

IDENTIFYING THE NOAHIC FLOOD IN HISTORICAL GEOLOGY PART ONE

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ABSTRACT

This paper explores the an extended series of parallel "coincidences" between the Paleozoic/early Mesozoic geological deposits and the event series of the Noahic flood. There are 25 successive events occurring in precisely the same order. Therefore mathematical odds oppose the possibility that these two records of earth's history have arisen independently. It is proposed that creationists should evaluate the possibility that the geological record and the Biblical record of Genesis 7-8 are the same event series. This would require the historical geological column to be refitted into the framework of Biblical time.

INTRODUCTION

Creationists normally assume that the stratigraphic record somehow represents God's activities in Genesis. Yet the taphonomic testimony which these fossils could have given concerning the way that they died largely has been ignored. Perhaps this has been because of the macrochronological framework in which these fossils have been presented by uniformitarianists. Be advised that when I refer to specific geological deposits, I am by no means attributing vast ages to these. I use the terminology of historical geology only to refer in a recognizable manner to specific sections of earth's historical layers.

The study of creation has been hindered by several non-specific, simplistic approaches to the harmonization of geology with Genesis. Some have built harmonization models which leaned too heavily on the authority of historical geology, warping the Biblical evidence to fit it. Others have ignored the physical evidence in presenting their favorite Biblical model of earth's early events. As a result, our harmonization models largely ignore the finer points of earth's catastrophic history which the fossils could have given. They have failed to consider the taphonomic interval, that is, the explicit study of the death by which earth's fossil life really died.(1) They have not examined the fossils to see how they were transferred into the lithosphere as part of the record of the rocks. To put it bluntly, we have ignored the testimonies of the fossils and of the rock matrix around them concerning earth's early history. Because the fossils have been misused to attack the Bible, we have treated the earth record and its fossil lifeforms almost as illicit research. Yet the Creator Himself admonishes us through Job to listen to the message of the earth. "...Speak to the earth, and it shall teach thee...that the hand of the Eternal Lord has produced all of this" (Job 12:8-9).(2)

This failure has been paralleled by a second major failure of some creationists. Refusing to allow the Scriptures to be the final authority in all scientific research has subjected them to the influence of uniformitarian explanations of earth's history. The Creator warns us of this second danger by means of Peter. "...I write unto you...that you should keep in mind the words which previously were spoken by the holy prophets...that you might know this beforehand that, in the last of the days (of the church), scoffers will come...saying... 'Everything remains without (cataclysmic) change since the beginning of creation'" (II Pet. 3:1-4). Peter utilizes the Noahic flood as the illustration of a catastrophic event in Earth's history. Regrettably some creationists have ignored this cataclysm, this "deluge" (Lu. 17:27; II Pet. 3:6) while accepting the uniformitarian doctrine of earth's history. Most have set aside Biblical revelation concerning other major catastrophic events in earth's early ages, explaining all geological history almost entirely by a single great Biblical catastrophe. To some this has been the Noahic flood.(3) For others a single pre-Adamic flood(4) has explained all fossils. In either approach a universal flood was the means whereby multitudes of creatures left the biosphere to become part of the lithosphere as fossils.

