

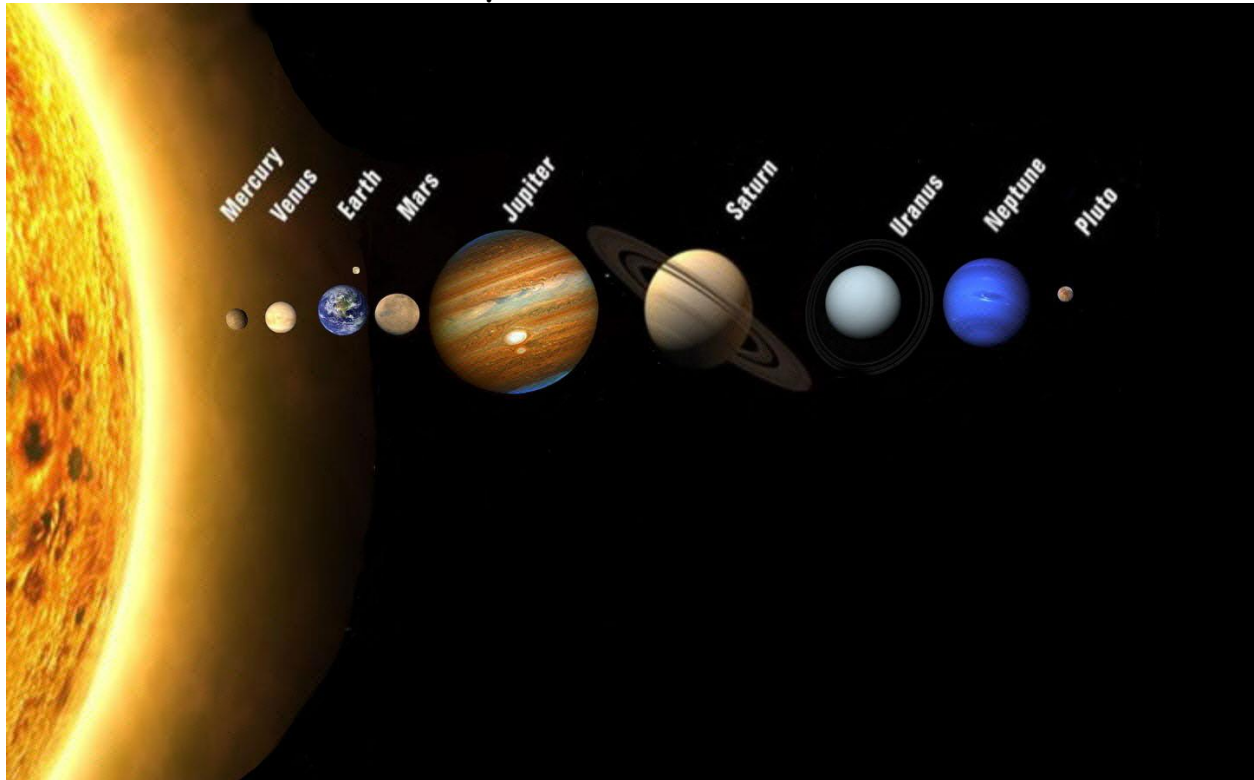
"How Big is Your God?"

For the past year I have been struggling to comprehend how great our God is, and how amazing it is that He would care about us as much as He does.

We will begin with an Astronomy lesson like we had in high school.

