

## **Observation analysis of the impact of urbanization over East China**

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On the premise that the influence of urbanization on air temperatures is greatest on calm, cloudless nights and is reduced in windy, cloudy conditions, homogenized daily minimum for the period 1960-2008 at East China land stations are analyzed separately for windy, cloudy and calm, cloudless conditions, and the trends are compared. There is a small tendency for calm, cloudless days to have warmed more than windy, cloudy days over East China, the difference is 0.03°C per decade attributable to urbanization. In contrast, the urban caused warming from 1979 to 2008 is estimated to be 0.66°C per decade. The warming caused by urbanization is always smallest in summer in East China, JingJintang area, Yangtze River delta and Pearl River delta. The reasons are likely to be systematic changes in atmospheric circulation and long-wave radiation changes at night due to different cloud conditions.