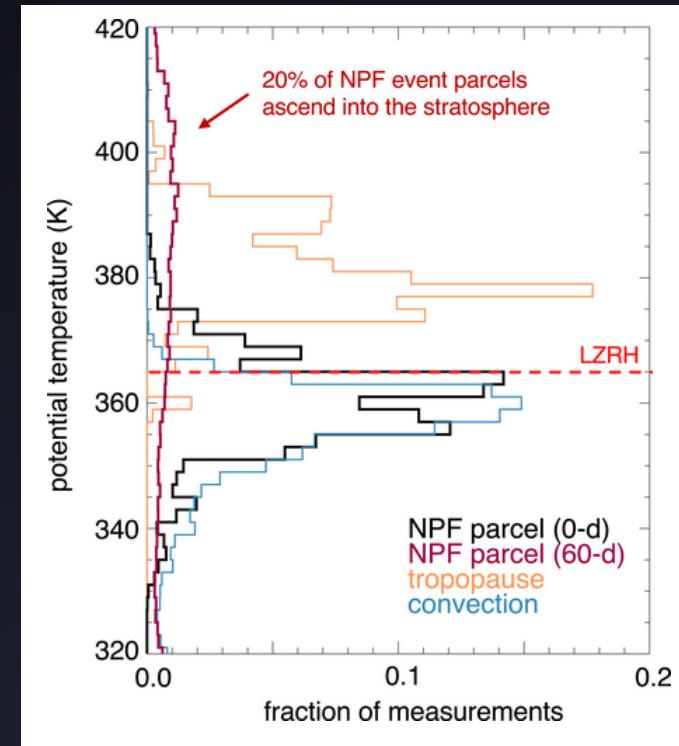




Uncovering the Fate of Aerosols that Affect Earth's Radiation Budget

Certain gases in the atmosphere, under the right conditions, can condense to form stable particles. These newly formed particles in the atmosphere are very small upon formation but can grow to larger sizes and play an important role in climate. Understanding their origins and pathways is crucial for evaluating their effects on:

- **Cloud formation**
- **Stratospheric ozone depletion**
- **Atmospheric general circulation (on Earth and Mars)**



Ueyama, R., Smith, W.P., Brown, M., Jensen, E.J., Ziembra, L., Bui, T.P., Dean-Day, J., Williamson C.J. On the Fate of Aerosols Produced by New Particle Formation in the Upper Troposphere and Lower Stratosphere. *Geophysical Research Letters*. July 2025. <https://doi.org/10.1029/2025GL116860>

FIGURE: Analyses of high-altitude aircraft measurements over the Asian summer monsoon region reveal **an abundance of newly formed particles in the upper troposphere downstream of convection** that may contribute to the stratospheric aerosol layer.