

Abstract Submitted
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Multifractal Structures in the temperature and the humidity

KYUNGSIK KIM, Department of Physics, Pukyong National University, Busan 608-737, Korea, CHEOL-HWAN YOU, DONG-IN LEE, Department of Environmental Atmospheric Sciences, Pukyong National University — The multifractal structure of the temperature and the humidity is investigated in eight cities of Korea. For our cases, we estimate the generalized Hurst exponent, the Renyi exponent, and the singularity spectrum for tick data of the temperature and the humidity. In particular, we discuss the recent findings that suggest the scaling exponents characterizing the multifractality. After analyzing the multifractality, we compare the multifractal property of eight different cities and discuss the different behavior of each city.

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