Subject: Re: Reading Raw Image
Posted by weitkamp on Thu, 20 Sep 2007 16:05:25 GMT
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rpertaub@gmail.com wrote:

> I have a .raw image file from a lumenera camera that I am trying to
> open. It is a 10-bit image (1280x1024). The total bytes is 7864320
> (1280x1024x6) (not sure why that is).

If this is a color image, then it is probably because you have 3 color channels (most likely red, green, and blue). For each channel, you need 2 bytes to store 10-bit data. Makes 6 bytes per pixel. Now the remaining question is how the channels / pixels are ordered in your image. You need to find this out by trying.

> I tried using read_binary with data_dims =[1280,1024] but the image is
> just snowy...not what I expect to see.

The easiest to read the file into IDL is probably to use an unsigned integer array of dimensions [1280, 1024, 3] or a permutation of these. Something like this (I didn't test):

```
imgdata = uintarr(1280, 1024, 3)
openr, 1, 'yourfile.raw'
readu, 1, imgdata
close, 1
```

You can then try to display an individual channel, for example imgdata[*, *, 0] or. If you only get snow as you describe, there may be essentially two reasons (or a combination of the two):

(a) The byte order of the long integers is wrong. You can reverse this with the "byteorder" command:

```
byteorder, imgdata
```

and then try again. (This is, however, not likely to be the reason if the images were both written on computers of the same architecture, for example on an IBM-PC compatible architecture.)

(b) Or the dimensions are not ordered correctly in the data (i.e., you chose the wrong permutation of your three dimensions). In that case, try something like

```
imgdata = reform(imgdata, 1280, 3, 1024)
```

or any other permutation of the dimensions, and then try displaying a

channel again.

Good luck
Timm