Neither of these flood models begins to account for all of the testimony of the earth. Both ignore specific geological details about earth's history which are found both in Genesis and in geology. For example, both universal flood explanations of historical geology ignore the dehydrated dinosaur skeletons found in the windblown sands of the Mesozoic deposits.(5) They disregard the insect and plant fossils imbedded in a volcanic ash fall in the Cenozoic Lake Florissant beds near Pike's Peak or in the John Day formation of Oregon.(6) They overlook the staggering evidence that the Mesozoic dinosaur fossil beds of Utah, Wyoming, Montana and Alberta contain creatures which were buried there during an enormous volcanic ashfall from the rising Northern Rockies. That ash forms the major matrix in which these creatures are buried in many places. The dinosaur egg nests, the broken egg shells and the great skeletons found near Choteau, Montana have staggered the imagination of the few creationists who have examined them. However most visitors at Egg Hill have ignored (with the evolutionist excavator, Jack Horner)(7) the taphonomic evidence of the very catastrophic moment of death and burial which surrounds these fossils. This life assemblage of dinosaur eggs, newly hatched infants and parents was buried in a matrix of volcanic ash, muds and sands borne by air and water. Everywhere in these fossil beds there is evidence that a giant tidal wave from the west that had been generated by earth movement abruptly had buried them. One finds the source of that earth movement in the Lewis Overthrust when he lays aside the normal creationist denial of the "so-called overthrust"(8) by rejecting it as a movement of indurated rock. It was not hard rock that moved. The evidence there shows that the Proterozoic materials which overthrust the younger, overlying Mesozoic and Paleozoic materials were soft ocean bottom muds, soft-crumpled and twisted by the movement. When this very real overthrust is followed to the south a few dozen miles, it soon reduces to a gigantic fold near DuPuyer, Montana. That very abrupt overthrust, a part of the diastrophism induced by the separation of the continents in Genesis 10:25, buried the life assemblage that is now entombed in eastern Alberta, Montana and Wyoming. The burial of the dinosaurs in that shallow shoreline basin is an assemblage of creatures which lived and died together several generations after the Noahic flood. As a result of their deaths being misunderstood and misplaced in history both by evolutionist and creationist, these great creations of God have been unable to give mankind a clear testimony about the day in which they died.

A TEST CASE: IS THE FLOOD IDENTIFIABLE IN HISTORICAL GEOLOGY?

The Noahic flood can serve as a test case to determine if its successive stages are reproduced anywhere in the historical geological column since it provides an extended series of contrasting events that should establish horizons in the layers of earth's crust. These should provide a format to see if there are corresponding events in the physical, geological record. I have found that the geological record of Paleozoic and early Mesozoic times lies remarkably parallel to the Noahic flood account like the two sides of a ladder. There are 25 "rungs" linking the two accounts of earth's history. This then is what I have found.

1. The Foundation Below the Evidence. The first point of contact is at the very foundation of the Paleozoic deposits. According to Genesis 5-7, the Noahic flood event series was preceded by an interval of at least 1,500 years between the creation week and the Noahic flood which appears to have been geologically inactive. Is there record of a similar, major quiet period fairly early in the recorded layers of geological history? Indeed, just such an interval lies between the Proterozoic and the Paleozoic deposit series. This depositional break is recorded geologically in many locations.(9) In the Grand Canyon it is called "the great unconformity" by geologists.

2. The Fossil Context Around the Foundation. Now this depositional unconformity at the bottom of most Paleozoic deposits is preceded by few fossil traces in the Proterozoic deposits.(10) Yet it is followed by a great outburst of fossilization in the Paleozoic deposits.(11) This deposition interruption could relate directly to the events of Scripture. The same sequence is present in Genesis 1:9. That passage and Psalm 104 suggest a vast runoff of marine waters from the continent at the abrupt uplift of land mass above sea level in the third solar day of creation. This would have produced great evidences of sedimentary deposition in the marine basin which surrounded the landmass. Remember that plant life was created later that same solar day. I therefore expect to read of fossil pollen grains which are entombed in the former muds of the Hakatai Shale in the Proterozoic of the Grand Canyon. Marine life was created two solar days later. I believe that the drainage of the great single continent described by Genesis 1:9 would have continued for years after the rebellion in the garden. This scenario remarkably accords with that found in the Proterozoic deposits. I have seen great algae clusters in Proterozoic material at the foot of Grinnell glacier in Glacier National Park(12)(13). Occasional worm trails and rare prints of marine fossils in the Proterozoic deposits(14)(15) would not seem out of place if this identification is accurate.

But some will object: By itself, how could this remote "coincidence" suggest that the Noahic flood began on top of "the great unconformity?" This highly unlikely suggestion nevertheless deserves examination in context before it is discarded. Only a careful examination of the

formations preceding and following "the great unconformity," coupled with the precise details of the event series in the Noahic flood, ever can answer that question.

