High levels of gaseous elemental mercury and particulate mercury observed at the summit of Mt. Fuji during summer observ

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The chemical cycling and spatiotemporal distribution of mercury in the troposphere is poorly understood. We measured gaseous elemental mercury (GEM) and particulate mercury(p-Hg) along with SO2, ozone, aerosols and meteorological variables at the summit of Mt. Fuji (3776m a.s.l.) from 23 August to 30 August. The mean mercury concentrations were 23ng/m3 (GEM) and 4.7ng/m3 (p-Hg). We observed this event of strongly enhanced atmospheric GEM levels with maximum concentration up to 25 ng/m3. High GEM and p-Hg levels were related to pollution events, particularly SO2 transported from Asian Continent. As result of back trajectory analysis will show this phenomena