G-1 Picarro CO_2, CH_4, H_2O Measurements for BBOP: MCE Framework for Plume Resolving Optical Property Analysis

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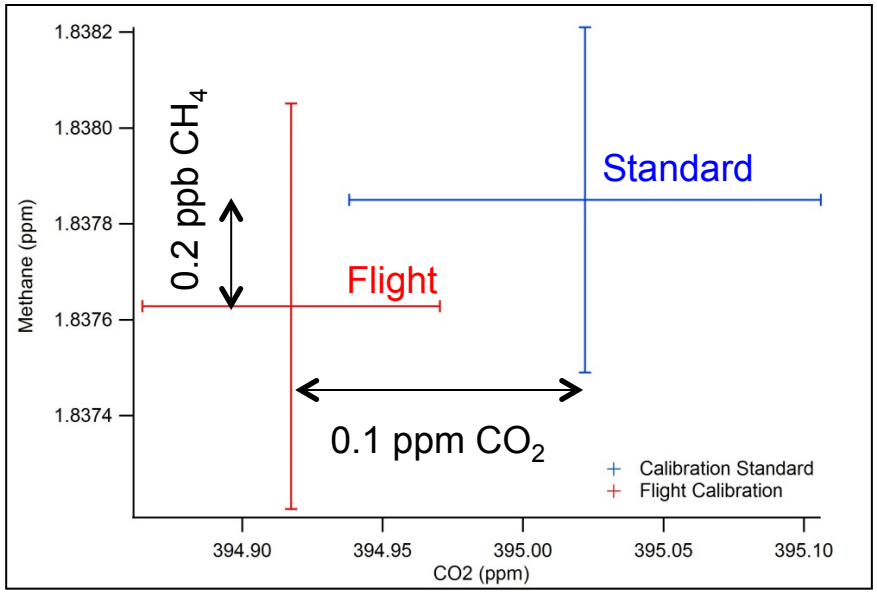
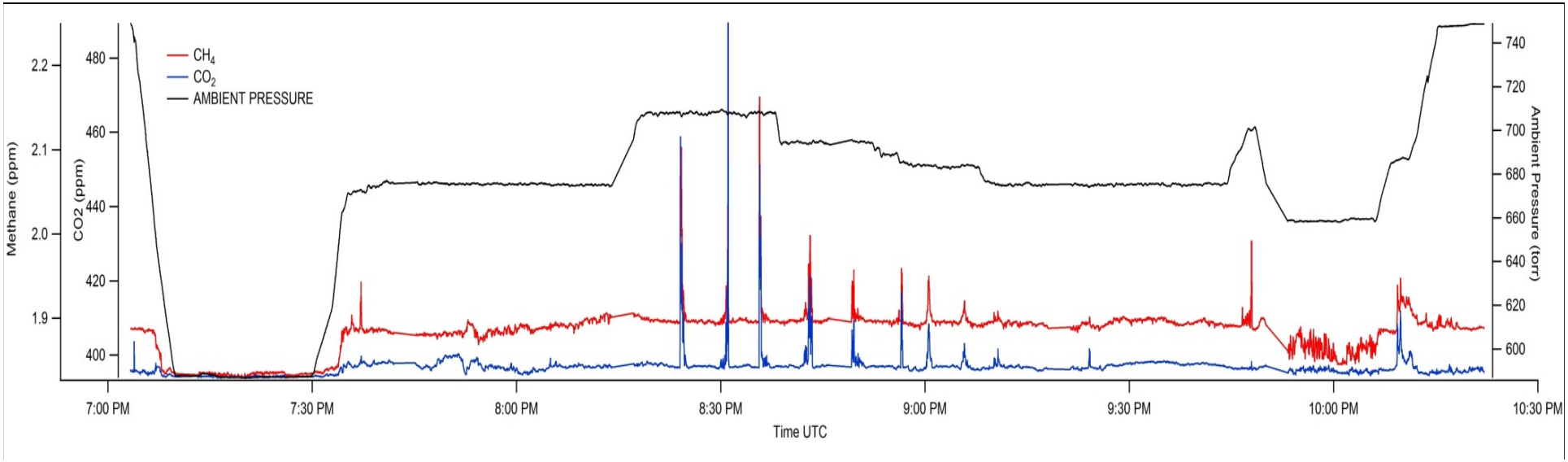
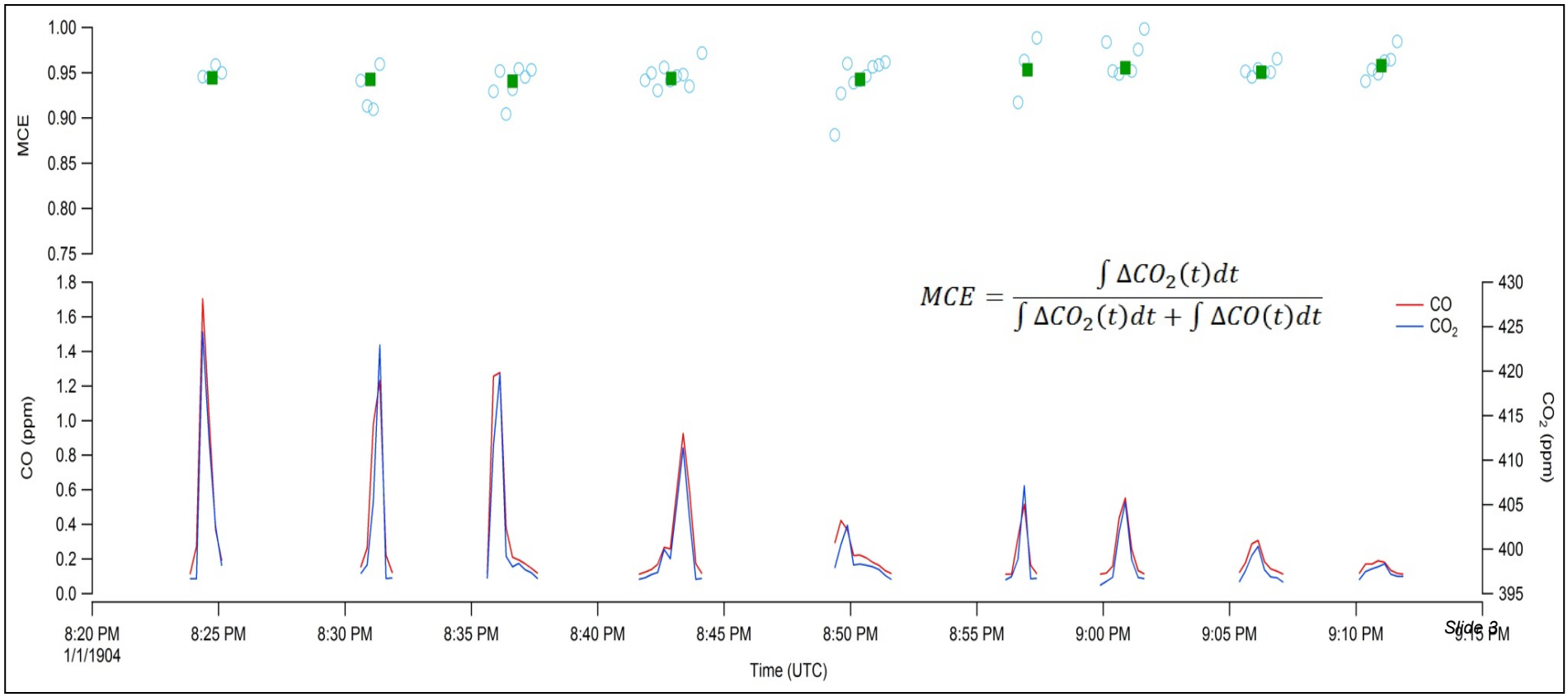
BBOP Flight Picarro Sample: Calibration and Plimes

- CO_2 and CH_4 on ~ 5 seconds.
- Calibrations every 20-30 minutes
- October 20, 2013 data resolve plumes in CO_2 & CH_4 from Ag. fires 8:15pm to 9:15pm UTC near Memphis.





Modified Combustion Efficiency (t; plume integrated)

- CO from Los Gatos N_2O/CO Analyzer.
- MCE calculated separately for each plume.
- MCE values for the last 4 plumes ~ 0.01 higher than the first five plumes indicating more efficient fires.