3. The Beginning of the Flood. The third identifiable geological element of the Noahic flood is its actual inception. That began as the fountains of the deep were opened (Gen. 7:11a). Now according to Job 38:4-9, these had been the original source of the primal, universal ocean when it first had covered earth's surface just after earth's creation. These words describing the inception of Noahic flood in Genesis 7:11 are important. "...The same day all the fountains of the great deep were broken up." We must look in geology for the Noahic ocean bottom deposits, ejected onto that ocean bottom. Both the initial outpouring of the ocean as described in Genesis 1, Job 38:8-10 and Psalm 104:5-9 and this outpouring in Genesis 7 appear to be very abrupt events. The Noahic flood's cataclysmic eruption of water from within the earth's crust would have entombed the less-mobile forms of pre-Noahic, bottom life. The disturbance of 1,500 years of ocean bottom muds should be found as part of that burial scene. This is precisely what is found in the Tonto Group, the initial Paleozoic deposits which are called "Cambrian." (16) This "epoch" of geological history displays vast numbers of relatively immobile marine lifeforms buried in great layers of mud. The Tapeats Sandstone (17) at the bottom of the Cambrian looks like material ejected from these great ocean bottom wellsprings. The Bright Angel Shale and the Muav Limestone (18) which overlie it certainly look like the lighter, calcium rich, bottom debris accumulated during nearly two millennia of quiet before the Noahic flood. These would have settled more slowly than the coarse sandstone which underlies them. Is this only a coincidence?

4. The Expansion of the Flood in the Sea. The rapid encroachment and burial of the land mass by the Noahic flood waters is the next stage of the flood. It is described in Genesis 7:11-18. This should have provided heavy samplings of the fossils of the shoreline as the sea swiftly expanded, overwhelming the landmass. Is it yet only another remarkable correlation that exactly these evidences are found in the Ordovician and Silurian sections of the Paleozoic deposits? Historical geologists, looking at these evidences have chosen to read evidences as that life now was beginning to migrate to the shores of the landmass. Isn't it just possible that these fossilized marine to shoreline lifeforms have a long ignored testimony concerning their death and fossilization that is entirely in harmony with Genesis 7? The odds of this being so are improving as we climb the historical column.

5. The Flood Buries Creatures on the Landmass. According to Genesis 7:21-23, the creation researcher next should find a universal burial scene in historical geology. That indeed is the case. The record of the might of the Noahic flood can be traced accurately from its inception at the base of the Paleozoic in the Cambrian layers through its universal stage in Devonian times and through its initial retreat stages in the upper Paleozoic deposits by means of the fossil record. Whereas the fossil record in this "era" began in the overwhelming of ocean bottom life forms, it clearly records the encroachment and destruction of many shoreline and land forms as the Noahic flood rapidly reached its universal stage, stabilized and then began its slow retreat.

6. The Burial of Entire Ecozones by the Flood. The stages of the deposits the fossil record demonstrate a successively modified dominance of the destroyed ranks of phyla by different major classes of lifeforms. This change in successive layers inadequately has been explained by creationists as hydraulic sorting. But the record shows that there is no sorting by size in these deposits. (19) The view ignores the physical evidence! There is no evidence that the smaller creatures were deposited first by the flood waters and then larger bodied creatures like the dinosaurs were deposited. Indeed, very small creatures are found throughout the Paleozoic and Mesozoic deposits. I have seen together in the Mesozoic deposits of Montana the tiny, two inch long femur of a newly hatched dinosaur and the giant, four foot long femur of a mature dinosaur. (20) These diverse sized creatures had been buried in the same mid-Mesozoic layers of ash and sand at Egg Hill near Choteau, Montana. Clearly this was not a hydraulically sorted death assemblage but a life assemblage, preserved immediately and permanently at death. The hypothesis of hydraulic sorting cannot explain the taphonomic evidence. It is far better to recognize the successive encroachment, stabilization and retreat stages of the Noahic flood as the key factors accounting for this zonation of fossil types in Paleozoic times. Now Paleozoic deposits had begun with a dominance of marine shell life. Soon the violence of the Noahic flood included many classes of fishes in its violent burial of marine life. Then the evidences of shoreline life begin to be represented in the Paleozoic deposits. There is remarkable parallel between the Genesis account of earth's total submergence during the flood's universal stage and that which is found in the Devonian through the mid-Mississippian stages of Paleozoic deposits.