Except back then they didn't know a 1/4 of what we know today

We will start with our Solar System



Our Solar System

- This picture shows the planets in order, but the scale is way off
- If our Sun is a yellow marble that is half-an-inch in diameter, then:
- Mercury is 3 feet from the sun
- Venus is 6.5 feet from the sun
- Earth is 8.2 feet from the sun - To scale, it is the size of a grain of sand
- Mars is 13 feet from the sun
- Jupiter is 42.6 feet from the sun
- Saturn is 79 feet from the sun
- Uranus is 161 feet from the sun
- Neptune is 250 feet from the sun

- Pluto is 328 feet from the sun
 - That's over a football field including the end zones
 - That would be almost to the Georgetown Square from here

Our Solar System is just a fragment of our Milky Way Galaxy

- We marvel at the number of stars visible on a dark night



Milky Way - Sky view

- Every pin of light that we can see with the naked eye is in our galaxy, except for nine close galaxies.
- And if we think "WOW, I can see millions of stars", the truth is only 9,095 stars can be seen from Earth with the naked eye.
 - But that is from all around our planet. From any one location, on an extremely dark night, a human can only see about 4,000 stars.
- So, the Milky Way galaxy contains 100 to 400 billion stars and we can only see about 4,000 of them with the naked eye.

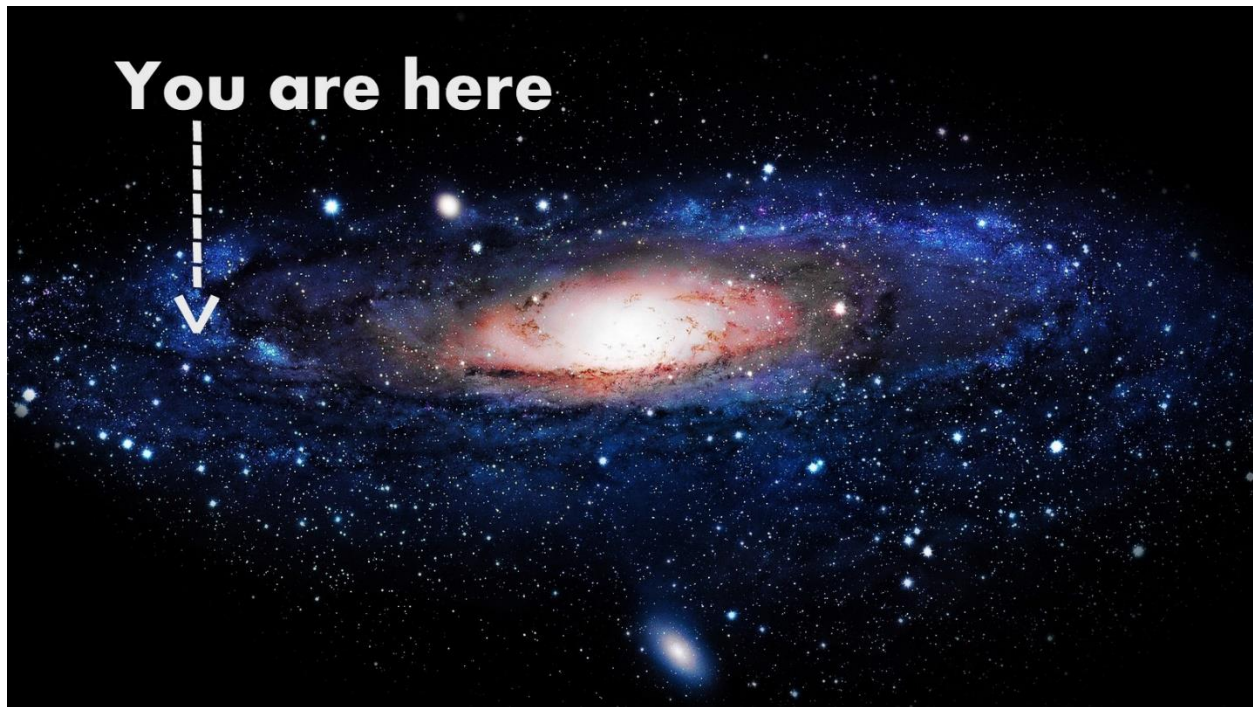


Image Depicting our Solar System's location within the Milky Way Galaxy

- Our Milky Way galaxy is about 100,000 light-years across.
 - Light travels at 186,000 miles per second
 - A light year is how far light travels in a year
 - This is a number we cannot comprehend
 - So, on our scale where the yellow marble is our sun, and Pluto is about a football field away, our Milky Way Galaxy would extend 25 million miles - that is, from earth to the planet Venus!
 - These distances relate to just our galaxy, but they are mind-boggling.



