Sanders, J. E.; and Merguerian, Charles, 1995b, New York City region: Unique testing ground for flow models of Quaternary continental glaciers.

The Mesozoic red-bed fills of the Newark (NY-NJ)- and Hartford (CT-MA) basins and the "crystallline corridor" between them yield numerous indicator stones for inferring the flow directions of the Quaternary continental glaciers. The most-recent glacier (Woodfordian) flowed from NNE to SSW. Lack of distinctive reddish-brown erratics downflow from the S end of the Hartford basin in the Pleistocene sediments composing Long Island's north-shore cliffs indicates that this glacier did not reach much of Long Island and thus did not deposit the Harbor Hill Moraine.

The next-oldest glacier (Early Wisconsinan? or Illinoian?) flowed from NNW to SSE. In western Queens, this glacier eroded a striated pavement beneath the Harbor Hill Moraine, which here consists of reddish-brown erratics derived from the NE Newark basin W of the Hudson River. In central Long Island, downflow from the "crystalline corridor," till deposited by this glacier lacks reddish-brown erratics. In E Long Island, this till contains reddish-brown erratics from the Hartford basin. A still-older glacier, flowing from NNW to SSE, deposited the Ronkonkama Moraine. The oldest till exposed at Croton Pt. Park, S. of Peekskill, flowed NNE to SSW.

We speculate that when glacial ice did not block the N end of Hudson Bay, the ice that reached NY City came from the NNE (from the "Labrador center"). When ice blocked the N end of Hudson Bay and Lake Zissaga formed, glacier flow to NY City came from the NNW (from the "Keewatin center").

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