THE CLOCKWORK OF THE ECLIPSE

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On August 21, 2017, I traveled with my daughter, Kayla, and her friend, Maria, to Southeast Missouri State University in Cape Giradeau, to conduct some business and to watch the solar eclipse. Leaving them on campus with their friend, Cheyenne, I ate lunch with my son, Ryan and then went back to his apartment and visited with our friends, Grant and Joey. Together, the four of us watched the eclipse together. I must say that it surpassed my expectations. Just as had been predicted, an incredibly hot day with heat indexes of 105-110 suddenly became cool and pleasant. It shocked me. In referring to the sun, Psalm 19:5-6 says, "Which is as a bridegroom coming out of his chamber, and rejoiceth as a strong man to run a race. His going forth is from the end of the heaven, and his circuit unto the ends of it: and there is nothing hid from the heat thereof." In hiding the sun, the moon gave us a merciful respite from the heat. Street lights came on. Locusts and crickets began to chirp. I pointed out the planet Venus as being visible in the sky. To my amazement, I also noticed the shadow of the eclipse on a concrete step leading down to the apartment. The sun was shining through a hole in the metal steps above. It reminded of when I was boy in the 1970's during a solar eclipse. Having no special glasses, we used shoeboxes in which we made a hole and saw the sun's shadow on the paper.

Taking off our special glasses and viewing the total eclipse was an awe inspiring sight. My nephew, Eric Carlson, is a skilled photographer and took some amazing photographs of it in Nashville, TN. He described it as, "definitely the most incredible thing I have ever experienced."

Upon returning home later that evening, I watched some of Nasa's coverage around the country. They interviewed former NASA astronaut, Mike Massimino, who is an American professor of mechanical engineering at Columbia University. Mike talked about the amazing clockwork involved in a total solar eclipse and how it is unique to our planet.

The moon is about 400 times smaller than the sun in diameter. However, the moon is also about 400 times closer to us than the sun. As a result, the sun and moon have the same apparent size in the sky, and are able to exactly eclipse each other from the point of view of an observer on earth within the path of totality as I was on August 21st. Computer studies show that this phenomenon is unique among the known moons of the solar system. In their amazing book, *Our Created Moon*, Dr. Don DeYoung and Dr. John Whitcomb point out: "This fortuitous size distance balance between our moon and the sun is usually described as a 'surprising coincidence' or a 'lucky accident' in nature. However, this phenomenon actually points to yet another detail of design in the moon's creation for man's benefit and God's glory." In speaking of a total eclipse of the sun, Dr. Henry Morris wrote, "The exact reason why God designed it this way is not yet evident, but the relationship is too precise to be accidental."

Once on the island of Jamaica, Columbus threatened non-cooperative natives, "that, should they persist in their enmity, the moon would lose its light." Columbus used his knowledge of astronomy and of a coming eclipse of the moon to gain control over them. He knew from the Astronomic Calendar of Regiomontanus that a total lunar eclipse was due on February 29, 1504 and used that knowledge to his advantage. If not for the mathematical precision of the universe, how could astronomers predict eclipses? Who was the great Mathematician who designed all of this? How did all of this "clockwork" come about?

In Job 38:33, God asked Job, "Knowest thou the ordinances of heaven?" The word

ordinances means laws. God's heavenly bodies are operated to His finely-tuned celestial laws created by His wisdom. Friends, if the celestial bodies operate according to laws, there must be a Divine lawgiver!

The Psalmist said in Psalm 33:6,8,9: "By the word of the Lord were the heavens made; and all the host of them by the breath of his mouth . . . Let all the earth fear the Lord: let all the inhabitants of the world stand in awe of him. For he spake, and it was done; he commanded, and it stood fast." We can look at the heavens and know that they were created by the breath of the mouth of the Lord, by the power of the word of God.

Dr. Arthur M. Harding, Professor of Mathematics and Astronomy at the University of Arkansas, described our solar system by saying, "Surely here is a gigantic machine which makes us stand in awe and wonder at the power of the Creator who could design such a machine and put it into operation."

Astronaut Mike Massimino was right when he said the total solar eclipse was just like clockwork. I stood in awe and wonder!