Subject: Re: pixel size in DICOM images Posted by Jo Klein on Tue, 27 Feb 2007 14:54:19 GMT

View Forum Message <> Reply to Message

Hi Pete.

Pixel size is stored in tag (0028,0030). Note that this is actually pixel spacing, not pixel size, although in most contexts these terms are interchangable. The IDLffDICOM object will help you extract this and other data.

Cheers.

Jo

Subject: Re: pixel size in DICOM images Posted by Mike[2] on Tue, 27 Feb 2007 14:54:33 GMT View Forum Message <> Reply to Message

On Feb 27, 9:32 am, Peter Clinch <p.j.cli...@dundee.ac.uk> wrote:

- > As far as I can tell the QUERY_DICOM routine doesn't actually tell me
- > the pixel size (i.e., mm in the original target, not number of pixels
- > making up the image) of an image. Which is a shame, as I'd really like
- > to know what that is!

>

- > Have I got that wrong, or are there any suggestions from The Team as to
- > how I'd most easily go about getting that?

To get the pixel size and image dimensions, you can use IDLffDICOM:

```
IDL> dcm = obj_new('IDLffDICOM')
IDL> var = dcm->read(filename)
IDL> Nx = *(dcm->getvalue('0028'x,'0010'x))[0]
IDL> Ny = *(dcm->qetvalue('0028'x,'0011'x))[0]
IDL> pixel\_size = *(dcm->getvalue('0028'x,'0030'x))[0]
IDL> help, Nx, Ny, pixel_size
NX
           UINT
                    =
                         512
NY
           UINT
                         512
                    =
PIXEL SIZE
               STRING = '0.9765625\0.9765625 '
IDL> print, float(strsplit(pixel_size, '\', /extract))
   0.976562
               0.976562
```

Although I often use the DICOM standard to look up group/element pairs, it is even easier to use IDLffDICOM::dumpelements:

IDL> dcm->dumpelements

Regards, Mike

Subject: Re: pixel size in DICOM images Posted by Peter Clinch on Tue, 27 Feb 2007 15:04:21 GMT

View Forum Message <> Reply to Message

Mike wrote:

> To get the pixel size and image dimensions, you can use IDLffDICOM: <snip>

That was pretty comprehensive!

Many thanks, problem sorted...:-)

Pete.

Peter Clinch Medical Physics IT Officer

Tel 44 1382 660111 ext. 33637 Univ. of Dundee, Ninewells Hospital

Fax 44 1382 640177 Dundee DD1 9SY Scotland UK

http://www.dundee.ac.uk/~pjclinch/ net p.j.clinch@dundee.ac.uk