

DACOM CO and CH₄ for INTEX-A

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Special Thanks Blake, Blake et al. Fried and Walega



SACRIFICIAL OFFERING
FOR STABLE CO₂, N₂O, and CH₄



853
CO 49.2
CH₄ 194.5
N₂O 300.93
CO₂ 342.81

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

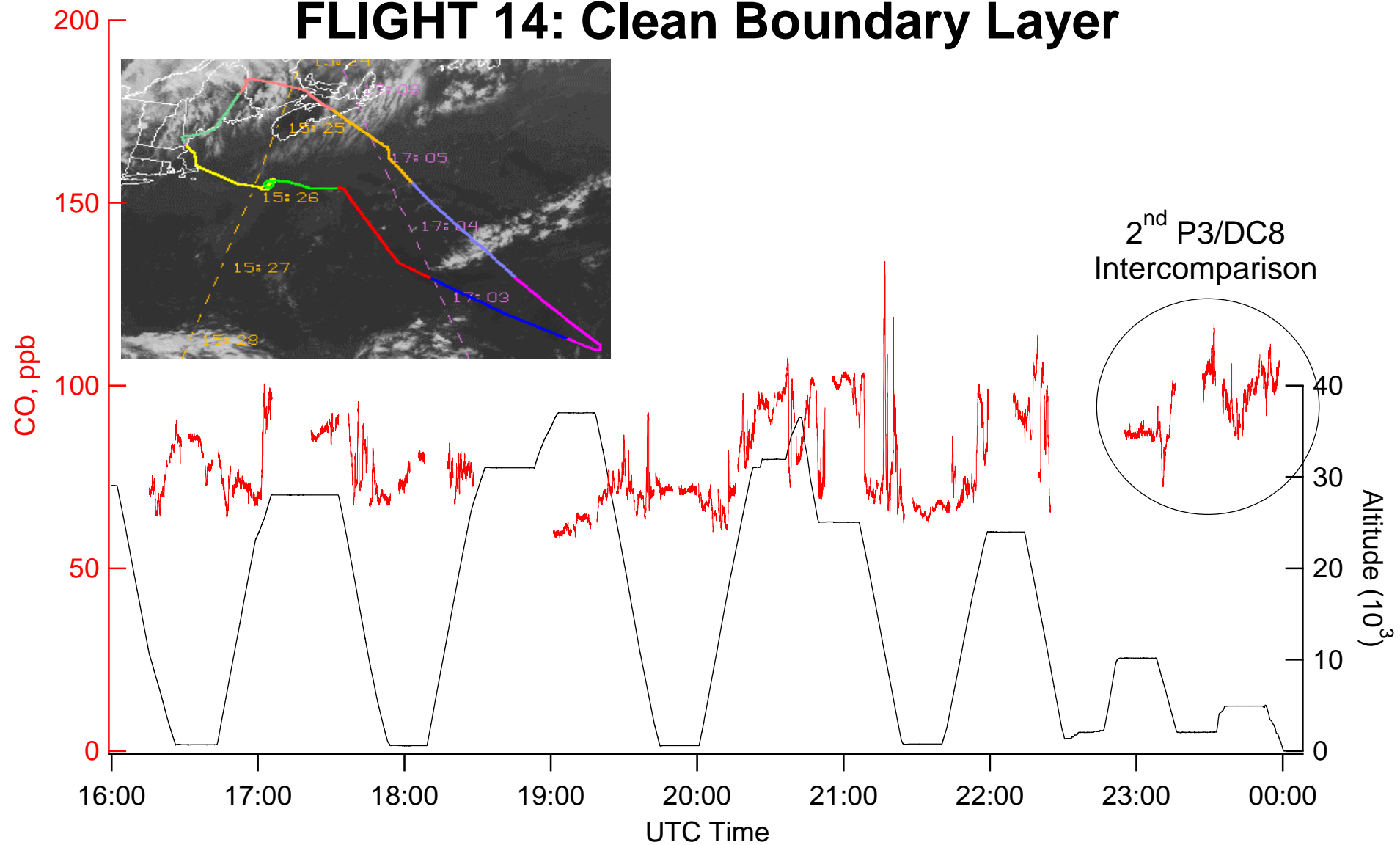
CH₄

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

