

---

Subject: Re: UppGL

Posted by [nneilson](#) on Fri, 20 May 2011 20:54:40 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

raxvan wrote on Fri, 20 May 2011 12:18:1. Except when they are not loading.

2. Some platforms will not allow you to have non power of two textures.

1. Do you have a link to tests that have confirmed this??

On the same computer a file will get to the GPU in the same amount of time if the files are the same size in bytes. I thought I made it clear in my last post that it is the format (.jpg or .dds) that effects performance. .dds is much faster getting through the GPU and displayed. You can do a Google search for "dds v jpg"

2. I assume you meant application rather than platform which is usually used as OS, at least that is what I am used to.

If so you are correct. Some applications use pow2 to determine the lztd, like Google Earth and some do not. Some servers have a large image that are made up of many smaller images like the Satellite images and what is requested is tiled on the fly for whatever is requested.

In this case a request can be made for whatever lztd, pow2, 2 deg, 10 deg, 36 deg, whatever your age is divided by pi or ???, it is just numbers.

Also note that GE references from the top left and many others from the bottom left. Some have a pixel size of 256x256, some 512x256 and some 512x512.

The fastest (and with the fewest problems) is if the images are all pre-tiled so any time for the server to tile them is eliminated, that is how I have all the FAA Charts. In this case the lztd must be what they were pre-tiled with.

These are used on a true 3D app with the images draped over an ellipsoidal globe (WGS84) with elevation data (DEM).

Just to make it clear so there is less chance of a misunderstanding the lztd or lowest resolution layer can be whatever one chooses (except it should divide evenly into 360 if it crosses the date line.

For every level the size in degrees is one half of the size of the level with one step lower resolution regardless of the lztd chosen.

This is referred to as the LOD or Level Of Detail.

GE uses 180 deg as level zero.

For my merged sets I used 10 deg.

For my zero level (LOD 10) the tile size is 10 degrees.

GE's size near that would be LOD 4 at 11.25 degrees.

The tile naming is a different but basically it's the lat and lon from the reference point divided by the tile size for that level. Mentally with 10 deg the locations lat and lon can be determined. With 11.25 deg it would be time to pull out the Abacus beads.

Download gdal2tiles.py and take a look at the formats that will make.

It's good you have an interest in tiling.

---