Tectonics

Supporting Information 2 for:

Meso–Cenozoic geodynamic evolution of the Patagonian foreland: insights from low-temperature thermochronology in the Deseado Massif

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Table of content:

Data inversion results

The raw results of data inversion performed with QTQt (Gallagher, 2012) are presented in Fig S4 to S8.

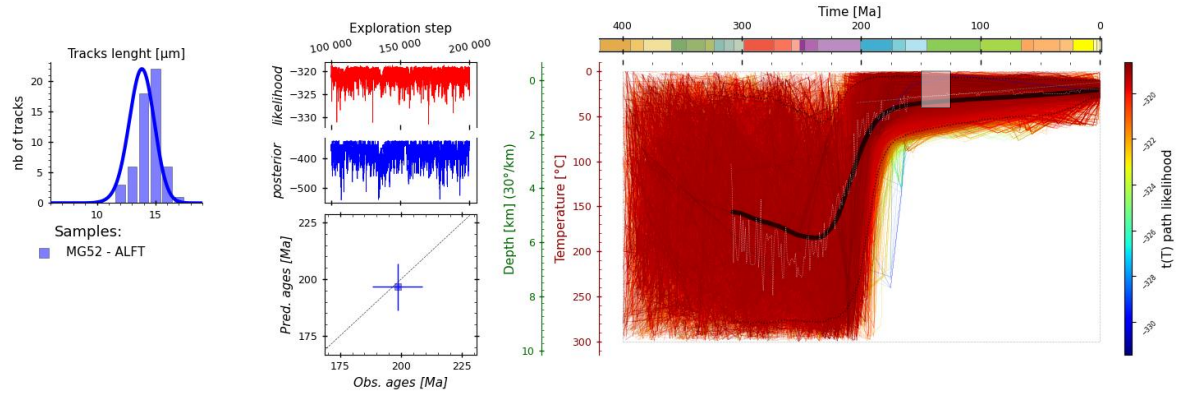


Figure S4: Thermal model results obtained for the sample of Bajo Grande Fm. (MG52), with predicted thermochronological data results.

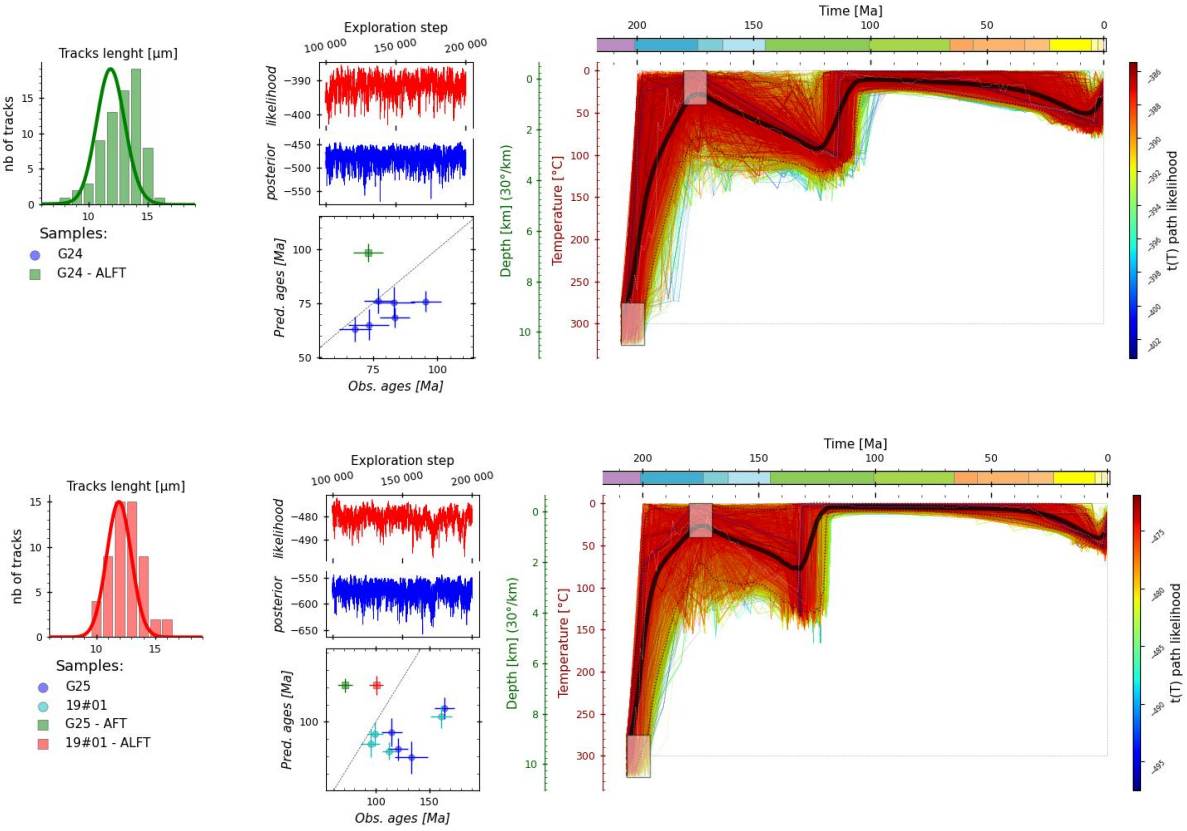


Figure S5: Thermal model results obtained for the La Leona Fm. samples (G24, G25 and 19#01), with predicted thermochronological data results.

