Subject: Re: read an irregularly structured ascii file. Posted by wlandsman on Tue, 25 Sep 2012 20:38:47 GMT

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On Tuesday, September 25, 2012 2:35:44 PM UTC-4, (unknown) wrote:

```
> 221 0. 125893. 141254. 158489. 177828. 199527. 223873. 251189. > 281839. 316229. 354815. 398109. 446686. 501190. 562344. 630961.
```

Ah, the joy of reading a raw Kurucz model atmosphere file. (I am embarrassed to have recognized these numbers. More ammunition for my wife to call me a geek.)

I have an old program to read similar files which I give below. Unfortunately, my file format was not identical to yours, so you will need multiple changes. I'd work on it one step at a time. First try to read only the first array, and after you succeed go to the next portion of the file.

```
--Wayne
pro rdkur,file,teff,logg,flux,wave
close,1
openr,1,file
str = ' '
nmod = 221
teff = fltarr(nmod)
logg = fltarr(nmod)
wave = fltarr(1221)
f = fltarr(1221)
flux = fltarr(1221,nmod)
i = 0
test = ' '
while test ne "END" do begin
   readf,1,str
   test = strtrim(gettok(str,' '),2)
endwhile
readf,1,wave
while not eof(1) do begin
  readf.1.str
  dum = gettok(str,' ')
  teff[i] = float(gettok(str,' '))
  dum = gettok(str,' ')
  logg[j] = float(gettok(str,' '))
  readf,1,f
  flux[0,j] = f
  readf,1,f
 i = i + 1
```

```
endwhile
j = j-1
flux = flux[*,0:j]
teff= teff[0:j]
logg = logg[0:j]
return
end
```

Subject: Re: read an irregularly structured ascii file. Posted by Russell Ryan on Tue, 25 Sep 2012 21:46:26 GMT View Forum Message <> Reply to Message

```
On Tuesday, September 25, 2012 4:38:48 PM UTC-4, wlandsman wrote:
> On Tuesday, September 25, 2012 2:35:44 PM UTC-4, (unknown) wrote:
>
>
>>
>> 221 0. 125893. 141254. 158489. 177828. 199527. 223873. 251189.
>>
>
    281839. 316229. 354815. 398109. 446686. 501190. 562344. 630961.
>
>
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>
>
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>
>
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>
>
>
```

```
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> str = ' '
> nmod = 221
> teff = fltarr(nmod)
> logg = fltarr(nmod)
> wave = fltarr(1221)
> f = fltarr(1221)
> flux = fltarr(1221,nmod)
> j = 0
> test = ' '
  while test ne "END" do begin
>
      readf,1,str
>
>
      test = strtrim(gettok(str,' '),2)
>
> endwhile
  readf,1,wave
  while not eof(1) do begin
>
     readf,1,str
>
>
    dum = gettok(str,' ')
>
>
    teff[j] = float(gettok(str,' '))
>
>
    dum = gettok(str,' ')
>
>
    logg[j] = float(gettok(str,' '))
>
    readf,1,f
>
>
    flux[0,j] = f
```

```
readf,1,f
>
>
    j = j+1
>
  endwhile
>
  j = j-1
>
> flux = flux[*,0:j]
>
>
  teff= teff[0:j]
>
  logg = logg[0:j]
>
>
>
>
> return
> end
```

Wayne,

I'd hoped an astronomer would chime in. Don't feel bad, I was helping a friend debug a code that used these files, and I explained his code was working because I recognized the numbers....

It looks like I came up with something similar (ie. a bunch of calls to gettok). It's kinda slow, about 12 for my test file, but I think it's fairly robust to a changing file format. I'll play around with your ideas...

Thanks! Russell