



## **Vertical influence range of surface inhomogeneities into the turbulent boundary layer**

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Rough natural surfaces show inhomogeneities on a broad range of scales. Those inhomogeneities produce flow variances on a broad range of scales and interact with various eddy sizes within the flow above it.

From surface and aircraft measurements of temperature, moisture and wind fields over land surfaces with different land use the height variation of surface inhomogeneities is studied in greater details. The data sets were partly taken over irrigated and non-irrigated surfaces with surface temperature jumps of more than 10° C. The detectable range of this temperature jumps in the vertical is discussed in comparison to theoretical boundary layer considerations.