

Figure S1a-h – Our compiled zonal, hemispheric and global summer $\Delta^{14}\text{C}$ curves versus those of Hua et al. (2013).

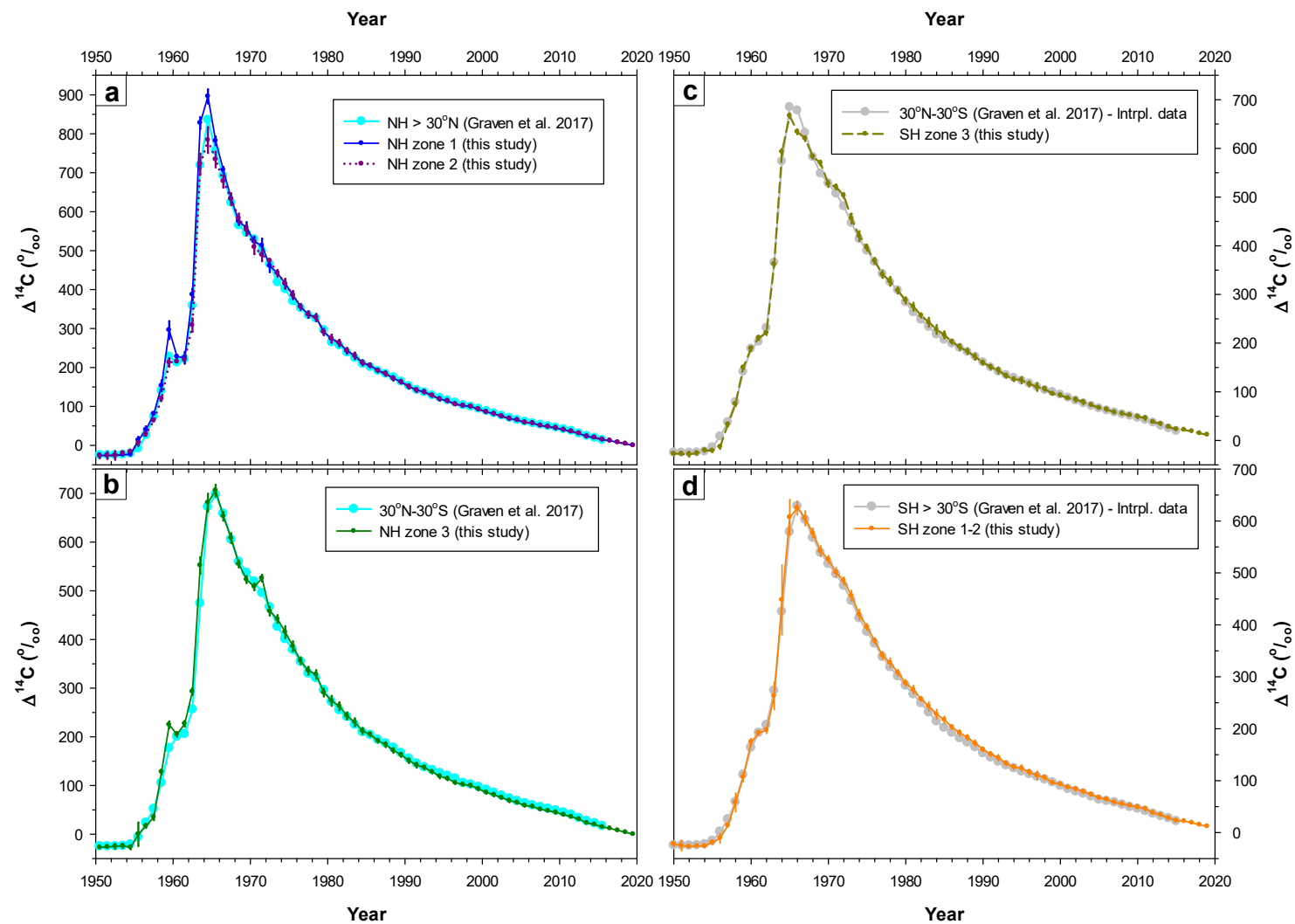


Figure S2 – (a-b) Our compiled zonal summer $\Delta^{14}\text{C}$ curves for the NH versus compiled $\Delta^{14}\text{C}$ data of Graven et al. (2017), and **(c-d)** Our compiled zonal summer $\Delta^{14}\text{C}$ curves for the SH versus interpolated values of the compiled $\Delta^{14}\text{C}$ data of Graven et al. (2017). The latter data were linearly interpolated in order to get the same timing for both compiled data sets for ease of comparison.

