

We see two important points here. First of all the heavens can't be measured. Yes, there have been guesses and yet, as we have seen, the universe is expanding and we don't know how far it goes out there, some 12 to 14 billion light years or more, probably much more than that! Secondly, the Lord says that we will not be able to count the host of heaven, we will not be able to count the stars, they can't be numbered!

In regards to how many stars are out there, and there is more than 1,056 or even 3,000, Fraser Cain writes, "It's a great big Universe out there, with a huge number of stars. But how many stars are there, exactly? How many stars are there in the Universe? Of course it's a difficult question to answer, because the Universe is a vast place and our telescopes can't reach every corner to count the number of stars. But we can make some rough estimates.

Almost all the stars in the Universe are collected together into galaxies. They can be small dwarf galaxies, with just 10 million or so stars, or they can be monstrous irregular galaxies with 10 trillion stars or more. Our own Milky Way galaxy seems to contain about 200 billion stars; and we're actually about average number of stars.

So an average galaxy contains between 10^{11} and 10^{12} stars. In other words, galaxies, on average have between 100 billion and 1 trillion numbers of stars. Now, how many galaxies are there? Astronomers estimate that there are approximately 100 billion to 1 trillion galaxies in the Universe. So if you multiply those two numbers together, you get between 10^{22} and 10^{24} stars in the Universe. How many stars? There are between 10 sextillion and 1 septillion stars in the Universe. That's a large number of stars." [No kidding!] - Fraser Cain, How Many Stars?, January 28, 2009

3. OCEANOGRAPHY

We are now going to look at oceanography because again, what man did not know for many years, God did and spoke it forth in His Word! Solomon, long ago wrote in Ecclesiastes 1:7, "All the rivers run into the sea. Yet the sea is not full: To the place from which the rivers come, There they return again." How true that statement is. Let me give you one example. The Mississippi River, with an average flow rate, when running at an average rate of flow, dumps approximately 6,052,500 gallons of water into the Gulf of Mexico every second. Can you imagine that, over 6 million gallons of water per second! And keep in mind that this is the water that is dumped into the oceans from just one river!

What happened to all that water? Where does it go? Once again the Bible tells us in Ecclesiastes 11:3a we are told, "If the clouds are full of rain, They empty themselves upon the earth . . ." And in Amos 9:6b we are told, ". . . Who calls for the waters of the sea, And pours them out on the face of the earth - The Lord is His name." In other words, it is that water cycle and this was not fully understood until the 16th and 17th centuries! That means more than 2,000 years before this was discovered, God told us about it! The water that goes into the sea is evaporated and then it comes down again upon the land and it goes into the sea once again!

Did you know that there are paths in the sea? There are, not because I said so but God did. In Psalm 8:8b we are told, ". . . And the fish of the sea That pass through the paths of the seas."

Did you know that this was discovered by a man who had this verse read to him! Matthew Fontaine Maury, a United States Navy officer was one of the people who charted the oceans currents. Not the first but one of the ones that used the Bible to prove what he believed.

Maury took God at His Word and found that the Word of God was fully accurate, completely accurate. He gave a defense for what he believed in, he did not compromise his faith but stood strong in what he believed, the Scriptures to be the authoritative, infallible, inerrant Word of God! May we do the same!

The Bible also speaks very clearly on the hydrological cycle or the water-vapor cycle. In Job 36:27-29 we are told, "For He draws up droplets of water, Which distill as rain from the mist, Which the clouds drop down And pour abundantly on man. Indeed, can anyone understand the spreading of clouds, The thunder from His canopy?"

It is interesting because both the Hebrew and English definition of the word "distill" speak of it as follows, this word distill speaks of having small moisture droplets of steam or vapor condensate and collect into water drops large enough to become heavy and to fall! In fact, what we see here in Job is the complete hydrological cycle of evaporation, cloud formation and precipitation! The hydrological cycle was first "discovered" by two "great" scientists named Perrault and Marriotte in the 1700's. Yet it was described in the Bible thousands of years before that.

