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The FUNDAMENTALS of the modern methods in wind wave forecasting and their use in wave modelling.

In recent years for wind wave forecasting often begin to be used the so called interactive models, where attempts have been made to take into account the feedback mechanisms of interaction between atmospheric boundary layer and wind waves/so called two-way coupling/. The necessary method in description of such two way coupling is the EMPHASIS ON THE variability of the sea surface roughness .we discuss here the concept of aerodynamic roughness of the sea surfase and generalisation of empirical data on its variability in connection with so called wind speed scaling in Kitaigorodskii similarity theory/Kitaigorodskii,1962,2012/. The application of the latter to the data analisis of wind waves will be also discussed in framework of Kitaigorodskii asymptotic laws for deep and shallow waters.