Subject: JPEG2000 with Floating point data possible?
Posted by gaurav1089 on Tue, 14 Mar 2017 13:38:16 GMT

Hello!
It feels great to be back to tinkering with IDL after such a long time. Presently, I am trying to work with extremely heavy multi-band hyper spectral images and was wondering if I could save some memory by saving the images in JPEG2000 format.

Now, the thing is that the present images have pixel values that are floating point values. The IDL documentation for "WRITE_JPEG2000" does not have any such option the way, for example, "WRITE_TIFF" has. IDLffJPEG2000 has an option in the form of BIT_DEPTH, but it only supports values from 1 to 24 (which would not suffice for Floating point values that are saved in 32 bit).

But I really wonder why this limitation is present when theoretically JPEG2000 supports floating point values too, as mentioned in the High Dynamic Range section of its Wiki page https://en.wikipedia.org/wiki/JPEG_2000.

Is this a limitation of IDL in any way? Are there any work-arounds?

Cheers!

Gaurav