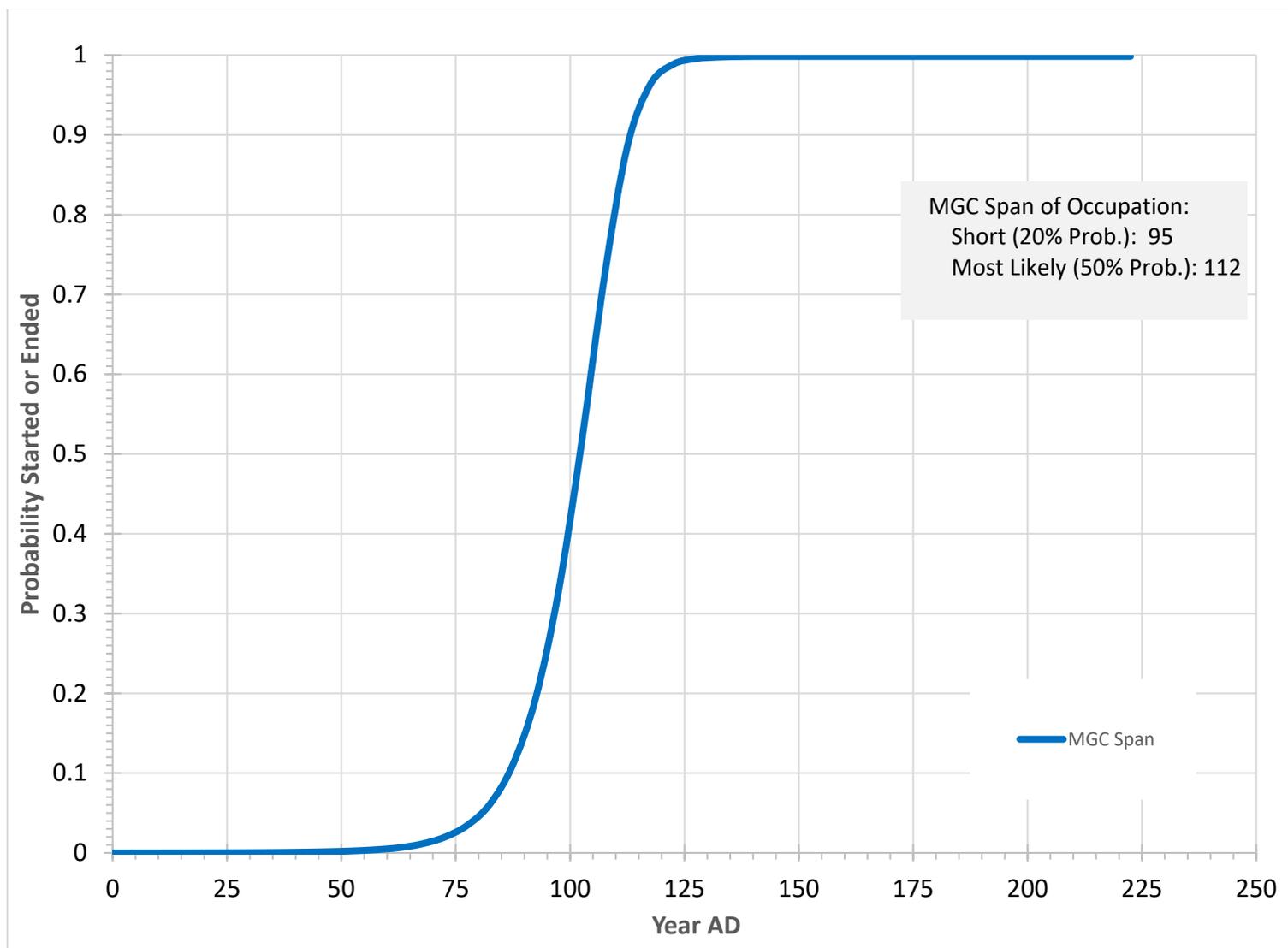


Supplemental Figure S1. Basic Radiocarbon Model Likelihood, Posterior and Combined plots. The Likelihood plot (A) shows the calibrated radiocarbon dates before the model is applied. The Posterior plot (B) shows the radiocarbon distributions after calibration and the model are applied. The Combined plot (C) shows both the Likelihood and Posterior plots, with the Likelihood distributions in light gray and behind the Posterior distributions. The Posterior and Combined plots also include the modeled distributions MGC Start and MGC End, which are boundary distributions calculated by OxCal and represent the estimated site occupation start and end dates based on the model specifications.

