

July 2, 2014

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 1/08/2016
INITIALS: JL
PUMP#: 2729323
1. Run zero air 10 minutes (✓) (v)
2. PUMP CURRENT: 105.26 (mA)
3. PUMP PRESSURE: >11 (psi)
4. DMT Press/vac: 27 / 20 (in Hg)
5. Bypass cell (✓) (v)
6. Add 5-6cc cathode (✓) (v)
7. 30 MINUTES HI O₃ (✓) (v)
8. 3 MINUTES NO O₃ (✓) (v)
9. DUMP CATHODE RINSE: (✓) (v)
10. ADD 3.0 CC FRESH CATHODE # 261
11. ADD 1.5 CC ANODE SOLUTION: (✓) (v)
12. RUN 10 MINUTES on NO O₃ (✓) (v)
13. RECORD CURRENT BEFORE O₃: BG = 0.51 μA
14. RUN 10 MINS on 5 μA O₃ (✓) (v) - then switch to NO O₃ AIR.
15. RECORD: TIME TO DROP FROM 4 TO 1.5 μA: 49.07 sec.
16. Run sonde for 10 mins on NO O₃ (✓) (v)
17. RECORD CURRENT: BG = 2.297 μA
18. Short the cell leads: (✓) (v)
19. Intake tube stored in sonde frame: (✓) (v)
20. Place Sonde inside plastic bag: (✓) (v)
21. Store inside Styrofoam flight box: (✓) (v)

Turn on all switches except air pump

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 1/13/16

1. RUN 5 MINS on NO O₃ (✓) (v)
2. RECORD CURRENT: 0.131 μamps
3. RUN 5 MINS on 5 μamps O₃ (✓) (v) - then switch to NO O₃ AIR
4. RECORD TIME TO DROP FROM 4 TO 1.5 μamps: 26.89 sec
5. Short cell leads and Store in Styrofoam flight box: (✓) (v)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 1/25/2016
INITIALS: NL

1. Cathode solution # or date written on bottle: 261
2. CHANGE CATHODE SOLUTION (3cc): (✓) (v)
3. CHANGE ANODE SOLUTION (1.5cc): (✓) (v) (Yes/No)
4. RUN ON NO O₃ FOR 10 MINUTES: (✓) (v)
5. RECORD THE NO O₃ BACKGRND#1: BG1 = 0.43 μamps
6. RUN ON 5 microamps of O₃ for 10 Minutes: (✓) (v)
7. SWITCH TO NO O₃ AIR
8. RECORD: DECAY TIME TO DROP FROM 4 TO 1.5 μamps: 26.20 sec
9. RECORD: 5 - T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 25.1, ROOM RH (%): 17
Flowrate Correction: 3.77 (%)
FLOWRATE #1: 29.79 sec
FLOWRATE #2: 29.63 sec
FLOWRATE #3: 29.53 sec
FLOWRATE #4: 29.49 sec
FLOWRATE #5: 29.61 sec
AVERAGE T100: 29.61 sec

<u>Dry</u>	<u>27.20</u>	<u>27.73</u>	<u>27.97</u>	<u>27.84</u>
<u>Wet</u>	<u>28.93</u>	<u>28.86</u>	<u>28.97</u>	<u>28.89</u>

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU052
GMT DATE (YYMMDD): 1/25/2016 LOCAL DATE: 1/25/2016
GMT LAUNCH TIME: 2:30 LOCAL TIME: 9:30am

Operator Initials: _____
BALLOON SIZE: 800 Grams: _____ TOTEX _____ Hwoyee _____ PAWAN _____ (✓ one)
PAY-OFF-WEIGHT: _____ Grams: _____ Burst Alt: _____ (km) Turn/Burst: _____

O₃ sn: _____ O₃ CELL BACKGROUND (μamps): _____ O₃ Ventilation Holes: _____
O₃ Flowrate: _____ (sec) O₃ Flowrate Correction: _____ (%)
Radiosonde sn: 36172 Freq: 403 (MHz)

NOAA FPH sn: _____ (if using Frost Point Hygrometer.)

SURFACE PRES: _____ (hPa)
SURFACE TEMP: _____ (C)
SURFACE RH: _____ (%)

Sky Conditions: _____

REMARKS: _____