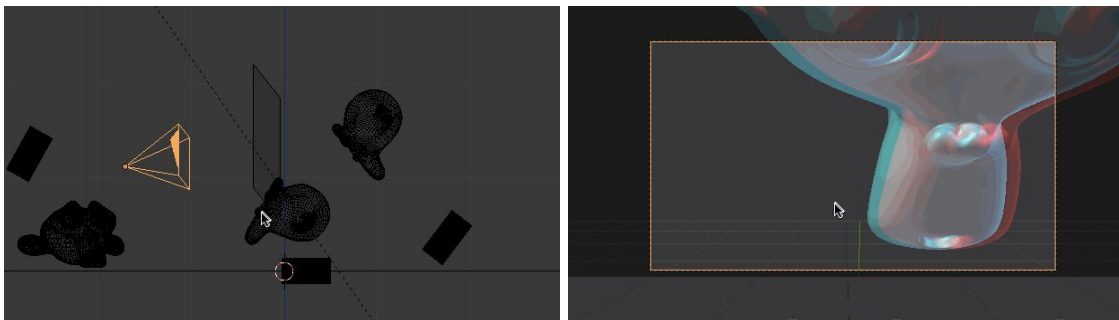




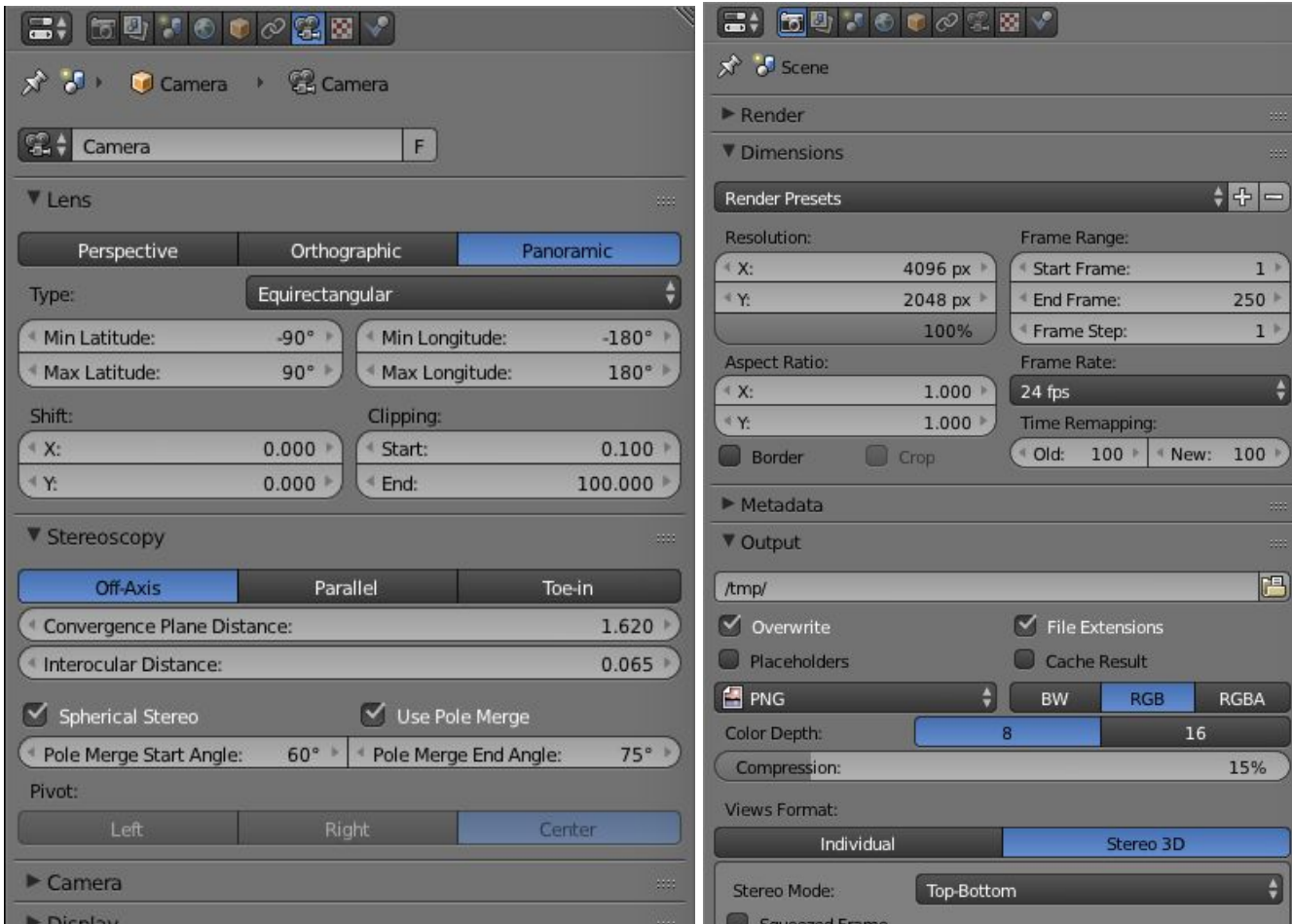
Rendering Panoramas from Blender Cycles

For the assignment you need to save an *Equirectangular, Stereo (Top-Bottom), Panoramic render at 4096 pixels large*, here's how:

1. Put your camera in the middle of your scene, in a spot where things look interesting.
2. With camera selected, ALT+R to make your camera look straight down. R (rotate) the camera while holding CTRL to snap to logical increments til your camera points exactly 90 degrees.
3. Look thru your camera (0-KEY), Use SHIFT-F and mouse to look all around and make sure the view is in fact, interesting.



4. With camera still selected go to the **Camera** Properties panel and change:
 - a. *Lens* to *Panoramic + Equirectangular* should be selected from the pull-down menu below it.
 - b. And make sure *Spherical Stereo + Use Pole Merge* are checked in the *Stereoscopy* section.
5. In the **Render** properties panel:
 - a. In the *Dimensions* section, change your resolution to 4096 x 2048 at 100%
 - b. In *Views Format* section click Stereo on and select *Top-Bottom* from the pulldown below that.



6. Now when viewing the scene in Rendered view things should look a bit warped.



7. That's it. Render it! (via F12 or the button in the Render panel)
8. Save your image as a PNG file and upload it to the Drive folder.

Note: While there is only one image in your viewport, the rendered file should look like this:



Two images on top of each other in one 4096x4096 .png file.

Cardboard and Apps

- <https://vr.google.com/cardboard/> - make one yrself [instructions](#)
- Cardboard app - [iOS](#) , [Android](#)
- Cardboard Camera app - [iOS](#) , [Android](#)
- VRAIS - app to view images uploaded from your browser - [iOS](#), [Android](#)
- <https://sketchfab.com/vr>
- Lots of things to view on Youtube - I made you [a playlist](#)

Stereo Rendering documentation:

- <https://docs.blender.org/manual/en/dev/render/workflows/multiview/usage.html> - for rendering a stereo view of an object.

Rendering 360 Panoramic Video from Blender

- [Everything you need to know in an 11 min tutorial video!](#)

DIY web code and samples

- [Google VR View script](#)
 - [Getting Started Tutorial](#) - very good walkthrough of how to use the code
- Samples - <https://vr.chromeexperiments.com/> - with sample code for use with [three.js](#)
 - Visit g.co/chromevr on your phone
- <https://aframe.io/> - framework for Web VR - go beyond the pre-rendered! Real-time/Computational 3d possibility!