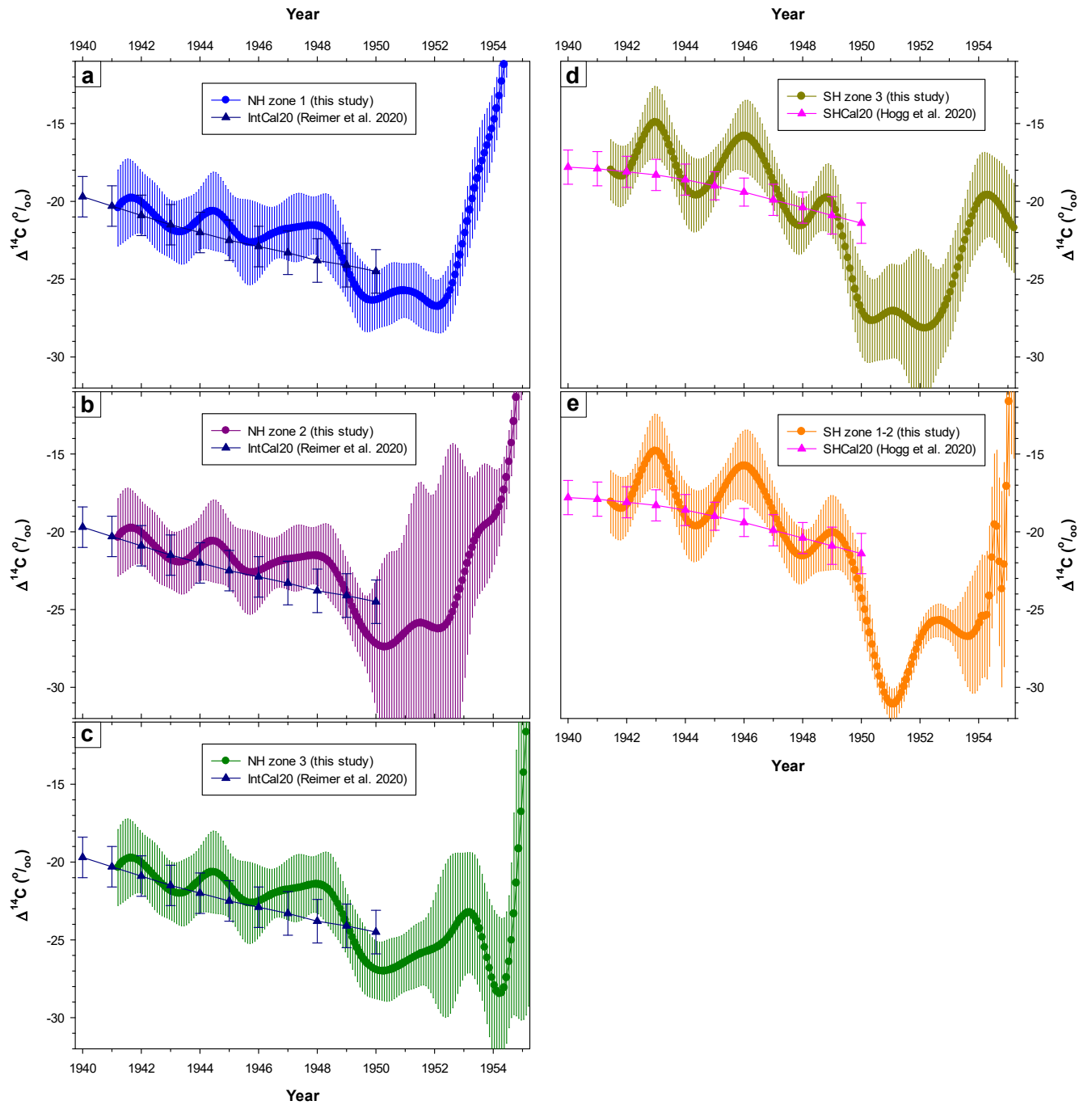


Figure S3 – (a-c) Our zonal monthly $\Delta^{14}\text{C}$ data for the NH versus the IntCal20 curve (Reimer et al. 2020), and (d-e) Our zonal monthly $\Delta^{14}\text{C}$ data for the SH versus the SHCal20 curve (Hogg et al. 2020).