

JESUS THE CREATOR

By Michael J. Caba

Often when we think of the person of Jesus, the picture of a bearded man in traditional Middle Eastern garb walking the dusty pathways of ancient Israel comes to mind—and that is all well and good since the image is quite accurate as far as it goes. Nevertheless, Jesus, being God incarnate, is so much more than the mere man conjured in our mental constructs that it greatly benefits us to expand our meditations to the full degree of His glory. Indeed, though it is not often a point of concerted reflection, the individual who worked as a manual laborer on construction projects in ancient Israel is also—get this—the creator of the entire cosmos. Further, the evidence of His divine handiwork, especially in His endeavors to make our planet conspicuously suitable for life, is pleasing to behold. We will pursue this latter subject in greater detail below, with a particular emphasis on the earth's interaction with the nearby nuclear furnace, the sun.

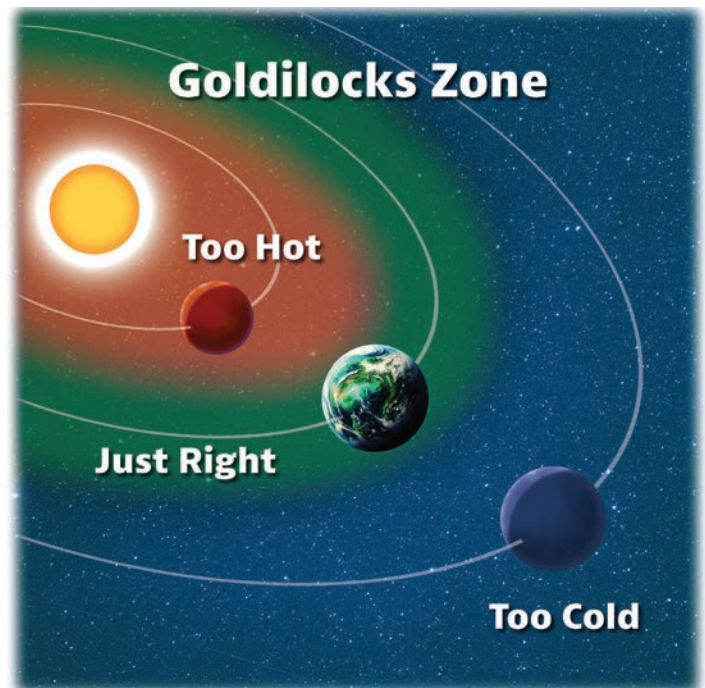
Scriptural Testimony

To establish the aforementioned matters, we begin with the straightforward scriptural testimony, “In the beginning, God created the heavens and the earth” (Gn 1:1). Further, the Scriptures are also explicit that Jesus, the second Person of the Trinity, who is also called the Son, was the creating agent within the Godhead. For example, John 1:3, speaking about Jesus, states, “All things were made through him, and without him was not any thing made that was made.” In addition, when creation was finished, God looked upon His handiwork and saw that it was “very good” (Gn 1:31), and, implying the earth's continued suitability for the flourishing of life, He told mankind to “be fruitful and multiply” (Gn 1:28). Thus, in a cosmos that is exceedingly deadly to life in a multitude of ways, we should nonetheless be able to find distinct aspects of the earth that protect life and allow it to flourish per God's design, even despite the detrimental effects of the entrance of sin into the human experience.

