

# Revisiting Ozone Measurements with Meteors

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Understanding the role of ozone in the high-altitude region (50–100 km) is essential for understanding the atmospheric processes in the upper atmosphere. Earlier studies have shown that it is possible to use overdense meteor trails to measure ozone concentration in the meteor region. Here we revisit this topic with a compilation of previously reported “characteristic” decay times of overdense meteor trails and compare the derived ozone contents with other technique. The compilation involves nine meteoroid streams recorded by five radar systems in 1957–2014. The derived values falls within the diurnal range of ozone determined by SABER instrument on the TIMED satellite. Comparison of simultaneous measurements between meteor radar and SABER during the Draconid meteor outbursts in 2011 and 2012 and the Camelopardalid meteor outburst in 2014 also shows a decent agreement. We conclude that meteor-trail technique is reliable in measuring ozone content in the meteor region.