

## THE NECESSITY OF THE CANOPIES

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*There has been much discussion of the possibilities, composition, and maintenance of a pre-Flood canopy surrounding the earth. Venus space probes have shown a canopy to be possible; for Venus has one. This paper discusses the idea that not only was the canopy possible but that it was a necessity. It was necessary before the Flood to produce the climatic conditions the Bible describes for that time. When that canopy was emptied its water became the erosional force that produced the sediments that formed the sedimentary rock. A restored canopy was necessary after the Flood to produce the climatic conditions that made Oregon's weather tropical and that allowed mammoths to live at the Arctic Circle. When that canopy was emptied it produced the ice age and froze and preserved the mammoths.*

### Introduction

"And said God, Let be an expanse in the midst of the waters, and let it (be) dividing between waters (and) the waters. And made God the expanse, and He separated between the waters which (were) under the expanse and the waters which (were) above the expanse, and it was so. And God called the expanse, Heavens." (Genesis 1:6,7)<sup>1</sup>

This passage has caused much discussion among Creationists. In 1961 Morris wrote, in reference to it, "We feel warranted, therefore, in suggesting such a thermal vapor blanket around the earth in pre-Pleistocene times as at least a plausible working hypothesis, which seems to offer satisfactory explanation of quite a number of Biblical references and geophysical phenomena."<sup>2</sup>

Since those words were written and until now, many have been "working" on and writing about the canopy. Some have defended its existence Biblically<sup>3,4</sup> and some are not quite convinced.<sup>5,6</sup> Proposals have been made for canopies of liquid water<sup>3</sup>, of ice<sup>7</sup>, and of superheated steam<sup>8</sup>. Methods of maintaining a canopy have been suggested<sup>7,8</sup>. Kofahl reviewed some of these conflicting ideas and found them inadequate. Yet he wrote,

"The pre-Flood atmosphere may have and (in this author's opinion) probably did have a water vapor canopy. . ."<sup>9</sup>

The present writer is also of that opinion and was pleased that Akridge brought to our attention that Venus has a canopy.<sup>10</sup>

On December 9, 1978, the Pioneer Venus 2 spacecraft sent its five probes through the Venusian atmosphere to five different spots on the planet. The information those probes sent back about the cloud canopy (for that is what the clouds form) and the atmosphere is significant for Creationists. The cloud-top temperatures vary, depending on the location, from -72° F to -10° F. The cloud bottom is at 194° F and the planet's surface is around 900° F. The cloud is made up of thick layers. The upper layer contains sulfuric acid and water droplets. The next two layers probably contain particles of liquid or solid sulfur. Surprisingly the clouds end abruptly, almost exactly 30 miles up, everywhere on the planet. The first 10 miles below the clouds contain a few particles, 1/10,000 of an inch and smaller. In the next 20 miles to the ground no particles of any size were

detected. Dr. Robert Knollenberg, whose cloud particle-size spectrometer was designed to detect solids and vapor droplets, said,

"It was a very clean atmosphere. Below 30 miles it was immaculate."

At the interface of cloud and atmosphere the pressure was slightly more than at sea level on earth. At the planet's surface it was more than 90 times that on earth. One probe kicked up a cloud of dust when it landed. It took more than four minutes for the air to clear which seems to indicate almost no wind at the surface. It is worth noting that the accepted theory as to why Venus is so hot is because of the so-called Greenhouse effect.<sup>11</sup>

All this information brings questions to mind. What supports the canopy at an altitude of 30 miles above the surface all around the planet? What prevents the canopy from mixing with the atmosphere even though there is pressure at the surface where they meet? Is the pressure at the interface due to the weight of the canopy? Because the canopy is colder than the atmosphere, shouldn't it be heavier and therefore sink into the atmosphere? What prevents it from doing so?

However, Venus has a canopy and it would seem that whatever is maintaining it could surely have maintained a water vapor canopy around the earth.

Let us now consider some evidence, Biblical and otherwise, that shows that a canopy was a necessity before and after the Flood and that each time it was emptied it produced profound effects on the earth.

### I - BEFORE THE FLOOD Temperature

A significant clue as to the temperature on the newly created earth is the fact that Adam and Eve were created naked. In keeping with God's seeing that all creation was "very good", it could not have been cold enough to make them shiver, not hot enough to make them sweat, but always, day and night the year-round, the temperature had to be in the comfort zone for naked bodies. This zone is what Smith calls the "thermal neutral zone".<sup>12</sup> He points out that for homeotherms there is a portion of the range of changing environmental temperatures where the energy required to maintain proper body temperature is the lowest. To determine the exact limits of the neutral zone would require a special temperature controlled room. A rough estimate of the limits was made, however, by placing a thermometer next to the skin while varying the amount of body covering. Below 84° F was too cool and over 94°

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F was too warm. Thus we conclude that the temperatures on the newly created earth were always within those limits.

