

# AOS Aircraft

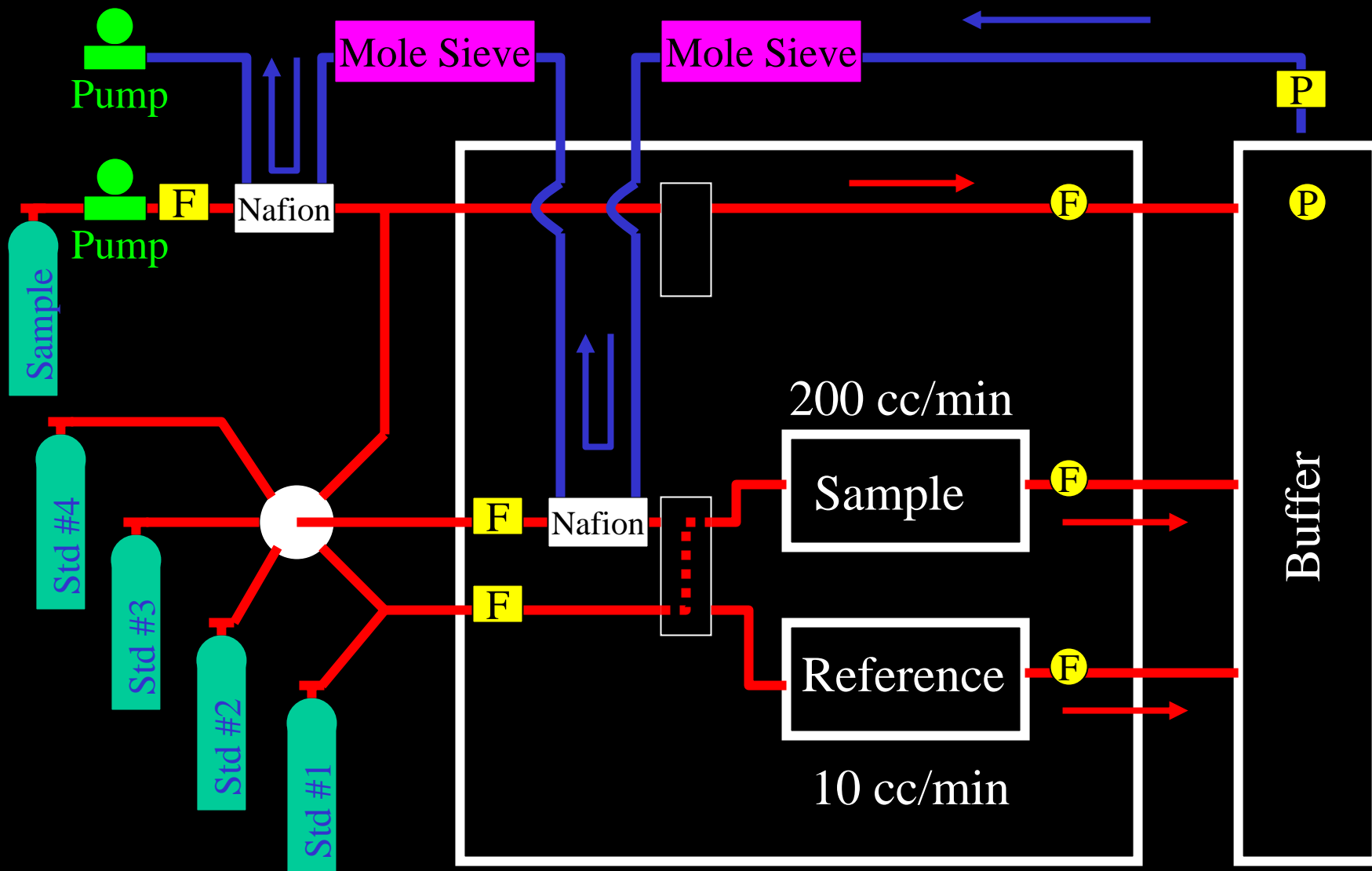
Aaron Watson

Tim Ikenouye

Colm Sweeney

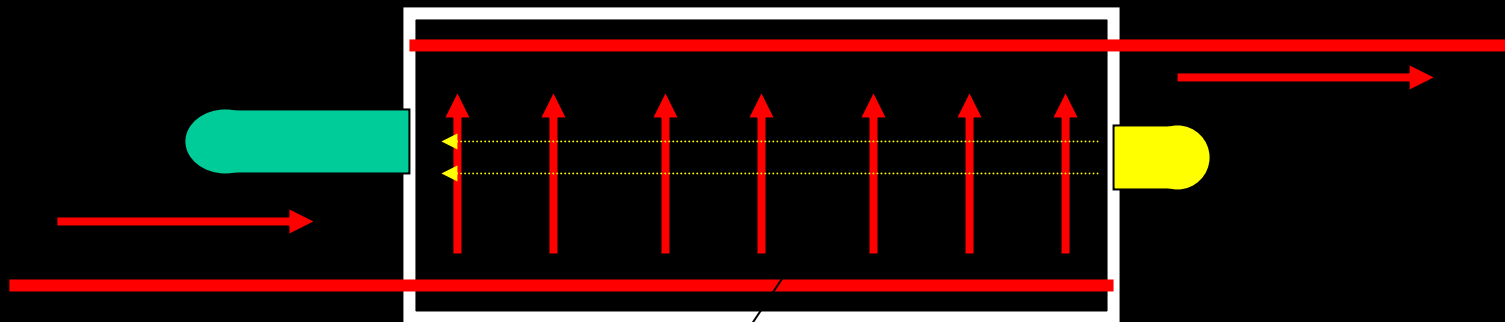
- 1) Plumbing Schematic
- 2) The Cell Design (for smooth flow)
- 3) Field RUN – Sample Cell Temp on left, Cell Temp difference on right (Sample-Reference)
- 4) Offset increases with moisture
- 5) One way to calibrate the instrument using a linear fit of 4 standards
- 6) Another cal – quadratic fit of 3 standards

- 7) Actual CO<sub>2</sub> signal at mesa (noon FRI – noon SAT 3/3/06)
- 8) Zoom of the flat part near the end.
- 9) Difference between the 2 cal methods.

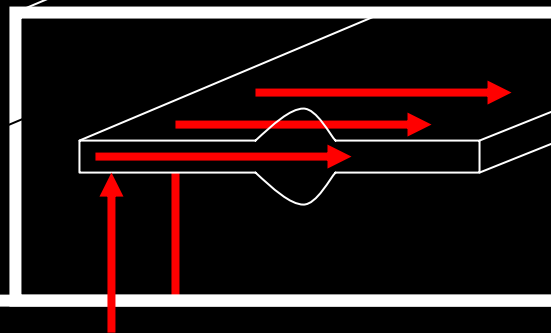


- Actuator (F,P)
- Meter (F,P)