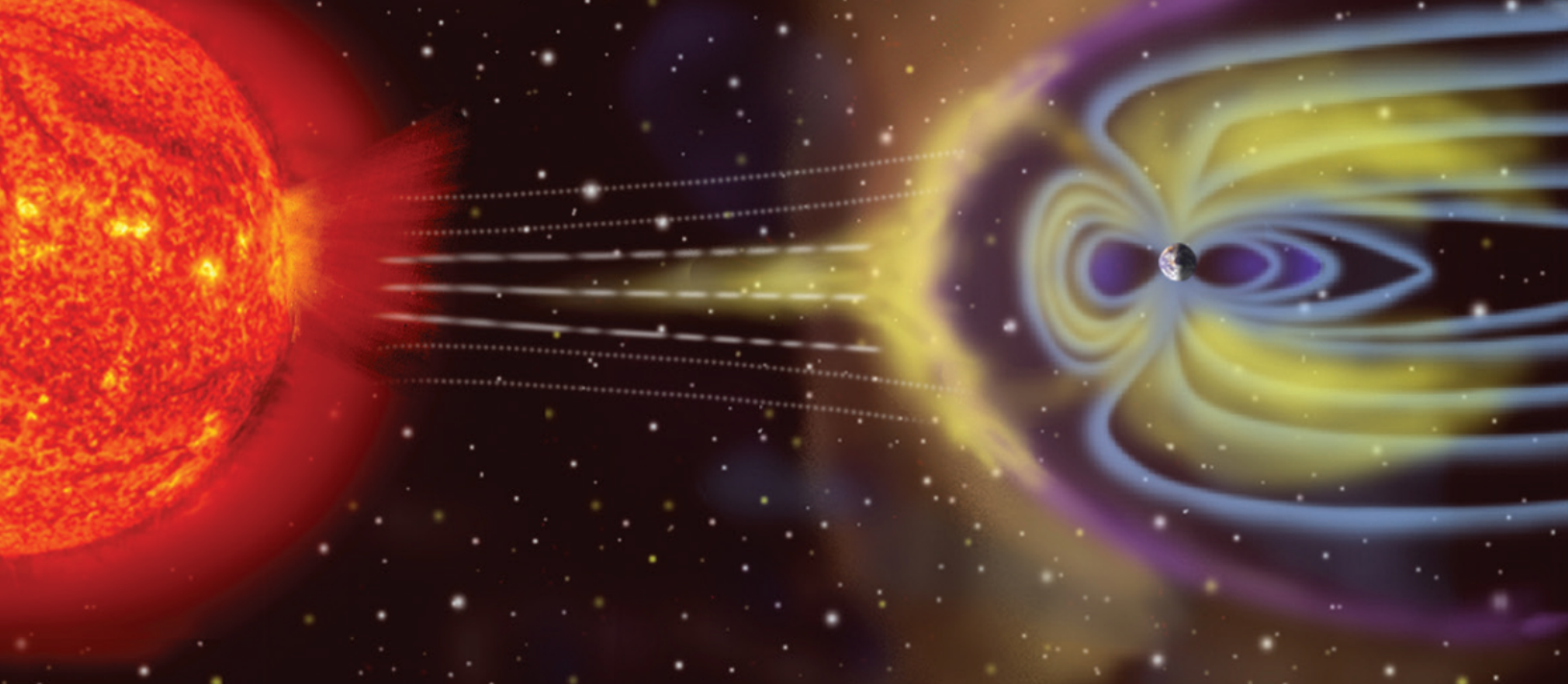
Goldilocks Zone

Concerning these distinct aspects of the earth, we can begin with the planet's distance from our local star, the sun. The sun is a giant ball of plasma undergoing nuclear fusion yielding temperatures in the range of 27,000,000°F at its core and hovering

around 10,000°F on its surface. Needless to say, these levels of heat would prove instantly deadly to life. Yet, to avoid the hazards at the opposite end of the temperature spectrum—the paralyzing cold of empty space, which is near negative 455°F—life must receive some warmth. Specifically, life needs to be in a temperature zone that allows for liquid water—or, as the saying goes, the temperature must be “just right.” That life can only exist in a certain heat range based primarily (though perhaps not exclusively¹) upon the distance to a nearby star is widely recognized in the scientific community, with the following quote from NASA being a typical acknowledgment: “Habitable zones are also known as Goldilocks' zones, where conditions might be just right – neither too hot nor too cold – for life.”² Not surprisingly, the fact that you are reading this article indicates that the earth is located in just such a habitable zone; in essence, its location is “very good.”



For life to exist, liquid water must be present, which is possible in a Goldilocks zone, where extremes of heat and cold are avoided. Earth is in just such a zone. Illustration by Pete Chadwell; © Michael J. Caba.