### Wind

Many people, especially those in cold climates, are familiar with the "wind chill factor". They know that for a given temperature, it takes more energy to stay warm when the wind is blowing than when the air is still. This fact, together with the "very good" nature of the new earth, means that in those days there was no wind when the temperature was on the low side of its range but there could be a mild breeze when the temperature was on the high side. The Bible tells us that such was the case. That information is in one phrase of Genesis 3:8. The familiar translation of this verse is,

"And they heard the voice of the Lord God walking in the garden in the cool of the day."

The word "cool" is a mistranslation of the Hebrew word, "ruwach", which means "wind" and comes from a root word meaning "to blow". It speaks therefore of any movement of air and is translated throughout the Old Testament by "wind" and "breath". It also means "spirit". The Interlinear Bible<sup>1</sup> translates "ruwach" in Genesis 3:8 as "breeze" of the day. This phrase tells us two things: that at a certain time every day a breeze came up and there was no air movement all the rest of the 24 hours.

What time of day was the "breeze of the day"? Our earlier deductions determined that air movement could only be when the temperature was at its highest. That time, of course, was mid-afternoon. It was then that the warmed earth had heated the air above it enough to cause it to rise. That movement pulled in cooler air from the side creating the "breeze of the day".

### Every Day the Same

Adam and Eve were naked when God commanded them to "be fruitful and multiply and fill the earth." (Genesis 1:28). Thus, everywhere on the face of the earth and all the time the temperature was in the "comfort zone". This would have been an impossibility if the polar regions had several months of darkness as at present. The earth, therefore, must have had its axis perpendicular to the ecliptic thus making each day the same length, from pole to pole, throughout the whole year.

Objections to the earth being perpendicular to the ecliptic have been raised on the basis of Genesis 1:14 which states that one purpose of the lights in the heavens was to be "for seasons". The seasons in the verse are equated with the four seasons of the year the earth now goes through. This view is not needed, however, to satisfy Genesis 1:4, for that can be done with Job 38:32, which reads,

"Can you bring out the constellations in their season. . .?"

### No Rain

"For not had rain sent Jehovah God on the earth . . . and a mist went up from the earth and watered all the face of the ground . . . And a river went out

from Eden to water the garden." (Genesis 1:5, 6, 10)<sup>1</sup>

At creation God installed an underground watering system instead of today's overhead system. He also had to provide a method to prohibit the present hydrologic cycle. How did he do it? Today when the air pressure is high we have clear weather. Several years ago when California was having a drought, we were told it was caused by a high pressure ridge off the coast. If high pressure stops rain, then it is likely that the original atmosphere was at a pressure somewhat higher than the highest of today.

It has been shown that three conditions were present on the newly created earth that are not with us today. The temperature, world-wide and all the time, was in the "thermal neutral zone". There was no wind except for a mild breeze at mid-afternoon, and there was no rain. To produce these three conditions, two things were necessary: the earth's axis had to be perpendicular to the ecliptic and there had to be a canopy to pressurize the atmosphere and produce a Greenhouse effect.

## II - DURING THE FLOOD

### Sedimentary Rock

Sedimentary rock has become, for me, the prime evidence of a world-wide flood.

More than two-thirds of the land area of the earth is covered with sedimentary rock. Estimates of the volume of such rock vary, of course, because of the great uncertainties that confront those that make such estimates. In 1924, the American geochemist, F. W. Clark, estimated that the sedimentary rocks made up about 5 percent of the crust to a depth of 10 miles. That would be a volume of 10<sup>8</sup> cubic miles, enough to cover the entire earth to a depth of one-half mile. Others have made estimates from somewhat lower to three times as much. Nearly all estimates are made on the assumption that all of the material of which the rocks are composed must have ultimately been derived from igneous rocks<sup>13</sup>.

As to when the sedimentary rocks were formed, the evolutionist believes that the processes of erosion, transportation, deposition, and solidification have been going on for at least 3.5 billion years. But even if 3.5 billion years had been available, could 100 million, or even less, cubic miles of igneous rock have been eroded?

### The Evolutionist's Dilemma

For a moment, let us grant the evolutionist his assumptions. Imagine, then, the time in that dim past, just before the first bit of sedimentary rock had been formed. The total land area of igneous rock was open to the forces of erosion. Some sediments were produced which were washed together with other sediments and deposited in some area where they hardened into rock. That rock is with us today. It has been given the name Precambrian. The fact that the rock is observed by us means that from the time it was formed until now no erosional forces acted upon it. If they had we would not be observing it today. Thus, the area occupied by that first bit of sedimentary rock made no more contributions of sediments. Time went on and other areas became covered with sedimentary rock that we observe

today and then those areas also ceased being a contributor of sediments. In time, over two-thirds of the land area became covered with a layer of sedimentary rock.