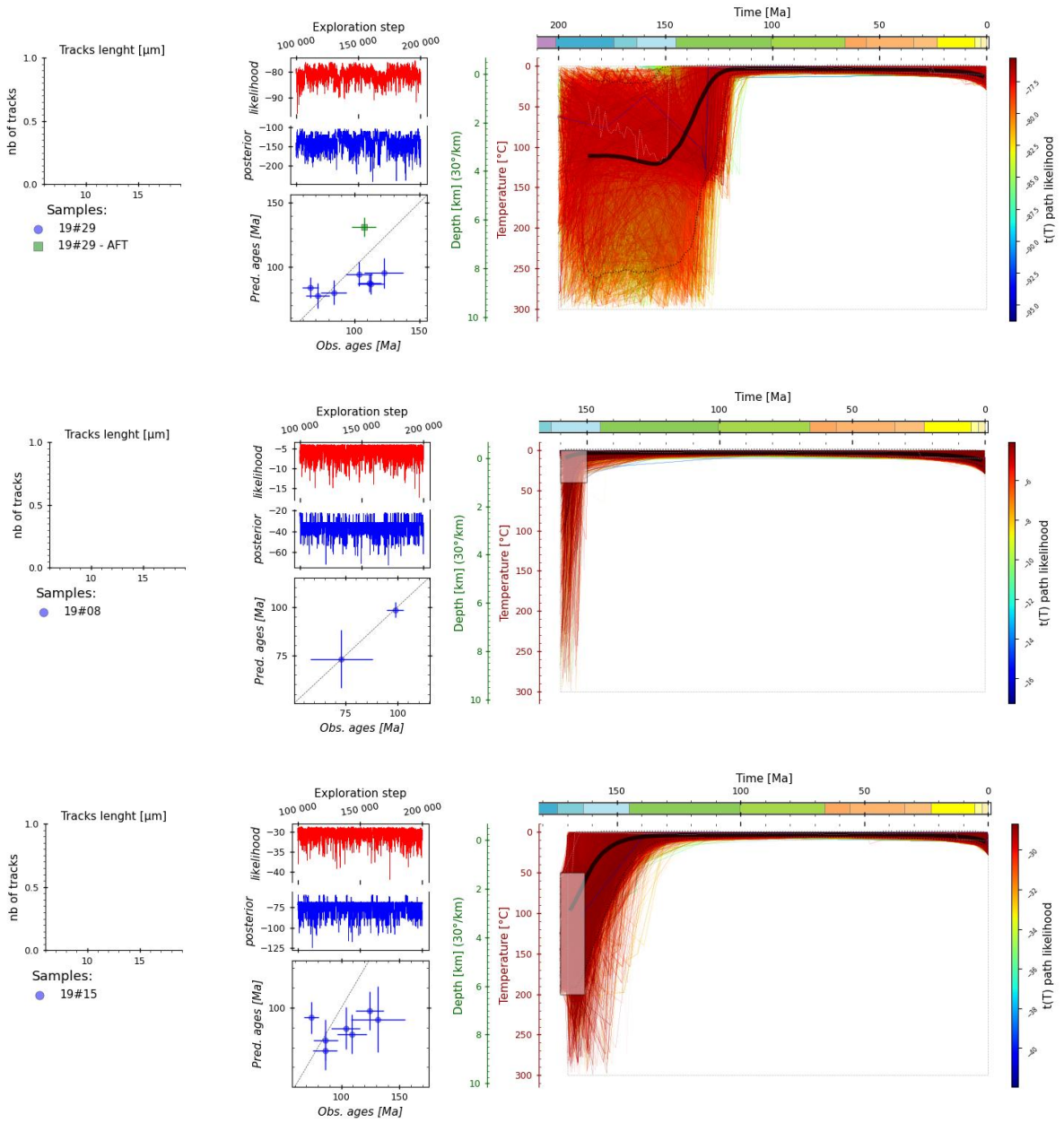
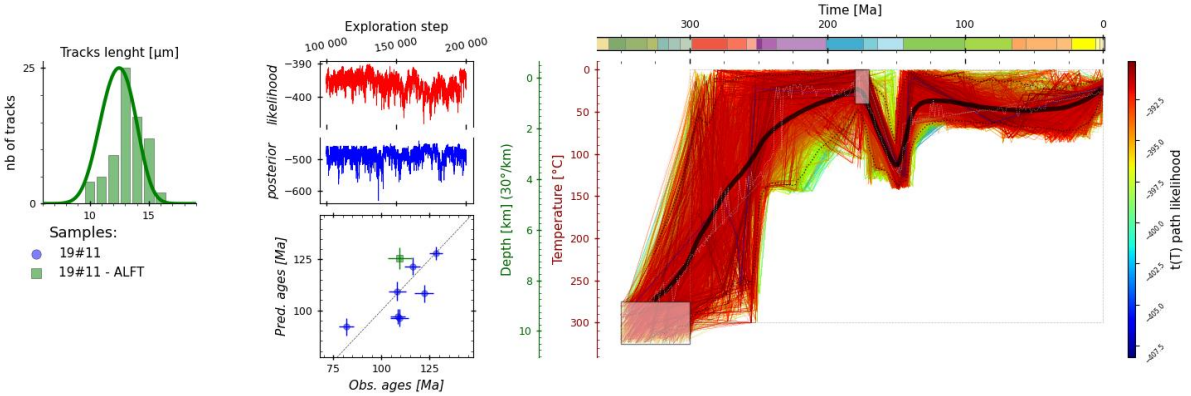


