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Weather Impacts on Uncrewed Aircraft

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Message from the Guest Editors

Advanced Air Mobility (AAM) seeks to bring safe, accessible, affordable, and automated aerial services and transportation for cargo and passengers. The aircraft participating in this new air transportation system span from small multirotors to larger uncrewed aircraft (UA) that transport people. Most of these operations will take place between the surface and 1500 m above the ground, i.e., typically within the atmospheric boundary layer (ABL), and span both urban and rural areas. Although this is a portion of the atmosphere that traditional manned aircraft have quickly passed through during ascent and descent, this is a new environment for sustained aviation operations, and one that is characterized by highly variable meteorological conditions and high levels of atmospheric turbulence. Consequently, flight conditions can change dramatically across very short temporal and spatial scales. Exacerbating this challenging environment are the use of aircraft with lower mass, moment of inertia, thrust, and speed, thus making them extremely sensitive to their ambient environment.



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Special Issue



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Message from the Editor-in-Chief

Drones is the only international open-access journal about the science, policy and technology of drones and its applications. Nowadays, the proliferation of drones is a reality for local policy makers, regulatory bodies, mapping authorities, startups and consolidated companies. There are many uses and benefits of drones: from the emergence of new sensors and the evolution of new platforms; to the development of specific software and the emergence of new applications. *Drones* publishes reviews, regular research papers, communications and short notes, without restriction on the length of papers. *Drones* seeks to provide a central forum for scholars engaged in drones' research and applications.

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