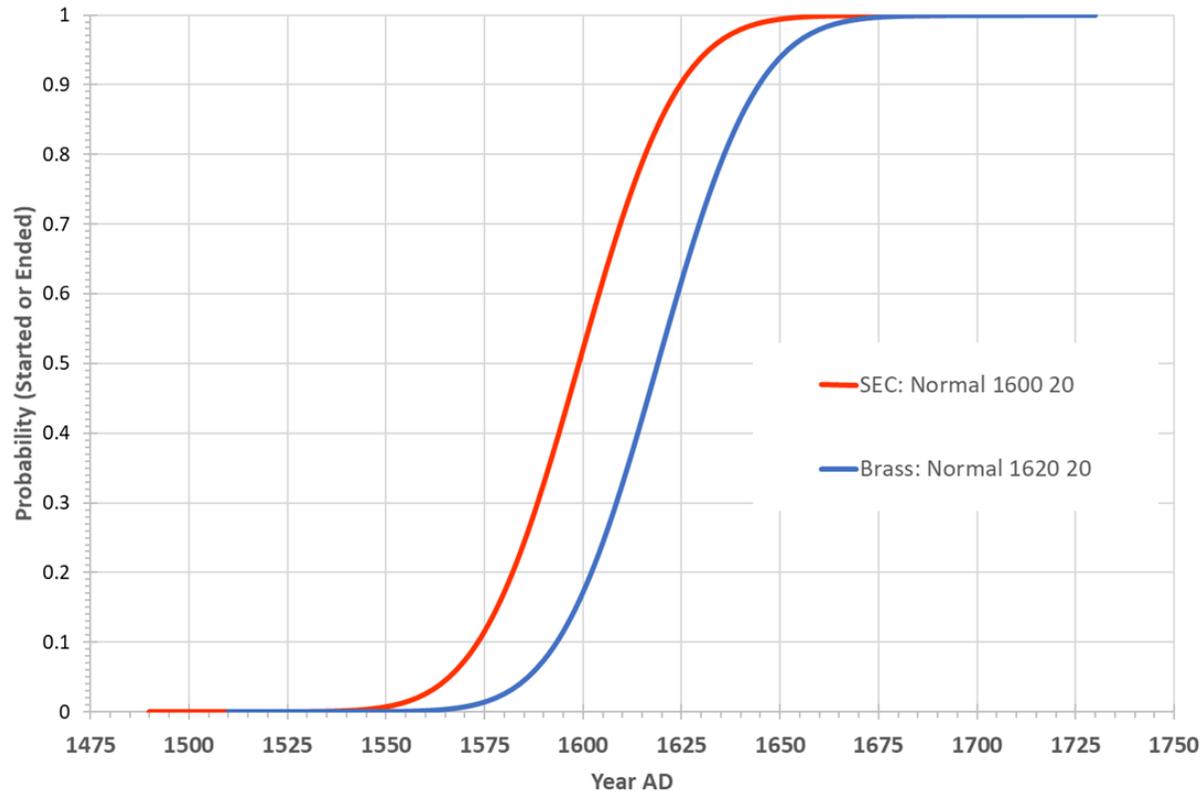


Supplemental Figure S2. Modeled Middle Grant Creek span of occupation. Based on the Basic Radiocarbon model and the OxCal Span command. Data provided in the BasicRC supplemental file folder.

