



## **Millennial-scale climate variability during the past 720,000 years recorded in the Dome Fuji ice core**

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A 3035m deep ice core was retrieved from Dome Fuji, East Antarctica in January 2007. The core provides us with undisturbed climate record for the past 720,000 years, the second longest ice core record after the Dome C core. The Dome Fuji  $\delta^{18}\text{O}$  record shows pervasive millennial-scale climate variability during the past seven glacial periods. We find a close match between the Dome Fuji  $\delta^{18}\text{O}$  and the Dome C  $\delta\text{D}$  records even on millennial scales, as well as on orbital time scales. This suggests homogeneity of millennial-scale climate variability across East Antarctic Plateau over the past seven glacial periods. Mineral dust flux also shows millennial-scale variability, while sea salt flux doesn't. With the new Dome Fuji record, we discuss the frequency and timing of the millennial-scale climate variability in East Antarctica during the past 720,000 years.