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## Early-Mid Pleistocene ice core records of Antarctic and global cooling

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Here we present water isotope and noble gas data from the Allan Hills, Antarctica, which provide insight into the local and global climate extending through the Mid Pleistocene Transition and beyond. The Allan Hills blue ice archive provides snapshots of climate that extend well beyond continuous ice core records, but their interpretation has challenges, including complex stratigraphy, potential preservation bias, and highly thinned records. The water isotope and noble gas data (which come from the same ice samples) suggest a statistically significant correlation between Antarctic temperature and mean ocean temperature, consistent with previous studies. However, we observe subtle differences between these climate reconstructions, including within the mid-Pleistocene transition. We discuss these datasets in the context of broader global changes, and the nuances of the Allan Hills archives.

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