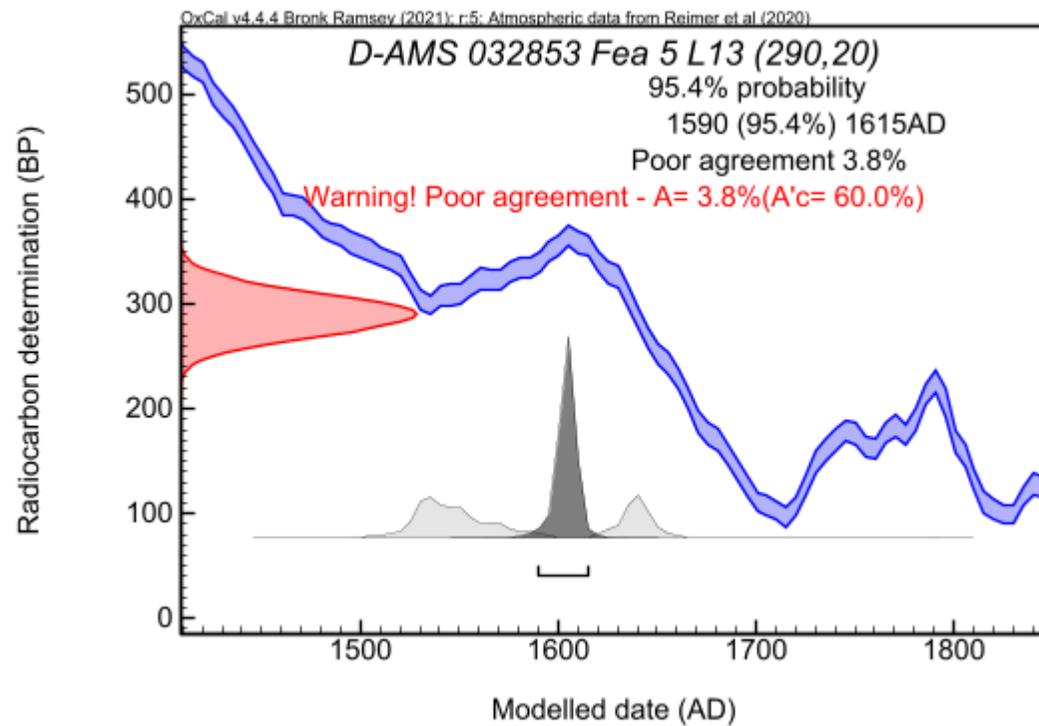
SEC Example



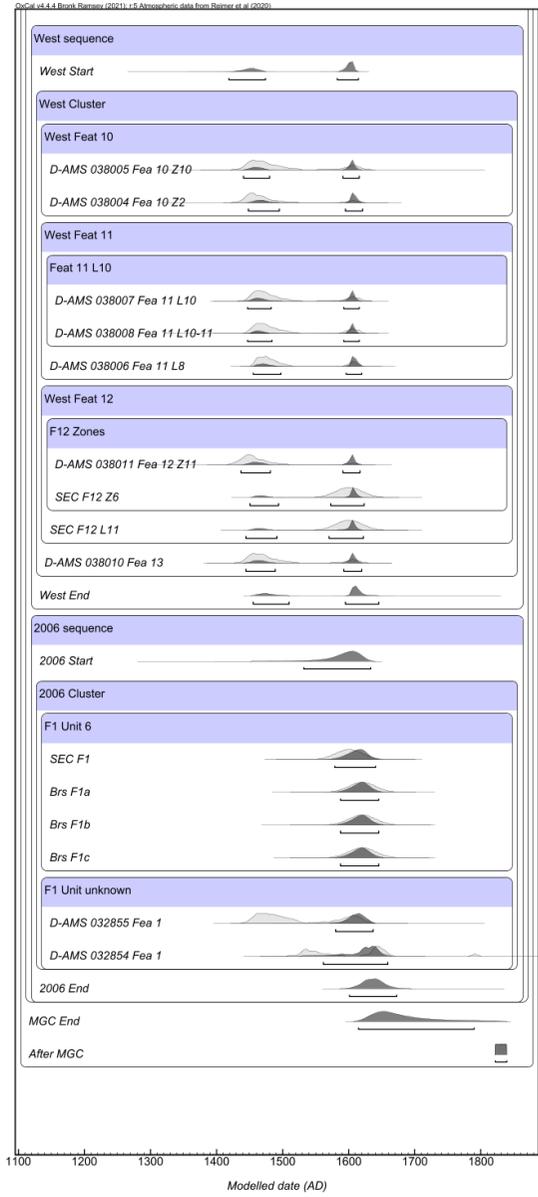
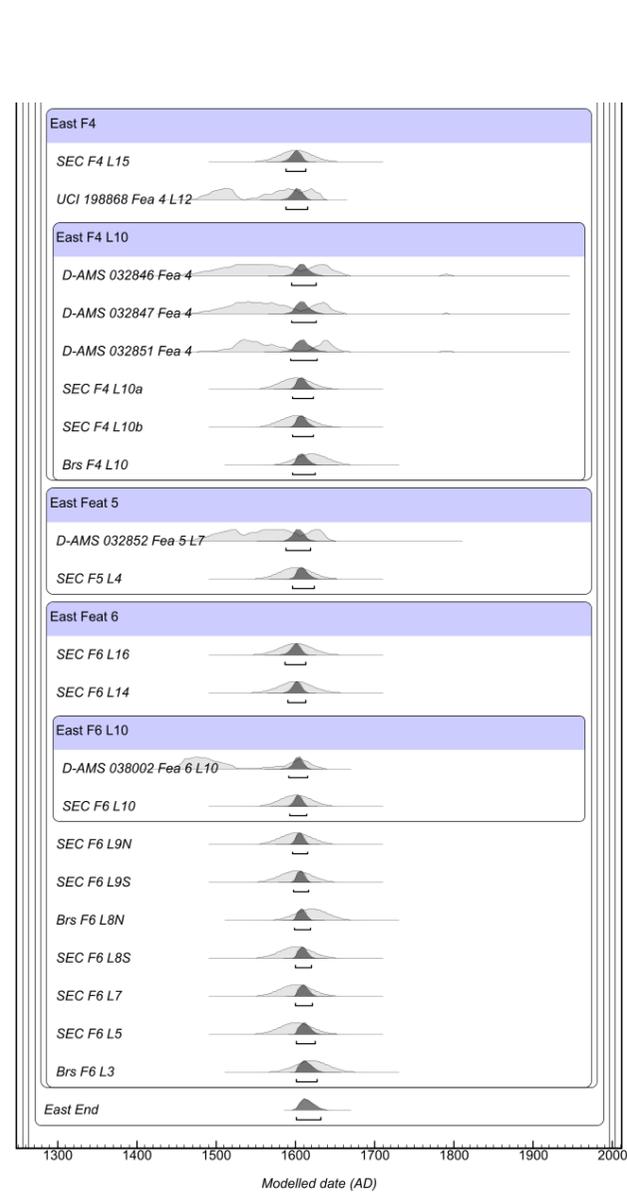
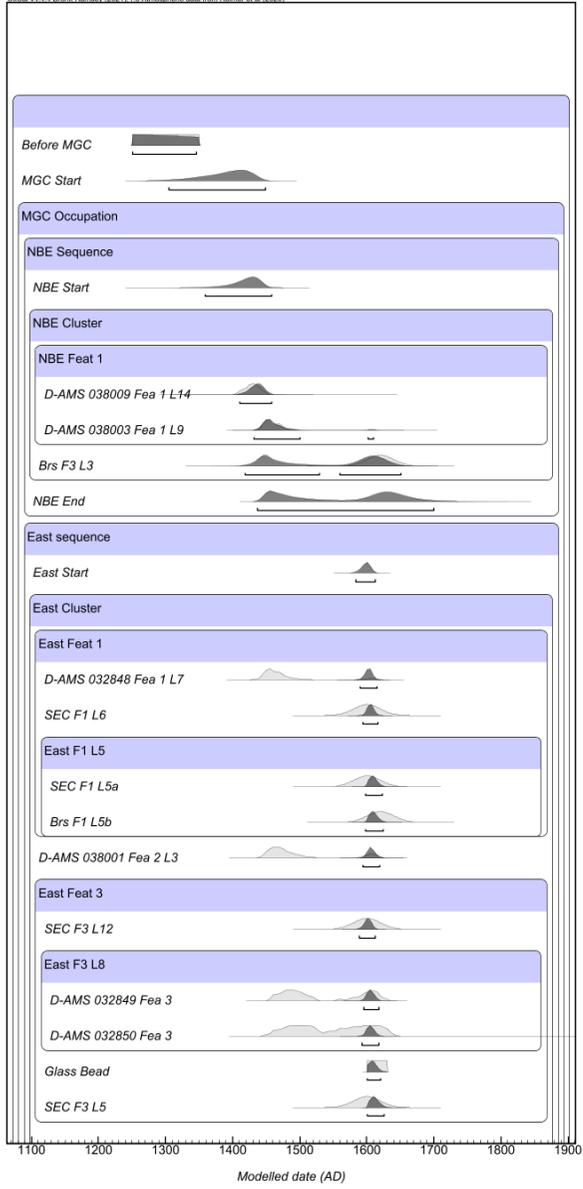
