Decreasing preservation rate of ~2.3 Ga zircons for the Mesoproterozoic cover of Quanji Massif, NW China

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The Quanji Massif in the NW China is a cratonic remnant that is composed of a Paleoproterozoic basement and a cover of Mesoproterozoic – early Paleozoic strata. Detrital zircons from three and tow samples from the lower and upper sections of the Mesoproterozoic terrigenous clastic cover respectively yielded strong and weak age populations of ~2.2–2.4 Ga (see Figure 1). These results imply that it is necessary to comprehansievly study samples along sequential strata rather than only within a single stratum, in case of missing understanding an important tectonic event such as the ~2.2–2.4 Ga plate tectonic event worldwide.

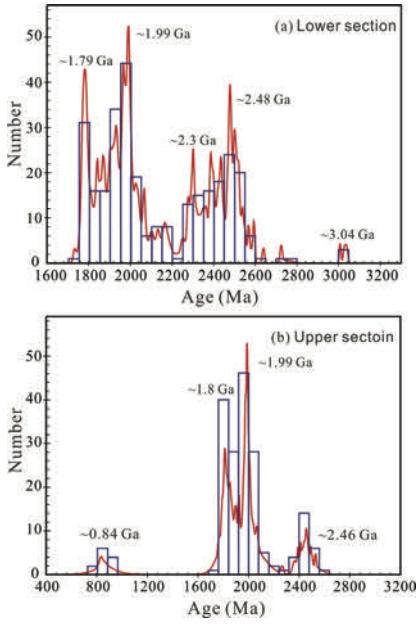

Figure 1: Zircon age spectra for (a) the lower and (b) the upper sections of the Mesoproterozoic clastic strata.

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