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AVERAGE WIND SPEED REDUCTION IN A MEDIUM-SIZED CITY

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We try to assess the modification in the average wind speed in urban areas. The study is applied to the medium-sized city of Vic, which has over 40.000 inhabitants and is located in northeastern Iberian Peninsula. We use data from two automatic meteorological stations located at the city centre and in the outskirts, at a high time resolution (10 min). The main results show a reduction between 5-10 m/s in the nocturnal part of the day at the urban area, while in diurnal time there is a low increase (5 m/s). In strong windy days, the increase at the centre of the city is very important (up to 20 m/s), because of the canyon effect of the urban zone.