

# **OBSERVATION AND STUDIES ON IONOSPHERIC DISTURBANCES OVER CHINA USING THE AIRGLOW ALL SKY IMAGE NETWORK**

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China covers both mid-latitude and low-latitude regions, and it has a unique terrain distribution. In order to study the perturbations in the upper atmosphere and ionosphere in mid- and low-latitude, we have established a monitoring network of airglow over the Chinese Mainland. This network has conducted double-layer detection for OH airglow (with a radiation altitude of about 87 kilometers) and OI 630 nm red line airglow (with a radiation altitude of approximately 250 kilometers) for more than ten years. This report will focus on the optical observation results of ionosphere disturbances in the mid- and low latitudes regions of China. It includes observations of mid-latitude auroras in the northernmost part of China and their impact on the ionosphere, mid-latitude ionospheric TID observed in central China, and low-latitude plasma bubbles observed in southern China.