



## Atmospheric Airglow—Recent Advances in Observations, Experimentations, and Modeling

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### Message from the Guest Editor

Dear Colleagues,

Airglow is very sensitive to atmospheric conditions like local temperature and number density of gas species reacting in the airglow chemistry. Changes in the temperature or gas concentrations would lead to airglow variations. Monitoring airglow has become a useful diagnostic tool to better understand the atmosphere and the dynamical and chemical processes in the MLT region. In addition, airglow observations have been used to obtain the number densities of gas species, derive wave characteristics, and infer the state of the atmosphere.

Airglow observations, experimentations, and theoretical studies have significantly advanced our understanding of airglow and their interactions with atmospheric waves in recent decades. In recognition of the recent advances in airglow research, the journal *Atmosphere* is planning a Special Issue as a compilation to showcase the current results from relevant studies in airglow observations, experimentations, and numerical modeling, from the E and F regions of the terrestrial atmosphere to other planets.

Prof. Dr. Tai-Yin Huang  
*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!

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