

Darwin's Valentine - A Cometary Impact Remnant Transposed Upon Glacial Terrain Near Lake Nipigon?

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The origin and nature of the Younger Dryas cooling event and the chronology and timing of the Laurentide Ice Sheet (LIS) retreat, Marquette readvance and Glacial Lake Agassiz (GLA) discharge have recently been challenged by a reexamination and reanalysis of their associated relic features,^{1,2,3,4} and now completely thrown into doubt by a new cometary impact hypothesis relying on proxies far removed from the glacial outwash terrain.⁵ Google Earth terrain map images⁶ provide an expedient method of verifying proxy identified extraterrestrial impact events,^{7,8} and thus a superficial search for the hypothesized 12,900 BP Clovis cometary ice sheet impact immediately reveals a large and anomalous glacial remnant feature near Lake Nipigon (Figure 1), which suspiciously resembles a high energy and low angle atmospheric blast onto the glacial ice, with the anticipated northwest southeast trajectory axis, within the area of geological and historical interest.^{9,10}

This hypothesis may be either falsified or verified by further collection and analysis of any relevant proxy data nearer to the proposed impact site, from remote polar ice cores, or more directly by recent and ongoing seismic acoustic soundings of the presumed submarine glacial runoff and discharge sediments lying on the floor of upper Lake Superior and on either side of the Sibley peninsula.^{11,12} A reanalysis of Pleistocene and Holocene surface deposits in this area may also prove helpful in determining if this unusual feature represents a heavily eroded geomorphism resulting from periodic ice sheet outwash, a preferred glacial lake discharge terminus dictated by continental and ice sheet topography, or alternatively, an impact astrobleme remnant resulting from the hypothesized 12,900 BP Younger Dryas bolide.

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Figure 1. Google Maps Terrain Image, Lat. = 49.17, Long. = -88.84.

