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Summer temperature trend over the past two millennia using air content in Himalayan ice

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Abstract. Two Himalayan ice cores display a factor-two decreasing trend of air content over the past two millennia, in contrast to the relatively stable values in Greenland and Antarctica ice cores over the same period. Because the air content can be related with the relative frequency and intensity of melt phenomena, its variations along the Himalayan ice cores provide an indication of summer temperature trend. Our reconstruction point toward an unprecedented warming trend in the 20th century but does not depict the usual trends associated with "Medieval Warm Period" (MWP), or "Little Ice Age" (LIA).

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