The earth is protected from the solar wind storm by its strong magnetic field. Illustration by NASA, https://www.esa.int/ESA_Multimedia/Images/2007/10/The_Sun_Earth_connection. Public Domain. Retrieved from <https://commons.wikimedia.org/w/index.php?curid=192450>.

Magnetic Field

Another aspect of the Earth-Sun relationship concerns how our local star pours forth a continuous stream of charged particles referred to as the solar wind. This particle stream, along with cosmic rays, has the potential to effectively render our planet a sterile realm. Yet, the earth has a key feature that provides shelter from the storm—namely, its magnetic field. NASA says, “Unlike Mercury, Venus, and Mars, Earth is surrounded by an immense magnetic field called the magnetosphere. . . . Our magnetosphere plays the role of gatekeeper, repelling . . . unwanted energy that’s harmful to life on Earth.”³ At least among the rocky planets of our solar system, the earth is uniquely structured for life to thrive.

Atmospheric Ozone

In addition, ultraviolet light from the sun needs to be constrained, though some UV can also be helpful. As the Centers for Disease Control and Prevention (CDC) explains, “Ultraviolet (UV) radiation is a form of non-ionizing radiation that is emitted by the sun and artificial sources, such as tanning beds. While it has some benefits for people, including the creation of Vitamin D, it also can cause health risks.”⁴ Consequently, a balancing act is necessary, and this act is performed by the ozone in our atmosphere. In this regard, NASA says, “Ozone protects life on Earth from the Sun’s ultraviolet (UV) radiation.”⁵ Thus, the atmospheric blanket above us helps to create a nice sweet spot for life to thrive.

The Moon

For our last example of the conspicuous intent of the Creator to make Earth a cradle for an assortment of life, we turn to our



View from the International Space Station of the earth’s atmosphere, which contains the ozone layer. Atmospheric ozone helps protect life on Earth from harmful UV radiation. Image courtesy of the Earth Science and Remote Sensing Unit, NASA Johnson Space Center. NASA Photo ID: ISS013-E-54329. Taken July 20, 2006. <https://eol.jsc.nasa.gov/SearchPhotos/photo.pl?mission=ISS013&roll=E&frame=54329>. Retrieved from <https://commons.wikimedia.org/w/index.php?curid=1722627>.

natural satellite, the moon. The moon always has one face turned toward the earth; in scientific terms it is “tidally locked” by the gravitational interaction between the two bodies. Yet, the tug-of-war between these two also steadies the earth on its particular axial tilt, producing a stability in the seasonal cycles that is conducive to the wide diversity of life extant on our globe. In the words of NASA, “the Moon makes Earth more livable by moderating our home planet’s wobble on its axis, leading to a relatively stable climate.”⁶ Thus, once again we see the natural world exhibiting a trait that enhances the ability of Earth to serve as a repository for life.

