Subject: Re: Arghh, not an Axis object problem....
Posted by Brian Larsen on Tue, 13 Jan 2009 16:41:18 GMT
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If this if your issue I can't say as I am still in the stone age with
direct graphics only, but when working with julian days I often get
bit by the float/double issue, be sure the julian days are doubles.
You probably have this right but worth a check. What is your code
doing that is wrong?

IDL> help, 2454845.083333333954215
<Expression>   FLOAT   =   2.45484e+06
IDL> help, 2454845.083333333954215d
<Expression>   DOUBLE   =   2454845.1

Brian

 --- --------------
Brian Larsen
Boston University
Center for Space Physics
http://people.bu.edu/balarsen/Home/IDL

Subject: Re: Arghh, not an Axis object problem....
Posted by ghgm2008 on Tue, 13 Jan 2009 18:21:12 GMT
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On Jan 13, 9:41 am, Brian Larsen <balar...@gmail.com> wrote:
> If this if your issue I can't say as I am still in the stone age with
> direct graphics only, but when working with julian days I often get
> bit by the float/double issue, be sure the julian days are doubles.
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>
> --- --------------
> Brian Larsen
> Boston University
> Center for Space Physicshttp://people.bu.edu/balarsen/Home/IDL

Brian,

Yeh - Julian days needing to be double can really catch you out - but
I don't think that is the issue.
In my code everything is double that needs to be.

The problem is that idl will not plot the axis as it is being asked to
- this issue has come up many times before
(lots of criticism about object axes working in a very non-intuitive
way). I've read all the old posts on this - but
they're not helping.
There is something I'm missing in my code.

What my code is doing is:
1) Not drawing the axis
2) Drawing 1 tickmark (roughly in the middle) and then marking this
with many (overlaind) formatted Julian dates
   - which then becomes a big blob of overlaid text.

Hmm, it's like idl has scaled the axis itself - to be a large scale -
so that all of my ticks and text end up being on top of each other.

Cheers,

George.

Subject: Re: Arghh, not an Axis object problem....
Posted by David Fanning on Wed, 14 Jan 2009 05:47:48 GMT
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ghgm2008@gmail.com writes:

> Yeh - Julian days needing to be double can really catch you out - but
> I don't think that is the issue.
> In my code everything is double that needs to be.

Have you tried using the OFFSET keyword to LABEL_DATE?
I think LABEL_DATE is screwing you up somehow. That way
you can use smaller numbers for the labels.

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.

Subject: Re: Arghh, not an Axis object problem....
Posted by ghgm2008 on Wed, 21 Jan 2009 23:20:02 GMT
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On Jan 13, 10:47 pm, David Fanning <n...@dfanning.com> wrote:
> ghgm2...@gmail.com writes:
>> Yeh - Julian days needing to be double can really catch you out - but
>> I don't think that is the issue.
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>
> Have you tried using the OFFSET keyword to LABEL_DATE?
> I think LABEL_DATE is screwing you up somehow. That way
> you can use smaller numbers for the labels.
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

David,

Sorry for the slow reply - but yes, that cured it - thanks for the
help.

For anyone following this thread here is the issue - and the solution:

if you are wanting to produce a time axis between 2 Julian dates that
are
close together (say 3 hours apart) you would think this is how it is
done:

result = label_date(date_format='%H')
xrange = [tmin,tmax]
info.xaxis1_A->SetProperty, range=xrange
info.xaxis1_A->SetProperty, tickformat='label_date'

Looks fine - but it doesn't work. IDL seems to have a problem with
big Julian numbers and small fractions.

The way to get it to work is to use the OFFSET keyword (as David

points out)
 - then the axis scales between zero and (tmax - tmin)

like this:

```
result = label_date(date_format='%H',offset=tmin)
xrange = [0.d,tmax-tmin]
info.xaxis1_A->SetProperty, range=xrange
info.xaxis1_A->SetProperty, tickformat='label_date'
```

I don't quite understand why this 'fix' wasn't just incorporated into the
Label_date function itself - and therefore invisible to the user - but it wasn't
so you have to do the above.

Also, my problems were for Julian dates with a small difference (3 hours) -
but the same issue arises for larger differences (10 days)... so maybe the
above is a general solution for time axes with Julian dates.

Cheers,

George.