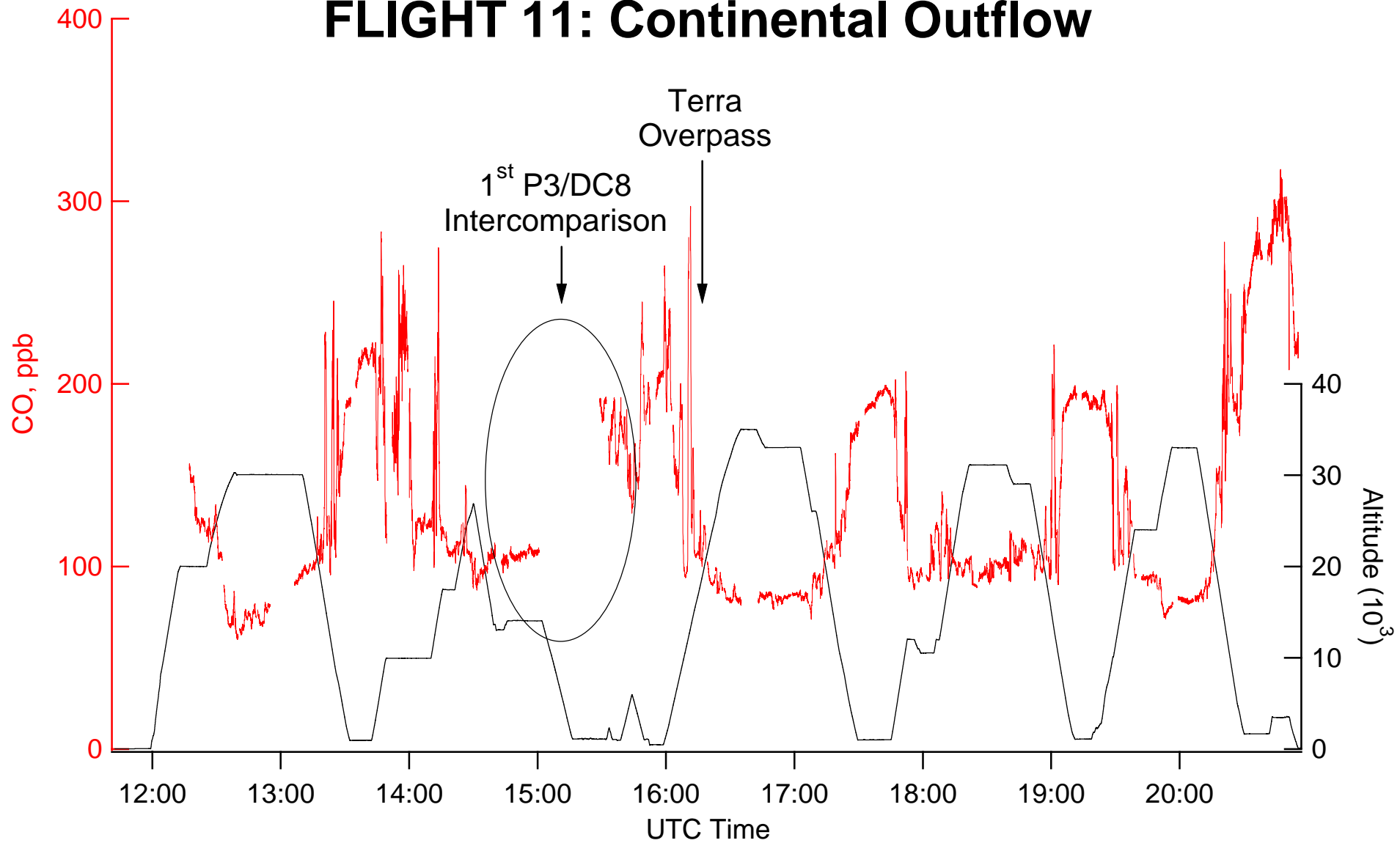
NOAA/CMDL CO Scales

- 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

