



God Created the Firmament

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And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so. And God called the firmament Heaven. And the evening and the morning were the second day. (Genesis 1:6-8)

God's work on the second day of creation is also marvelous, miraculous, and beneficial. On this day he made the firmament. The Hebrew word means "spread out" or "expanse"; it speaks of God who "spread out the sky", while the Psalmist (104:2) says that God stretches out the heavens like a curtain."

The firmament includes our atmosphere, since Genesis 1:20 tells us that the birds fly "in the open firmament of heaven." Science has learned a great deal about the atmosphere which God created. We know, for example, that it may extend from 3,000 to 4,000 miles above sea level (most of our atmosphere is in the troposphere that extends approximately 5 to 10 miles above sea level), that it has various rather ill-defined layers, and that the temperature varies tremendously as one ascends. We know too that our atmosphere is really a great ocean of air, weighing approximately 15 pounds for a column one square inch at sea level and composed primarily of nitrogen (78%) and oxygen (21%). No matter where we might be, at sea level or at 15,000 feet above sea level, that ratio always remains constant.

What is the Purpose of the Firmament?

God said that its purpose is to divide "the waters which were above the firmament." That simple statement describes a profound miracle, the miracle of water in the atmosphere. We can see the waters under the firmament all around us in the oceans, lakes, and rivers of the world; we cannot see the waters above us, unless we happen to be caught in a rainstorm. So, we seldom think about the moisture in the atmosphere. Yet, there is actually so much water above us that scientists estimate some 15 million tons falls upon the earth in the form of rain, snow, hail, and sleet every second of the entire year. An estimated 45,000 thunderstorms occur throughout the world daily.

On December 26, 1948 an estimated 99 million tons of snow fell on New York City in one day! An inch of rain on an acre of land amounts to 113 tons of water, while an inch of rainfall on a state like Iowa (58,000 square miles), not an unusual event, amounts to an incredible 4 billion tons of water. Multiply that figure by 33 inches of average annual rainfall in Iowa, and you will have a little idea of the unbelievable huge amount of water that God places into the firmament.



Job asks (38:25-27) who it is that causes it "to rain on the earth where no man is; on the wilderness where in there is no man. . . .to cause the bud of the tender herb to spring forth?" The great prophet Isaiah answered this question (41:17, 18): "When the poor and needy seek water, and there is none, and their tongue faileth for thirst, I, the Lord, will hear them, I the God of Israel will not forsake them. I will open rivers in high places, and fountains in the midst of the valleys: I will make the wilderness a pool of water, and the dry land springs of water." Deuteronomy 28:12 tells us that rain is one of the blessings of an obedient nation, while Deuteronomy 28:24 tells us that drought is one of the curses of God upon an immoral and disobedient nation. We ought to learn that lesson very well in America.

There is, of course, a huge amount of water in the oceans of the world, but before it will help us, God must purify trillions of barrels of it; He must transport this incredibly large amount to 'every spot on earth' and He must let it fall gently to water the land. If we were given this problem, we should have to throw up our hands in despair. No matter how much time, effort, and money we should expend upon this project, that work is simply far beyond mankind's ability. The United States alone receives an average of some 7 trillion tons of moisture annually. All of the world's trains, trucks, and freighters, working around the clock, could not transport even a fraction of that amount from the ocean to us. And if that is true of the United States, which averages some 30 inches of rainfall a year, what shall we say about parts of Hawaii and Southeast Asia which averages more than 400 inches of rainfall annually? The amount of rain that falls on our world staggers the imagination.

Yes, our God "calls for the waters of the sea, and pours them upon the face of the earth" (Amos 9:6), either in the Flood, as at Noah's time or in the form of gentle rain, as in our day. In His omniscience He created the firmament and through it a perfect method of providing rain for our fields and gardens, for the mountains and for the valleys, for the lakes and for the oceans (they also need rainfall to replenish their oxygen supply).



This is what God did to achieve that purpose: He created the sun and gave it the power to expand water some 900 times (we call that process evaporation). Since water is approximately 800 times heavier than air, the expanded moisture easily ascends into the atmosphere while all of its impurities are left behind. Our God has given the sun the remarkable ability to raise as much as 5,000 tons of water from one square mile of ocean surface every hour.

