How Do Trace Gas and Particle Interactions Impact Air Quality?

Atmospheric reactions between gases and particles can form halogens, such as nitryl chloride (CINO₂). These reactions are relevant to the Miami area (see figure) and can impact air quality through the production of criteria air pollutants. This student project will test how particle composition affects the production of halogens through laboratory and field measurements using state-of-the-art instrumentation.

Observations of halogens (e.g., CINO₂) along the southeastern US coast from Ostoff et al.,(2008).

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