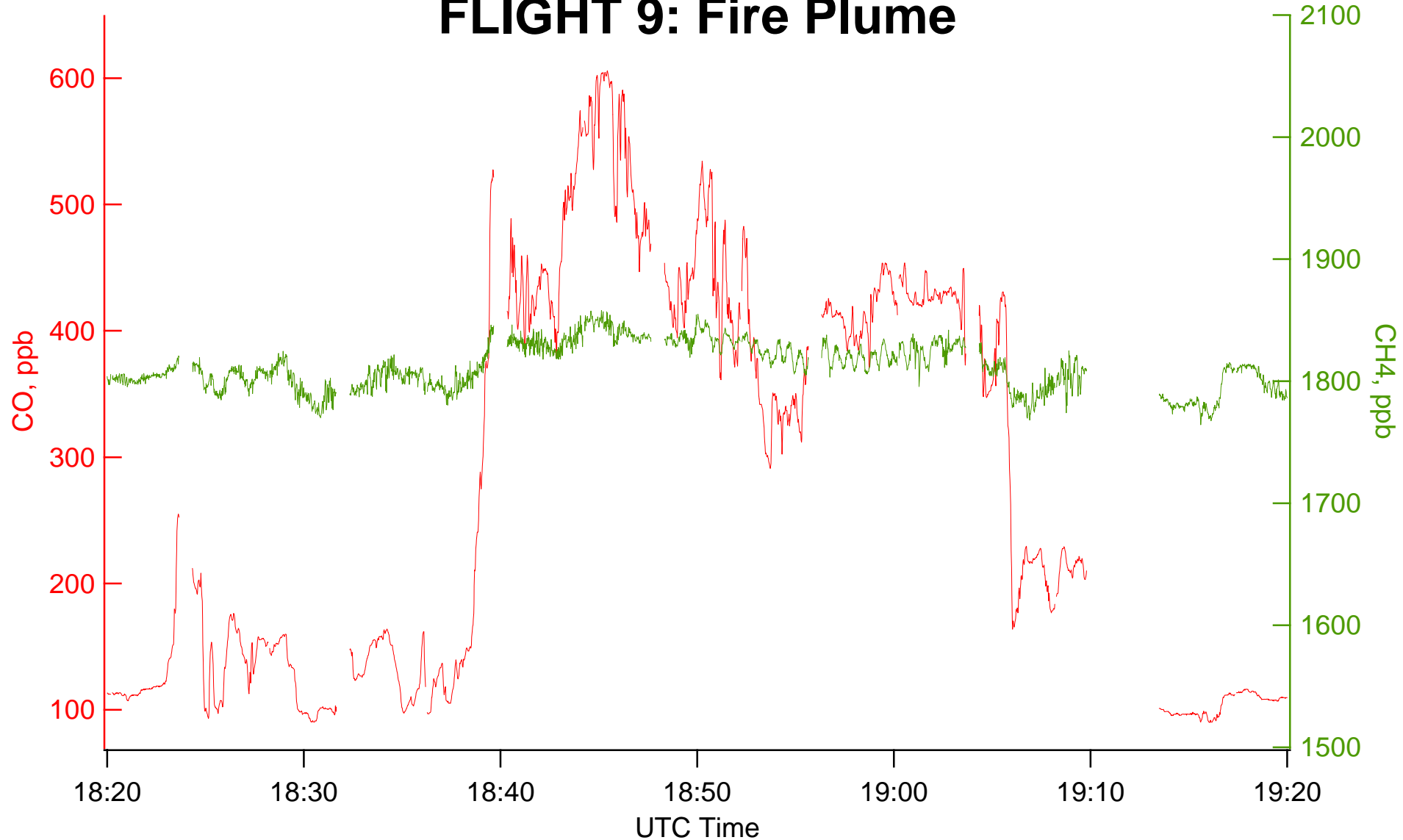
FLIGHT 14: Clean Boundary Layer



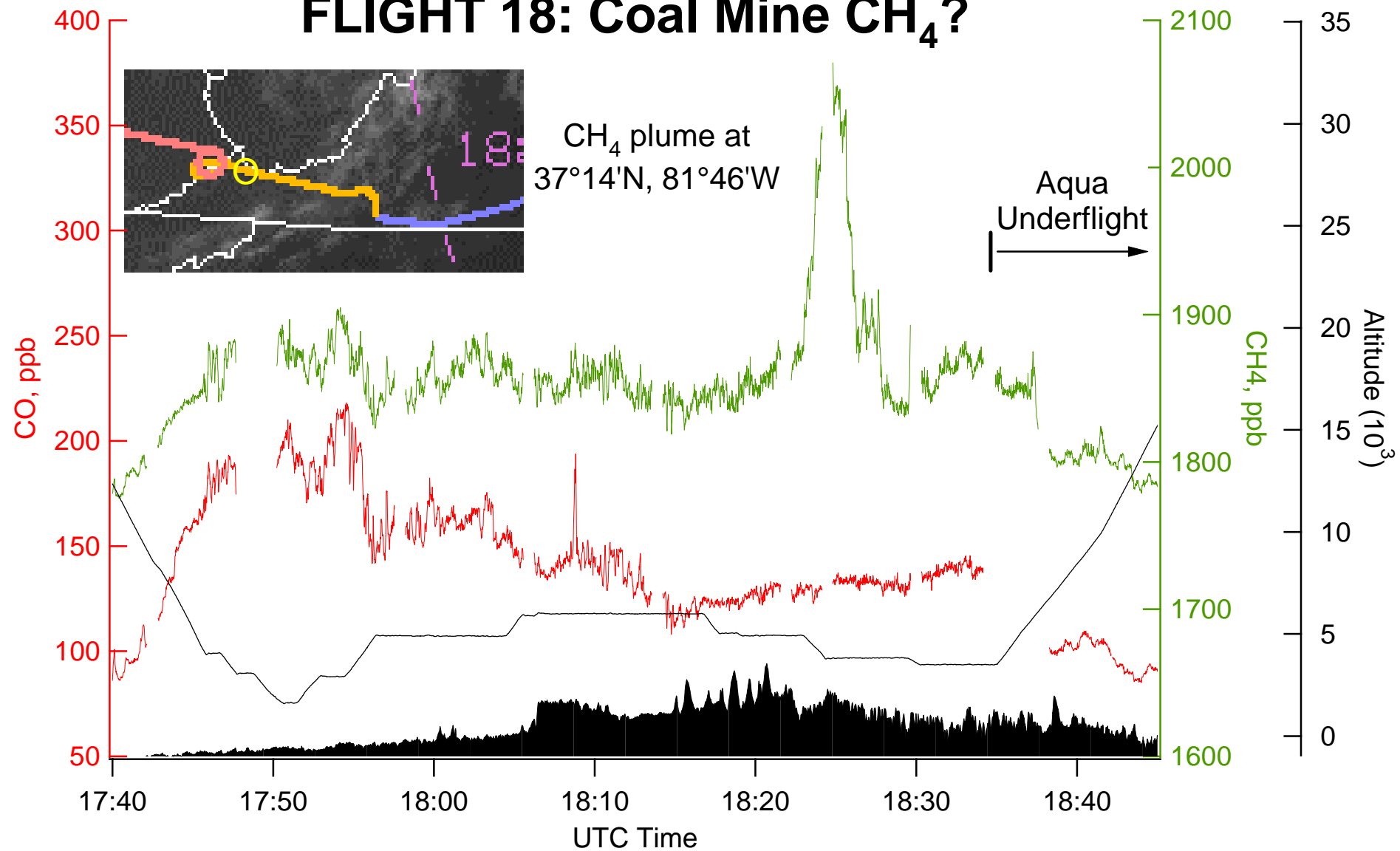
FLIGHT 11: Continental Outflow