7. The Pre-flood Climate Recorded by the Flood's Deposits. Genesis 1-9 records specific hints concerning a universal, hothouse climate on the Pre-flood earth. The elevation of a vast supply of water above the atmosphere was the major event of the second solar day of creation which caused the above phenomenon. Following the Lord's call for that event, Verse 7 describes the action: "Then God proceeded to make the expanse and He caused the division of

the waters which were down underneath the expanse from the waters which were up over the top of the expanse. Thus it came to be so." (I attempt to translate the two couplets of three Hebrew prepositions which are found here by the underlined words). This layer of water probably was water vapor in a zone above the atmosphere where warmer temperatures maintained it as dense clouds of vapor. In any case, it served as a great radiation filter which protected man from the harmful radiation which now ages mankind. The record of slow maturation and longevity in Genesis 5 appears to confirm the presence of that protecting canopy. One should also notice the Lord's first mention of weather extremes in Genesis 8:22. These words were spoken to Noah after the Noahic flood. As a result, the creationist should predict that gymnosperms or naked seed plants(21) should have been very dominant among the plants entombed by Noahic flood deposits. The Paleozoic deposits demonstrate a remarkable dominance by the naked seed plants of the plant world which lies entombed in their marine deposits. These indicate "...a moist, warm to hot climate without marked seasons..."(22). That would have provided an environment decidedly advantageous to the gymnosperms. On the other hand, the creationist should have predicted that this extremely humid environment would have hindered the angiosperms or hard seed plants in the Pre-flood world. The Paleozoic deposits confirm this, even though occasional angiosperm pollen grains appear to be found considerably earlier in the deposits in the Proterozoic layers.(23) (I conclude that these came from the vegetation created on the third solar day of creation, blown into the waters which drained off of the newly uplifted land mass to become part of the Proterozoic deposits).

It is clear from Genesis 5 that the maturation rate and the multiplication rate of the mammals as represented in Genesis 5 by man was slowed up nearly 15 times when evaluated by the rates found today. Since it appears that the canopy retarded reproduction in man by delaying sexual maturity, this may be a major factor contributing to the remarkably little representation of mammals in Paleozoic deposits. Fish, plant life and amphibian lifeforms utterly dominate the proposed Paleozoic/Noahic flood deposits where one would expect to find more mammal fossils including man. After all, the Flood was brought as the means of judging mankind! On the other hand, it just may be possible that we should be searching the Paleozoic deposits of Iran and Iraq, the cradle of life, to find most of man's fossils from that period. Nonetheless, sufficient indications of man's presence have been found to support his presence in spite of denial by the uniformitarian philosopher. Another factor that might explain the absence of larger bodied mammals and man in the Paleozoic, if this is the Noahic flood deposit, is the likelihood that these continental creatures would have been swept off into the Indian Ocean area which was nearby the area of their creation. Gases forming in their bodies would have enabled them to float temporarily. On sinking into the ocean depths, these carcasses would have been dissolved by the ocean's acids as they drifted down into the abyssal depths.

8. Evidence of the Stabilization of the Flood. The violence of the universal submergence of the land in Genesis 7:18-24 was followed by its stabilization in the one hundred fifty days of the universal stage. Such a quieting of the flood would have resulted in vast marine sedimentary precipitation of the pre-flood ocean's calcium rich life forms and debris from destroyed life forms. This actually is an accurate description of the contents of the Devonian and early Mississippian deposits. Wherever I have been able to examine the Devonian deposits, I have found strong indication of quieting waters which displayed considerable evidence of quiet oscillation. This seemed to be very characteristic of those seen in New York and Pennsylvania. Now the Mississippian deposits display that which I identify as evidence of extremely abrupt marine sediment precipitation. One of the petroleum geologist's publications read somewhere in my past presented the postulate that abrupt changes in water temperature through the injection of a current could account for sudden precipitation of concentrated sediments in a body of water. The great 500 foot layer of Redwall Limestone in the Grand Canyon and its Madison Limestone counterparts in Utah and Montana seem to provide a good example although Wonderly strenuously argues otherwise.(24) Often these great limestone deposits are almost without bedding planes except in their upper boundaries. They are rich in the fossils of smaller marine life. At that point I begin to detect indications of temporary retreat oscillations of the marine shoreline. On the north rim trail of the Grand Canyon I have observed that this upper boundary of the Mississippian Redwall Limestone interbeds extensively with the Supai which overlies it. On the Navaho trail in the early Pennsylvanian layers above the great Redwall Limestone bed, one can recognize that the continued oscillation in the Supai Assemblage briefly but repeatedly has exposed the shallow profiled landmass in that area to the sun's rays. Indeed, this assemblage is filled with evidences of oxidation that must represent atmospheric exposure. It is these stains which have dyed the surface of the underlying, blue toned "Redwall Limestone" to the point that it now bears this odd name. There are very clear mud cracks(25) present near the upper boundary of the Supai assemblage as well as numerous well preserved rain drop prints. These had to be formed during brief exposures of the surface in drying periods when it lay briefly under an open sky. Is parallel merely by chance? The odds of that being the case rapidly grow slimmer as one continues to find such parallels while searching upward through time in the two records.