Our God gathered the waters into one place, let the dry land appear, and created plant life on the third day. Here you can read Genesis 1:9-13. By the morning of the third creation day, our God had taken some gigantic steps toward preparing this world as the perfect home for mankind. Light had been made, and that was the utmost necessity for both plant and animal life. Then there was the firmament with its blue sky, its life-preserving air, its water, and all its other blessings for mankind. Yet, a totally inconceivable amount of work still remained before this Earth would be exactly the kind of home that a loving God had planned for His children. The world was still one great disorganized mass, composed of a mixture of water, soil, rocks, and minerals. There was not a trace of life anywhere. That was the condition to which our God now turned all of His attention, and this was the way He proceeded:

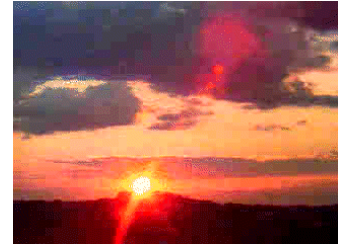
Our God commanded, "Let the waters under the heaven be gathered together unto one place." (Genesis 1:9)

Immediately that is exactly what happened! What a gigantic feat! Nothing quite like this colossal convulsion ever happened again in all the world's history, with only Noah's Flood approaching it in magnitude. To accomplish this amazing great miracle, God had to depress the ocean floor as much as 37,000 feet in some places (three-fourths of the oceans are two or more miles deep); He had to separate approximately 320 million cubic miles of water from everything else on Earth; and he needed to transport all of that water to one place in one day's time. If you have ever seen the mighty Mississippi in flood stage, you probably saw less than one-millionth as much water as God moved on that great third creation day. How well does the firmament correlate with the rest of God's creation?



What a blessing that the firmament fits wonderfully well with the rest of God's marvelous creation! For example, our bodies are designed to withstand exactly the approximately 15 psi. of air pressure at sea level. If we would rise high enough into the atmosphere without protection, our bodies would eventually explode and the blood would boil, because the weight of air is so much less at the higher altitudes. Everything else on Earth is also designed to withstand the same amount of air pressure.

Long ago King David extolled our God with that familiar 19th Psalm, whose opening verse in this: “The heavens declare the glory of God; and the firmament sheweth His handiwork.” “Praise ye the Lord. Praise God in His sanctuary; praise Him in the firmament of His power.” (Psalm 150:1) What else can we do but praise and thank God for His tremendous work in creating the firmament that gives us our many varieties of weather, the beautiful clouds, the magnificent sunrises and sunsets, the life-preserving rain, the awe-inspiring northern lights, the proper air for breathing, the comparatively moderate climate, etc. Indeed, what God said at the close of the first day about light could very well be repeated on the second day, “Behold, the firmament is good.”



What are the other blessings of the firmament?

There are, of course, various other blessings of the firmament, all of them more or less directly related to rainfall and to the weather. For example, approximately 100 lightning flashes occur somewhere in the world every second. They fuse the nitrogen of the air into nitrogen oxide that is soluble in water. exactly what plant life needs for survival and growth. Lightning produces some 100 million tons of nitrogen annually, more than all of the world's fertilizer plants. (Lightning may, of course, also be highly dangerous, even fatal. However, if one avoids being near anything that points into the sky during a thunderstorm, or if one remains in his car, he can generally watch this awesome display of divine majesty in comparative safety.)

There is in our atmosphere the jet stream, some 4 to 8 miles above us, sometimes traveling at 250 or more miles per hour. It has a great effect upon our weather, as well as upon the speed of airplane travel. In addition to the jet stream, the firmament has many other highly complex air currents that also affect our weather.

Long ago God asked His servant Job, “Hast thou entered into the treasures of the snow? Or has thou seen the treasures of the hail?” (Job 38:22) True, snow and hail can cause great difficulties for both man and beast. More than once God has decided a battle or a war with snow or hail, as he did when he won the victory for Israel over the five kings with great hailstones (Joshua 10:1-11). Yet, we should recall the amazing beauty of the trillions of snowflakes, all of them hexagonal, none of them alike. We remember also the importance of heavy snowfalls for the millions of acres of land in the western part of our country. If it were not for the runoff of this snow, many farmers and ranchers would be in dire straits. Yes, there are treasures in the snow.

And God did it all with one almighty word—that is the only correct answer to the question that the Lord Himself posed to Job of old: “Who shut up the sea with doors, when it brake forth, as if it had issued out of the womb. . . and said, Hitherto shalt thou come, but no further: and here shall thy proud waves be stayed?” (Job 38:8,11) Our God saw that His gathering together of the waters in the seas “was good.” (Genesis 1;10) *LSI*