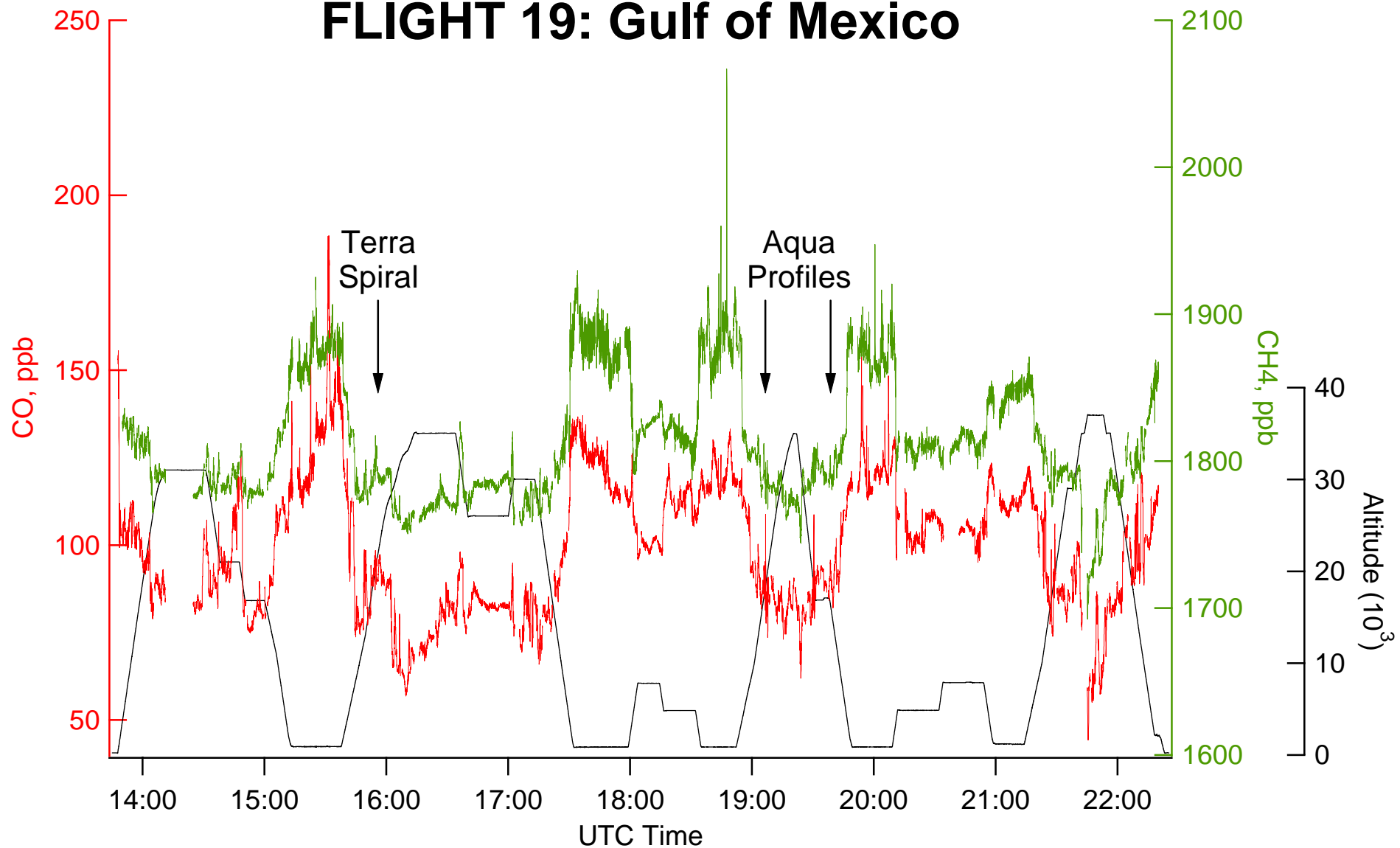
FLIGHT 9: Fire Plume



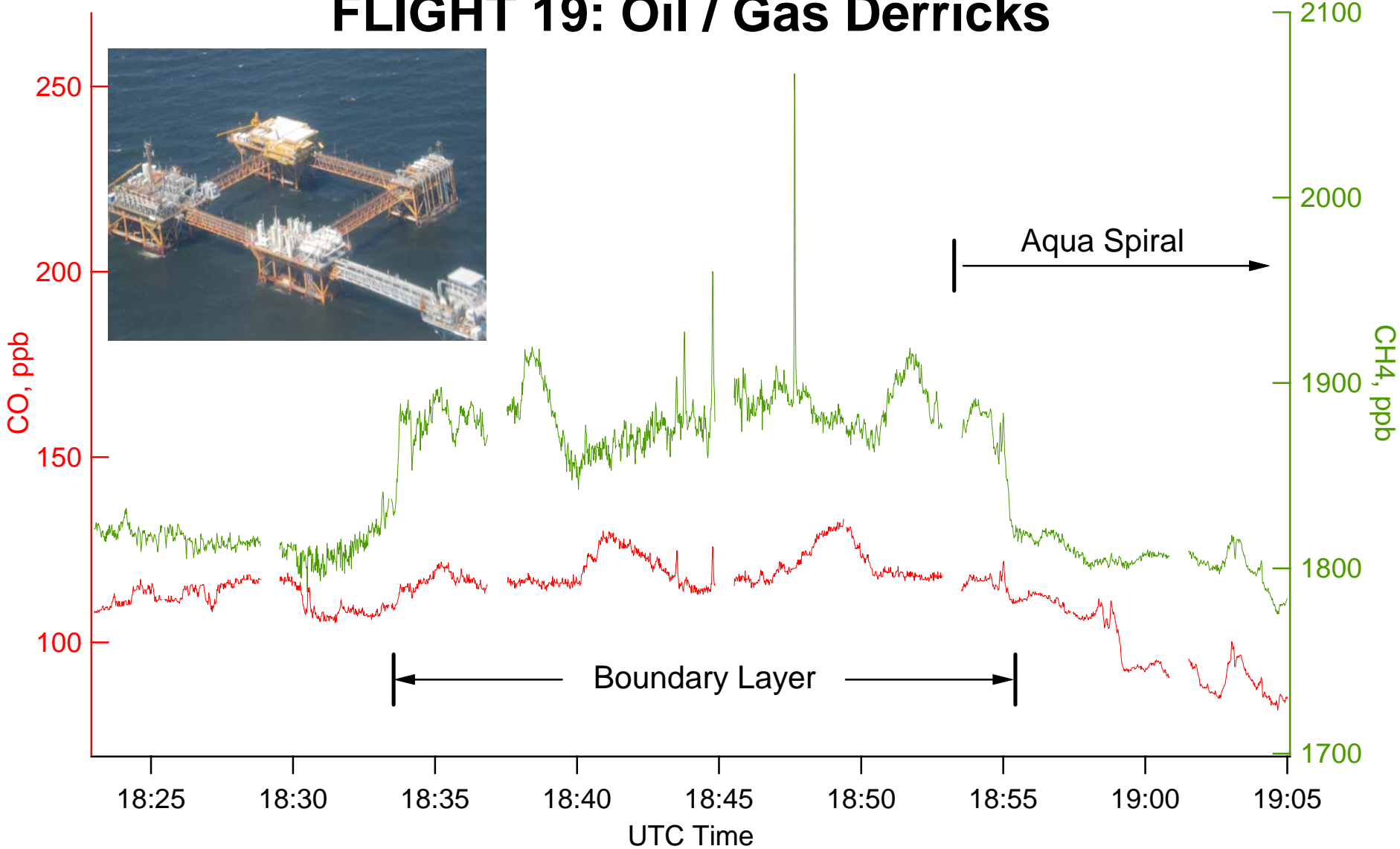
FLIGHT 18: Coal Mine CH₄?



