

## **MTBE as a tracer for Asian and Mexican Megacity Emissions**

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Methyl tertiary butyl ether (MTBE) is an oxygenate added to gasoline to either increase the oxygenated content or to increase the octane rating. MTBE is currently added to fuels in Mexico and Asia. MTBE is short lived in the atmosphere (~3.5 days) with losses due primarily to reaction with the OH radical. It is an exclusive indicator of tailpipe and evaporative emissions and unlike acetylene, is not emitted from biomass burning. We demonstrate its use as a tracer during the MIRAGE-MEX and INTEX-B campaigns and, along with other VOCs measured by the TRACE Organic Gas Analyzer (TOGA), attempt to differentiate important VOC emission sources in Mexico and Asia.