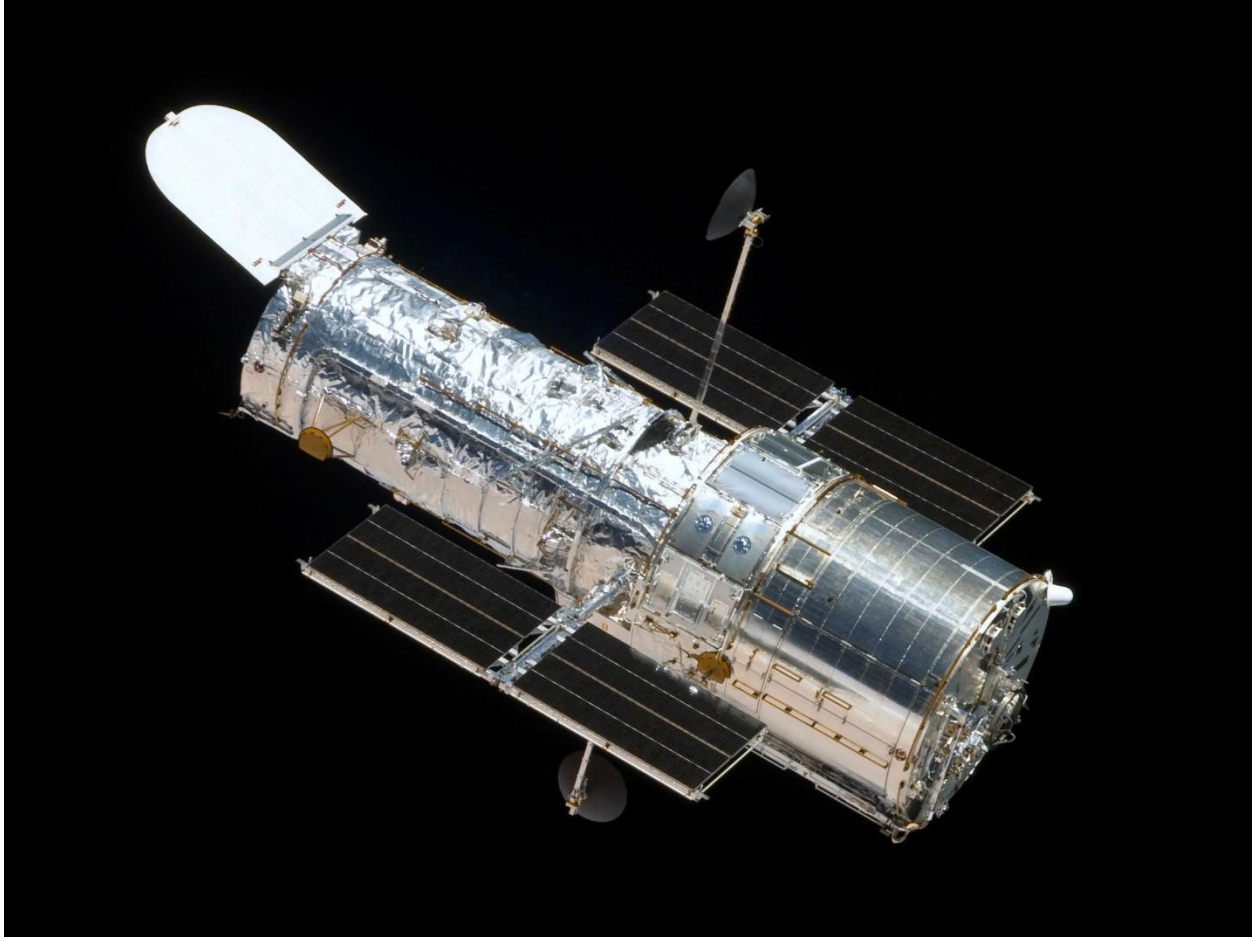
Our Sun compared to the superstar Stephenson