Figure S6: Thermal model results obtained for the Bahia Laura Volcanic Complex samples (19#29, 19#08 and 19#15), with predicted thermochronological data results.



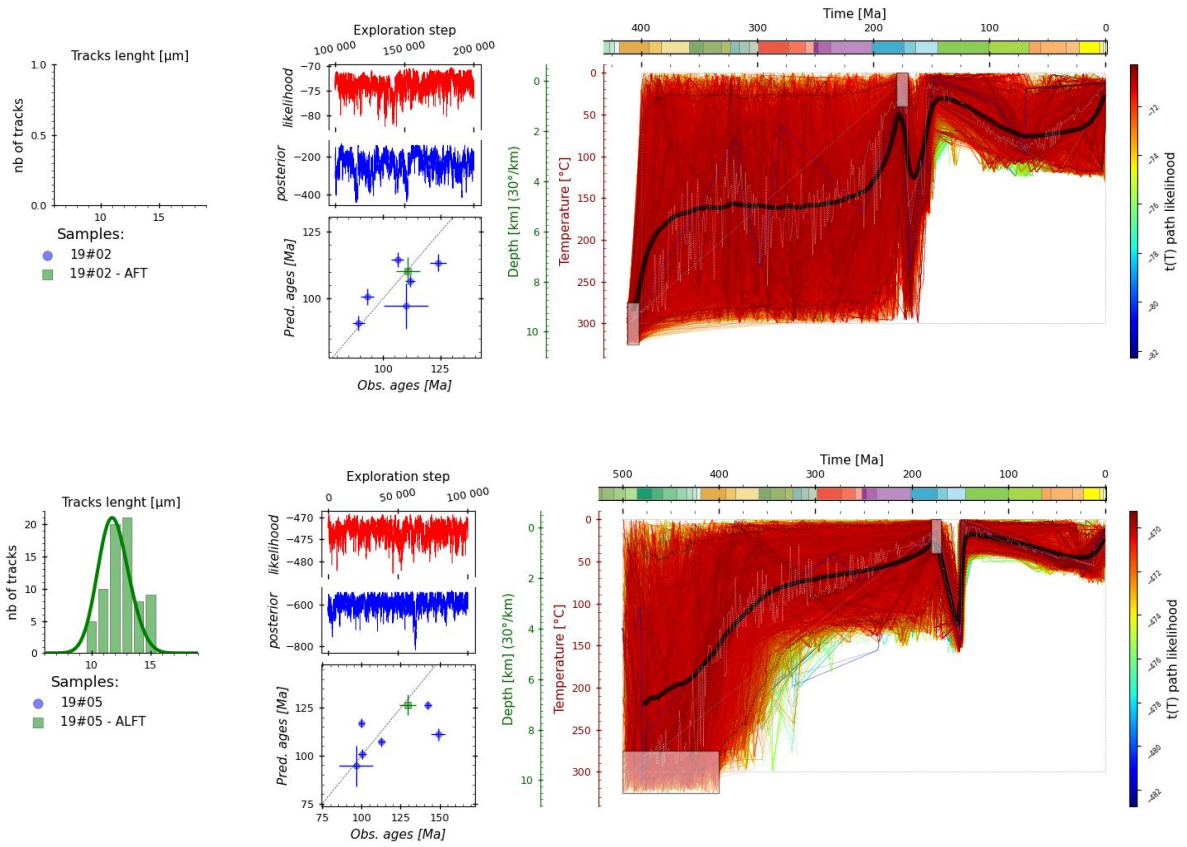


Figure S7: Thermal model results obtained for the Rio Deseado Complex samples (19#02 and 19#05), with predicted thermochronological data results.

