Subject: jpeg2000 compression
Posted by scvt on Tue, 12 May 2009 23:01:48 GMT

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I am trying to save an image as a jp2 file. I'm wanting to try various
levels of compression (yadayadayada, you know the story).

But the most compression I've been able to get (roughly 3.5x) is still
well short of our target. I've tried several values of n_levels, but
it
hits a wall at about n_levels=3. Larger values don't achieve further
compression. But then it doesn't further reduce image quality either.
I
also gave tiling a try, with various sizes of tile_dimensions. This
had
little effect. Smaller tiles actually resulted in a slightly larger
jp2.

I am using write_jpeg2000.pro frontend. Made minor modifications, such
as
adding tile_dimsnsions as something I can pass to it. It doesn't have
a
single 'quality' keyword like write_jpeg classic, or ImageMagik's
CONVERT,
or a couple other image programs I've seen mentioned here with a
'jpeg2000
quality' search. N_levels seems to be the closest equivalent.

The subject is a single band 2048x2048 image of the sun digitized to
12 bits and stored in an array of short int.

What else do I need to be doing? Write_jpeg2000 is clearly short a few
options. OTOH, direct use of idlffjpeg2000 seems an extreme case of
driving a stick. No doubt there are situations where that level of
detailed control is useful but this shouldn't be one of them. I've
looked over the help on the idlffjpeg2000 properties and it isn't
clear
what else will effect the writing of the image file.

I'm trying to modify or replace it so it will do what I need, and also
to
have something with the same general flavor as the other write_* image
procedures.

I suspect there's something fairly simple I need to be doing but I'm
unfamiliar with low level access to the jpeg2000 engine. Can anyone
point
me in the right direction?

Thanks in advance for any help!

Richard Clark