

# WORLDS WITHOUT NUMBER

*The heavens declare the glory of God.*

By R. Val Johnson  
Church Magazines

One of the great truths restored in our day is that we are literally spirit sons and daughters of God. In scriptures brought to light by the Prophet Joseph Smith, we read these words of our Heavenly Father: “I made the world, and men before they were in the flesh” (Moses 6:51; see also Moses 3:5).

Perhaps because the concept of *father* is easy to grasp, or perhaps because the idea that we are the offspring of God is so empowering (see Acts 17:28), we sometimes tend to focus on that personal relationship and forget that our Heavenly Father, through His Son, is also the Creator and Ruler of the universe. To Moses, He declared:

“I am the Lord God Almighty, and Endless is my name. . . .

“And worlds without number have I created; . . . and by the Son I created them, which is mine Only Begotten” (Moses 1:3, 33).

The God we worship is more powerful than we can comprehend. The Father, through His Son, not only created the heavens and the earth but also is the power that sustains those creations. Speaking of the Savior and the light, or power, by which He creates and governs, the Prophet Joseph wrote:

“He . . . ascended up on high, as also he descended below all things, in that he comprehended all things, that he might be in all and through all things, the light of truth. . . .

“Which light proceedeth forth from the presence of God to fill the immensity of space—

*A planetary nebula in the  
Musca constellation.<sup>1</sup>*

“The light which is in all things, which giveth life to all things, which is the law by which all things are governed, even the power of God” (D&C 88:6, 12–13).

While God is able to comprehend and govern all things, we mortals struggle to comprehend even the most rudimentary of His works. And yet, we are blessed to live in the fulness of times “in the which nothing shall be withheld. . . .

“ . . . If there be bounds set to the heavens or to the seas, or to the dry land, or to the sun, moon, or stars—

“All the times of their revolutions, all the appointed days, months, and years, and . . . all their glories, laws, and set times, shall be revealed in the days of the dispensation of the fulness of times” (D&C 121:28, 30–31).

That promised knowledge is being revealed to us by faith, foremost in the revelations of the Prophet Joseph Smith. It is also coming to us by study. (See D&C 88:118.) Astronomers, with the aid of powerful instruments, are helping us glimpse the extent of God’s dominions. While astrophysics in the future will surely be modified as more is learned of the universe, what we have learned so far is mind-boggling. And if anything is true



of the research done over the past several decades, it is that the more we learn, the more incredible our view of God's creations becomes.

Caught up in the wonder of this expanding view of the cosmos, we can only kneel in awed reverence before Him, the creator and sustainer of it, and express gratitude that this divine, all-powerful Being is our Father. And we stand in stunned astonishment to learn that the purpose of all the work He has done is to bring about our immortality and eternal life (see Moses 1:39). Knowing all this, should we not gladly obey His counsel and, with eagerness, receive the ordinances and covenants that will guide us to eternal life with Him?

What follows is just a glimpse of the majesty and glory of our Heavenly Father's handiwork.



### **In the Beginning**

Our sun was created to give light and life to the earth on which we live. For example, the miracle of photosynthesis enables plants to convert sunlight into the matter we eat and to release into the environment the oxygen we breathe. Our planet is just the right distance from the sun—neither too far away (and thus too cold) nor too close (and thus too hot) to sustain the amazing diversity of animals, plants, and people that populate it.

### **Moving in His Majesty and Power**

Light travels at 186,282 miles (299,792 km) per second. As far as we can tell, nothing in the physical universe can go faster. Because light travels so fast, and because its speed is constant, we can use it to measure the incredible distances in the universe. Light from the sun takes only eight minutes to reach earth, which revolves around the sun at an average of 93 million miles (149.7 million km). A number of other planets and objects revolve around the sun. Circling the sun at the edge of this solar system is a cloud of small, icy objects. They are so far away that it takes seven hours for light from the sun to reach them. That is nothing compared with the distance to our nearest stellar neighbor. Light from Proxima Centauri travels more than four years to reach us. Light from the nearest galaxy, Andromeda, travels to us in about two million years. Because of the sheer size of the universe, astronomers commonly measure distances in light-years, so Andromeda is said to be two million light-years away.

*Left: Mexico, including the Baja California Peninsula, as seen from space.<sup>2</sup>  
Above: The planet Saturn.<sup>3</sup>*





**WE ARE  
EVERYTHING  
TO GOD**

"This is a paradox of man: compared to God, man is nothing; yet we are everything to God. While against the backdrop of infinite creation we may appear to be nothing, we have a spark of eternal fire burning within our breast. We have the incomprehensible promise of exaltation—worlds without end—within our grasp. And it is God's great desire to help us reach it."