Brs Example



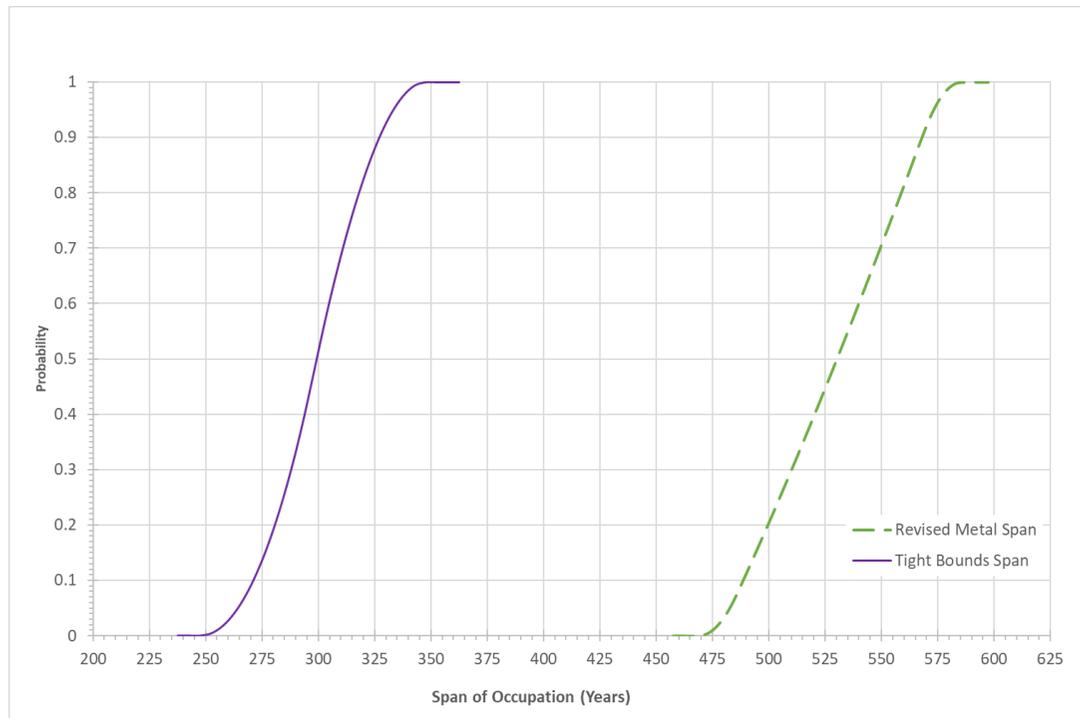
Supplemental Figure S3. Prior distributions used to represent smelted European copper (SEC) and brass (Brs) in the chronological modeling. They are normal distributions with a mean of AD 1600 and AD 1620, respectively, and a standard deviation of 20 years.



