

عنوان مقاله:

(Campus Wind Environment Evaluation (Case Study: North China University of Technology

محل انتشار:

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خلاصه مقاله:

Wind environment in the populated built area especially in campus is important. This s tudy tes ted57 crossroad spots over of the whole campus in North China University of Technology (NCUT). The data of wind speed and direction were measured at fixed time and fixed place. The average, maximum values as well as the speed variation scale were calculated. Wind comfort criteria were adopted to examine the spots of s till wind zone, wake flow zone and risky zone. The overall measured data in wind scale map was analyzed to find out the changes of wind speed and direction in different seasons and in different locations of the school. Research and analysis showthat The results show that the overall wind environment of the campus is good, the average wind speed is between 0.04-4.8, the average wind speed in spring (1.38m/s) is slightly larger than that in autumn (0.87m/s). However, the overall frequency of campus wind comfort location measurement is not high (52% and 30% in spring and autumn respectively). Finally, with analysis results, some sugges tions were given to improve the wind environment of NCUT campus. Additional CFD .simulations are undertaken in order to help identifying the wind risky points

کلمات کلیدی:

Wind environment, campus environment, CFD Simulation, wind comfort

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