

July 2, 2014

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 9-24-15
 INITIALS: KWS
 PUMP#: 2228740
- Run zero air 10 minutes (v)
 - PUMP CURRENT: 81.78 (mA)
 - PUMP PRESSURE: 211 (psi)
 - DMT Press/vac: 261 20 (in Hg)
 - Bypass cell (v) *High ozone*
 - Add 5-6cc cathode (v)
 - 30 MINUTES HI O₃ (v)
 - 3 MINUTES NO O₃ (v) *near pump*
 - DUMP CATHODE RINSE: (v)
 - ADD 3.0 CC FRESH CATHODE # 261
 - ADD 1.5 CC ANODE SOLUTION: (v)
 - RUN 10 MINUTES on NO O₃ (v)
 - RECORD CURRENT BEFORE O₃: BG = 0.235 μ A
 - RUN 10 MINS on 5 μ A O₃ (v) - then switch to NO O₃ AIR.
 - RECORD: TIME TO DROP FROM 4 TO 1.5 μ A: 35 sec.
 - Run sonde for 10 mins on NO O₃ (v)
 - RECORD CURRENT: BG = 0.235 μ A
 - Short the cell leads: (v)
 - Intake tube stored in sonde frame: (v)
 - Place Sonde inside plastic bag: (v)
 - Store inside Styrofoam flight box: (v)

- AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 10/1/15
- RUN 5 MINS on NO O₃ (v)
 - RECORD CURRENT: 0.054 μ amps
 - RUN 5 MINS on 5 μ amps O₃ (v) - then switch to NO O₃ AIR
 - RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: 26.06 sec
 - Short cell leads and Store in Styrofoam flight box: (v)

FLIGHT PREPARATION IN LAB.

- DATE (LOCAL): 10/10/15
 INITIALS: NL
- Cathode solution # or date written on bottle: 261
 - CHANGE CATHODE SOLUTION (3cc): (v)
 - CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 - RUN ON NO O₃ FOR 10 MINUTES: (v)
 - RECORD THE NO O₃ BACKGRND#1: BG1 = 0.239 μ amps
 - RUN ON 5 microamps of O₃ for 10 Minutes: (v)
 - SWITCH TO NO O₃ AIR
 - RECORD: DECAY TIME TO DROP FROM 4 TO 1.5 μ amps: 23.32 sec
 - RECORD: 5 - T100 FLOWRATE TIMES:
- T100 FLOWRATE TIMES:
 ROOM TEMP (C): 21.1, ROOM RH (%): 51
 Flowrate Correction: 2.67 (%)
 FLOWRATE #1: 29.51 sec
 FLOWRATE #2: 29.34 sec
 FLOWRATE #3: 29.43 sec
 FLOWRATE #4: 29.40 sec
 FLOWRATE #5: 29.48 sec
 AVERAGE T100: 29.43 sec Avg
 Avg | 27.7 | 27.64 | 27.61 | 27.67
 Std | 18.39 | 28.5 | 28.31 | 28.41

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: _____
 GMT DATE (YYMMDD): _____ LOCAL DATE: _____
 GMT LAUNCH TIME: _____ LOCAL TIME: _____
 Operator Initials: _____
 BALLOON SIZE: _____ Grams: _____ TOTEX _____ Hwoyee _____ PAWAN _____ (v one)
 PAY-OFF-WEIGHT: _____ Grams: _____ Burst Alt: 332 (km) Turn/Burst: _____
 O₃ sn: _____ O₃ CELL BACKGROUND (μ amps): _____ O₃ Ventilation Holes: _____
 O₃ Flowrate: _____ (sec) O₃ Flowrate Correction: _____ (%)
 Radiosonde sn: 25867 Freq: _____ (MHz)
 NOAA FPH sn: _____ (if using Frost Point Hygrometer.)
 SURFACE PRES: _____ (hPa)
 SURFACE TEMP: _____ (C)
 SURFACE RH: _____ (%)
 Sky Conditions: _____
 REMARKS: _____