The Importance and necessity of quality peer review

Earth in Cataclysm
Philip G. Budd
San Bernardino, CA, 2014

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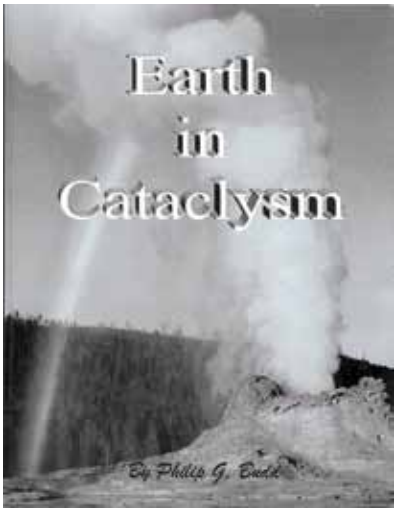
I met Philip G. Budd on a field trip in the Colorado Front Range last fall. The trip was sponsored by the Cedarville University geology program just prior to the Geological Society of America meetings in Denver. As I understand it, Philip has worked as a professional geologist in the area for many years and holds a Bachelor of Science in Geology degree from a large state university. It was on that field trip that he mentioned to me that he was writing a book on a new concept he had for a Flood model[1]. In late January, he sent me a copy of that book and asked me to write a 'no strings attached' book review for *Journal of Creation*.

Collapse Tectonics

Budd calls his model 'Collapse Tectonics'. The manuscript tries to address many and varied topics and how they might fit into the model. Budd proposes that all but a small part of the Proterozoic formed during the Flood. He espouses that the Archean and the earliest part of the Proterozoic formed before the Flood and that the latest part of the Proterozoic (containing the Ediacaran fauna) and the entire Phanerozoic were deposited after the Flood (p. 109). Following the Flood, the centres of the continents collapsed and sank into the earth; hence the name for the model. As the continental centres sank, they filled with marine water, depositing sediments beginning with the latest part of the Proterozoic. In this description, I am generalizing his model quite a bit and leaving out some of the major points Budd tries to make (like his reasons for collapse); but this appears to be the gist of it. He illustrates part of the model with an unnumbered figure on p. 81 of his book (figure 1).

Collapse Tectonics and data

Reading this book was a frustrating experience for me because Budd does not write in a standard scientific style. It is poorly organized and often skips from topic to topic without fully developing or providing sufficient evidence for any one issue. Most scientists develop their arguments by presenting pertinent *data* and then follow that by *interpreting the data*. Budd has *data* and *interpretation of data* mixed throughout the book, so it is difficult to follow his arguments. He proposes his Collapse Tectonics model without citing or addressing (or even consulting?) any of the previous work that has been done on Flood modelling.[2] When proposing a new model, it is generally good practice to review the insufficiencies of the prior models and then explain why the new model answers some nagging question(s) that the previous model(s) failed to explain. Instead, it appears that this new model was the result of a contest (see the note on p. 6), not the result of legitimate scientific investigation and explanation. Certainly there have been 'tectonic collapses' that have occurred, but Budd fails to develop examples, argue for the widespread and continental nature of them, or build a compelling case that this is a major theme in geology that has



somehow been missed. It is a concept that should be fairly easy to document geologically.

Collapse Tectonics posits that the centres of the continents collapsed following Noah's Flood, causing thick marine deposits of Paleozoic and Mesozoic strata to be formed in the centres of the continents (see figure 1). If this actually happened, we should expect the thickest piles of Phanerozoic sediments in the mid-continent. This is clearly not the case in North America; here we find a general trend of extremely thick Phanerozoic sequences on the east and west coasts, and only a relatively thin cover of sediment in the mid-continent.[3] I was not entirely clear why Budd proposed such a model; he tried to draw on some Scriptural support but surprisingly he also drew on apocryphal writings to support many of his claims (see, for example, pp. 4, 5, 7, and 8). Yet he states (p. 10), "It is important not to read into Scripture more than Scripture provides." In my opinion, he is reading far too much into the apocryphal writings.

Budd is on the fringe of Creation Science when he suggests the Flood was an entirely Precambrian event (see his chart on p. 109). There are many problems to this approach. One of the primary problems is that

