New England Antiquities Research Association



New Astronomical Alignments Found

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Measurements recorded and analyzed this spring relating to differences in location and displacement from their viewing horizons for two north-facing above-surface laid up stone "U" shaped constructs, at a site in southeastern Massachusetts, suggest a 500 year separation for their use as places for observation of the Big Dipper, the Algonquian Bear.

Today the tail of the Big Dipper crosses the meridian 1.4 degrees above the local horizon in the early evening in mid-January. 1000 years ago it was 5 degrees higher in the sky. During this period the Dipper has been at a tangent point on the precessionary circle. The drop toward the horizon in the last thousand years has been effectively vertical. These two viewing site constructs are located on the south side of adjacent hills, below hilltop level, facing north uphill towards their respective viewing horizons. For observers seated in their respective structures and viewing the tail of the Dipper, as it brushes the earth making the connection to the sky, the vertical angular difference of observation differs by about 2.7 degrees. The astronomical Tables indicate a 500 year difference for that viewing angle displacement.

The Bear Cycle Ceremony (ritual bear hunt) was a component of the Algonquian Munsee/Mahican Big House Renewal Ceremony held in mid-January. The Bear connects the earth to the sky.

There are several other constructs on the site relating to horizon observations of the Sun at solstice.

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