MODELS HARMONISATION AS A MATHEMATICAL PROBLEM

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Models harmonisation may be considered from a functional analysis point of view. Functional conversion transforms the realization from some scale models class into a point of the next scale models class (downscaling). Such approach lets us see an incorrectness of the inverse problem of usage of larger scale models results in local models or model output interpretation in comparison with an actual measurement. The functional generalization in comparison of models and observed wind profiles in the boundary layer is illustrated.

It is shown that there are three main components of the studied wind field: the equilibrium state is described by the first orthogonal function (ground state), next EOFs describe the shapes of the main oscillations and the non-correlated variability is characterized by residual dispersion.

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