

Thesis Title	Change of Climatic Parameters for the Last Decade
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Abstract

This research consists of two parts. The first part was to study change of climatic parameters for the last decade in Thailand by using ambient temperature and relative humidity data from the meteorological department. Using the statistical analysis method, it was observed that change of climatic parameters for the last decade had not certain trend because they were strongly depend on abnormal weather. This research studied change of climatic parameters for the last 40 years also. It was found that the ambient temperature parameters at Chiang Mai, Ubon Ratchathani and Bangkok for the last period (1989-1998) were significantly higher than 40 years period ago. The second part used total solar radiation data since 1998-1999 to find the regression coefficient of fractional time of Thailand by Reddy, Kumar and Saunier's method. It was observed that fractional time varied polynomial third order with radiation ratio. It can be used to calculate daily utilizability and then the long-term performance of the passive system in the later.

Keywords : Ambient Temperature / Relative Humidity / Total Solar Radiation / Fractional Time / Radiation Ratio / Daily Utilizability Function