

## Abstract

One of climatological indices widely used in Japan is the number of days in some categories of daily minimum and maximum temperatures ( $T_{\min}$  and  $T_{\max}$ ), such as  $T_{\min} < 0^{\circ}\text{C}$ ,  $T_{\min} \geq 25^{\circ}\text{C}$ ,  $T_{\max} < 0^{\circ}\text{C}$ ,  $T_{\max} \geq 25^{\circ}\text{C}$  and  $T_{\max} \geq 30^{\circ}\text{C}$ . The present study aims at evaluating their bias arising from changes in the observation time of  $T_{\min}$  and  $T_{\max}$ , which are currently defined for 0000–2400 JST (Japan Standard Time), but were observed for 2200–2200 JST at most stations until 1939 and for 0900–0900 JST for  $T_{\min}$  from 1953 to 1963. The analysis was based on hourly temperature data at 830 automated stations (AMeDAS) from 1979 to 1997. In comparison to the 0000–2400 observations, the 0900–0900 and 2200–2200 observations were found to result in decrease of  $T_{\min} < 0^{\circ}\text{C}$  days by 4.9 days/year (5.8%) and 2.3 days/year (2.8%), respectively, and increase of  $T_{\min} \geq 25^{\circ}\text{C}$  days by 0.8 days/year (15%) and 0.3 days/year (5.1%), respectively, on the average over all the stations. For the numbers of  $T_{\max} < 0^{\circ}\text{C}$ ,  $T_{\max} \geq 25^{\circ}\text{C}$  and  $T_{\max} \geq 30^{\circ}\text{C}$  days, the bias due to 2200–2200 observation was found to be small. Then a simple equation for the relationship between biases of the number of days and temperature was derived, and its validity was examined. Finally, a brief analysis was made about the effect of the bias on the long-term change rate of the number of days. It was shown that the number of  $T_{\min} < 0^{\circ}\text{C}$  days during the last hundred years can have a superficial trend of several days/(year  $\cdot$  100 years) unless correction is made for the bias.



## 第7回大気科学と大気質への応用 (Atmospheric Sciences and Applications to Air Quality, ASAAQ と略称) 国際会議のお知らせ

上記会議のメキシコ開催が変更となり、急遽、台湾台北での開催となりました。2000年10月31日～11月2日、グランドホテルでの開催が決定。多数ご参加下さい。

**主 題**：大気汚染質と温暖化ガスの測定とモデル、対流圏化学、大気汚染と気象（ダイオキシン、PAH、重金属など）、緊急時の対応、発生源収支、環境アセスメント、汚染物質除去過程・制御技術、制御政策。特に、地域の気候変化とその影響、および対流圏物質のリモートセンシングについては特別セッションを予定。  
**発表希望者**：英語で200～400語のアブストラクト（口頭またはポスターの発表希望の別）を2000年7月15日までに右記に送付のこと。

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また、次の ASAAQ-2000 Web site でも、アブストラクト送付や登録ができる他、詳細な情報が得られます。

ASAAQ-2000 Web (<http://www.atm.ncu.edu.tw/asaaq2000/>)