

Intercomparison of Measurement Nitrous Acid by IBBEAS and LOPAP

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Nitrous acid (HONO) is an important source of the OH radical, the primary oxidant in the atmosphere that participates in the formation of ozone, which can lead to the so-called "photochemical smog" in polluted regions. The chemistry of HONO in the atmosphere is not well understood knowledge of its role as source of OH radicals is desirable difficulty in being measured.

The measurement of Nitrous Acid with good time resolution and sensitivity is important for understanding OH source in Atmosphere. Incoherent broadband cavity-enhanced absorption spectroscopy (IBBCEAS) and Long Path Absorption Photometer (LOPAP) hold much promise in this regard. We present the deployment of the field instrument both of IBBCEAS and LOPAP in urban Shanghai. Intercomparison of online HONO measurements was carried out during Winter Campaign (Shanghai, China, Winter, 2017-2018).