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Dr. Yafang Cheng,
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Dear Editor,

We are pleased to submit a manuscript entitled "Observing a Volatile Organic Compound from a Geostationary Infrared Sounder: HCOOH from FengYun-4B/GIIRS" for consideration as a research article. The authors are Zhao-Cheng Zeng, Bruno Franco, Lieven Clarisse, Lu Lee, Chengli Qi, and Feng Lu.

This paper reports the first retrieval results of a VOC (i.e., HCOOH) from the world's first geostationary hyperspectral infrared sounder (i.e., FY-4B/GIIRS) capable of day/night measurements with a 2-hour temporal resolution. HCOOH is one of the most abundant VOCs in the Earth's atmosphere and an important source of atmospheric acidity. We showed that the FY-4B/GIIRS effectively tracks HCOOH enhancements from wildfires and biogenic sources both during the day and at night. Inter-comparison with IASI HCOOH data shows good agreement, indicating that FY-4B/GIIRS observations have comparable sensitivity to the state-of-the-art IASI datasets. The instrumentation and the geostationary observations described in this paper are innovative, unique, and not available elsewhere.

Given the difficulty in observing the diel variations of tropospheric VOCs from current low-Earth-orbit (LEO) satellites, this study could serve as a model for new approaches to monitoring VOCs from geostationary infrared sounders, including the forthcoming European IRS on board Meteosat Third Generation (MTG). This paper is therefore suitable for submission to **Journal of Geophysical Research: Atmospheres** which is focused on publishing original research articles that advance and improve the understanding of atmospheric properties and processes.

Thank you for your consideration of this paper.

Yours sincerely,

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