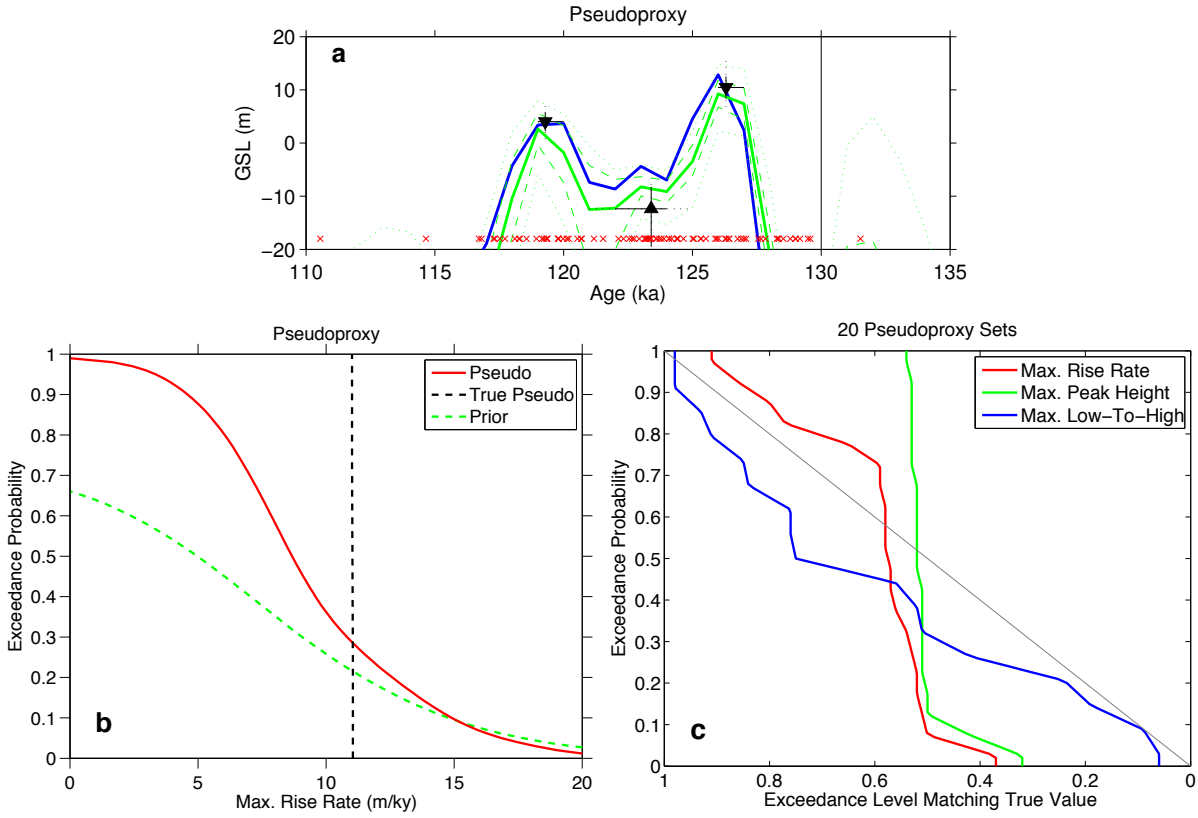

Figure S-1. Pseudoproxy analyses. (a,b) Analyses for one particular proxy data set. (a) Projected GSL distribution (green curve) and its 67% (dashed) and 95% (dotted) confidence intervals, true GSL (blue curve), identified peaks and troughs (triangles), and mean projection of observation ages (red crosses). (b) Exceedance probability for different rates of intra-LIG sea level rise (red), the prior (dashed green curve), and the known true value (dotted vertical line). (c) Probability, for 20 different pseudoproxy data sets, that the true value of a given statistic exceeded a given exceedance level. The statistics shown are maximum rate of intra-LIG sea level rise (red), maximum peak height (green), and maximum intra-LIG low-to-high sea level swing (blue). The grey curves shows a 1:1 line for comparison; values above this line reflect a projection underestimate, and values below this line an overestimate. For example, the green curve indicates that in all the pseudoproxy data sets, the true peak height fell between the 54% and 32% probability exceedance levels.