# The Detector Cells

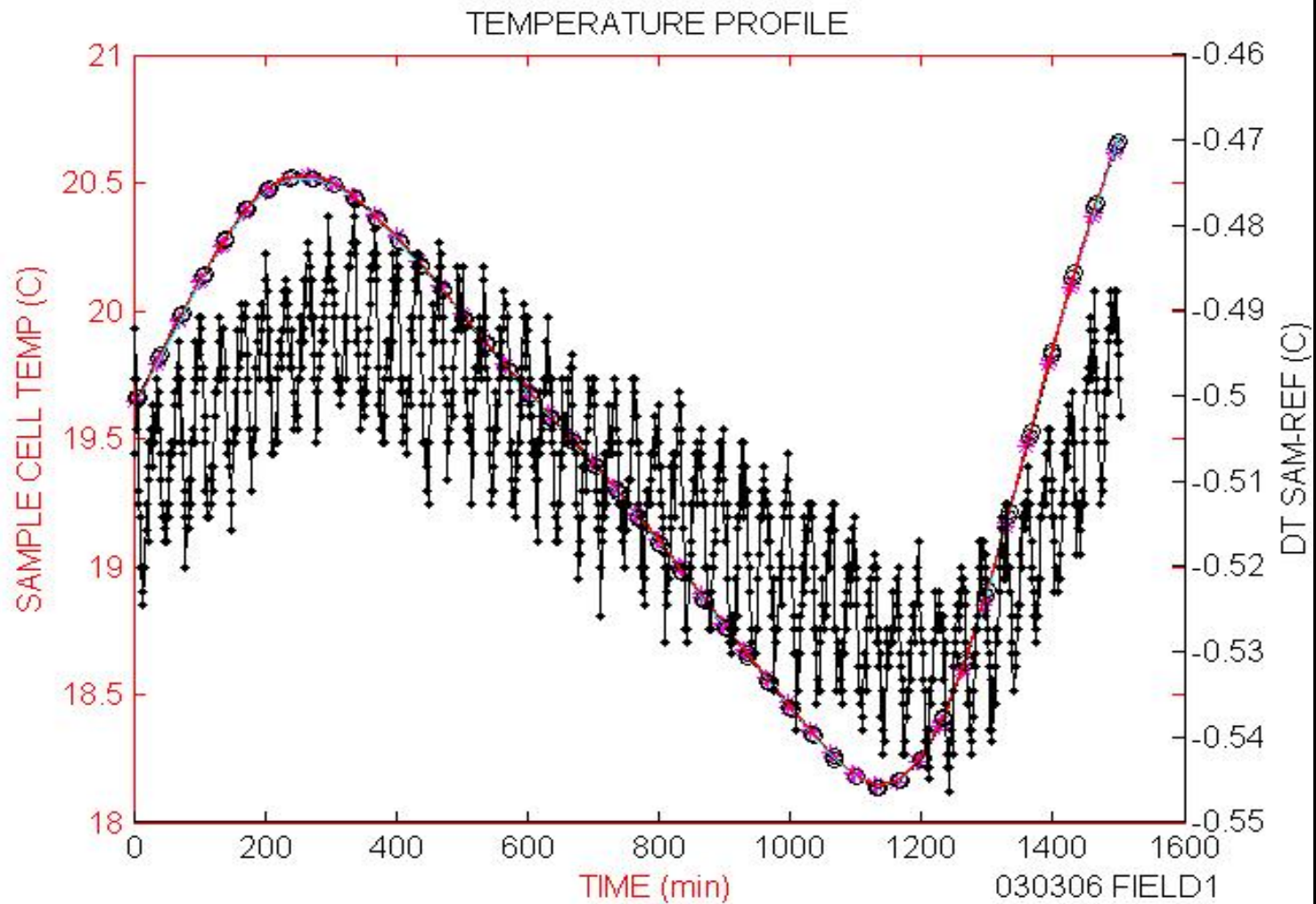


Designed for even  
flow across whole  
light path

