Special Issue

Wind Tunnel Simulation and Atmospheric Diffusion Study

Message from the Guest Editor

Most would agree that the wind tunnel modelling of atmospheric flow and dispersion began in the late 1950s in Jack Cermak's laboratory at Colorado State University. Indeed, Cermak is often referred to as the 'father of wind engineering', and deservedly so. Although dispersion modelling was subsequently developed at a number of key centres around the world, it was considered the minor part of wind engineering, which concentrated on wind loading and related matters. This was not entirely justified but was particularly obvious at the major wind engineering conferences, leading to the formation of a separate set of meetings, commencing with the 1982 workshop on wind tunnel dispersion tests at MT-TNO in the Netherlands. This eventually led to the Physmod (physical modelling of atmospheric flow and dispersion) international conferences from 1999 onwards. The subject shares much in common with mainstream wind engineering but has its own distinct character and challenges, which was why a separate and focused conference series was important.

Guest Editor

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Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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