

Pikes Peak BIF and the Flood (or Creation Week?)

I enjoyed the recent article on banded iron formations (BIFs) and their rapid formation¹. The Dickens article assigns specific types of BIF to the Creation Week and Flood:

“... early Precambrian BIFs forming in the early Creation Week and late Precambrian BIFs forming in the initial phase of Noah’s Flood.”²

This interpretation is based on earlier work by Dickens and Snelling proposing a unification of the uniformitarian Precambrian time period to Bible history.³ This concept was challenged^{4–7} and defended using naturalistic datasets (e.g. radiometric age-dating, plate tectonics, biostratigraphy, lithologic correlation) and the red herring, North Pilbara Terrane.⁸ This perspective remains unacceptable to many young-earth creationists because it creates confusion by defining and applying specific uniformitarian geologic time intervals *ad hoc* to biblical history.^{9,10}

Age-dating rocks and the problem with BIFs

BIFs generally do not contain fossils, so assigning an age-date relies on standard radiometric dating techniques. Despite the claim that the RATE study provides answers to the concerns of creationists willing to follow an accelerated form of nuclear isotope decay¹¹ many serious issues remain unresolved.^{12,13} Defining BIFs biblically by their naturalistic radiometric age raises several issues: 1) it defines the onset of the Flood between Dickens’ proposed ‘Precambrian’ age-dates,² 2) it contradicts previously proposed pre-Flood/Flood boundaries defined

by those using the time-compressed uniformitarian geologic timescale,^{14–18} and 3) it contradicts the proposed age of the Flood-formed Pikes Peak BIF¹⁹ which is not defined biblically by its uniformitarian-assigned radiometric age-date and is not applied against a time-compressed geologic timescale. Again, unnecessary confusion is created by young-earth creationists who accept and follow a modified ‘relative’ radiometric age or time-compressed geologic timescale.

Pikes Peak BIF

While not comprehensive, the Dickens article overlooked a relevant, previously published young-earth creationist work on the Pikes Peak BIF found across central Arizona (USA). This work was previously cited in response to Dickens and Snelling.⁴ The uniformitarian radiometric age-date of the Pikes Peak BIF (1.75 Ga—early Proterozoic) falls into Dickens’ ‘early Precambrian’ period and would by his definition be formed during the Creation Week.

Our study of the Precambrian Pikes Peak BIF in Arizona was conducted from a biblical Reconstructionist perspective and resulted in an interpretation completely different from what naturalists had previously proposed. From this study, the uniformitarian assumptions (and corresponding radiometric age-dates) were found to be unnecessary and the resulting biblical catastrophic interpretation actually resolved a number of issues viewed as enigmatic by naturalists. This Arizona BIF, in the context of its surrounding strata, is best interpreted as a product of the Flood, not the Creation Week.

As with any universal assertion, the Pikes Peak BIF invalidates the concept that they can be used to define a pre-Flood/Flood boundary. Their formation and development is not a unique global time horizon useful in defining biblical geologic history. I

continue to contend that every geologic area on Earth must be redefined within the context of biblical history and not by naturalistic age-dating assumptions based on radioisotopes or index fossils.

Clarification on the use of ‘relative’ radiometric dating in defining biblical history

Several questions remain in understanding Dickens’ application of ‘relative’ radiometric dates in support of the Remodeled framework of biblical history:

1. If radiometric age-dates are acceptable as ‘relative’ and not absolute, then how are erroneous age-dates corrected? Creationist work has demonstrated the inappropriate ‘Precambrian’ radiometric age given by the Rb–Sr method for the recent lava flows of western Grand Canyon as well as the overall failure of several other radiometric age-dating techniques used on the Proterozoic Brahma amphibolite.
2. Which of the current radiometric age-dating techniques are acceptable for young-earth creationists? Uniformitarians acknowledge that many of the older radiometric age-dating methods are no longer reliable and therefore should not be used to determine the appropriate age of Precambrian basement rocks.
3. How much of the naturalistic world view should young-earth creationists accept in defining biblical history? The acceptance of ‘relative’ radiometric dating opens the entire naturalistic chronology (i.e. 4.55 Ga) and would include the adoption of the entire uniformitarian geologic column and its naturalistic/evolutionary-supported assertions. Are young-earth creationists only drawing the line of distinction between worldviews (i.e. naturalism vs the Bible) over the concept of deep time?
4. In defining the antediluvian period using the radiometric age-dating of

basement rocks, are you suggesting that the pre-Flood earth was simply exposed shield with little-to-no sedimentary cover across the purported Rodinian supercontinent?