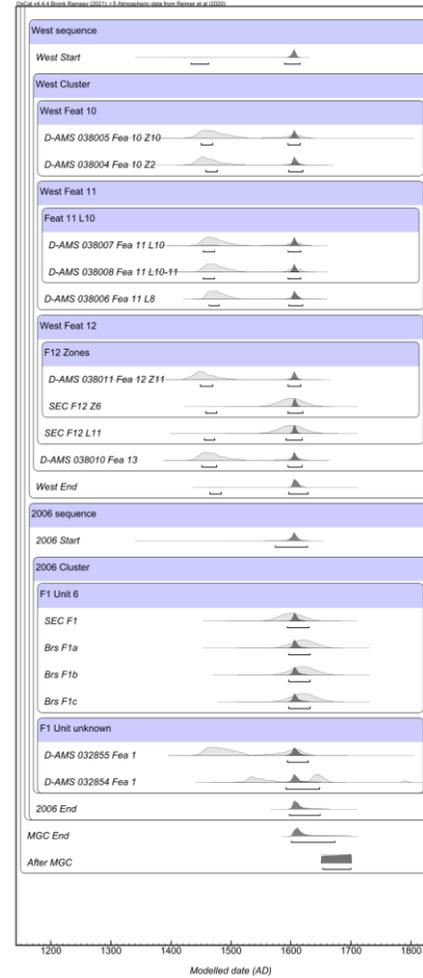
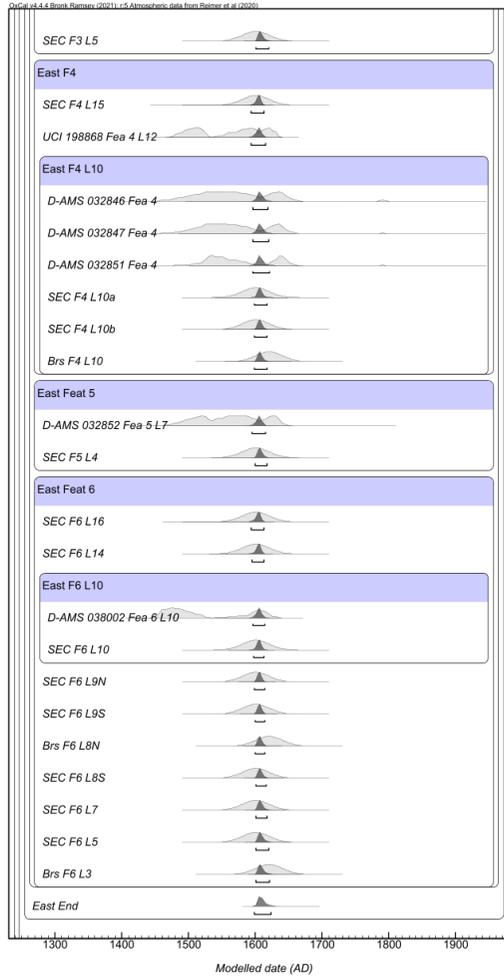
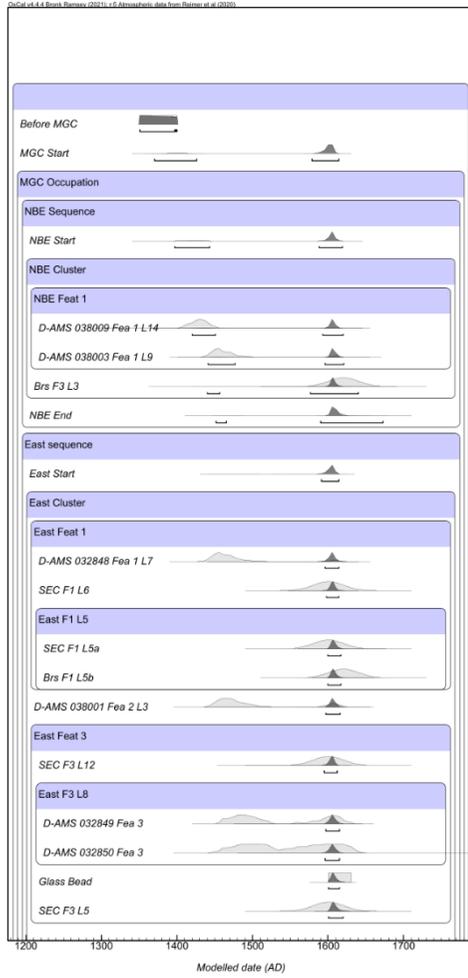
Supplemental Figure S4. East Cluster Feature 5 Layer 13 radiocarbon date in the Metal Added model. Note that the posterior distribution (dark