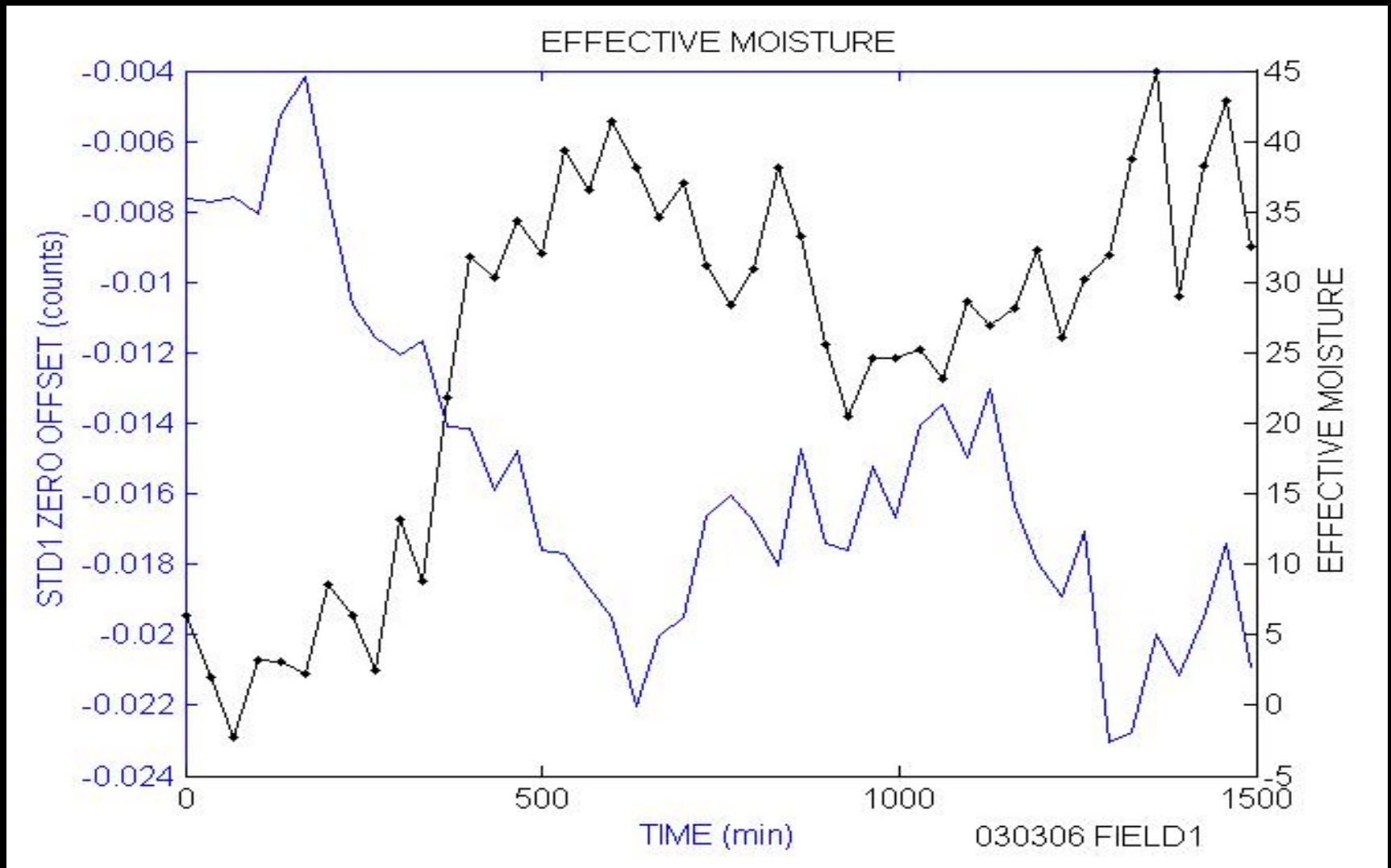


Cell Volume  
= $\sim 4$  cc

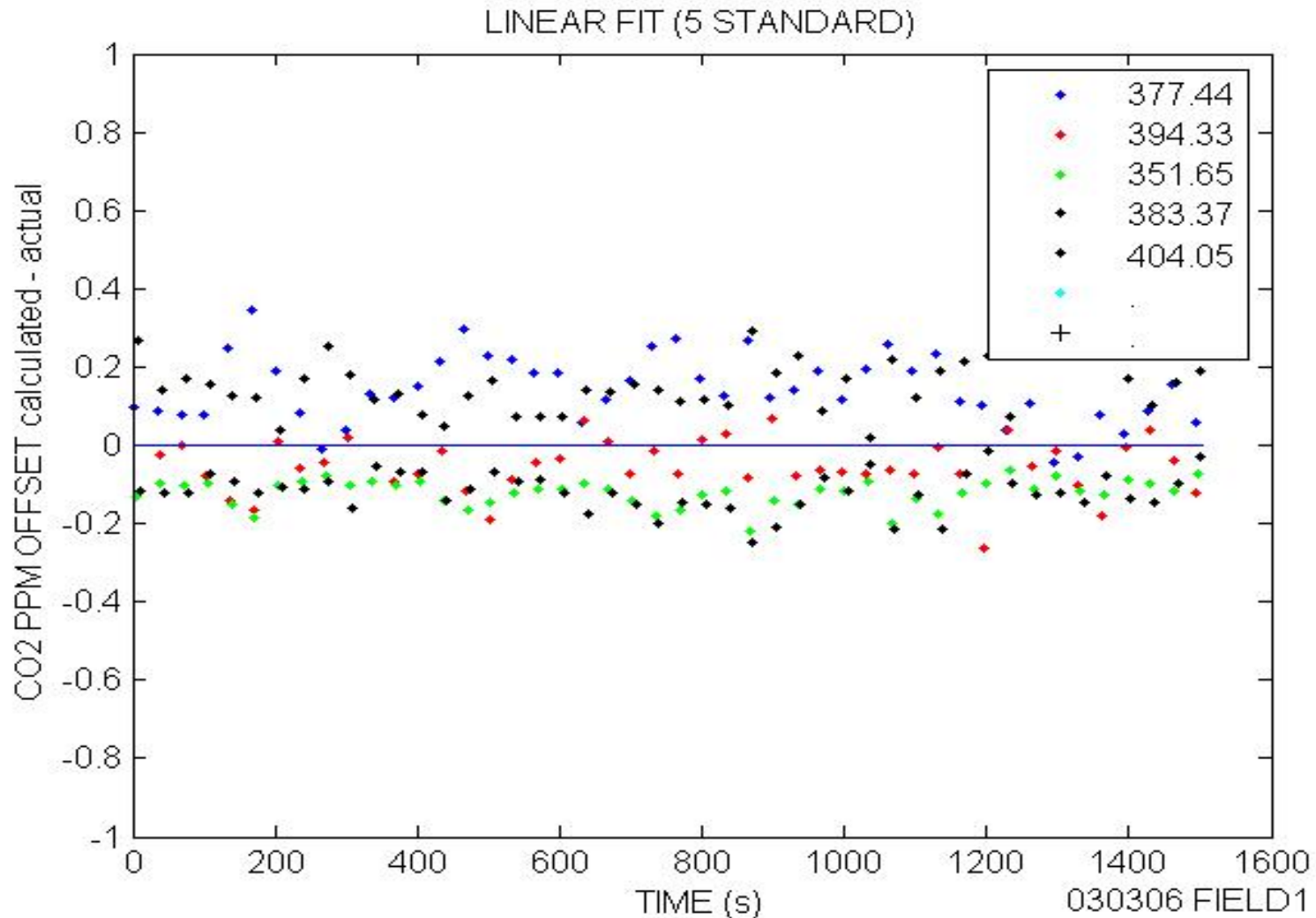