President Dieter F. Uchtdorf, Second Counselor in the First Presidency, "You Matter to Him," *Ensign*, Nov. 2011, 20.



### **Great Is Our Lord, and of Great Power**

Most stars are grouped into communities called galaxies. Our own, the Milky Way, is a medium-sized spiral galaxy more than 100 thousand light-years in diameter. It has between 200 and 400 billion stars. Yet it is only one of billions of galaxies—estimates range from 100 billion to 500 billion. The largest galaxy discovered so far has 100 trillion stars. All those stars come in a dazzling array of colors and sizes, some more than a thousand times larger than our own.

Together, all the galaxies in the visible universe contain an estimated 30 billion trillion stars. Yet that number may be a small fraction of all there are. Evidence suggests that we can see only about 5 percent of all there is (the rest is “dark matter” and “dark energy,” so called because it can’t be seen or detected directly by the instruments we have). The universe, in fact, may be infinite in size.

And God controls it all.

*Left: Spiral galaxy in the Coma Berenices constellation.<sup>4</sup>*

*Above: Two merging star clusters in the Tarantula Nebula.<sup>5</sup>*



### In His Own Image

In recent years, with advanced telescopes and other instruments, scientists have begun to search not just for stars but also for planets around those stars. The number of planets discovered is growing rapidly. As of March 2013, the number surpassed 900, and some appeared to lie in the same habitable zone as our earth. The number of planets in our galaxy alone could easily be in the hundreds of billions. Considering that there are hundreds of billions of galaxies in the visible universe, the number of planets is so large as to be incomprehensible—truly worlds without number (see Moses 1:33–35).

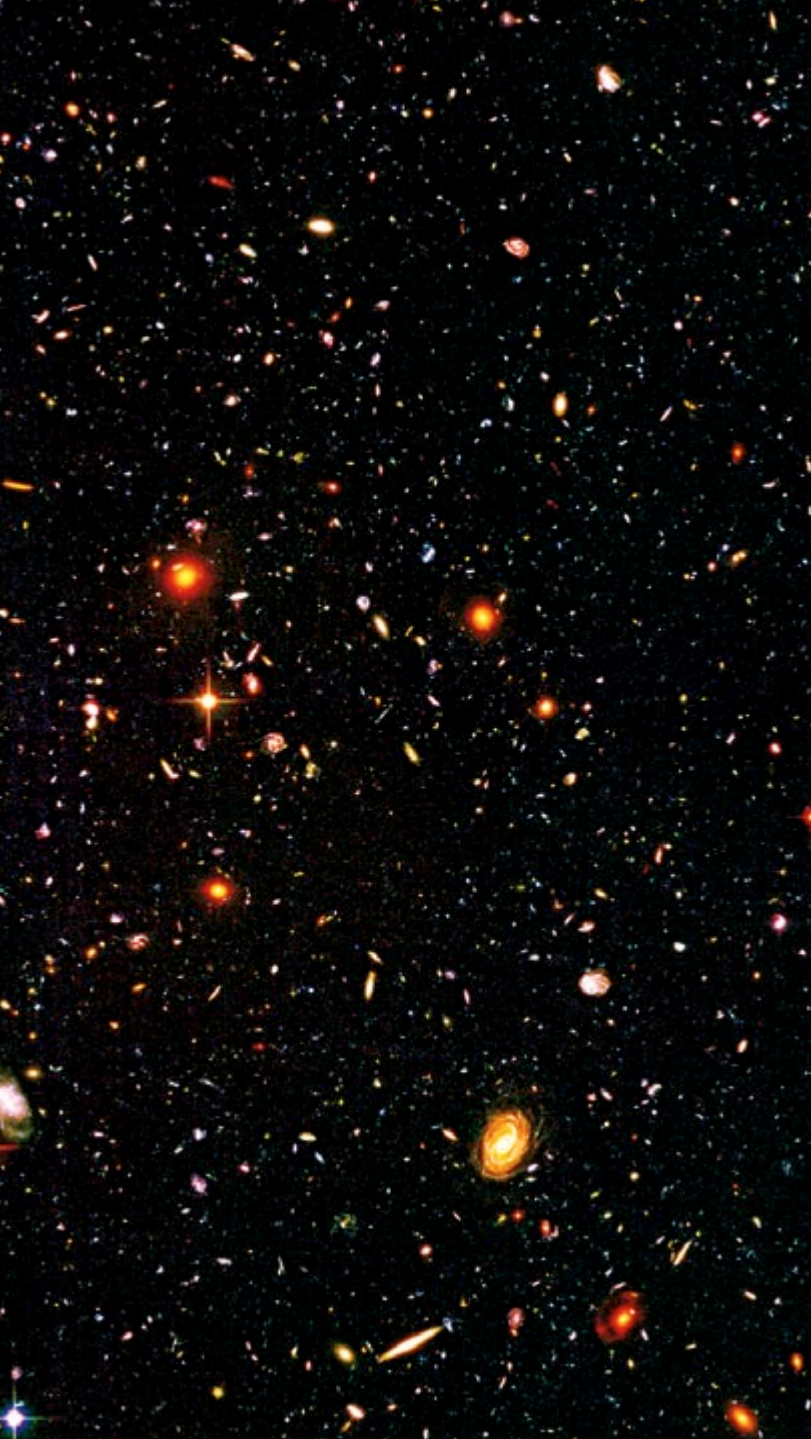
And scattered among them, as the Prophet Joseph Smith testified, are worlds whose “inhabitants . . . are begotten sons and daughters unto God” (D&C 76:24; see also Joseph Fielding Smith, “Out of the Darkness,” *Ensign*, June 1971, 2). ■

