

Euraustralasian Comet Impact Near the North Pole at 0.78 Ma and Global Correlation of the Pre-late Lower Quaternary Alpine-Himalayan Epeirogenesis-Inthanon Uplift to New Zealand-Pacific Orogenesis: A Geological Update

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Extended Abstract

Euraustralasian cometary impact had a pathway in the northnorthwest direction (Fig. 1). It came near the North Pole from south Siberia in Europe through Asia and Australia, finally colliding Darwin crater (Bunopas et al., 2008, in press). It took more than ten thousands of years for catastroloess to be covered almost half of the land surface. We considered that the continental wide deforest and major flood may have occurred contemporaneously with ~0.78 Ma tektite (Charusiri et al., 2003) falls and the paleomagnetic reversals. Catastroloess (muddy sands) were transported as flooded alluvial sediments into the Mun River in the Khorat Plateau (Howard, 1999; Bunopas et al., 1999; Haines et al., 2002, 2004). Catastroloess on land fallen down from several hundred kilometers eventually buried several things such as animals, fallen burnt trees and trunks (Fig. 2), as evident in Thailand and Australia. The most important discoveries revealed that the theory of origin of glaciations in Middle Pleistocene; the mass extinction in Miocene (8-10 Ma) and the impacts and the origin of tektites and microtektites (Fig. 4) were incorrectly interpreted in response to climatic changes (Glass, 1990; Wasson, 1991; Bunopas et al., 1999). Geochemically, the Euraustralasian cometary impact contributed less amount of Ir, suggesting the terrestrial source. Sediments suggesting Miocene extinction in Khok Soong of the Khorat Plateau, northeast Thailand (Chaimanee, 2007) and central Australia were buried under catastroloess (Bunopas et al., 2007). Catastroloess at Kunming in southern China is not the China wind-blown loess (Han et al., 1997) in the Yellow Mountains, north of Beijing. Catastroloess and loess could be differentiated by RAM (Bunopas et al., 2007; Bunopas et al., 2008). Former Cenozoic cometary impact elsewhere from America: 34.5Ma, German-Czechoslovakia-Libya-Egypt: 14.7Ma and Ivory Coast and Ghana: 1.1Ma (Glass, 1990; Bunopas et al., 1999) all entered the Earth similarly by a mis-tracking comet on either on the Nemensis theory or the Planet X theory (Burderi and Gorman, 1985), entered from the north pole along the south-southwest trails.

In the Buntharik astrogeological event, tektites, real-time catastroloess on lands dated as the latest Lower Quaternary Himalayan Epeirogenesis, uplifting to present elevations, further higher than the Middle Miocene extrusion. The connection to the Inthanon uplift raised the Western Mountains of Thailand and the South Peninsula continuing to the orogenesis of the Rings of Fires and the total emergence of New Zealand and the Pacific islands. This was possible by the advanced moving northwards of India, Australia and Africa, reflected in the lower Quaternary lifting of Asia and Europe. Impact surfaces which were conclusively dated and correlated by Euraustralasia-wide catastroloess layer and were resting over late Pliocene Mae Moh lignite beds were >1,000m uplifted at Hod near Doi Inthanon from western Thailand mountains to the Malay Peninsula. The late Lower Quaternary Alpine-Himalayan-Pacific epeirogenesis - Kaikoura Orogeny was temporally associated with catastroloess followed by the first Middle Pleistocene glaciations in lower Europe, Asia, Australia and New Zealand. A gradual change of physiography may have happened after 0.78 Ma Euraustralasian cometary impact, e.g., the Mekong River in China moved from east- to northeast-wards, because of the Himalayan uplifting.

Evidence of mass extinction was found under the 0.78 Ma catastrophe, such as Upper Miocene ancient elephants in Thailand and huge birds in central Australia are quite different from those of the catastrophe. We considered that the impact also marked the continental Q1/Q2 boundary for the first time in the Khorat Plateau, Thailand. The occurrence of Middle Pleistocene glaciations started to cover the lower north Asia and some in Australia. In New Zealand it is more prominent in the South and less in North Island over catastrophe layers in Christchurch and Wairarapa (Young, 1964). The glaciation theory may contribute little to the ocean from Pacific Ocean deep-sea core (Shackleton and Opdyke, 1976), but for the impact catastrophe (or ejecta) of the Buntharik Event the Euraustralasian horizon can be well preserved in the cores.

Keywords: Lower Pleistocene, Catastrophe, Euraustralasian cometary impact, Buntharik Event, Inthanon.

