



## **The Relationship between the Western North Pacific Subtropical High and the East Asian Surface Ozone**

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The tropospheric ozone is known as one of the short-lived climate pollutants and the greenhouse gases, but little is known about it. The purpose of this study is to diagnose the relationship between the western North Pacific subtropical high and the East Asian surface ozone. For the study, we used the trajectory enhanced tropospheric ozone residual (TTOR) for 9 years (2005-2013) and GEOS-Chem model data for 41 years (1971-2011). Despite the short period, the observation well shows the ozone concentration changes according to the WNPSH strength and the model as well. WNPSH enhances the convection along the East Asian monsoon band and the surface ozone concentration decreases. The ozone concentration increases in the area around the rainband. Depending on the location of the rain band, the ozone concentration changes. This study indicates that the ozone concentration is affected by not only the emission of ozone precursors and but also the meteorological condition.