gray) only overlaps a small portion of the likelihood distribution (light gray). This produces the poor agreement value of 3.8%.



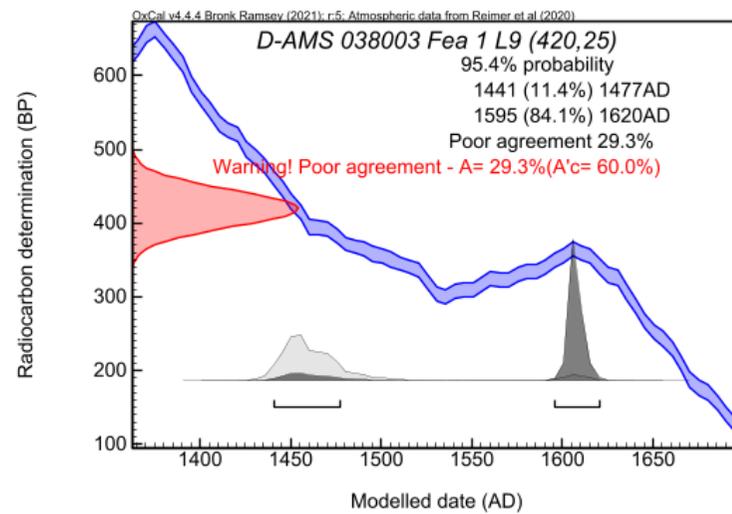
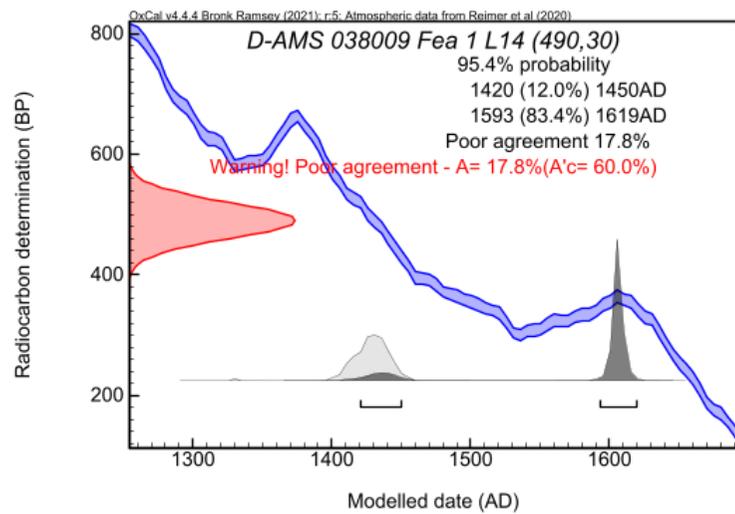
Supplemental Figure S5. Revised Metal model plot.



