Subject: Re: IDLgrImage and the channel keyword Posted by Dick Jackson on Thu, 05 Feb 2015 00:29:50 GMT

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On Wednesday, 4 February 2015 15:53:14 UTC-8, Jim P wrote:
> On Wednesday, February 4, 2015 at 2:02:30 PM UTC-7, ronn kling wrote:
>> All.
>>
>> Has anyone figured out how to use the channel keyword for IDLgrImage?
>>
>> If you try this
>>
>> file = 'E:\Program Files\Exelis\IDL84\examples\data\rose.jpg'
>> im = read image(file)
>> xobjview, obj_new('IDLgrImage',im, channel='ff0000'x)
>>
>> What I expect to see is a red channel image, but instead I see cyan which is a combination of
green and blue. So it is almost acting like a color subtraction. But if you try other hex
combinations they don't work like subtractions either.
>>
>> Any ideas????
>> Ronn Kling
> Good question! It doesn't produce what I would expect from the documentation setting just the
red channel in an RGB input image:
>
> IDL> a = bytarr(3, 255, 255)
> IDL> a[0, *, *] = 255B
> IDL> xobjview, idlgrimage(a, channel = 'ff0000'x)
> IDL> xobjview, idlgrimage(a, channel = '00ff00'x)
> IDL> xobjview, idlgrimage(a, channel = '0000ff'x)
>
  Compare with
>
>
 IDL> xobiview, idlgrimage(a, channel = '000101'x)
> Is Karl still out here on the internets?
```

Or perhaps Don J Lindler who, 14 years ago, claimed to have been "able to use IDLgrImage objects with the channel set ('ff0000'x for red, '00ff00'x for green, and '0000ff',x for blue).":

https://groups.google.com/forum/#!searchin/comp.lang.idl-pvwave/IDLgrImage\$20channel/comp.lang.idl-pvwave/j9LozjSkkFQ/9B e5T_DCTzcJ

:-)

FWIW, how it looks to me is indeed "subtractive colour" handling... note that if you pass '000000'X

what you get is the white background, not a black image, so perhaps '000001'X means to add a blue subtracting filter only: where B in the RGB image is high, it passes blue (along with full, unfiltered red and green, giving white), and where B is low, only blue is lowered (again, along with full, unfiltered red and green, giving yellow)

Cheers,

-Dick

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