Subject: Re: concatenate arrays of different sizes
Posted by Vince Hradil on Thu, 27 Mar 2008 15:48:36 GMT
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On Mar 27, 10:34 am, vino <astrocr...@gmail.com> wrote:
> Hello Everyone,
> I am trying to concatenate arrays of different sizes into a single
> variable.The problem is as follows:
> I am tracking about 10,000 stars through a period of six months. I
> have a single variable containing the intensity of all stars with
> zeros when the star is not in the field of view. I ran into memory
> problems when i try to track for longer periods.
> so i thought of storing the information only when the stars are
> present in the field of view. This is where i am lost since each star
> is present for different periods and i dont know how to store them all
> in a single variable. The alternative might be to store each star
> information in a single file but the aim of my project is to track
> about half a million stars, i wanted to do something sensible right
> from the first.
>
> Thanking you in advance for your help
>
> regards,
> vino

I would use an array of structures...
for each star:
star_data[i] = {star_id:current_star_id, month:obs_month,
intens:current_star_intensity}

Subject: Re: concatenate arrays of different sizes
Posted by R.G. Stockwell on Thu, 27 Mar 2008 16:42:09 GMT
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"vino" <astrocrazy@gmail.com> wrote in message
 news:98fa711f-7d7e-4131-a70a-a75dfe22850d@d4g2000prg.googleg roups.com...
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What is time sampling on those?

You have intensity (float?) for 10k stars, by how many times in that siz

months?

Every ten minutes, fits into my winxp laptop just fine.

ie a = fltarr(10000,6*30*24*6)

Some suggestions:
Perhaps you could downsample the intensity time series - do
you really need that high time resultion?

You could categorize the stars into groups (based on quadrant in
the sky, or on magnitude) and analyze the groups seperately.

You make a pointer array for each star, 10k pointers where each pointer
points to a strucutre which holds the time and intensity
for when it is in view.

Cheers,
bob

Subject: Re: concatenate arrays of different sizes
Posted by vino on Fri, 28 Mar 2008 09:01:33 GMT
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On Mar 27, 9:42 pm, "R.G. Stockwell" <notha...@noemail.com> wrote:
> "vino" <astrocr...@gmail.com> wrote in message
>
> news:98fa711f-7d7e-4131-a70a-a75dfe22850d@d4g2000prg.googleg roups.com...
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> You make a pointer array for each star, 10k pointers where each pointer
> points to a strucutre which holds the time and intensity
> for when it is in view.
>
> Cheers,
> bob
Hello Bob,
Thank you for your suggestion.
The cadence of this particular instrument is 40 minutes. And since i
am looking for transiting planets, this high cadence is very essential
to me.
The intensity array i am using contains flux for 3 different apertures
and hence the larger size.
As you suggested, catagorising it by quadrants was one of my ideas and
the other is to build a database. But now i will learn how to use
pointers and store it.
Thank you so much.

To Vince Hardi:
Thank you so much. Didnt think of it. Will try that.

regards,
vino