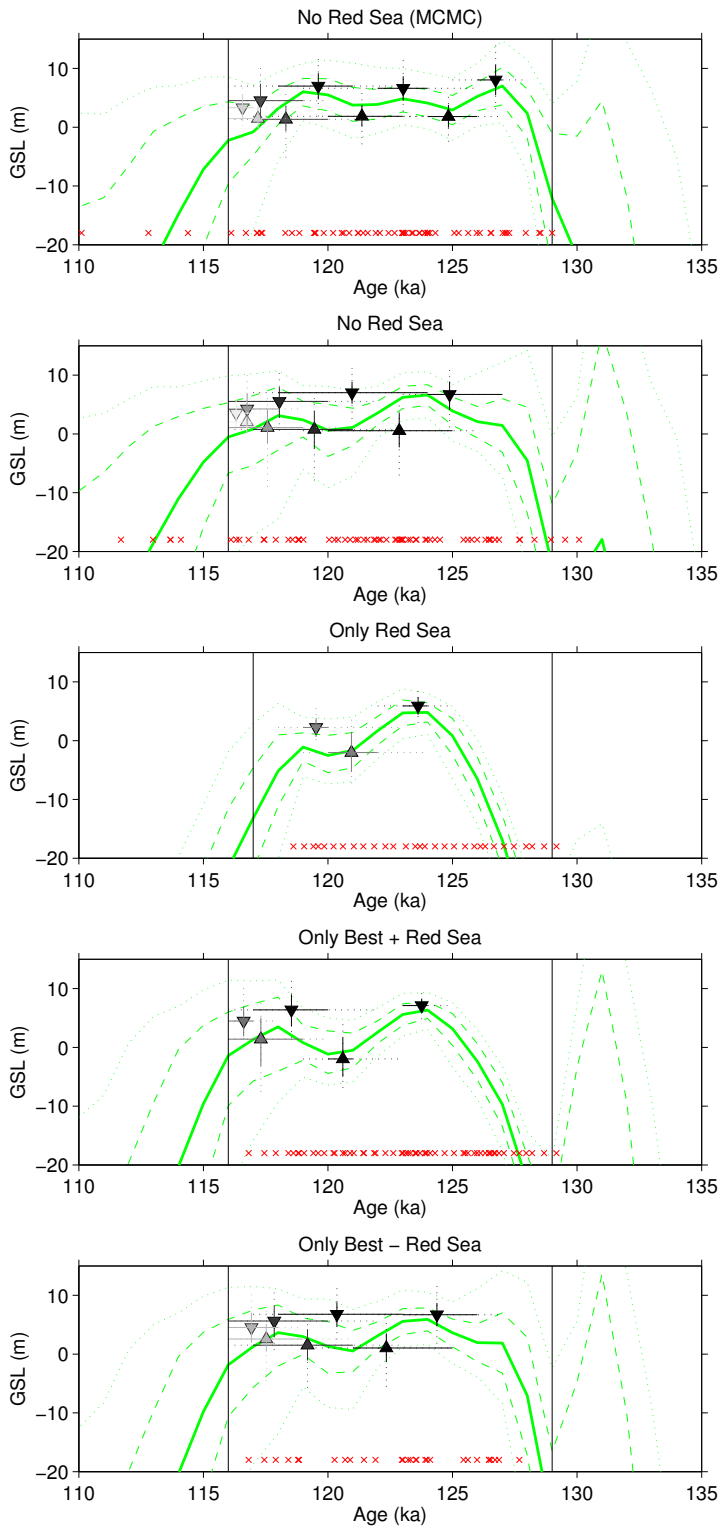

Figure S-2. Resolved peaks (downward triangles) and troughs (upward triangles) of the LIG sea level curve for subset analyses. Presentation as in Fig. 3.