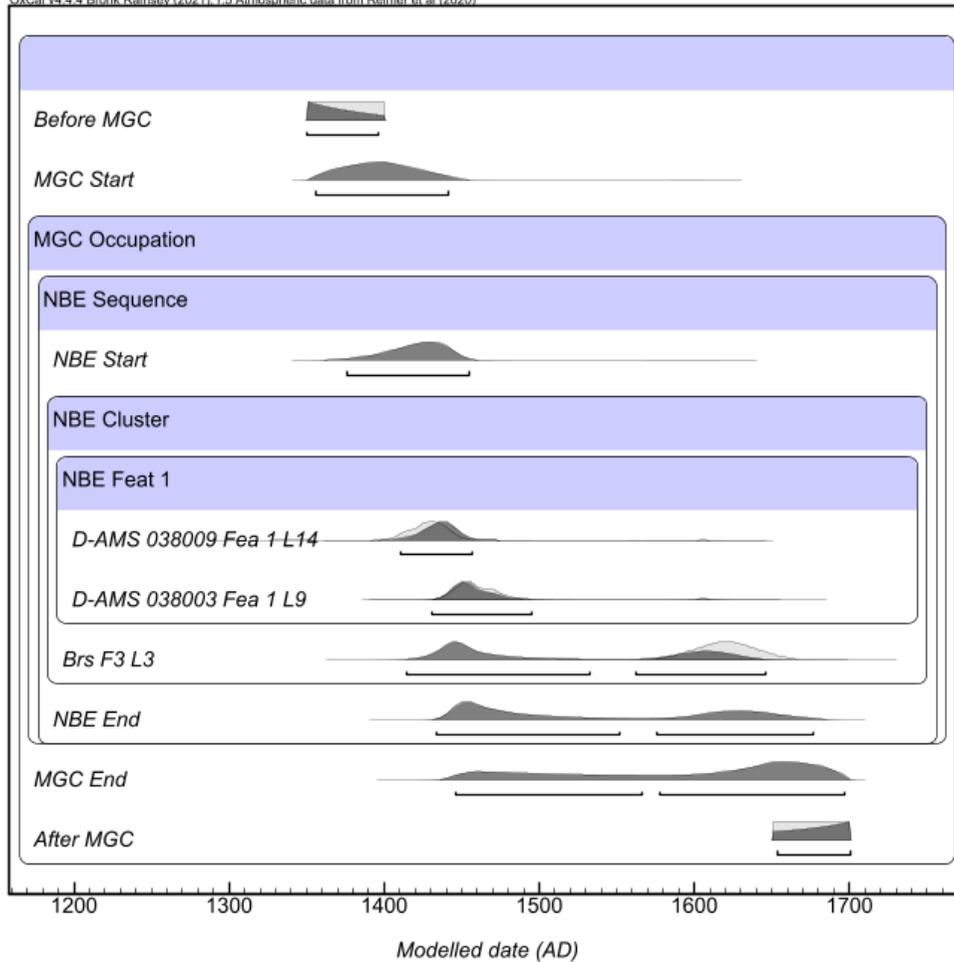
Supplemental Figure S6. Span of occupation probabilities as determined by the Revised Metal and Tight Bounds models.



Supplemental Figure S7. Tight Bounds model plot.



Supplemental Figure S8. Individual radiocarbon likelihood and posterior distributions radiocarbon samples D-AMS 038009 (left) and D-AMS 038003 (right) when using the Tight Bounds model.



Supplemental Figure S9. Plot of the model output when only the NBE Cluster and the Tight Bounds TPQ and TAQ date ranges are included within the MGC model. Note that the NBE radiocarbon posterior curves closely match the likelihood curves, producing an early NBE start and thus an early MGC start date range.