Subject: Re: Reading DICOM images

Posted by Mike[2] on Wed, 25 Jan 2006 20:27:24 GMT

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DICOM image data is stored as integers. To scale them to the appropriate units, you can use the following function. (This will work for any DICOM image)

function rescaled_dicom_image, filename
;; rescaled_dicom_image: load a single dicom image slice from filename
;; and rescale it with rescale slope and intercept.
dcm = obj_new('IDLffDICOM')
dcm->Reset
var = dcm->Read(filename)
rescale_slope = *(dcm->GetValue('0028'x,'1053'x))[0]
rescale_intercept = *(dcm->GetValue('0028'x,'1052'x))[0]
img = float(*(dcm->GetValue('7fe0'x,'0010'x))[0]) * rescale_slope +
rescale_intercept
obj_destroy, dcm
return, img
end

This will give you a properly scaled image for for almost all DICOM data. I think that this is always in HU for CT image data, but YMMV on that. For some modalities, you can find the units of the image values as well. For example, for PET data, you can learn the units from the NMI Units (0054,1001).