9. The Flood begins its Retreat Stages. The initial retreat stages of the Noahic flood after the 150 days should evidence aeolian deposits of sands both above sea level and in the waters according to Genesis 8:1. Indeed, as the flood began its retreat, the first factor which would have produced a recognizable change in the geological deposits is God's work of the sending of the wind to dry up the earth (Gen. 8:1). "God made a wind to pass over the earth, and the waters began to dry up." In the Pennsylvanian section of the Grand Canyon there are evidences of wind deposits and traces of continental vegetation overlying great marine deposits containing marine fossils. It is a fact that the Paleozoic deposits are the only series of universal flood deposits in the entire geological column which contain a very broad spectrum of fossils. (That factor alone requires us to reject the Proterozoic layers as Noahic flood deposits for these layers have a very limited fossil content)! If then, as I propose, the Paleozoic deposits must be identified with the major stages of the Noahic flood, then these wind deposits implied by Genesis 8:1 must be present in its upper layers. Initial wind activity and oscillating shorelines as the land first are exposed in the Pennsylvanian Supai layers of the Grand Canyon. The 400 foot Coconino Sandstone formation is a giant testimony to the presence of a massive wind current(26) like the jet stream which irregularly coursed over the area which has become the Coconino and Kaibab Plateaus. Now creationists, errantly striving to account for practically all of historical geology by the Noahic flood, explain the unbelievably rich supply of wind dune materials in the Coconino Sandstone as submarine dunes.(27) This simply is not possible. Submarine dunes are able to achieve slopes of no more than 22 degrees before they begin to migrate in a great submarine slump. In the Coconino Sandstone many of these dunes, which now are preserved as stone, approach slope angles of 45 degrees. They also clearly show that they were just above sea level. Repeatedly they have been lopped off by intruding wave erosion before the next wind pattern was established. (This phenomenon would be somewhat difficult to duplicate in the submarine environment normally attributed to this deposit by creationists)! Often the wind angle has come from a new direction, a factor difficult to reproduce by ocean currents. Multitudes of amphibian tracks were made by creatures climbing up out of the sea onto the newly established marine plane on the dunes. These tracks were made while the sandy surface was still wet and somewhat firm but they were almost immediately covered by blowing sands which protected them from succeeding shoreline waves. These windy signs in the Coconino formation and below are remarkably in harmony with what one should expect on the basis of Genesis 8:1 and its mention of wind.

10. The Tidal Waves in the Retreating Flood Deposits. According to Genesis 8:1 and 3, the creationist should predict that these aeolian deposits should also be accompanied by signs of tsunami. These are great ocean waves generated by crustal movement. These tsunami should have left evidence of their powerful onslaught and then of their return from off the low profile of the newly exposed landmass. After all, Genesis 8:3 indicates that this was the case after the 150 days of submergence were finished. Our English translations of this verse fail to convey this clearly. The Hebrew text specifically speaks of repeated onslaught of the newly exposed landmass by these waves. It says: "Now the waters were going and returning from off the earth continually..." Two Hebrew infinitives absolute follow the verb and dramatize the repetition and continuance of the action of the main verb in Hebrew. (Compare Genesis 8:7 for a parallel Hebrew construction where the raven is seen "going and returning repeatedly"). Is this massive oscillation of the shoreline to be found in the record of the rocks in the right place for another correlation? Indeed it is. The evidence of wave oscillation begins in the Grand Canyon in the Supai Assemblage and in the Coconino Sandstone. It is much less obvious in the Toroweap Limestone (mixed with the sands of the Coconino from below). Many signs of submergent oscillations are also present in the Kaibab Limestone at the top of the Grand Canyon. A fascinating place to study this phenomenon of alternating wind and tidal oscillation is in the Mesozoic windblown sand deposits of Echo Park where the Green and the Yampa Rivers join in Dinosaur National Monument in Utah. There I have counted over 30 major tidal reversals which interrupt the ongoing wind deposits on one cliff face. These wind and tidal wave patterns continue to form a major characteristic for more than half of Mesozoic time.