Important Questions

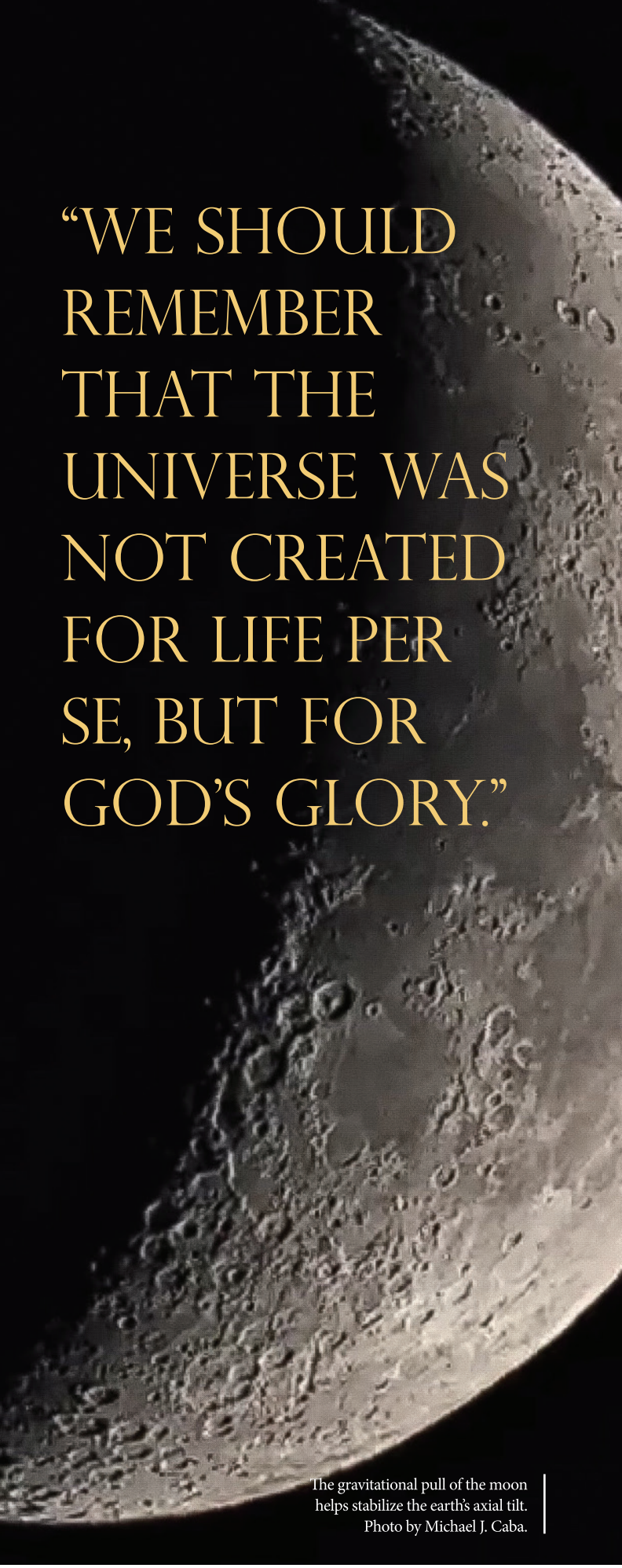
As is readily apparent from the above examples, to which many more could be added,⁷ there is a set of very explicit parameters for the existence of life as we know it—and the prerequisites are not just on a planetary level, but extend to the dynamics of the universe as a whole.⁸ This situation often causes a question to arise: What accounts for the life-favoring nature of the earth? Is it mere chance that so many factors are “just right,” or should we consider the involvement of a designing hand? Leaving solely human philosophical reflection aside for a moment, we know that for some the answer is straightforward: “In the beginning, God created the heavens and the earth.” This statement is consistent with the observed phenomena we have discussed (though, of course, we should remember that the universe was not created for life per se, but for God’s glory).

But another question also is quite common: Just how unique is the earth? This is a particularly relevant question now that we have discovered many thousands of planets around nearby stars other than our own sun, a fact indicating the probability that many billions of planets exist in the heavens above. In recognition of the tremendous overall expanse of the universe before us, it is often said that surely “there must” be other life out there, even intelligent life. However, another point in this discussion should also be considered. Specifically, what is the probability of any one planet possessing all the necessary attributes for life together at the same time? As a simplified example of this point, if the probability of a planet having a particular necessary attribute were 1/10, and if only twelve similarly probable necessary planetary attributes were required for life, then the odds of any given planet having all twelve of these necessary attributes would be one in a trillion $[(1/10)^{12} = 1/1,000,000,000,000]$ —a truly astronomical number.⁹

For sure, at this point in time we do not know the probability of any one planet having a necessary attribute—say, location in a habitable zone—and we further do not even know how many necessary attributes there are. Nonetheless, a distinct possibility exists that the odds against life existing elsewhere are staggeringly high. Thus, we should exercise caution in regard to proclamations concerning the extent of life in the cosmos; indeed, the Creator may have only created one such suitable abode. ❧

Note:

Dr. Caba owns a small astronomy education business that can be found at <https://telescopeguy.net>.



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The gravitational pull of the moon
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Photo by Michael J. Caba.