Data inversion with different AHe diffusion model

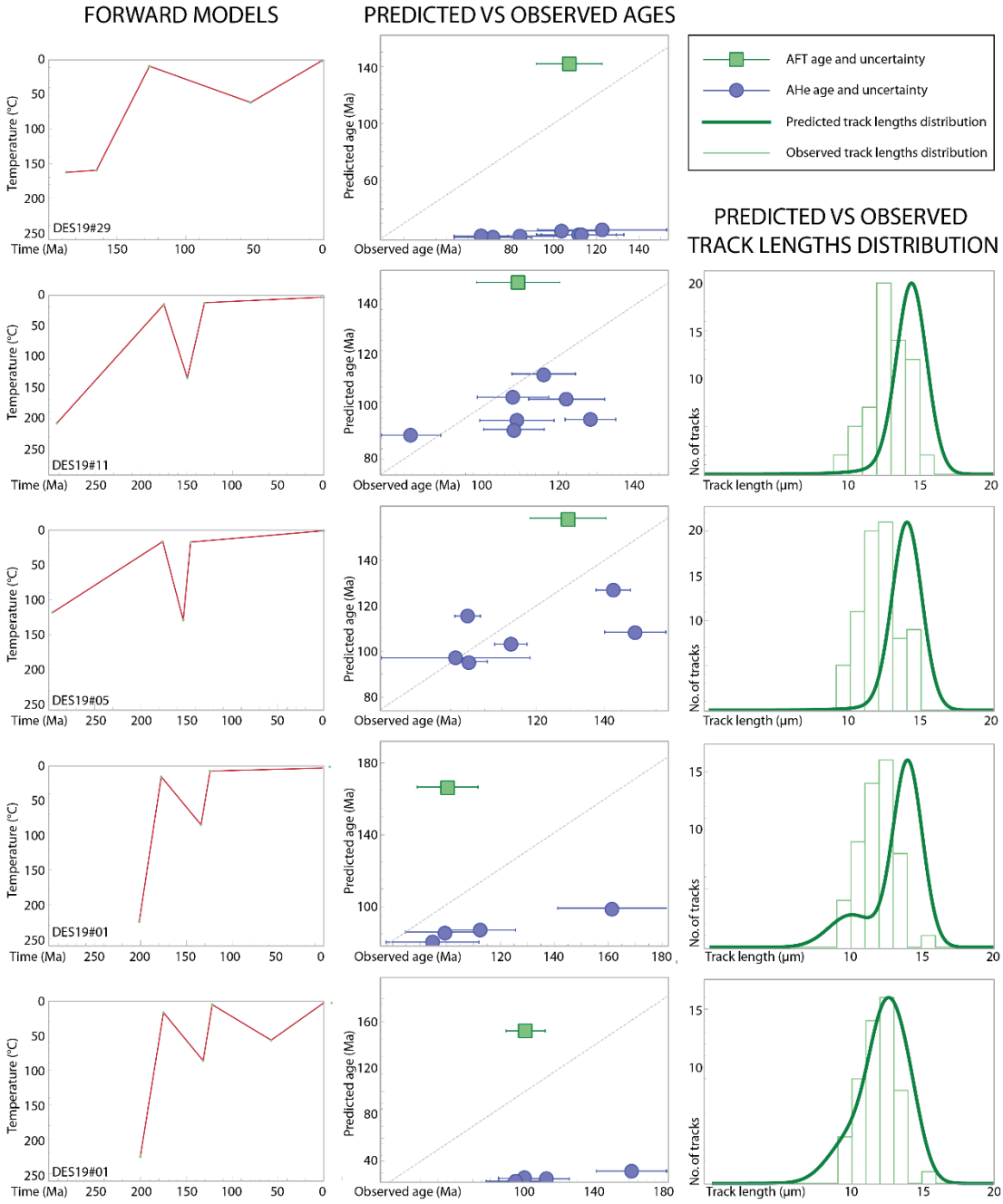


Figure S8: Forward models were conducted for samples DES19#05 and #11 without the Late Cretaceous–Cenozoic heating phase, for DES19#29 with this heating phase, and for DES19#01 with both scenarios. These models demonstrate that they do not accurately reproduce the AHe dates, AFT dates, and/or lengths compared to the inverse models interpreted and discussed in our study.

References

Gallagher, K., 2012. Transdimensional inverse thermal history modeling for quantitative thermochronology. Journal of Geophysical Research: Solid Earth 117, n/a-n/a. https://doi.org/10.1029/2011JB008825