

## THE EXPANDING NOAA TALL TOWER NETWORK FOR MONITORING CO<sub>2</sub> AND RELATED GASES

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Four tower sites have been added to the NOAA tall tower network since beginning of 2007, bringing the total number of sites to seven. In addition to continuous monitoring of CO<sub>2</sub>, CO, and meteorological parameters, daily flask sampling using automated samplers has been implemented at several sites. The flask samples are analyzed for a large suite of species including CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, δ<sup>13</sup>CO<sub>2</sub>, COS, a suite of halocarbons, and some hydrocarbons. O<sub>3</sub> was measured at 10m and 400m above ground level at the Texas tower site during the summer of 2006 and has proven to be a useful indicator for urban and power plant pollution events. Radon-222 is measured at two of the sites and provides an indicator of surface influence. Several of the towers are directly beneath or near NOAA aircraft profiling sites. We will present an overview of results from the growing network, including comparisons with results from NOAA's CarbonTracker CO<sub>2</sub> data assimilation system.

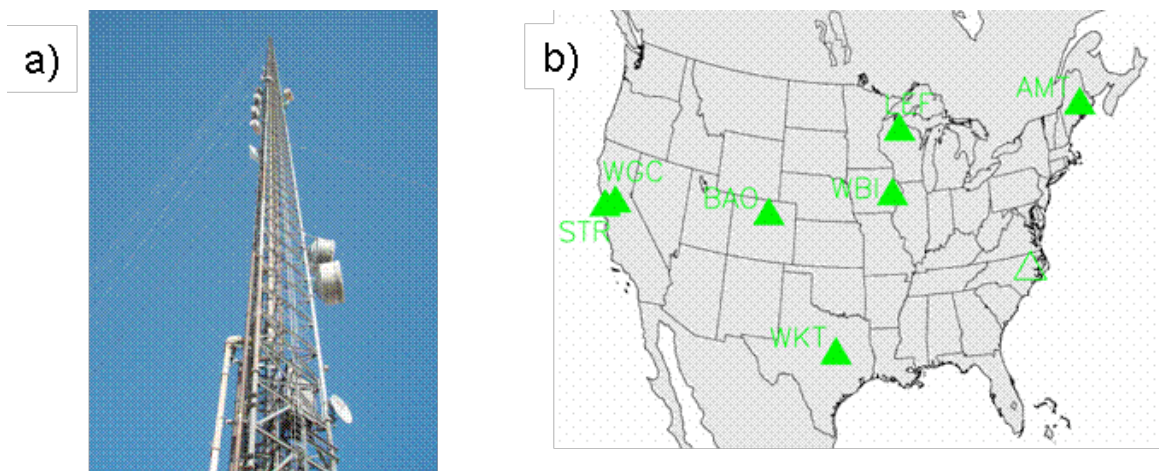


Fig. 1 a) The WGC tower near Sacramento, CA. b) The NOAA Tall Tower network.