- This yellow marble, our sun, is a very mediocre star. The largest known star in our *Milky Way Galaxy* is Stephenson 2-18. It was discovered in 1990. Its diameter is 2,150 times that of our sun.
- The picture above shows our sun in comparison to this superstar Stephenson
- And our whole galaxy was created by our *God*.

Two more items in our Astronomy lesson

The Hubble Telescope

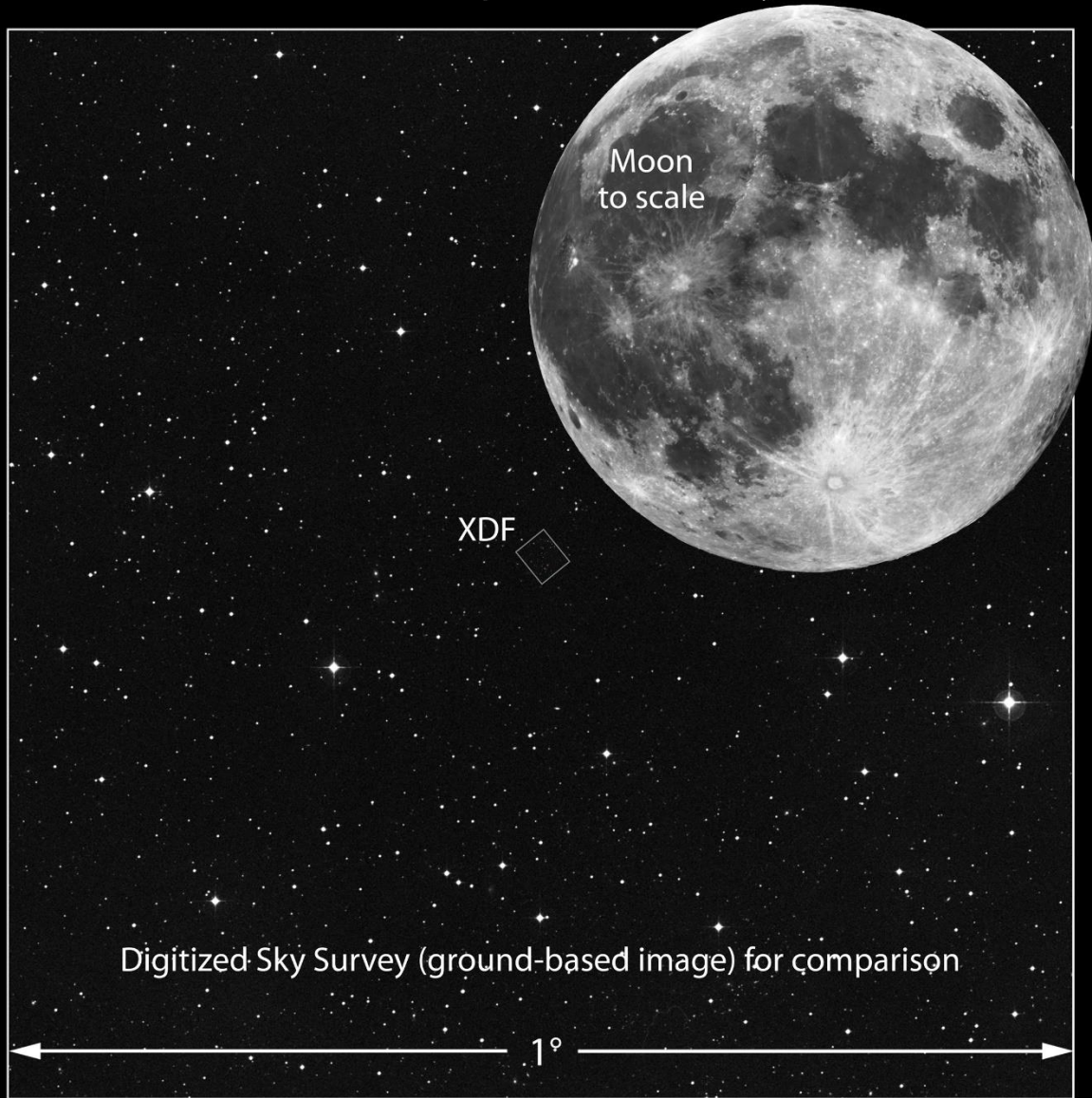
- It was launched on April 24, 1990.
- It is 14 feet in diameter and as long as a school bus.



