Parametrization of the Micrometeorological Tower’s Data Through Similarity Theory Of Monin–Obukhov and by Gradient and Profiles Methods

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Up on the present research was made a Superficial Boundary Layer (SBL) parametrization through a micrometeorological tower’s data on Burgos (Spain). For this study was used the Monin-Obukhov’s theory (M-O), and the gradient and profiles methods. One intends, through profile methods, to esteem $\zeta_0$ and to obtain the atmosphere stability’s regime. So far, we have identified the contribution of both thermal ($q$) and dynamics ($U$) terms up on $(\mathbf{Ri})B$, where we found out a big variation on the two geometric levels, with relation to the stability transition regime, and 1.5 m level presents a stability regime and to 5.2 m level an instability atmospheric condition was observed. Was esteemed the $f_m(x)$ and $f_h(x)$ functions for the experiment using the gradient method for the two cases. We evaluated the atmospheric stability regime by the gradient method end was identified atmospheric stability regime on the 1.5 m level and on the 5.2 m level was observed a variation between both stability and instability regimes. The information obtained here showed significant results, check the important role of the parametrization of meteorological data made through hypothesis, and the gradient and profile methods carry out on the SBL characterization.

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