Did you know that there is weight to wind? There is! So when someone says you are full of hot air, that means what you are saying is heavy man! No, sorry but what can I say. I guess, turn to Job 28:24-26 and I will show you what I mean. We are told, "For He looks to the ends of the earth, And sees under the whole heavens, To establish a weight for the wind, And apportion the waters by measure. When He made a law for the rain, And a path for the thunderbolt."

Did you realize that the fact that air has *weight* was proven scientifically only about 300 years ago? Imagine that, only 300 years ago! Is this important? You bet it is. You see, the relative weights of air and water are needed for the efficient functioning of the world's hydrologic cycle, which in turn sustains life on the earth. You see, God knew this, He created the heavens and the earth and He has told us long before we discovered it! It was not random chance happenings that all this is working out. There is a God who created the heavens and the earth, end of story!

We can go on but I hope you can see that when the Bible speaks on matters of science, it is 100% accurate. If there is something that seems to be a discrepancy, it is because we are either misunderstanding what has been said or it is the way we are looking at the issue. Again, science has to keep correcting itself, God does not!

Robert Ingram wrote, "Science is a marvelous tool given by God to discover the secrets of the cosmos and to elicit praise from men. When science is rightly studied within the context of the faith it is an ally, not an enemy." May we not forget that!



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What the Bible says about . . . The Bible Part 2

The Bible is not a science textbook but when it speaks about scientific things, it does so with 100% accuracy as we will see. So let's examine the scientific evidence for the Bible.

SCIENTIFIC EVIDENCE

1. FUNDAMENTALS OF SCIENCE

We might as well start with the fundamentals of science, or the basics of science. Herbert Spencer, the famous British philosopher who lived back in 1820 to 1903 made an interesting observation. He said that there were basically five fundamentals of science. They are: **Time, Force, Action, Space, and Matter**. So a little over 100 years ago Spencer came up with this and it still holds true today.

But Spencer was not the first to come up with this. The Bible declared this some 3500 years ago! Who could write such a thing as this? Moses did in Genesis 1:1. Let me show you these five fundamentals of Science in the very first verse of the Bible. We are told, "In the beginning [time] God [force] created [action] the heavens [space] and the earth [matter]."

Isn't that interesting that in the very first verse of the Bible we can see that there is something very special, very unique about this book! Maybe you are not too impressed by this. If you are not, hang in there, I have much more to show you that will blow your mind away!

2. ASTRONOMY

The next thing we are going to look at is astronomy or the scientific study of the universe, especially of the motions, positions, sizes, composition, and behavior of astronomical objects.

A. THE EARTH

The first one we are going to be looking at is the earth. I am sure you have heard people call Christians who believe in the Bible, who believe in creation, "flat earthers" or that we believe in a flat earth! That is ridiculous and the only ones who could believe that are those that deny the Scriptures! Interestingly enough if go on the Internet and type that in you will see many sites related to this and people who today, in the twenty-first century, believe this, that the earth is flat and they are not Christian!

In Isaiah 40:22 we are told, **"It is He who sits above the circle of the earth, And its inhabitants are like grasshoppers, Who stretches out the heavens like a curtain, And spreads them out like a tent to dwell in."** Notice that it says, **"circle of the earth"** and not that the earth is flat! Over 2700 years ago the prophet Isaiah wrote this! In Proverbs 8:27 we are told, **"When He prepared the heavens, I was there, When He drew a circle on the face of the deep."** The shape of the earth is a sphere, it is round, not flat and God not only told us, but He should know because He created it!

Not only that, but in the oldest book of the Bible, the book of Job we are told, **"He stretches out the north over empty space; He hangs the earth on nothing."** Now this is an amazing statement for the people of Job's day! Job is telling us that the earth hangs upon nothing, there is nothing holding it up. Keep in mind that the Hindu people believed the earth was held up or suspended upon four elephants which stood on the back of a giant tortoise that was floating on the surface of the world's waters!

