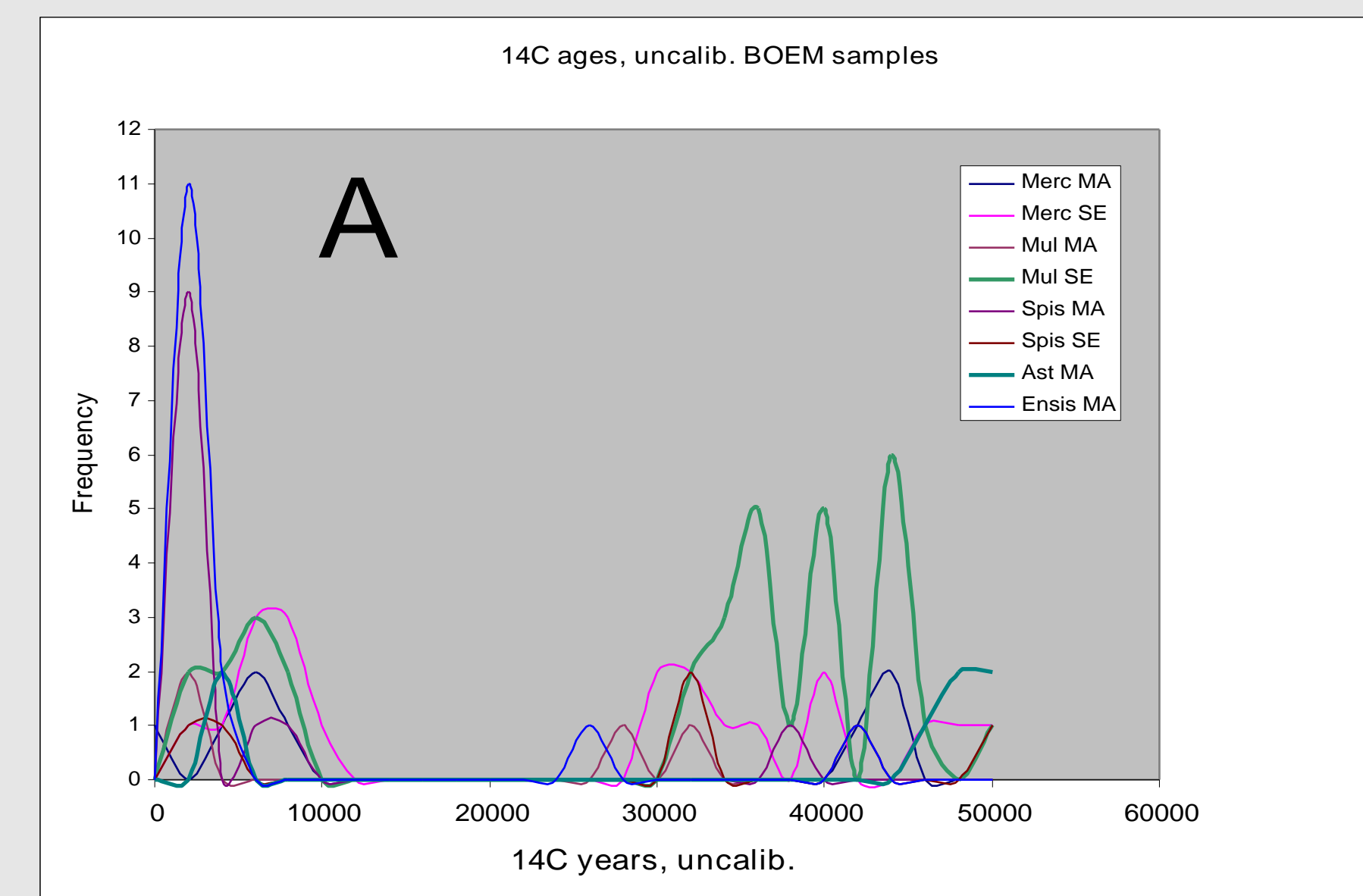


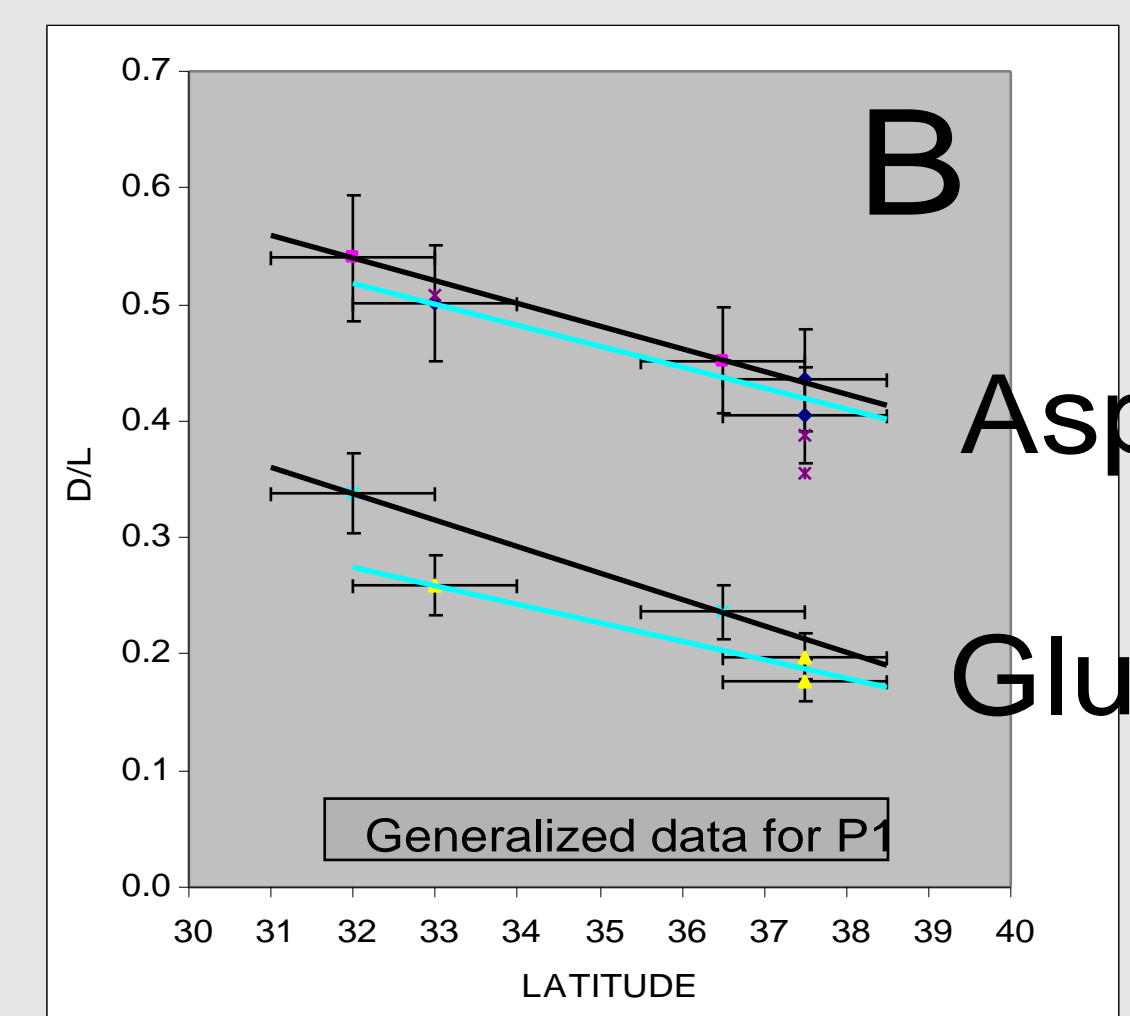
MD & VA: 18-1230, 18-1248 show two aminozones (P1 & P2) representing Q2 and Q1, respectively. 27-1520 shows one aminozone (P1 = Q2); 16-01 and 16-02 have ~ P1(+) D/L values. Q2 has 14C ages from ~30ka to >50 ka.

Three approaches to age estimation:

A: histogram plot of 14C results from shelf samples; five others (2 Merc, 3 Ast) yielded ages > lab det. limit. At face value, the 14C results for all the BOEM cores suggest the existence of an extensive ~40 ka unit on the shelf, but in almost all cases the AAR data indicate that the 14C ages are minimum ages.



B: Latitude trends of D/L Aspartic and Glutamic in Mulinia from onshore (black) and offshore (blue) sites (P1 zone). Data points are regional averages for sites in the mid-Atlantic and southeast Atlantic. The onshore sites plotted here are MIS 5a in age. The offshore sites plot slightly below the onshore sites, perhaps because of age or temperature differences. Interpretation of individual core results requires consideration of local environmental factors and the range of D/L values observed in each core. Core samples with "young" D/L values include NC08/09 and SC24, possibly MIS3 (broadly defined).



C: The concept of proportional time. Each number (4,8,16..) value represents a doubling in time (sample age) from independent experimental data. Typical values for P1 and P2 in the mid-Atlantic indicate that P2 must be at least 3x the age of P1. Similarly for the southeast region: the D/L values are different for the southeast, but the age differences are similar. Detailed comparisons for local groups of core data can refine these age estimates.

