DACOM CO and CH$_4$ for INTEX-A

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INTEX-A Data Summary

**CO**
- Available for all flights except Flt 13
- Data gaps in most flights
- Precision: 2 ppb or 2%
- Accuracy: NOAA/CMDL standards

**CH$_4$**
- Available for flights 18, 19, 20
- Some data available for flights 5, 7, 8, 9, 12
- Precision: ~0.5%
- Accuracy: NOAA/CMDL standards
NOAA/CMDL CO Scales

- NOAA/CMDL Calibration Cylinders provided with two CO calibration values
  1. RGA value – based on HgO detector
  2. VUVRF value – based on Vacuum UV resonance fluorescence detector

- VUVRF value is approximately 5% greater than RGA

- Starting with INTEX-A, DACOM CO data will use the new VUVRF value
FLIGHT 14: Clean Boundary Layer

2\textsuperscript{nd} P3/DC8 Intercomparison
FLIGHT 11: Continental Outflow

UTC Time

CO, ppb

Altitude (10^3)

1st P3/DC8 Intercomparison
Terra Overpass

12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00
FLIGHT 9: Fire Plume
FLIGHT 18: Coal Mine CH₄?

CH₄ plume at 37°14'N, 81°46'W

UTC Time

CO, ppb

CH₄, ppb

Altitude (10³)

Aqua Underflight
FLIGHT 19: Gulf of Mexico

UTC Time

CO, ppb

CH4, ppb

Altitude (10^3)
PAVE Flt 11: Strat to Trop Transition
PAVE Flt 11: CO, CH₄, N₂O and H₂O(v)