At that point an impossible situation arose. Erosional forces would be restricted to less than one-third of the land area which would have to supply millions of cubic miles of sediments which somehow would have to be spread over the more than two-thirds land area. Thus the Evolutionist has no way to build the Geologic Column. And all his billions of years are no help.

If the great thickness of sedimentary rock cannot be built up by gradual process over a long time span, how can it be produced? The answer will be in a method that will somehow continually store the material that is being eroded until all 100 million cubic miles (or whatever is the correct figure) of sediments have been produced and then deposit it in layers over two-thirds of the land area. The evolutionists, however, have no such method.

### The Creationist Solution

In the flood of Noah's day, the Biblical Creationist has a method to produce the necessary sediments, not from igneous rock but from originally created soils.

"... the same day were all the fountains of the great deep broken up, and the windows of heaven were opened." (Genesis 7:11)

"And the rain was upon the earth forty days and forty nights." (Genesis 7:12)

"And the waters prevailed upon the earth a hundred and fifty days." (Genesis 7:24)

The waters surging up from the deep and the currents produced by them undoubtedly produced much sediment. The greatest erosional force, however, was the water that fell from the canopy. For 960 consecutive hours that water rushed downhill, literally melting away the soil down to bedrock or to the level of the slowly rising flood waters. After the forty days of rain the waters of the Deep kept pouring forth for 110 more days, mixing and sorting and depositing the sediments. Finally the flood waters flowed off the land into the sinking ocean basins, carrying much sediment out to the continental shelves but leaving most behind. Then the sediments hardened into today's sedimentary rock.

Sedimentary rock says that in the past there was a time of erosion. A lot of sedimentary rock says there has been a lot of erosion. Fifty million cubic miles of sedimentary rock says that there has been erosion of cataclysmic proportions, almost beyond belief.

Fifty million cubic miles of sedimentary rock is only half the amount of the previously quoted estimate. From the Creationist's viewpoint, however, I believe it is more realistic. To produce that much from a suggested pre-flood land area covering half the earth's surface, the average elevation to be eroded away would have had to be over 2600 feet.

These figures make one reassess his belief about the magnitude of the changes wrought by the flood. They seem to indicate that God took the total originally created landmass down to bedrock and refashioned it into an entirely new and different world.

### III - AFTER THE FLOOD Low Sea Level

"Blue holes" are underwater caverns several hundred feet deep. In such a hole, in the area of the Bahama Islands, stalagmites and stalactites have been found at depths greater than 140 feet. This is evidence that the sea was once much lower than it is today. Also, some of the stalagmites were dated between 139,000 and 160,000 years old by radiologic dating techniques. A news article with this information states that this,

"... agrees with other evidence that the sea level may have plunged as much as 400 to 500 feet during the glacial period 130,000 to 200,000 years ago."<sup>14</sup>

Berlitz writes at length about discoveries<sup>15</sup> of buildings, temples, walls, roads, ports, and cities which are under the waters of the continental shelves of America, and primarily in the area of the Bahamas. What he calls the "evident explanation" for these things is that "they were constructed on dry land" during the last ice age about 12,000 years ago "which was subsequently engulfed when the ice melted at an accelerated rate."<sup>16</sup>

The evidence is convincing that at one time in the past the sea level was much lower than it is at present. The question is, when was it lower? The evolutionist has the level repeatedly lower as ice ages supposedly came and went in the hundreds of thousands of years in the past. The Biblical Creationist, however, doesn't have all those years. When, then, can he date the time of low sea level?

The evidences of low sea level quoted above were concerned with the area around the Bahamas which is basically limestone. In the previous section it was shown that the flood is what brought sedimentary rock into existence. Anything, therefore, that has happened to or on sedimentary rock is post-Flood. The time of low sea level, then, is after the Flood.

### Post-Flood Warm Weather World-Wide

When did the mammoths live that have been found frozen in the cold regions of northern Siberia? There were no freezing temperatures before the Flood and the complete reworking of the land mass during the Flood would have destroyed, not preserved them. Therefore, they must have lived after the Flood. For them to have lived at the Arctic Circle means that warm weather prevailed there after the Flood. The conclusion, then, is that there had to be an extended period of time between the end of the Flood and the beginning of the ice age.

