Catalog

- The YouTube channel where my blender videos are located
- Explore The Solar System: 360 Degree Interactive Tour!
 - This video is a quick and artistic tour of our solar system, with facts about the objects presented along the way.
 - Great deal of information about each object in our solar system in a quick video.
 - Artistically very pleasant
 - Lacks varying geometric and size perspective, because you stay stationary throughout.
- NASA | Juno Mission to Jupiter 360 Video Narrated
 - This video you to Jupiter along with Juno. You learn a lot about the mission and get a great view of Jupiter.
 - Very interesting view of the Juno spacecraft
 - Great perspective of Jupiter
- Mars The Red Planet 360 VR Documentary
 - This video has lots of useful information and images all regarding Mars.
 - Great use of 360 to show images and simulations in all directions.
 - A wealth of information about past, current and future Mars.
- <u>Iourney to the Birth of the Solar System 360 VR</u>
 - This video animates the birth of the solar system in VR. I think it does a good job providing an overview and using the 360 technology to show all that was going at each moment.
 - Goes through creation and evolution of our solar system stage by stage.
 - Explains how things came to be (including the moon) and how earth became habitable for life.
 - Does not give feel for the size of the solar system, you don't move much throughout the video.
- 360 Video VR Solar System Space video for Virtual Reality 4K
 - This video is a longer tour through the solar system starting from Mercury and ending at Pluto and includes passing by

many moons. This video does not include commentary or information further than the images.

- Doesn't give a great perspective of size or structure of the solar system, more just takes you around images of each object.
- TRAPPIST-1 Star and Planets in 360 NASA 2017 Discovery
 - This video takes you through each planet of the newly discovered Trappist system.
 - Great size comparison of the planets and the star as well as good facts and visuals discussing the habitable areas in the system.
- Take a Virtual Reality tour of six REAL exoplanets (4K, 360° VR experience) | We The Curious
 - o This video takes you to the surface of six studied exoplanets.
 - Informative commentary and you see things going on each planet all around you.
 - Great perspective of varying atmospheres and conditions on exoplanets.
- Astronomy Live: Sun-Earth Connection
 - This video is interesting because it is a live broadcast of a presentation give over the sun-earth connection.
 - The video demonstrates what the speaker is talking about well using 360.
- Saturn's Rings in 4K 360
 - This video gives a nice perspective of Saturn's rings. You sit just above them as Saturn's moons orbit. You can see the how wide the rings stretch and how flat they are.
- Potential Videos
 - o https://vimeo.com/ondemand/vrdta3y/210198297
 - Appears to be a very good documentary on the history of astronomy. It costs \$6.99. Vimeo also has one on extrasolar planets.
 - o https://forums.oculus.com/community/discussion/5001/s olar-system-model-heliocentric-vs-geocentric-wip
 - Looks to be good for seeing the old geocentric and newer heliocentric models of the solar system. Can

watch video with viewer, but you are not in control of where you look.

- VR for Education Website
 - This website has a lot of information and support for the use of VR and 360 video in education. Contains many interesting videos in many different fields.
- Apps (Software)
 http://www.sciencemadesimple.co.uk/curriculum-blogs/space-blogs/top-space-themed-vr-apps-for-google-cardboard
 - This website has a list of apps for apple and android that include astronomy and VR. It comments on each app about positives and negatives, and I think these would be good apps to explore.
 - Star Chart VR
 - VR planetarium and real-time simulation
 - o nytvr
 - New York Times has an app with 360 videos of news stories, a few of them track space missions.
 - Vimeo
 - Video sharing app, includes the on-demand documentaries.
 - Chromecast
 - Can connect with HDMI to projector or TV to show what is being seen on a phone or computer that is connected to Chromecast with app on projector or TV. The TV or Projector may need to have support for 360 videos for it to work. This is something to test, and I think I can with my ps4. From what I have found, the Chromecast will mirror the video, but will have a split screen.
- Creation Software
 - Blender
 - Good free software for creating simulations. Can create 3D simulations and render in 360-degrees and upload to YouTube. Following two videos are good demonstrations of this and uses for Blender.

- https://www.youtube.com/watch?v=SEMeiveKje4
- https://www.youtube.com/watch?v=0y6mTfxOyD0
- o Glowscript (http://www.glowscript.org/
- o HTML5 programming