Craig Markwardt <craig.markwa...@gmail.com>
wrote:
> On May 15, 10:21 am, sid <gunvicsi...@gmail.com> wrote:> Hi,
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> img = img((0+2):(szx-3) , (0+2):(szy-3)) ;; Remove outermost two
> rows and columns

Oh, and if you need other header keywords, then you need to read the
header with a slightly different call to MRDFITS().
  img = mrdfits(filename,0,header)
and then retrieve the keyword KEYNAME with FXPAR()
  value = fxpar(header, keyname)

Craig

Subject: Re: reading header and manipulating according to the header information
Posted by Jeremy Bailin on Sat, 15 May 2010 23:02:26 GMT
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> Based on the headers you provided, it looks like you have FITS image
> files.

Did anyone else see this sentence and get Clippy flashbacks??

"It looks like you have FITS image files. Would you like help with
flat fielding?"

-Jeremy.

Subject: Re: reading header and manipulating according to the header information
Posted by sid on Sun, 16 May 2010 14:31:01 GMT
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On May 15, 9:21 pm, Craig Markwardt <craig.markwa...@gmail.com> wrote:
> On May 15, 12:02 pm, Craig Markwardt <craig.markwa...@gmail.com>
> wrote:
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> img = mrdfits(filename,0,header)
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> value = fxpar(header, keyname)
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> Craig

Thank you this works now i could able to read the size of ccd as a
variable.
In my data header I have a line like the one below,

COMMENT = 090222 Lat=40N exp=50s seeing 3",

in this line I need to read the lat=40N that is the value 40 as a idl
variable which I need use for further analysis,
but if I do the same process like,img = mrdfits(filename,0,header) and
value = fxpar(header, comment),
then it prints the whole sentence '090222 Lat=40N exp=50s seeing
3"' .

So can anyone suggest is there any way to read only the desired part
of the string.

regards
sid

Subject: Re: reading header and manipulating according to the header information
Posted by Gray on Sun, 16 May 2010 16:13:15 GMT
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On May 16, 10:31 am, sid <gunvicsi...@gmail.com> wrote:
> On May 15, 9:21 pm, Craig Markwardt <craig.markwa...@gmail.com> wrote:
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> So can anyone suggest is there any way to read only the desired part
> of the string.
>
> regards
> sid

STRSPLIT will split the comment into multiple elements, then
WHERE(STREGEX(/Boolean)) will tell you which one you want, then GETTOK
or STRSPLIT will extract the value.

Subject: Re: reading header and manipulating according to the header information
Posted by sid on Fri, 21 May 2010 19:37:54 GMT

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On May 16, 9:13 pm, Gray <grayliketheco...@gmail.com> wrote:
> On May 16, 10:31 am, sid <gunvicsi...@gmail.com> wrote:
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>
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>> So can anyone suggest is there any way to read only the desired part
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>
>> regards
>> sid
>
> STRSPLIT will split the comment into multiple elements, then
> WHERE(STREGEX(/Boolean)) will tell you which one you want, then GETTOK
> or STRSPLIT will extract the value.

Thank you everyone, i could do the job with
strsplit(variable,'string',/extract)
regards
sid