These questions were not addressed when previously posed²⁰ and it is hoped that an answer will follow in response to this letter. I appreciate the work on BIFs that Dickens has conducted and would appreciate further clarification.

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- See cited references in Froede, ref. 4.

» Harry Dickens replies:

I am glad that Mr Froede enjoyed the article, *Banded iron formations formed rapidly*. I thank him for his comments. The following is intended for clarification.

Pikes Peak BIF

The Pikes Peak BIF is early Precambrian and described as Algoma-type.¹ It is not associated with mixtites, which are characteristic of the late Precambrian Rapitan-type BIF. Thus in terms of the *Journal of Creation* article’s YEC framework, it may be inferred that the Pikes Peak BIF formed in the early days of Creation Week, rather than in the Noahic Flood.

BIF and Flood onset not solely defined by radiometric age

The three types of BIF referred to in the article are described in terms of their field relationships and lithology, and so can be recognized in the field independent of radiometric age-dating. However, there are consistent trends, such as Rapitan BIFs being younger in age than Algoma and Superior-type BIFs. Relative radiometric age-dating is consistent with relative age indicated by field stratigraphic relationships—in

many locations worldwide, Neoproterozoic sedimentary strata can be found overlying older Precambrian crystalline basement. Such geology can be correlated respectively with early Flood and early Creation Week.

I do not define the onset of the Flood on radiometric dates on their own, independent of other evidence. The order in radiometric dates and the order in lithologies, as well as chemical and other isotopic trends go together in a consistent way in numerous cases.^{2,3}

I infer that:

- The erosion of land associated with the Flood’s rain can be correlated with Neoproterozoic geology, including mixtites interpreted as mass flows rather than as ‘glacials’ and that Sr isotope trends indicate continental erosion.⁴
- The corollary of this is that Archean to Mesoproterozoic crystalline basement rocks can be correlated with early Creation Week.
- The pre-Flood earth surface was destroyed (Genesis 6:13) in the sense of being totally wiped away (Matthew 24:39).

Global processes involved in early Creation Week should be considered. There is no need to lump so much geology into the Flood and not allow that some rocks may have formed in the Creation Week. Similarly, rocks consistent with the early Flood erosion of land due to the rain should not be discounted.

Geological sequences not deep-time geological ‘System Periods’

I am not defining and applying specific uniformitarian geologic time ‘Periods’ *ad hoc* to biblical history. There are patterns and order in radiometric dates that can be useful in a relative rather than absolute time sense. Recognizing literal sequences of observable, mappable rock units is not tantamount to accepting uniformitarianism and naturalism.

I do not want to malign the good intentions of those with a reconstructed biblical approach. However, I consider that much valuable work has already been done in mapping lithological sequences around the globe. There is a need to keep the baby and throw out the bath water:

The baby is the *observable*, mappable, correlatable order of stratigraphic successions with their characteristic fossils, lithologies, chemical signatures, and consistent pattern and order of isotopic ratios.

The bathwater is the *interpreted* long ages and molecules-to-man evolution.

Order in the rock record has been put there by God during His sequence of creative acts recorded in the Bible. [Not just Genesis 1 but chapter 7, 2 Peter 3 etc.] In stratigraphy there are significant patterns that can be related to God's creative work in designing the earth as man's home. As with many scientific datasets there may be some anomalous values. However, not using relative patterns in radiometric dates that reflect stratigraphic order, may be considered 'throwing the baby out with the bathwater'. The stratigraphic and isotopic order in the rocks is important evidence.

Neither uniformitarianism nor naturalism

With due respect to Froede, the 2008 work by Dickens and Snelling⁵ was definitely not uniformitarian in terms of rapidity of processes, including radiometric decay. A number of tectonic events (e.g. global rifting) and lithologic types (e.g. komatiites and BIFs) described and inferred environments (global oceans in early Creation Week and early Flood) are not uniformitarian and not occurring today.

A profound episodicity (episodicity is not uniformitarian!) exists in global Precambrian rock radiometric dates.⁶ The deformation age distribution of greenstone belts (most abundant

at 2.70, 1.85, 1.05, and 0.60 Ga) is broadly similar to the age distribution of Precambrian granites and detrital zircons.³ Heating events can reset radiometric dates to lower values.^{7,8} There are regional patterns in radiometric dates that can be related to different Precambrian geological provinces.

Naturalism excludes the Bible. When God created, He brought order to the universe even in atoms and continents, for God is not the author of confusion (1 Corinthians 14:33). Thus there should be harmony between God's Word and His Creation. Despite the complexity, we should not discount the order in observable, mappable Precambrian geology and associated measurable isotopic and chemical trends. Correlating such trends and patterns with God's Word is not naturalism.

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