

ice-core signal, the latitude of the presumed eruption was taken into account as well as the likelihood the core signal overestimates the stratospheric aerosol loading. The core signal matches the volcanic chronology, developed from independent sources, to about AD 700. A previously claimed match of about 30 per cent to volcanic events from 1 BC to 7000 BC¹⁰ was shown to be in error because the researchers did not use dendrochronology-corrected carbon-14 dates for the non-core volcanic chronology.^{11,12} The difference between carbon-14 dates and calendar year dates supposedly amounts to 800 years older than 3000 BC, and 100 to 150 years from AD 100 to 700. The correlation of volcanic time series needs at least a 3-year resolution.

From the above empirical orthogonal functions and the good match with known large volcanic eruptions of the past 1,300 years, many eruptions during the ice age portion of the core were discovered:

We identified ~850 volcanic signals (700 of these from 110,000 to 9,000 yr ago) with sulfate concentrations greater than that associated with historical eruptions from either equatorial or mid-latitude regions that are known to have perturbed global or

Northern Hemisphere climate, respectively. This number is a minimum...¹³

The number of eruptions is considered a minimum because of the coarse sampling of the core. Seven hundred volcanic eruptions greater than historical eruptions over a 100,000 year period is not expected to perturb the climate on scales more than a few years. However, telescoping the uniformitarian time-scale for the 110,000 to 9,000 year period into a span of 500 years or so, according to the method of Vardiman,¹⁴ results in an ice-core signal of massive volcanism during a post-Flood ice age. In the compressed creationist time-scale, some of these 700 volcanic events probably were the same event. Regardless, one of the potent mechanisms for a rapid ice age after the Flood (the other mechanism being warm ocean water at mid and high latitudes)¹⁵ has probably been empirically verified.

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M. J. Oard

The Trouble with Teeth

Shark researchers have found that sharks, which shed their teeth throughout their lives, begin shedding them *in utero*.¹ Michael Gottfried of the Calvert Marine Museum in Solomons, Maryland, U.S.A and Malcolm Francis of the National Institute of Water and Atmospheric Research in Wellington, New Zealand, studied a pregnant female great white shark. They found teeth in both the mother's uterus, as well as in the stomach of the 1.2 metre

long baby. Many of these teeth were quite different to adult great white shark teeth. Many were small, conical and not serrated, whereas adult teeth are large, flat, triangular and serrated. Interestingly, the embryonic teeth of the great white shark look virtually identical to the adult teeth of a sand-tiger shark, a species classified in an entirely different family.

Palaeontologists have used teeth alone to identify many fossil sharks. Often only teeth have been found.

Shark's teeth vary greatly, depending on where they are in the jaw. The discovery of embryonic teeth adds another dimension of confusion and raises the question of how many spurious fossil shark species have been named, based on embryonic teeth, and how much evolutionary speculation has been based on such teeth.

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D. Batten