

Subject: Angstrom symbol under IDL 2.x - FAQ?
Posted by [fireman](#) on Wed, 23 Jun 1993 16:01:00 GMT
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Hello, IDL users -

In IDL version 1, I had worked out a Hershey character string to show the Angstrom symbol:

```
angstrom = '!S!U! !M%!RA!N'
```

This uses the positioning command for a half-space, '!', which does not exist in IDL 2.x and higher versions. We are currently using IDL 2.4.0, and so cannot access the ISO Latin ASCII character set. Has anyone worked out the Hershey string for the Angstrom symbol under IDL 2.x?

Thanks,

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Subject: Re: Angstrom symbol
Posted by [ryba](#) on Wed, 15 Sep 1993 18:40:43 GMT
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In article <CDE3r0.ow@news.Hawaii.Edu>, egami@newton.ifa.hawaii.edu (Eiichi Egami) writes:

 $\triangleright$

```
> I'm wondering if there's a way to print out an angstrom symbol in a
> title of a plot with PostScript font. I know this is possible with
> X-window fonts, because the symbol is encoded with an octal number,
> which can be found by using "xfd". However, this symbol is not
> explicitly encoded in PostScript, so I don't know how to access it
> even though my printer has the font.
```

$$\frac{1}{\sqrt{2}}$$

|> Currently, I'm using the following sequence of positioning commands
|> to construct the symbol with PostScript font:

 $\frac{1}{\lambda}$

```
|> "!"SA!R !A!9\260!N"
```

$$\frac{1}{\gamma}$$

|> However, this still looks awkward.

$$\frac{1}{\sqrt{2}}$$

|> Is there a way to print out this symbol directly in PostScript?

|> Someone might have asked this question already, but I couldn't
|> find any answer in the FAQ. I would appreciate any suggestions.

|> Thanks in advance.

Well, the problem is the Angstrom symbol, known as Aring in the PostScript Reference Manual, is not in the default encoding. According to the manual, you can provide a font encoding string to put it in a currently "empty" place such as \201. I'm not a PostScript guru so I can't be sure, but this might work:

```
% Example nondefault encoding
/DiacriticEncoding [
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef /.notdef /.notdef /.notdef /space /exclam /quotedbl
/numbersign /dollar /percent /ampersand /quotesingle /parenleft
/parenright /asterisk /plus /comma /hyphen /period /slash /zero /one
/two /three /four /five /six /seven /eight /nine /colon /semicolon
/less /equal /greater /question /at /A /B /C /D /E /F /G /H /I /J /K
/L /M /N /O /P /Q /R /S /T /U /V /W /X /Y /Z /bracketleft /backslash
/bracketright /asciicircum /underscore /grave /a /b /c /d /e /f /g /h
/i /j /k /l /m /n /o /p /q /r /s /t /u /v /w /x /y /z /braceleft /bar
/braceright /asciitilde /.notdef /Adieresis /Aring /Ccedilla /Eacute
/Ntilde /Odieresis /Udieresis /aacute /agrave /acircumflex /adieresis
/atilde /aring /ccedilla /eacute /egrave /ecircumflex /edieresis
/iacute /igrave /icircumflex /idieresis /ntilde /oacute /ograve
/ocircumflex /odieresis /otilde /uacute /ugrave /ucircumflex
/udieresis /dagger /.notdef /cent /sterling /section /bullet
/paragraph /germandbls /registered /copyright /trademark /acute
/dieresis /.notdef /AE /Oslash /.notdef /.notdef /.notdef /.notdef
/yen /.notdef /.notdef /.notdef /.notdef /.notdef
/ordfeminine /ordmasculine /.notdef /ae /oslash /questiondown
/exclamdown /logicalnot /.notdef /florin /.notdef /.notdef
/guillemotleft /guillemotright /ellipsis /.notdef /Agrave /Atilde
/Otilde /OE /oe /endash /emdash /quotedblleft /quotedblright
/quoteleft /quoteright /.notdef /.notdef /ydieresis /Ydieresis
/fraction /currency /guilsinglleft /guilsinglright /fi /fl /daggerdbl
/periodcentered /quotesinglbase /quotedblbase /perthousand
/Acircumflex /Ecircumflex /Aacute /Edieresis /Egrave /Iacute
/Icircumflex /Idieresis /Igrave /Oacute /Ocircumflex /.notdef /Ograve
/Uacute /Ucircumflex /Ugrave /dotlessi /circumflex /tilde /macron
/breve /dotaccent /ring /cedilla /hungarumlaut /ogonek /caron
] def
```

```
% How to activate it:
/Encoding DiacriticEncoding def
```

```
% To deactivate:
/Encoding StandardEncoding def
```

To put this into the IDL PostScript file, you would use

device,output=blah

for each line (I think). But, shouldn't you be using nanometers instead???
I mean, Angstroms aren't strictly SI units.

--

Dr. Marty Ryba | Generation X:
 | Too young to be cynical,
 ryba@ll.mit.edu | too old to be optimistic.
Of course nothing I say here is official policy!!!!
