Subject: Re: JPEG2000 Tiling Examples?

Posted by David Fanning on Wed, 06 Jun 2007 13:32:45 GMT

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David Fanning writes:

- > Does anyone have an example of creating a tiled JPEG2000
- > file? I am finding the documentation, uh, less than
- > helpful. :-(

>

> Appreciate any help you can give.

Whoops! Quick fingers on that SEND button this morning!

What I want to do is use the tiling feature to create an IDLgrImage that I can use as a texture on a polygon. I'm not sure *exactly* what I want. I just know that the original image is VERY big, and I thought to speed up the process by using lower resolution tiles as a stand in until the full resolution was absolutely required.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: JPEG2000 Tiling Examples?

Posted by Michael Galloy on Wed, 06 Jun 2007 13:52:42 GMT

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On Jun 6, 7:32 am, David Fanning <n...@dfanning.com> wrote:

- > What I want to do is use the tiling feature to create
- > an IDLgrImage that I can use as a texture on a polygon.
- > I'm not sure *exactly* what I want. I just know that the
- > original image is VERY big, and I thought to speed up the
- > process by using lower resolution tiles as a stand in until
- > the full resolution was absolutely required.

I have an article about basic widget program that tiles an IDLgrImage (but not a texture on a polygon):

http://michaelgalloy.com/2006/04/15/idlgrimage-tiling-in-idl -62.html

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www.michaelgalloy.com

Subject: Re: JPEG2000 Tiling Examples?

Posted by Gaurav on Thu, 07 Jun 2007 07:19:47 GMT

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I think I came across a limitation to the tiling facility for JPEG2000 object. While all is quite well when you try and display the image in a view by directly adding it to a model that is displayed in the view (as in the demo program), things turn awry when the image object is actually texture mapped onto a polygon object. Since the polygon object may be in any orientation with respect to the view at the time of reading of the image, tiles are simply NOT read even though the program shown no error.

If any one has successfully implemented the tiling facility upon an image that has been warped onto a polygon object, kindly let me know cuz I am really stuck on this one.

Cheers!

Subject: Re: JPEG2000 Tiling Examples?
Posted by Michael Galloy on Thu, 07 Jun 2007 14:32:52 GMT
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On Jun 7, 1:19 am, Gaurav <selfishgau...@gmail.com> wrote:

- > If any one has successfully implemented the tiling facility upon an
- > image that has been warped onto a polygon object, kindly let me know
- > cuz I am really stuck on this one.

I've been told that is not possible right now. There are feature requests in this area, call ITT VIS and add your name if you are interested.

Mike

--

www.michaelgalloy.com

Subject: Re: JPEG2000 Tiling Examples?

Posted by Steven Houston on Fri, 08 Jun 2007 10:49:03 GMT

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mgalloy@gmail.com wrote:

- > On Jun 6, 7:32 am, David Fanning <n...@dfanning.com> wrote:
- >> What I want to do is use the tiling feature to create
- >> an IDLgrImage that I can use as a texture on a polygon.
- >> I'm not sure *exactly* what I want. I just know that the
- >> original image is VERY big, and I thought to speed up the
- >> process by using lower resolution tiles as a stand in until
- >> the full resolution was absolutely required.

>

- > I have an article about basic widget program that tiles an IDLgrImage
- > (but not a texture on a polygon):

>

> http://michaelgalloy.com/2006/04/15/idlgrimage-tiling-in-idl -62.html

>

- > Mike
- > --
- > www.michaelgalloy.com

>

As Mike mentioned you cannot use a tiled IDLgrImage as a texture map on an IDLgrPolygon.

If this doesn't rule out the use of a tiled IDLgrImage, then search the IDL Help for "Preloading Tiles". At the bottom of that page there is a section on how to load an entire low resolution version of your image. This will be displayed until you read in the full resolution tiles.

Cheers, Steve.

Subject: Re: JPEG2000 Tiling Examples?
Posted by Gaurav on Mon, 18 Jun 2007 09:58:16 GMT
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Thanks a lot for the confirmation folks. I simply found a way round the problem in the meanwhile. My application was such that I could know the boundaries of the image in terms of lat/lon without actually reading the complete image. What I did was to get this information for small rectangular chunks of image in a 2D loop at using the region keyword and then use these smaller images as complete images only if it was useful.

But choosing an optimum tile size has been a problem and it still causes upto 4 times the memory strain than reading just the right tile would have caused. What would I have done without my 2GB RAM!

Cheers!