11. The Rafted Debris Deposited by the Retreating Flood Waters. Returning to Paleozoic deposits, in Pennsylvania and elsewhere the Pennsylvanian deposit series contains great amounts of coal. These coal deposits point to another area of correlation. This great oscillation series mentioned above should have grounded vast quantities of vegetation debris that had been gathered into rafts by the Noahic flood's waters in many areas. The Pennsylvanian stage of the Paleozoic "era" derives its name from the mass of fossil plant evidence in the coal beds which are found in that state. I have seen evidence there suggesting that tidal waves were encroaching the landmass repeatedly even while these great rafted mats of Pre-flood vegetation were being deposited. I first suggested this in 1968 or 1969 in a creation conference at Lucerne, California. The uniformitarian attempts to describe the slow rotting of successive swamps to form that coal.(28) In so doing, he ignores the obvious record of waves which had deposited that material along the shoreline, only to cover it with the soft muck of the low profiled continental shoreline as the wave retreated again into the sea basin. I firmly believe that it was the grounding of the great vegetation mats

which had been rafted together by the great retreating Noahic tsunami waves of Genesis 8:3 that provided the vegetation debris which characterizes the Pennsylvanian in many areas of the world.(29) Numerous other areas on our continent received this debris to become important Pennsylvanian coal beds. Near the eastern Front Range of the Colorado Rockies these oscillation bed deposits have been buried hundreds of feet below the surface by the vast supply of rocky debris that later washed out of the rising Rockies. And the evidence appears to continue mounting, suggesting that one might do well to begin appreciating the geological record of the great Noahic flood as it is written so precisely in the Paleozoic series of deposits.

12. The Expanding Ocean Basins Receiving the Flood's Waters. But what was the earth movement which generated these Biblical tsunami? There should be evidence in geology of crustal movements which initiated these great waves of Genesis 8:3 and which opened up the new ocean basins which were needed to receive the runoff of the flood. And there is such evidence. I have read geological reports which described the initiation of continental separation, restlessness of the crust and some plate movement after the middle of the Paleozoic "era." Indeed, there are indications of a movement which began the breakup of the great single continent. This single continent or "Gondwana Land," as it is called by geologists, is rather well described in the command of Genesis 1:9. Indeed, it is required so that the waters of the ocean might be gathered unto one place. The geological record indicates that this brief crustal movement quieted as the Paleozoic event series drew to a close. After the Mesozoic "era" made its debut, this continent separating movement began again in earnest (in the division of the earth of Genesis 10:25). This earlier brief Paleozoic geological record of crustal movement closely correlates with the Biblical mention of great tidal waves even as the Noahic flood waters were receding. It sounds very much as if the Lord had used this movement to prepare the needed sea basins to receive the added water which now lay in the ocean in order to continue exposing the landmass after the flood. The atmosphere could not possibly have absorbed sufficient water to account totally for the retreat of the Noahic flood. At present the earth's atmosphere is estimated to contain no more than one inch of rain when it is averaged all over the globe. Is it merely an odd ??? coincidence ??? that this crustal movement is found in geology in precisely the right place to account for these tsunami? The rapidly building odds of chance are very much against it.