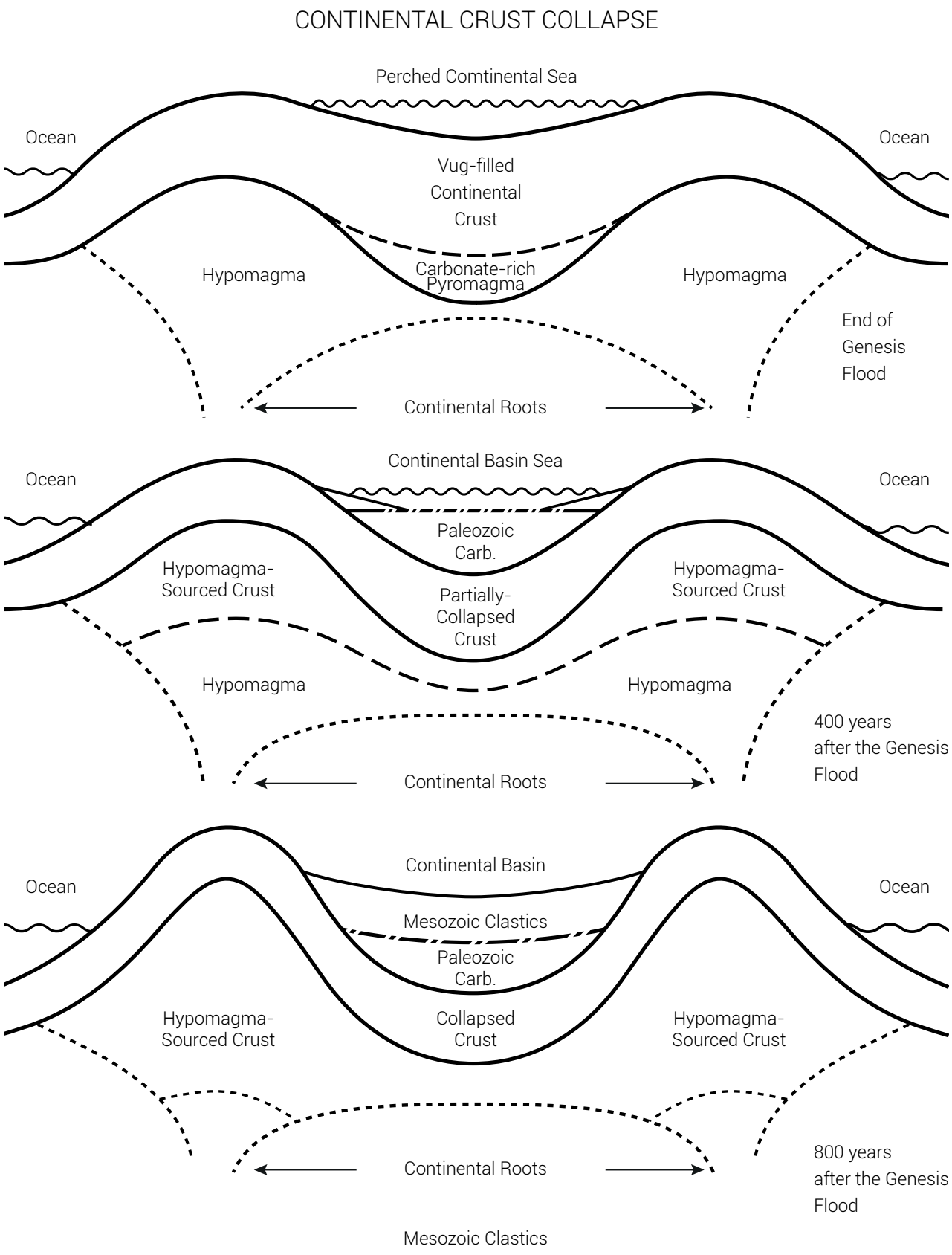


Figure 1. Budd's 'Collapse Tectonics' model from page 81 of his book.

almost the entirety of the Paleozoic and Mesozoic are *widespread marine* deposits that occur *on the continents*. Biblically, this should be one of the *prima facie* evidences for the Flood, not the post-Flood![4] It should be noted that Noah observed water draining off the continents (Genesis 8) when the Flood was over, not later returning to cover them. If Budd's model were true, the Ark should have landed on Precambrian sediments; there are none at the surface in the mountains of Ararat.[5] This alone shows that this approach is incorrect—it fails one of its main predictions. I suppose Budd could argue that the Ark landed on Precambrian rocks and then the entire area became submerged again during Collapse Tectonics. However, there is no biblical evidence for this proposition. The Bible does not record that Noah had to leave the area because of another oncoming flood. Additional problems come with the geology of Iraq, the area where Abraham and his family lived after the Flood. Here, we find significant amounts of folded Paleozoic and Mesozoic rocks[6] (which must have been formed underwater because of their marine fossils) supposedly deposited the same time Abraham and his forefathers were in the area. Both cannot be true.

Careless citations and poor peer review

In my opinion, Budd carelessly cites references throughout the book. I will not share every example that I found, but I will share some instances in which I have been personally involved or where I have some expertise. First, Budd cites my 2013 ICC work[7] as evidence that there must have been a tremendous bout of post-Flood catastrophism (which I believe). However, he uses my paper to argue that the entire Phanerozoic was deposited in post-Flood times. He misses the point of my paper completely! In this paper, and others,[4,8] I have argued that the *Cenozoic* is likely post-Flood in most places, not the entire Phanerozoic! Budd also has a section in his book on 'Dinosaurs and Permafrost'. Here he incorrectly states that the dinosaur bones I found in the arctic of Alaska[9] were all unfossilized. Apparently he missed my comment to the editor of this journal in 2005.[10] We now believe that all of the bones found in Alaska are clearly 'fossilized', although some can still contain original organic remains.