Hubble Telescope

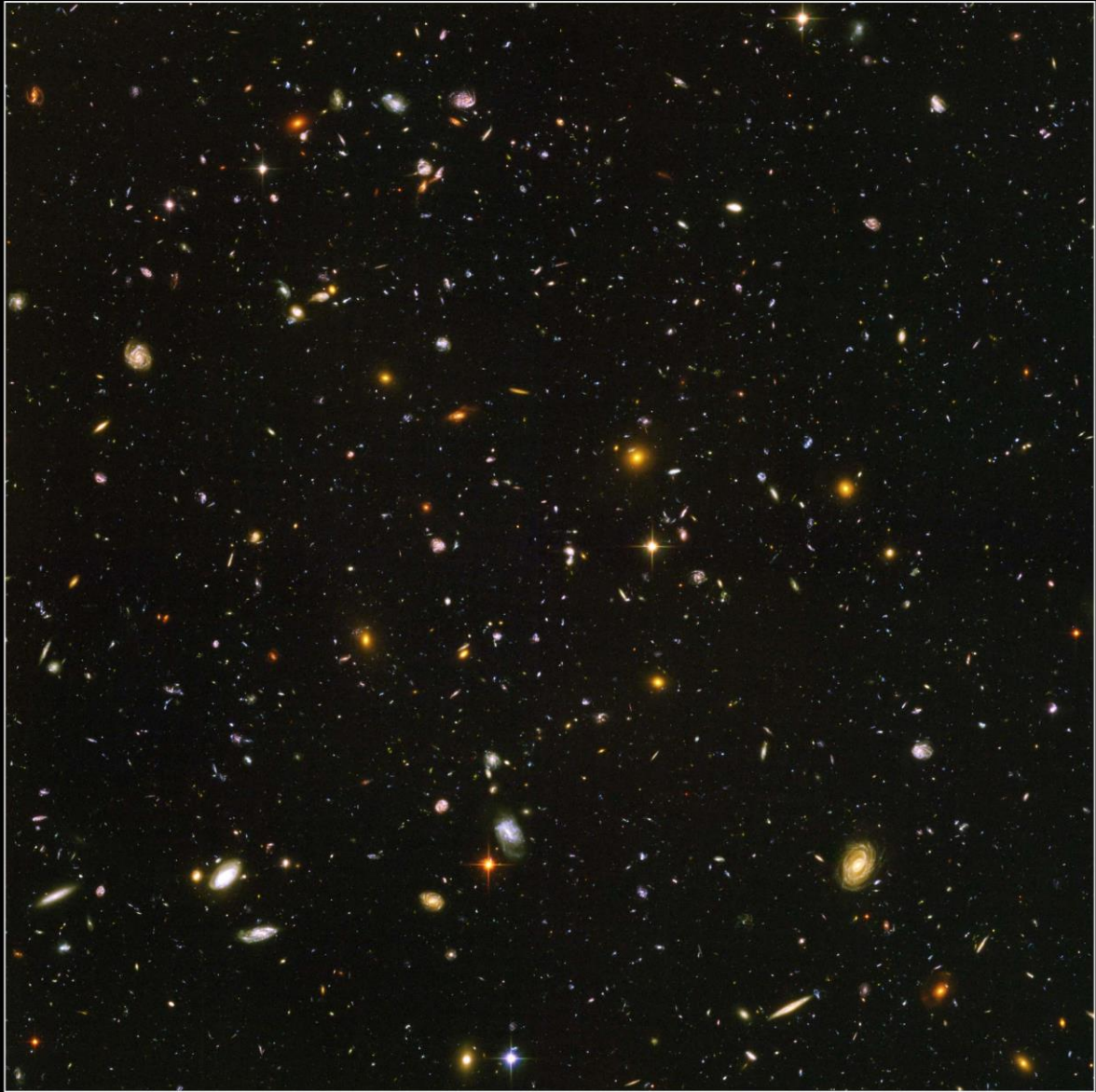
- It is powerful enough to see a firefly in Tokyo from Washington DC
- It has made more than 1.5 million observations since being launched
- On September 3, 2003, Hubble began pointing its camera at a small area in the night sky that was about a tenth the size of our moon. This area was chosen because it appeared to be complete blackness, with no stars visible to the naked eye.