There were others who believed that the earth was supported on the shoulders of Atlas or some strong man! For the Vedic priests, the earth was set on 12 solid pillars; its upper side was its only habitable side. The Altaic people of Northern Siberia affirm that their mighty Ulgen created the earth on the waters and placed under it three great fish to support it. And the Tartars and many of the other tribes of Eurasia believed the earth to be supported by a great bull! Man got it wrong; God got it right and spoke through Job to let us know that there is nothing observable holding up the earth! Job spoke this some 4,000 years ago!

Now what about this **"empty space"** to the north? Recently scientists have discovered that an area to the north of the axis of our earth, toward the polar star, is almost empty of stars in contrast to the other directions! In fact, Mitchell Waldrop wrote this in regards to this emptiness to the north in Science magazine, "The recently announced 'hole in space,' a 300 million-light-year gap in the distribution of galaxies, has taken cosmologists by surprise. . . . But three very deep core samples in the Northern Hemisphere, lying in the general direction of the constellation Bootes, showed striking gaps in the red shift distribution." (Mitchell Waldrop, "Delving the Hole In Space," Science magazine, Nov. 27, 1981).

Interestingly enough, this emptiness in the direction to the North of our solar system is not visible by the naked eye! How did Job know this? God knew it and spoke through Job. Science finally caught up with the Bible!

We also see that the First and Second Laws of Thermodynamics are spoken of in the Scriptures, long before man discovered them! The First Law or the Law of Conservation of Energy speaks of the fact that energy can neither be created nor destroyed. Isaac Asimov put it like this, "Energy can be transferred from one place to another or transformed from one form to another, but it can be neither created nor destroyed." To put it simply, all the energy that exists in our universe remains constant and it can never change!

How does this relate to us as Christians and what we believe? When God created the universe that is all there is, there is no new energy or matter that is created! And think about this. This Law was discovered in the nineteenth and twenty centuries! And yet, in Genesis 2:1 we are told, **"Thus the heavens and the earth, and all the host of them, were finished."** Now we may not think too much about what is said here, but I think it speaks volumes of our God!

The word that Moses used for **"finished"** in the Hebrew is in the past definite tense for this verb and it speaks of a completed action in the past and this action will never occur again! That is exactly what the First Law of Thermodynamics says or the Law of Conservation of Energy. Neither matter nor energy can be created; they can only be changed from one form to another!

The Second Law of Thermodynamics or the Entropy Law states that all systems and elements in the universe are wearing down. They are moving from order to disorder. This is in direct opposition to the Theory of Evolution which tells us that all simple systems and elements can become increasingly more organized and complicated by random chance. The Theory of Evolution is in direct opposition to the Second Law of Thermodynamics or the Entropy Law and yet they believe both are possible because the only other explanation is that there is a God!

Again, this was not discovered until the nineteenth and twenty centuries! But listen to what God tells us in His Word about things wearing down, moving from order to disorder, the Entropy Law! In Isaiah 51:6 we are told, **"Lift up your eyes to the heavens. And look on the earth beneath. For the heavens will vanish away like smoke, The earth will grow old like a garment, And those who dwell in it will die in like manner; But My salvation will be forever. And My righteousness will not be abolished."** In other words, this universe is wearing down, it is moving from order when it was created to disorder when it will be abolished or dissolved!

In Psalm 102:26 we are told, **"They will perish, but You will endure; Yes, they will all grow old like a garment; Like a cloak You will change them, And they will be changed."** The Psalmist is speaking of the heavens and the earth here and he is saying that they are growing old, they will not last forever! We see Paul quote this in Hebrews 1:11-12 where we are told, **"They will perish, but You remain; And they will all grow old like a garment; Like a cloak You will fold them up, And they will be changed. But You are the same, And Your years will not fail."**

These two Laws did not come into effect until after sin entered the world. So man is not evolving, getting better, but moving from order, perfection to disorder and decay! That is the Entropy Law and God told us about it long before man discovered it!

