

Figure S1. Area of igneous rocks in Macrostrat columns in North America (Fig. 1C) subdivided into “felsic” and “mafic” components. For a complete list of relevant lithologies, see <https://macrostrat.org/api/defs/lithologies?all>. A, Felsic area. B, mafic area, C, ratio of felsic to felsic+mafic igneous area. Note, mafic and felsic rocks can co-occur in the same unit and are counted in both representations. Note too that not all igneous rocks fall into one of these two lithology groups and that some rock names used widely in field descriptions (e.g., “granite”) are based on very general compositional information. Data for this and all other figures were obtained from Macrostrat API in March 2021: [https://macrostrat.org/api/units?lith\\_class=igneous&lith\\_type=metaigneous&project\\_id=1&response=long](https://macrostrat.org/api/units?lith_class=igneous&lith_type=metaigneous&project_id=1&response=long)

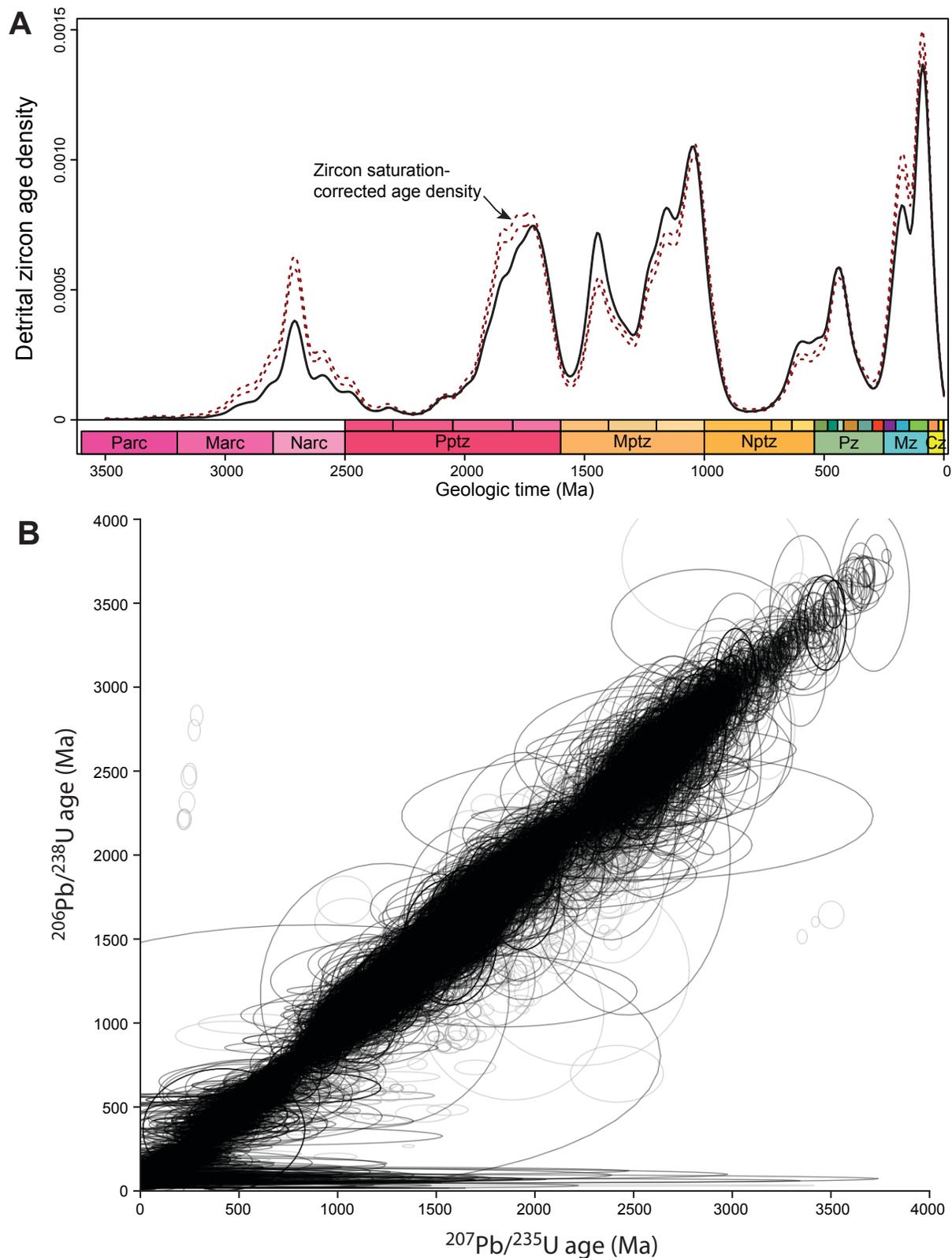


Figure S2. Raw and corrected DZ age kernel density and concordia for DZ grain ages. A, Uncorrected DZ density (from figure 3A) and density corrected to modern zircon saturation (Keller, et al. 2017). See also Fig. 3B. Upper and lower limits of corrected age density show 95% confidence limits from 100 bootstrap replicate samples of grains. B, Two-sigma error ranges of  $^{206}\text{Pb}/^{238}\text{U}$  and  $^{207}\text{Pb}/^{235}\text{U}$  age systems used to filter 75,290 measurements. Grains retained (69,453) are shown in black and intersect the 1:1 line. This concordance calculation does not account for covariance between the two systems, but doing so would primarily affect discordant measurements (shown in gray and mostly obscured by dense over-lap) that are near the 1:1 line. Presented results are robust to more stringent and relaxed culls of the data and to subsampling due to the large number of measurements included in the calculation of kernel density. See supplemental datafile for raw data used to compute concordia and KDE.