

Data Repository item #2018062

Curry, B.B., Lowell, T.V., Wang, H., and Anderson, A.C., 2018, Revised time-distance diagram for the Lake Michigan Lobe, Michigan Subepisode, Wisconsin Episode, Illinois, USA, *in* Kehew, A.E., and Curry, B.B., eds., Quaternary Glaciation of the Great Lakes Region: Process, Landforms, Sediments, and Chronology: Geological Society of America Special Paper 530, doi:10.1130/2018.2530(04).

APPENDIX. LIST OF RADIOCARBON AGES

Explanation for column headings in Appendix of Curry et al. (2017):

Lab Number, County = self-explanatory.

Site = published or popular name of site.

Material = material assayed.

SOM = soil organic matter.

Py-V = volatile component, pyrolysis treatment; Py-R = residual component, pyrolysis treatment (Wang et al., 2003a).

Latitude, Longitude = in decimal degrees. The locations of some sites, especially legacy sites, were determined or estimated from Public Land Survey System (PLSS) data provided in publications or in paper reports on file at the Illinois State Geological Survey (ISGS). For estimated locations, we chose best locations from visual cues for outcrops on aerial photography in Google Maps, such as evidence of landslides and/or cut-banks.

¹⁴C yr B.P. and ± = radiocarbon date and error.

Calibrated modal age = the peak age of the entire probably (see text for discussion).

Calibrated σ_1 mean = $[(\sigma_1(\text{max}) - \text{mode}) + (\text{mode} - \sigma_1(\text{min}))]/2$.

Lithostratigraphy = self-explanatory.

Source(s) = primary publication that lists the date.

Diachronic Unit = self-explanatory.

Subphase/Lake Chicago = self-explanatory (for Livingston and Crown Point phases only).

Note 1 = free-form extra information.

Note 2 = typically provides depth in core or section to object assayed.

Funding = self-explanatory.

Questionable date = flags questionable dates.

Submitter(s) = last name(s)(incomplete).

σ_1 up = the age of the younger bound at the one-sigma (68.27%) confidence level.

σ_1 down = the age of the older bound at the one-sigma (68.27%) confidence level.

σ_1 intercepts = for the calibrated probability distribution, the number of areas that are significant at the one-sigma value. One intercept indicates all of the significant probability lies within one-sigma range as defined by a normal distribution.

σ_1 area = the percent area under the summed probability curve. For a normal distribution, the sigma-one area is 68.27% of the total area under the calibrated curve normalized to one. The nearer this value is to 0.6827, the more likely it is that it represents a normal distribution.

σ_2 up = the age of the younger bound at the two-sigma (95.45%) confidence level.

σ_2 down = the age of the older bound at the two-sigma (95.45%) confidence level.

σ_2 mean = $[(\sigma_2(\text{max}) - \text{mode}) + (\text{mode} - \sigma_2(\text{min}))]/2$.

σ_2 intercepts = for the calibrated probability distribution, the number of areas that are significant at the two-sigma value. One intercept indicates all of the significant probability lies within two-sigma range as defined by a normal distribution.

σ_2 area = the percent area under the summed probability curve. For a normal distribution, the sigma-two area is 95.45% of the total area under the calibrated curve normalized to one. The nearer this value is to 0.9545, the more likely it is that it represents a normal distribution.

Median age = the median age of the entire probably. The median may be offset from the modal probability if the calibrated probability is not symmetrical.

$\delta^{13}\text{C}$ value = in per mil (‰).