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Measurement of Nitrous Acid in CAREBeijing by IBBCEAS system

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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) holds much promise in this regard. We present a description of IBBCEAS in near-ultraviolet (340 nm to 380 nm) to detect NO₂ and HONO. The broadband approach provides not only excellent selectivity to structured absorbers, but also information on aerosol extinction within the spectral window. We present the deployment of the field instrument and in situ HONO measurement in the CAREBeijing campaign (Wangdu, China, Summer,2014).