# TEMPERATURE PROFILE FIELD RUN



# H2O AND ZERO OFFSET FIELD RUN

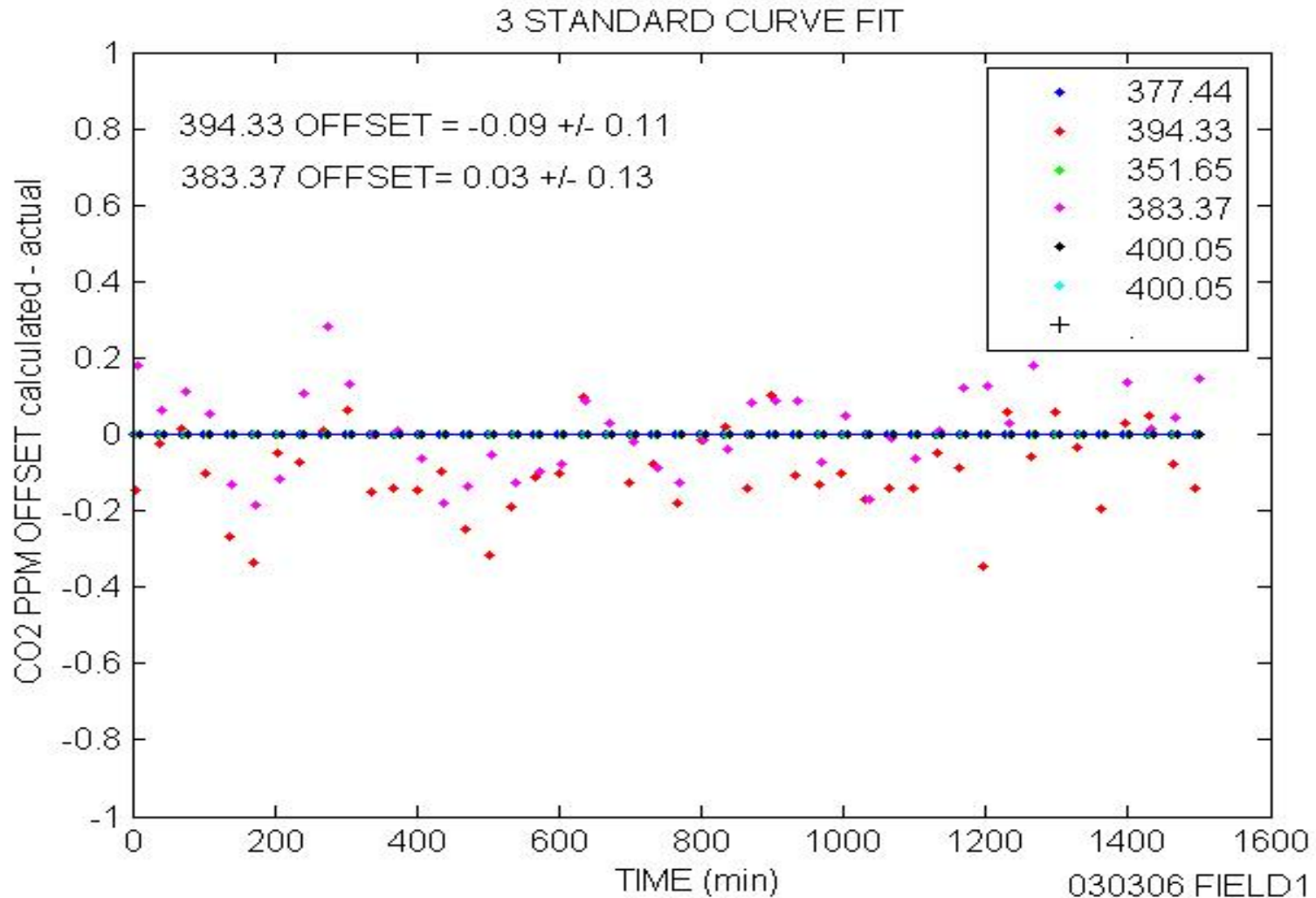