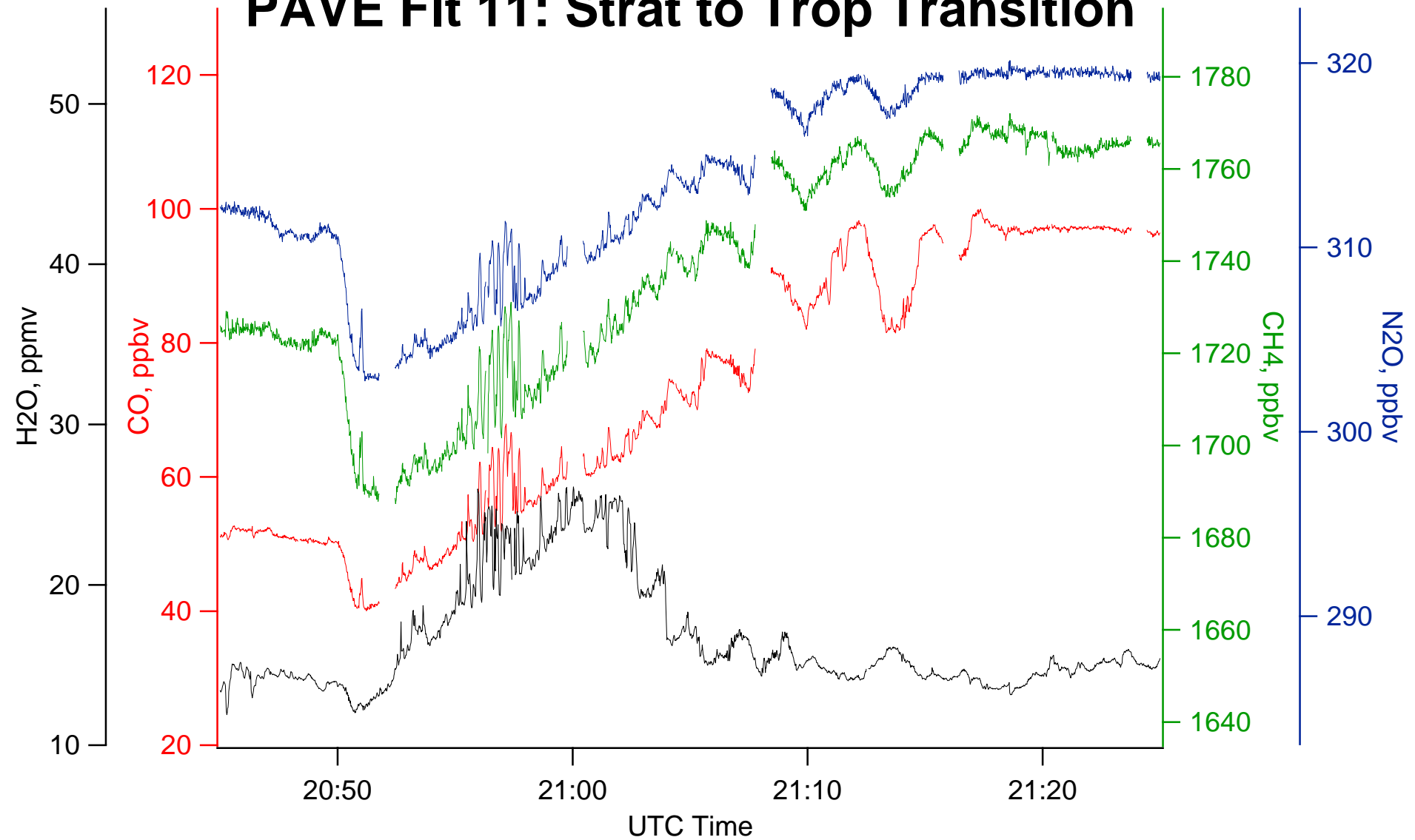
FLIGHT 19: Gulf of Mexico



FLIGHT 19: Oil / Gas Derricks



PAVE Flt 11: Strat to Trop Transition



PAVE Flt 11: CO, CH₄, N₂O and H₂O(v)