Size of Hubble eXtreme Deep Field on the Sky



Hubble Extreme Deep Field area compared to our moon

- Hubble kept its camera pointed there for four months, collecting all the light it could. This is what Hubble saw.



Hubble Ultra Deep Field
Hubble Space Telescope • Advanced Camera for Surveys

NASA, ESA, S. Beckwith (STScI) and the HUDF Team

STScI-PRC04-07a

Hubble Ultra Deep Field

- This image has over 10,000 galaxies. Every point of light you see is a galaxy, and each of these galaxies has billions of stars.

The James Webb Telescope was launched on Christmas Day 2021.

- It is way more powerful than the Hubble telescope
- The pictures taken by the James Webb telescope are mind boggling!!
 - <https://webbtelescope.org/images>
- One can only wonder how much more of God's creation we will be able to see through this telescope as time goes on!



James Webb Space Telescope

What Are the Implications of this Astronomy Lesson?

- Our universe is beyond comprehension. Billions of galaxies; Quintillions of stars!
 - A quintillion is a 1 followed by 18 zeros!!
- I believe angels were created by God to serve and worship Him.
- I believe humans were created by God, and the primary reason for our existence is to worship Him.
- This leads to my struggle.
 - Since I believe that God desires to be worshipped, and that He created a quintillion stars, why would He only create one planet of life-forms to worship Him?
 - By conclusion I have to believe God created countless other planets for the express purpose of having their inhabitants worship Him.

- I understand this is speculation and cannot be Biblically substantiated, but I believe it is the only conclusion to the creation we have discovered via the Hubble and the James Webb telescopes.
- This then leads to the most disturbing thoughts I entertain. If there are other planets, are they in need of a Savior? And if they are, did Jesus have to redeem them also?
- I believe Satan was created by God and subsequently rebelled against his Creator (Isaiah 14:12-15, Ezekiel 28:12-17, Revelation 12:7-12). I believe God consigned Satan to Earth, and gave him this planet as his domain (John 14:28-31, Ephesians 2:1-2)
- In Job 1:6-7, we read, "One day the angels came to present themselves before the Lord, and Satan also came with them. The Lord said to Satan, "Where have you come from?". Satan answered the Lord, "From roaming throughout the earth, going back and forth on it."
- Given that Satan is not omnipresent, I believe Satan's sole domain is Earth (total speculative conclusion). And Satan corrupted this planet via Adam and Eve, causing Jesus to have to come and redeem it.
- So I am confused. I do not want to be a heretic, but does Jesus have to redeem fallen life-forms throughout the universe, or was Jesus assigned to this planet and others assigned to other planets?
- This of course raises HUGE problems with the Biblical writings identifying Jesus as the ONLY Son of God.