*Above: Christus statue.<sup>6</sup>  
Center: Hubble Ultra-Deep Field image showing thousands of galaxies.<sup>7</sup>  
Right: Another view of the Tarantula Nebula.<sup>8</sup>*

### ANSWERING QUESTIONS

**What do Latter-day Saints believe about the nature of God?**

**W**e understand that the Godhead consists of three separate individuals: “The Father has a body of flesh and bones as tangible as man’s; the Son also; but the Holy Ghost has not a body of flesh and bones, but is a personage of Spirit” (D&C 130:22). While the bodies Heavenly Father and Jesus Christ have are physical, they are not mortal; they are immortal and glorified. All divine



beings are imbued with that glory—variously described in scripture as light, power, truth, and Spirit (see D&C 88:6–68)—and can thus be considered “one” (see John 17; D&C 20:28; 3 Nephi 11:35–36). Through this Spirit, God “comprehendeth all things, and all things are before him, and all things are round about him; . . . and all things are by him, and of him, even God, forever and ever” (D&C 88:41; see also Psalm 139:7–12; Bible Dictionary, “God”). For more information on this topic, see Christoffel Golden Jr., “The Father and the Son,” *Ensign*, May 2013, 99–101.

#### NOTES ON IMAGES

1. Pages 40–41: Nebula NGC 5189, made up of materials expelled by a dying star, is about 3 light-years across and approximately 3,000 light-years from Earth; courtesy of NASA, ESA, and the Hubble Heritage Team (STScI/AURA).
2. Pages 42–43: View of Mexico taken from the *Atlantis* space shuttle, NASA Identifier: STS081-711-042; courtesy of NASA and [www.dvidshub.net](http://www.dvidshub.net).
3. Page 43: The planet Saturn as photographed by *Cassini* robotic space explorer; courtesy of NASA/JPL/Space Science Institute.
4. Pages 44–45: The spiral galaxy NGC 4414, similar in form to our Milky Way Galaxy, is located about 60 million light-years from Earth; courtesy of the Hubble Heritage Team (AURA/STScI/NASA).
5. Page 45: Two merging star clusters in a region of active star formation known as the Tarantula Nebula, about 170,000 light-years from Earth; courtesy of NASA, ESA, and E. Sabbi (ESA/STScI).
6. Page 46: Detail from the *Christus*, sculpture by Aldo Rebecchi, based on an original by Bertel Thorvaldsen.
7. Pages 46–47: Composite image known as the Hubble Ultra-Deep Field (HUDF). The image was created from multiple exposures taken of the same area of seemingly empty, black space. Because the light from this area was so distant and faint, multiple exposures were needed to gather enough data to create the HUDF image. Almost all the specks of light visible in this photograph are galaxies (approximately 10,000). The area of this photograph is about the same area of the night sky that would be seen looking through an eight-foot-long soda straw. Courtesy of NASA, ESA, S. Beckwith (STScI), and the HUDF Team.
8. Page 47: The Tarantula Nebula is part of the Large Magellanic Cloud, a galaxy located near our Milky Way Galaxy; courtesy of NASA, ESA, and the Hubble Heritage Team (STScI/AURA).