Subject: Image processing question
Posted by rkj on Thu, 16 May 2002 15:41:11 GMT

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How do I convert a color image(.jpg) to grayscale?

I am using PV-Wave's Image_Read function to read the image,
which stores all the image info in an associative array.
Do I simply take the maximum RGB intensity value at each
pixel in the 'pixels' array (xdim,ydim,3)? This gives me
a grayscale image, but I'm not sure this is the "correct"
one.

Kyle J.

Subject: Re: Image processing question
Posted by Craig Markwardt on Sat, 18 May 2002 15:51:31 GMT

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rkj@dukebar.crml.uab.edu (R. Kyle Justice) writes:

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>
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> pixel in the 'pixels' array (xdim,ydim,3)? This gives me
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> one.

There is no one "correct" conversion from RGB to grayscale, since it
depends on the sensitivity response curve of your detector to light as
a function of wavelength. A common one in use is:

  $Y = 0.3*R + 0.59*G + 0.11*B$

Craig

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Craig B. Markwardt, Ph.D.   EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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