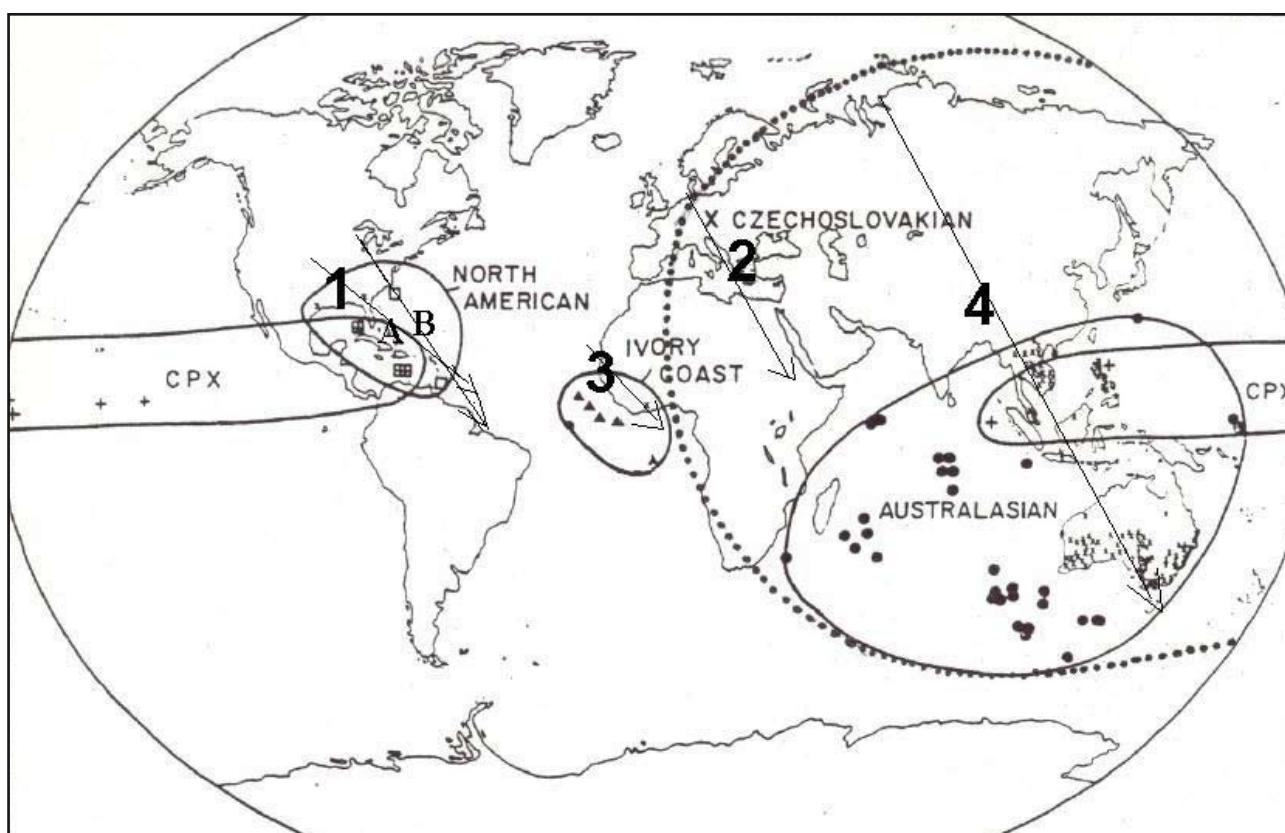


Figure 1. Map showing the Australasian tektite strewn field (4) and three previous older fields (Ivory Coast (3), Czechoslovakian (2) and North American (1)). Also shown is the clinopyroxene-bearing (Cpx) spherule-layer strewn field (Glass, 1985). Locations of tektite occurrences on land are indicated by X. Dotted circle is a minimum extension of an arbitrary boundary of the newly discovered Quaternary catastrophe field of the Buntharik Event (see text) (modified from Glass, 1990 and Bunopas et al., 1999). Different comets entered N-NNW, for (1) could be as either A or B, but more likely B. The entering closely near the north pole of each successive comet at different times is interesting, but will not be described herein.



Figure 2. Assemblage of ancient trunks of trees at Ban Tha Chang Pit 1, Nakhon Ratchasima, northeast Thailand.



Figure 3. Large tear drop or perhaps Flintstone's fighting tool from Chum Phae, Khon Kaen. Long axis of the tektite is about 11 cm.

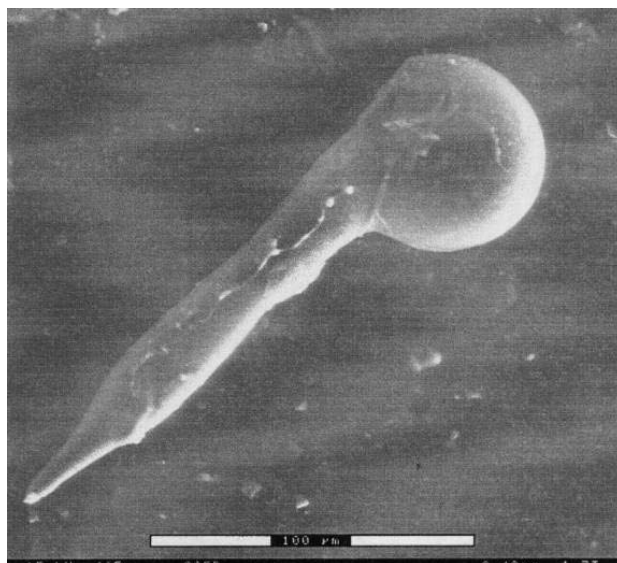


Figure 4. Microtektites or "microglass" at Ban Tha Chang Pit 2, Nakhon Ratchasima, NE Thailand (from Howard, 1999).

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