CONCLUSION

What is the significance of these twelve remarkably parallel events? Did Moses somehow have in hand a trustworthy historical geology by which to frame the story of Noah's flood? Hardly likely. Or could it be that historical geologists in our century secretly have been setting up the geological column to agree with the Biblical account? Not likely! Now the odds of 12 events naturally occurring in a predicted order approach one in forty million, I believe. But here the odds far exceed that for there are two parallel columns and in each series the events and details lie in the right order. What will the addition of another 13 parallels do to these odds as we continue this research on the Noahic flood? Well, on the basis of such odds, I wouldn't choose to jeopardize my eternal destiny by trusting the distortion of the physical, geological column by the uniformitarian! In spite of the apparently overwhelming evidence that this model can account for historical geology within the framework of Biblical time, it must be remembered that this is only a model. It is being offered so that it may be criticized and rejected if found completely misaligned with the facts. On the other hand, if it is found to account for the major part of the physical evidence, it may be worthy of rework, expansion and adoption.

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2. Scripture portions are the author's own translation.
3. In the Noahic Flood Cataclysmic Harmonizational Theory.
4. In the Classical Gap Theory.
5. I have seen one of these is on display in the American Natural History Museum in New York City. An excellent photograph of this particular skeleton may be found in the following entry:
Good, John M., Theodore E. White and Gilbert F. Stucker, The Dinosaur Quarry, Dinosaur National Monument, Colorado*Utah. National Park Service, Washington D.C., 1958,, p. 9.
Wind dunes in late Paleozoic and early to mid-Mesozoic deposits are correctly identified as such in uniformitarian writings. Note for example: Cronic, Halka, Roadside Geology of Colorado. Missoula, Montana: Mountain Press Publishing Co. 1980. pp. 255-256, 267-268 (where the Wingate Sandstone wind dunes are nicely illustrated).
6. Cronic, Ibid., pp. 136-138.

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 20. For an excellent photograph of this phenomenon, see Morell, *Ibid*, p. 41 or Matthews, *Ibid*, p. 273.
 21. Tidwell, William D., *Common Fossil Plants of Western North America*. Provo, Utah, Brigham Young University Press. 1975. pp. 14-16, plates 6-8.
 22. Von Engel and Caster, *Ibid*, p. 561, speaking of the Pennsylvanian climate.
- Note also a similar discussion in Schuchert, Charles and Carl O. Dunbar, *A Textbook of Geology*. Part II--Historical Geology. 4th ed., 1947. New York: John Wiley and Sons. pp. 257-260.
23. Tidwell, *Ibid*, pp. 17-21.
 24. Wonderly, Dan. *God's Time-Records in Ancient Sediments*. Flint, Michigan, Crystal Press. 1977. 258 pages.
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 26. Triassic and Jurassic sandstones display these great wind currents on the north end of the Colorado Rockies, the Big Horns, the Wind River Range, the Uintas and in the Grand Canyon, etc. For photographs and a uniformitarian discussion see Moore, *Ibid*, pp. 349-356.
 27. Representative of many identifying the Coconino wind dunes as exclusively of marine origin is Brand, L., "Field and Laboratory Studies on the Coconino Sandstone (Permian) Vertebrate Footprints and their Paleological Implications." *Paleogeography, Paleoclimatology, Paleoecology*. Vol. 28, pp. 25-38.
 28. Moore, *Ibid*, pp. 235-239. However Moore does come close to revealing the truth about the coal beds when he says: "The cyclic sedimentation resulting from these oscillatory movements of sea and land is an outstanding feature of Pennsylvanian deposition, and it is observed in Europe and other continents as well as in North America." p. 239. This fact should have been applied to his discussion of the manner in which Pennsylvanian coal was formed.
- Note also Chronic, *Ibid*, pp. 239-240. Chronic nicely describes the cyclic nature of these worldwide Pennsylvanian deposits which so often contain great coal deposits and tries to explain them by changes in sea level caused by oscillations in arctic and antarctic glaciation cycles.
29. Austin, Steve A., "Evidence for marine origin of widespread carbonaceous shale partings in the Kentucky No. 12 coal bed (Middle Pennsylvanian) of western Kentucky." *Geological Society of America. Abstracts with Programs*, vol. 11, pp. 381-382. Austin says: A coal bed, formed from terrestrial [*italics in original*] trees, is shown to contain thin marine [*italics in original*] shale layers called 'partings.' ...Partings have high illite and quartz, low kaolinite and montmorillonite, marine shales above the coal."