# LINEAR CURVE FIT FIELD RUN

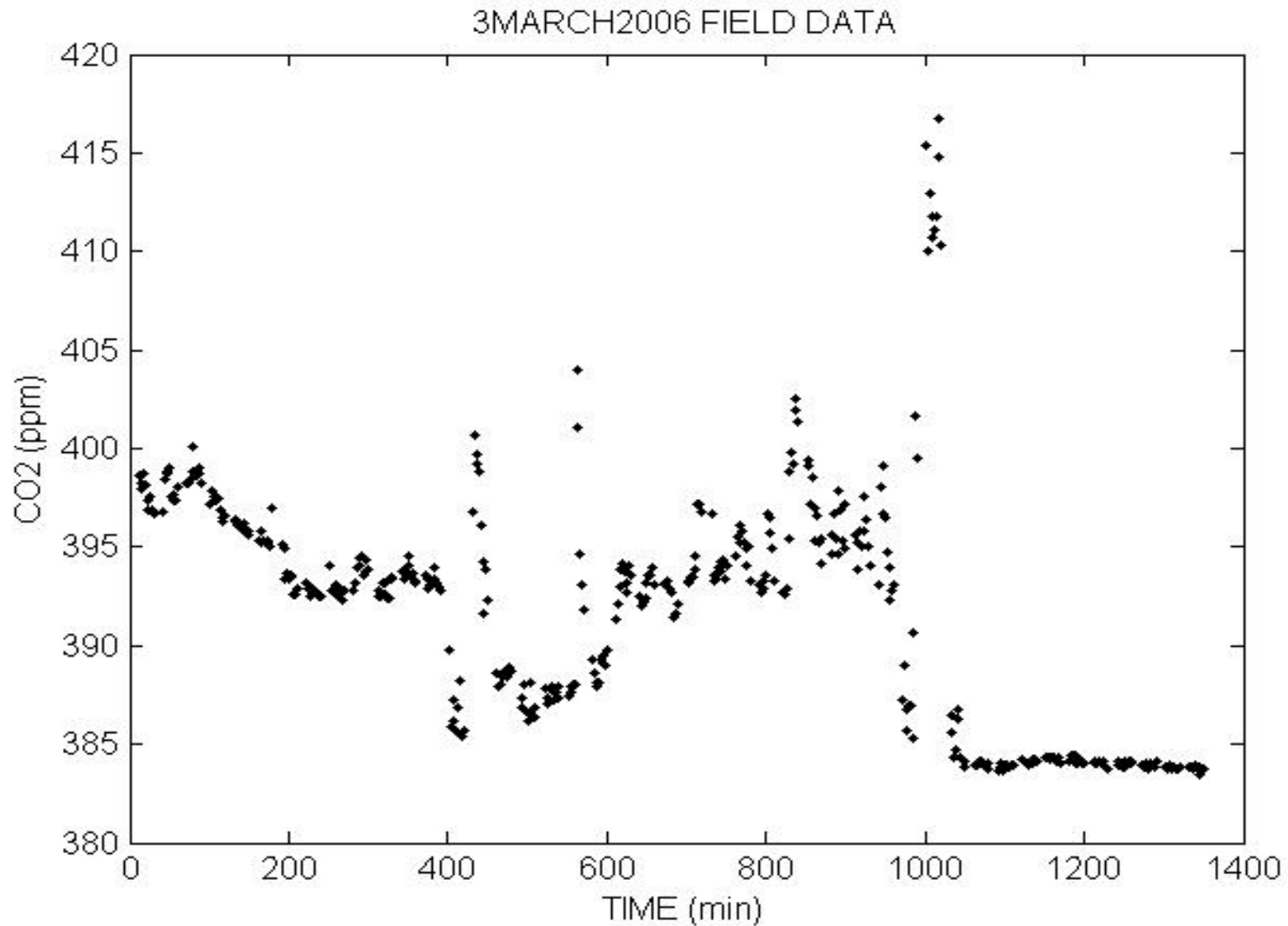




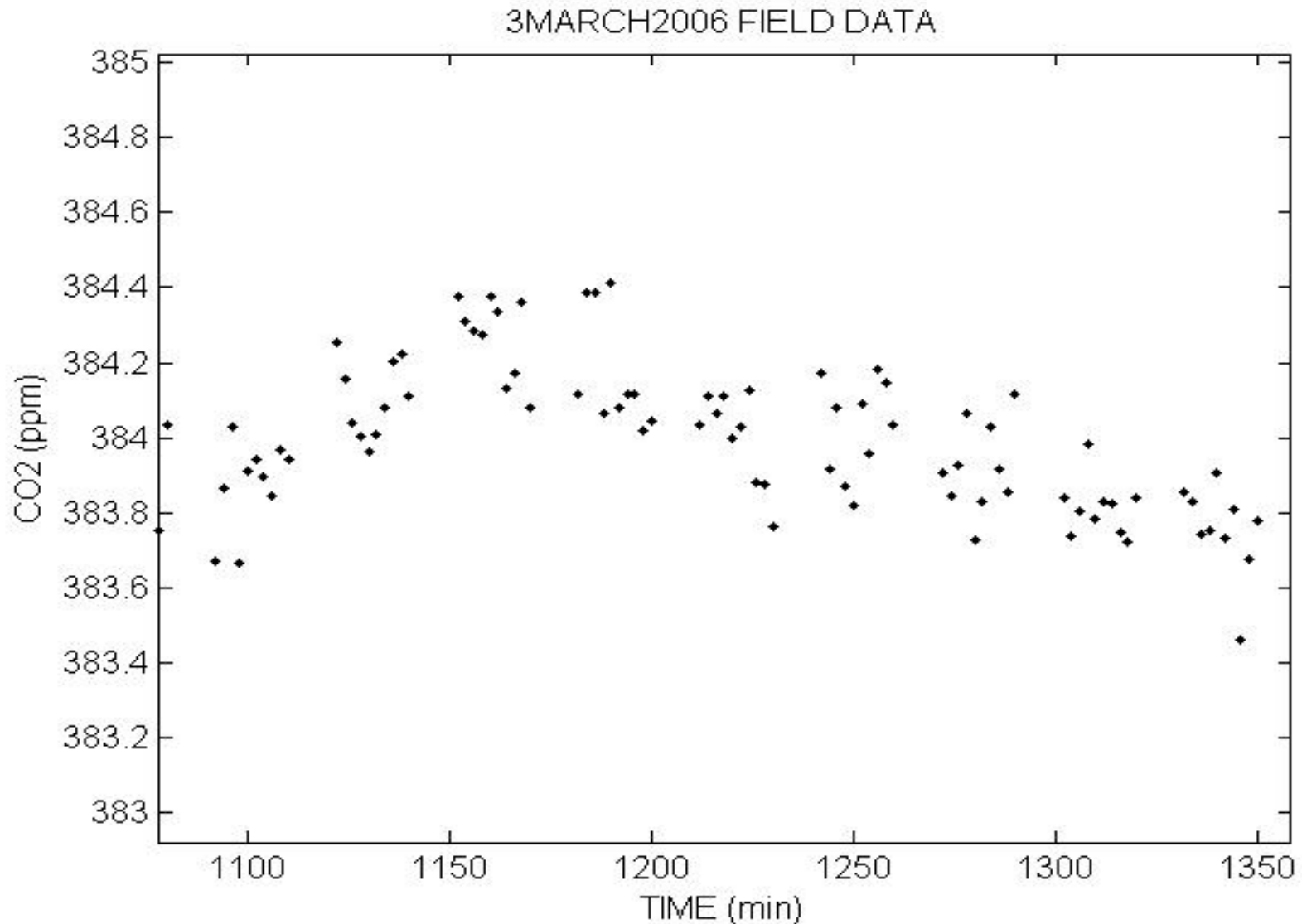
# 3 STANDARD CURVE FIT FIELD RUN



# LINEAR PREDICTION FIELD RUN



# LINEAR PREDICTION FIELD RUN-ZOOM



# METHOD DIFFERENCE FIELD RUN

