Geophysical Research Abstracts,
Vol. 10, EGU2008-A-05463, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-05463
EGU General Assembly 2008

URBAN HEAT ISLAND DIARY RHYTHM IN A MEDIUM-SIZED CITY

A. Garcia-Manuel, J. Martín-Vide and M.C. Moreno-García
Group of Climatology, University of Barcelona, Barcelona, Catalonia

We attempt to establish an urban heat island diary rhythm in a medium-sized cit and its changes thru the day. We applied the study to the city of Vic, located in northeastern Iberian Peninsula, which has over 40.000 inhabitants. We use two methods. The first one consists in urban transects and the use of a digital thermohygrometric probe covering almost all the city and its outskirts. In the second one we use data from two automatic meteorological stations located at the city centre (in the hottest zone), and in the outskirts, at a high time resolution (10 min). The main results show an intense urban heat island at nocturnal part of the day and a low intense urban heat island and even an urban cold island at the diurnal part of the day. In windy, cloudy or rainy days, differences between urban and rural areas are minimum or inexistent.