This same conclusion was reached by Nevins when he studied the strata of the John Day Country of northeastern Oregon. He wrote at length about it declaring it post-Flood and states that

"The climate was originally tropical in Clarno time changing to cold and humid during accumulation of the recent glacial deposits."<sup>17</sup>

He then concludes,

"It is therefore necessary to postulate a post-Flood era probably of some hundreds of years duration between the close of the Flood and the initiation of the recent continental glaciation."<sup>17</sup>

### The Canopy Restored

The "greenhouse effect" of a water vapor canopy would produce the weather conditions just described for Oregon and the Arctic. The water contained in a canopy would mean a lower sea level.<sup>18</sup> Thus, what was needed immediately following the Flood was a second canopy. The Bible indicates that such was the case.

"And remembered God Noah and every living thing and all the cattle which were with him in the ark. And made to pass God a wind over the earth and subsided the waters. And stopped the fountains of the deep, and the windows of the heavens; and was restrained the rain from the heavens. And retreated the waters from the earth, going and retreating; and diminished the waters at the end of fifty and hundred days." (Genesis 8:1-3)<sup>1</sup>

"And the waters were going and falling until the month tenth; in the tenth (month) on the first of the month were seen the tops of the mountains." (Genesis 8:5)<sup>1</sup>

The restoring of the canopy was made possible by three things God did on day 151 of the Flood year. Those things were: placing a restraint on rain, stopping the windows of heaven, and inaugurating a world-wide drying wind. After the first forty days of rain the canopy was empty. With the canopy gone the conditions that had prohibited today's hydrologic cycle were gone, so what we call normal rainfall took place. This, then, is the rain God restrained. With the wind evaporating immense quantities of water, and rain being prohibited, the moisture had to go above the stopped windows, thus remaking the canopy. In 73 days of wind the waters went down only several hundred feet, for the record says that after that length of time only the tops of the mountains were seen.

God's original underground watering system (Genesis 2:5, 6, 10) was totally destroyed by the Flood, after which it became necessary to permit the present hydrologic cycle to function. The first canopy prohibited wind and rain. The second canopy had to be installed to allow both.

### The Tilted Earth

Not specifically mentioned, but necessary for God to do, was to tilt the earth to its present inclination. This produced such profound changes from pre-Flood days that God calmed the survivors fears with this promise:

"While the earth remaineth, seed time and harvest, and cold and heat, and summer and winter, and day and night shall not cease." (Genesis 8:22)

The first day of the first month is the day Noah saw that the face of the earth was dried. (Genesis 8:13) That is the day, I suggest, that God tilted the earth and in such a way as to make it the vernal equinox, i.e. our March 21. Noah, being in the northern hemisphere, would then be going into his first spring. When he came out of the ark 57 days later, i.e. our May 17, he would still have had time to plant the seeds he had brought with him, and raise a crop before his first winter came upon him.

### IV - AFTER THE SECOND CANOPY Emptying the Canopy

The second canopy is obviously no longer in existence. The Bible has no direct statement about emptying the canopy but does have two statements which are clues to the how and when.

"... and the waters shall no more become a flood to destroy all flesh." (Genesis 9:15)

Emptying the canopy quickly would have caused another world-wide flood. Instead it must have been emptied slowly; I suggest as snow in the polar regions, and that only during the winter months. More snow fell each winter than could melt during the summer, and so the ice sheets built up, continually spreading southward. At the same time the sea level was slowly rising due to the summer melt. Perhaps it took up to a hundred years to empty the canopy, after which the ice sheets slowly melted, raising the sea level to its present height.<sup>19</sup>

Peleg, whose name means "a channel of water", lived from 100 to 339 years after the Flood. He was given his name because, "in his days was the earth divided". (Genesis 10:25)

The land masses were divided by water when the sea level rose high enough to flood the land bridges such as between Asia and Alaska, England and the Continent, and others. To do this in Peleg's day the snow may have started falling as late as 250 years or so after the Flood.

### Frozen Mammoths

An analysis of the temperature drop necessary at the time of the mammoth's death to leave them in the state of preservation in which they have been found, reveals it to be below -150° F.<sup>20</sup>

The Wind Chill table lists -148° F as the effective temperature of -58° F with a 50 mph wind. Those conditions could easily have been exceeded when God opened the canopy over the polar region to start the ice age. The sudden and great temperature change literally took the mammoth's breath away. Eventually, though, they had to breath and then they inhaled a great quantity of the frigid air which immediately froze their lungs. Thus they died by asphyxiation in a matter of minutes. The high winds and low temperature combined to rapidly freeze them.

The winds, I suggest, blew for some days before the snow fell in order to freeze the ground. Much erosion was caused by them and the loose material was packed around the fallen animals eventually burying them.

### References

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- <sup>5</sup>Strickling, James E., 1976. The waters above the firmament. *Creation Research Society Quarterly*, 12 (4):221.

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