Subject: Re: Angstrom Symbol Nonsense
Posted by davidf on Thu, 30 Jan 1997 08:00:00 GMT
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Brian Handy is traveling and unable to post to this newsgroup,
but he points out to me that for his angstrom symbol he uses this:

```
ang = STRING(197B)
```

He claims it works on the display and in PostScript files.

I don't know. I think it should be disqualified as being *way*
too easy. Most of us programmer types would feel
uncomfortable with it.

Thanks, Brian!

David

David Fanning, Ph.D.
Fanning Software Consulting
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Phone: 970-221-0438 Fax: 970-221-4762
E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com

Subject: Re: Angstrom Symbol Nonsense
Posted by Andy Loughe on Fri, 31 Jan 1997 08:00:00 GMT
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David Fanning wrote:

> It's elementary, my dear Watson. What I wrote was this:
>
> ang = '!6!sA!r!u!9 %!6!n'
>
> Take out your Geek to English dictionary. You can find it
> in Chapter 9 of the IDL User's Guide. This sentence is easily
> parsed:

"Geek" to English dictionary?

Just what are you implying about those of us who use IDL! ;-) ;-)

--
Andrew F. Loughe |
afl@cdc.noaa.gov
University of Colorado, CIRES Box 449 |
http://cdc.noaa.gov/~afl
Boulder, CO 80309-0449 | phn:(303)492-0707
fax:(303)497-7013

"I do not feel obliged to believe that the same God who has endowed us
with
sense, reason, and intellect has intended us to forego their use."
-Galileo

Subject: Re: Angstrom Symbol Nonsense
Posted by Andy Loughe on Fri, 31 Jan 1997 08:00:00 GMT
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William Thompson wrote:

>
>> David
>
> That's actually the same as the STRING("305B) that you suggested earlier, just
> expressed in decimal as well as octal. It does work regardless of graphics
> device, including PostScript, so long as one avoids hardware fonts.
>
> Bill Thompson

Bingo!
I don't think this can be done, reliably at least, for hardware fonts.
What does that mean? With hardware fonts it may work in X, but never in
PS.
Give it a try, I mean BOTH methods suggested by David Fanning. Here is
a
procedure for you...

```
pro test_fonts, setx=setx, setps=setps, hard=hard, soft=soft

!p.font = -1
set_plot, 'X'
if (keyword_set(setx))  then set_plot, 'X'
if (keyword_set(setps)) then set_plot, 'PS'
if (keyword_set(hard))  then !p.font =  0    ; Hardware fonts
if (keyword_set(soft))  then !p.font = -1    ; Vector-drawn fonts
```

```
!p.color      = 0
!p.background = 1

ang1 = '1) ' + string("305B)
ang2 = '2) !6!sA!r!u!9%!6!n'

el_nino1 = '3) El Ni' + string(241B)  + 'o'
el_nino2 = '4) El Ni' + string("241B) + 'o'
el_nino3 = '5) El Ni!sn!r!u!9A!6!no'

plot, indgen(1)

xyouts, .4, .8, ang1, /norm, chars=3
xyouts, .4, .7, ang2, /norm, chars=3
xyouts, .4, .6, el_nino1, /norm, chars=3
xyouts, .4, .5, el_nino2, /norm, chars=3
xyouts, .4, .4, el_nino3, /norm, chars=3

if (!d.name eq 'PS') then device, /close

end
```

--
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Subject: Re: Angstrom Symbol Nonsense
Posted by davidf on Fri, 31 Jan 1997 08:00:00 GMT
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Bill Thompson <thompson@orpheus.nascom.nasa.gov> writes:

>>   ang = STRING(197B)

> That's actually the same as the STRING("305B) that you suggested earlier, just
> expressed in decimal as well as octal. It does work regardless of graphics
> device, including PostScript, so long as one avoids hardware fonts.

Uh, right. :-(

I should point out, however, that whether you are an octal sort of person ("305), or hexadecimal ('C5'x), or (heaven forbid!) decimal (197), there is no way this is going to work unless you are using the Simplex Roman font.

The correct formulation, it seems to me, is this:

```
angstrom = '!3' + STRING(197B) + '!x'
```

Cheers!

Davod

David Fanning, Ph.D.
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Subject: Re: Angstrom Symbol Nonsense
Posted by thompson on Fri, 31 Jan 1997 08:00:00 GMT
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davidf@dfanning.com (David Fanning) writes:

> Brian Handy is traveling and unable to post to this newsgroup,
> but he points out to me that for his angstrom symbol he uses this:

> ang = STRING(197B)

> He claims it works on the display and in PostScript files.

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> too easy. Most of us programmer types would feel
> uncomfortable with it.

> Thanks, Brian!

> David

That's actually the same as the STRING("305B) that you suggested earlier, just

expressed in decimal as well as octal. It does work regardless of graphics device, including PostScript, so long as one avoids hardware fonts.

Bill Thompson

Subject: RE: Angstrom Symbol Nonsense
Posted by mallozzi on Sun, 02 Feb 1997 08:00:00 GMT
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Hi all,

All this talk about symbols reminded me of a package called TexToIDL that I found somewhere on the web. If you like TeX, this is a really neat program written by Matthew W. Craig that lets you specify symbols using TeX format. For example, if I wanted to XYOUTS the symbol for chi^2,

XYOUTS, X, Y, TexToIDL('\chi^2')

This is *much* easier than !7V!U2!N I think ;-) The documentation states translation is also available for PostScript hardware font.

If anyone is interested and cannot find it on the web, I can make it available from my web page.

PS I don't think the angstrom symbol is available with the package :-)

-bob mallozzi
http://cspar.uah.edu/~mallozzir/

Subject: Re: Angstrom Symbol Nonsense
Posted by davidf on Sun, 02 Feb 1997 08:00:00 GMT
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Stein Vidar Hagfors Haugan <steinhh@rigil.uio.no> finally supplies us with the Angstrom...er, Aring Symbol truth when he writes:

> As a native of a country where the combined office staff is
> probably spending millions of bucks each year trying to figure out
> "how do we get these blasted norwegian characters to work on *this* one!"
> whenver a piece of new equipment comes along, I'm proud to present the
> solution:
>
> set_plot,'PS'
> !P.font=0
>

> device,/isolatin1 ; It's only a shame that this is not the default...
>
> xyouts,0.5,0.5,/normal,string(197b)
> device,/close
> set_plot,'X'
>
> And to be really nitpicking, it's not at all an "angstrom sign" :-)
> It merely happens to be the character used in the name of the Swedish
> physicist {\Aa}ngstr{\"o}m.
>
> The KeySym is "Aring".

I *knew* we could figure this one out!

Thanks to Joe Gurman (who independently supplied this solution),
Andy Loughe, Bill Thompson, and Stein Vidar for all their help.

I'll write this down on my web page so I don't forget it the
next time I am asked. :-)

Cheers!

David

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Subject: Re: Angstrom Symbol Nonsense
Posted by steinhh on Sun, 02 Feb 1997 08:00:00 GMT

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In article <32F21F7B.738E@cdc.noaa.gov>, Andy Loughe <afl@cdc.noaa.gov> writes:
|> William Thompson wrote:
|>
|> >
|> > >David
|> >
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|> >
|> > Bill Thompson
|>
|>
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And to be really nitpicking, it's not at all an "angstrom sign" :-)
It merely happens to be the character used in the name of the Swedish
physicist {\Aa}ngstr{\"o}m.

The KeySym is "Aring".

Cheers,

Stein Vidar H. Haugan