Budd is incorrect when he states that "cataclysmic transport would be expected to pulverize body fossils prior to deposition" (p. 21). He uses this reasoning to explain why we don't find body fossils in his Proterozoic Flood deposits. Although more work could be done in this area, taphonomy experiments have shown that freshly killed carcasses actually hold up quite well during long distance transport.[11] It is not until several days or a weeks-worth of bacterial decay takes place that organisms begin to fall apart in earnest. Transportation mechanisms also certainly play a role, and have largely not been considered. Whether the carcass is a clast being transported by tractive processes or whether it is being transported by mass flow processes probably also dictates how fast it will fall apart. Budd is assuming that all carcasses were transported by tractive processes, which may not have necessarily been the case. My dissertation studies involved experimental fish taphonomy.[12] Budd's comments on fish taphonomy (pp. 118–119) seem to be more influenced by Velikovsky[13] than any serious work on the subject. In this section, Budd also cites William Buckland as publishing in *1937* (p.118, with the same mistake in the References on p. 218). Buckland actually published his work *Geology and Mineralogy* in *1837*.

Often times Budd does not cite any literature at all for his claims or misses much of the recent work done on a topic. In his discussion on reefs, he is completely ignorant of the large volume of creation studies that have been done on this topic[14] and instead cites some old conventional sources. He claims that stromatolite deposition is a slow process, when it has actually been observed to be a fast process in many cases.[15] In his section on clastic dikes, he fails to cite a single reference (conventional or creationist) even though much work, including creationist work, has been done on this subject[16] and even some on spectacular dikes in his own backyard of Colorado.[17] In his discussion on 'parentless polonium halos' it seems as though he is not aware of any of the recent (and very compelling) papers that Andrew Snelling has published on this topic.[18] Certainly Budd's dozen 'peer-reviewers' (whose names are listed on the first page of the book) should have alerted him to this problem, along with many others. Budd attempts to claim that Precambrian and Tertiary rocks interfinger with one another in an outcrop he discovered in Colorado (p. 206), implying that there is something wrong with the geological column; but fails to show a single photograph, drawing, or any evidence at all for his assertion. All of this is discussed in a single paragraph! I think readers will find this to be a common practice throughout the book.

Why quality peer review is important

I could go on. I found something I disagreed with on almost every page of the book. I would like to encourage potential creation authors that quality peer review is a very important and necessary process. You are not making positive contributions to the creation literature by circumventing the peer review process and publishing unevaluated ideas. Peer review needs to be done within the context of a community. Trying to make contributions without doing this will often cause embarrassment to creation

science. Peer review helps with the scientific process because it helps keep us objective. When we know something is going to be reviewed by a potential critic, we often do experiments, present data, and draw reasonable conclusions so our critics will be silenced. Budd's 'peer reviewers' either did not do their job or Budd ignored their suggestions for correction and revision. Either scenario is quite disturbing in my opinion. Among the reviewers he chose, he could have benefited greatly by having some geologists read the manuscript before publication. They would have caught many of the simple errors like his statement that the Green River Formation is found in Arizona (p. 118), for example. We who know Christ are part of a body, as Paul explained in 1 Corinthians 12. Every part of the body is necessary and has a role. Work within the community (body) and have your material thoroughly peer reviewed (by suitable critics) before you decide to publish!

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1. Philip Budd's model was originally presented in *The Flood Science Review* project (2011). Recently I downloaded a copy of that book (1,645 pages!) from In Jesus' Name Productions, Inc. (www.injesusnameproductions.org/pages/page.asp?page_id=167120) and spoke with one of the panelists who was involved in the 'review' of the various Flood models. The book is a discussion between various Flood model developers and panelists whose job it was to critique the models. Among the models discussed were Catastrophic Plate Tectonics (Baumgardner), the Hydroplate Theory (Brown), Vertical Tectonics (Oard), an initial presentation of Collapse Tectonics (Budd) and several others. The book is a back-and-forth discussion between developers and critics, trying to iron out the best points and flaws of each model. As I understand it, the entire discussion took place online (via email, etc.) and the book is a rendering of those discussions. I suppose the original concept was a good idea, but unfortunately many (but not all) of the panelists were not really qualified to critique the fine points of the models being presented. When good points were raised by qualified panelists, it often seemed like the developers were not well enough qualified to understand the seriousness of the critique. If you buy the book (by making a donation to IJNP), don't expect to find a scientific presentation of each model. Some models are presented in raw form and other, well-developed, models (like CPT) simply refer to already published literature. The book mostly critiques models; it does not really scientifically present them. Don't expect to find anything 'ground-breaking' in it.
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