Henriquez, S., DeCelles, P.G., Carrapa, B., and Hughes, A.N., 2022, Kinematic evolution of the central Andean retroarc thrust belt in northwestern Argentina and implications for coupling between shortening and crustal thickening: GSA Bulletin, https://doi.org/10.1130/B36231.1.

## Supplemental Material

Figure S1. Radial plots for AFT samples in the Sierra Alta (Coraya and Yacoraite Valleys).

**Figure S2.** Radial plots for AFT samples from the Tilcara Range, Cianzo area and east side of the Eastern Cordillera.

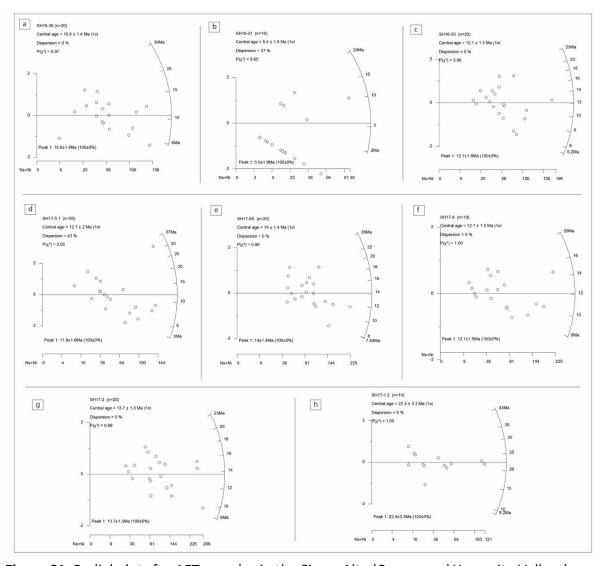
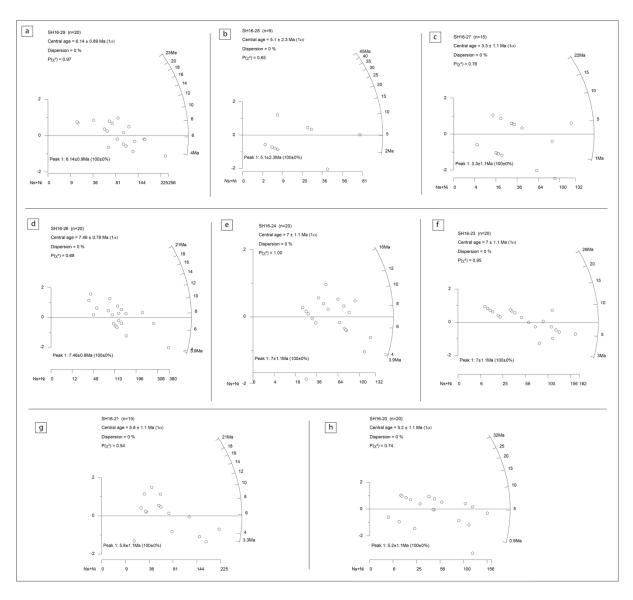


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**Figure S2.** Radial plots for AFT samples from the Tilcara Range, Cianzo area and east side of the Eastern Cordillera.