B. THE UNIVERSE

Look at the universe and how big it is and let's see what God has to say about it. First of all, how big is our universe? That is a great question and listen carefully to what Brent Tully wrote for Nova regarding this. He wrote,

". . . The most distant galaxies we can now see are 10 or 12 billion light-years away. We could never see a galaxy that is farther away in light travel time than the universe is old - an estimated 14 billion or so years. Thus, we are surrounded by a "horizon" that we cannot look beyond - a horizon set by the distance that light can travel over the age of the universe. This horizon describes the *visible* universe - a region some 28 billion light years in diameter. But what are the horizons of a civilization that inhabits the most distant galaxies we see? And what about galaxies at the limits of their vision? There is every reason to think that the universe extends a long way beyond the part of the universe we can see. In fact, a variety of observations suggest that our visible patch may be a small fraction - maybe an infinitely small fraction - of the whole universe. . . ."

- Brent Tully, How Big is the Universe?, 11/11/00

In other words, we can't really know how big it is because if the universe is only 14 billion years old and light travels at 186,000 miles per second, we can't go beyond 14 billion light years because that is all the time we have for light to travel that far! First of all that can only be true if the speed of light was a constant and when God created the heavens and the earth did He place these stars and galaxies already that far out and the light was already present upon the earth? Could be! And He thinks the universe is far bigger than we could ever imagine! Maybe bigger than he could but God created it and He measures it with the span of His hand!

Also, which is interesting to me, scientists today are telling us that the universe is expanding. Does the Bible speak of this? I believe that it does. In Isaiah 40:22 we are told, **"It is He who sits above the circle of the earth, And its inhabitants are like grasshoppers, Who stretches out the heavens like a curtain, And spreads them out like a tent to dwell in."** As you read this it seems to be saying that our universe is expanding since its creation because God is stretching it out, He is the one who is causing it to expand!

You can't see this happening with the naked eye and yet God has told us that He is doing this. Do we have to see it to believe it? If you have to please understand that this was not discovered until the 1920's as astronomers saw with the telescope that virtually all clusters of galaxies appear to be moving away from all other clusters or that the universe is expanding! Now do you believe it? Now here is another so-called problem!

In Isaiah 34:4 we are told, **"All the host of heaven shall be dissolved, And the heavens shall be rolled up like a scroll; All their host shall fall down As the leaf falls from the vine, And as fruit falling from a fig tree."** This verse is speaking of the coming judgment of God upon a Christ rejecting world and the creation of a new heavens and a new earth. But in doing so it talks about the heavens being rolled up like a scroll and that seems to indicate that the universe is flat. Great, first we had to deal with a flat earth and clear that up but now the Bible tells us the universe is flat. That can't be right, or can it? How can we be in a flat universe?

Brent Tully makes this interesting observation, something that we did not know until the recent past. He wrote,

"It turns out that the basic inflation picture satisfies a number of observed facts about the universe. One fact is particularly interesting because the better our observations become the more tightly they agree with a prediction of the inflation model. This is that the universe should be "flat" - no overall curvature of space. Spectacularly convincing evidence - recent measurements of irregularities in the microwave background radiation - supports this proposition." - Brent Tully, How Big is the Universe? 11/11/00

So the Bible is right, the universe is flat and God is going to roll it up like a scroll is rolled up! Once again man has caught up with God!

What about all the stars in the sky? In 150 A. D. Ptolemy counted 1,056 stars and he claimed that the number could not exceed 3,000! And yet, in Jeremiah 31:37 and 33:22 we are told, **"Thus says the Lord: 'If heaven above can be measured, And the foundations of the earth searched out beneath, I will also cast off all the seed of Israel For all that they have done, says the Lord.' . . . 'As the host of heaven cannot be numbered, nor the sand of the sea measured, so will I multiply the descendants of David My servant and the Levites who minister to Me."**