Jian-Gang Wang, Xiumian Hu, Eduardo Garzanti, Marcelle K. BouDagher-Fadel, Zhi-Chao Liu, Juan Li, and Fu-Yuan Wu, 2020, From extension to tectonic inversion: Mid-Cretaceous onset of Andean-type orogeny in the Lhasa block and early topographic growth of Tibet: GSA Bulletin, https://doi.org/10.1130/B35314.1.

## **Data Repository**

Figure DR1. Basaltic sill in the Shexing Formation. Cross-cutting relationship and Chilled margins indicate that these basaltic rocks are intrusive rather than volcanic.

Table DR1. Youngest detrital-zircon U-Pb ages of sandstone samples from the Shexing Formation.

**Table DR2.** Stratigraphic data for calculation of tectonic subsidence.

Table DR3. Petrographic composition of sandstones from the Shexing Formation.

Table DR4. U-Pb ages of detrital zircons from sandstones of the Shexing Formation.

Table DR5. Hf isotopic data of detrital zircons from sandstones of the Shexing Formation.

