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### On the cover

Satellite remote sensing is a unique technique for globally monitoring the Earth's environment. Red and yellow shading indicates regions with a high ammonia (NH<sub>3</sub>) concentration around the world, e.g., India, West Africa, and East China. In this issue, Dr. Minqiang ZHOU and Dr. Xingying ZHANG (beginning on page 379) established a full-physics retrieval algorithm based on an optimal estimation method to retrieve a global NH<sub>3</sub> map from the thermal-infrared spectra observed by the Hyperspectral Infrared Atmospheric Sounder (HIRAS) onboard China's FengYun (FY)-3D satellite.