

January 2014 NEW

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 4/3/2014
- INITIALS: WTC
- PUMP# (add x,y,z,R): 2324658
- 1. Run zero air 10 minutes  (✓)
- 2. PUMP CURRENT: 96.54
- 3. PUMP PRESSURE: 211
- 4. ENSCI Press/vac: 28/20 inHg
- 5. Bypass cell  (✓)
- 6. Add 5-6cc cathode  (✓)
- 7. 30 MINUTES HI O<sub>3</sub>  (✓)
- 8. 3 MINUTES NO O<sub>3</sub>  (✓)

- 9. DUMP CATHODE RINSE:  (✓)
- 10. ADD 3.0 CC FRESH CATHODE #:  (✓)
- 11. ADD 1.5 CC ANODE SOLUTION:  (✓)
- 12. RUN 10 MINUTES on NO O<sub>3</sub>  (✓)
- 13. RECORD CURRENT: BG = 0.122 μamps
- 14. RUN 10 MINUTES on 5 μamps O<sub>3</sub>  (✓) - then switch to NO O<sub>3</sub> AIR.
- 15. RECORD: TIME TO DROP FROM 4 TO 1.5 μamps: 36.40 sec.
- 16. Run sonde for 10 minutes on NO O<sub>3</sub> AIR  (✓)
- 17. Short the cell leads:  (✓)
- 18. Intake tube stored in sonde frame:  (✓)
- 19. Place Instrument inside plastic bag:  (✓)
- 20. Store inside Styrofoam flight box:  (✓)

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 4/9/2014

- 1. RUN 5 MINS on NO O<sub>3</sub>  (✓)
- 2. RECORD CURRENT: 0.042 μamps
- 3. RUN 5 MINS on 5 μamps O<sub>3</sub>  (✓) - then switch to NO O<sub>3</sub> AIR
- 4. RECORD TIME TO DROP FROM 4 TO 1.5 μamps: 25.07 sec
- 5. Short cell leads and Store in Styrofoam flight box:  (✓)

FLIGHT PREPARATION IN LAB. (Under 24 hours to launch)

DATE (LOCAL): 4/14/2014  
INITIALS: WTC

- 1. Cathode solution # or date written on bottle: 239
- 2. CHANGE CATHODE SOLUTION (3cc):  (✓)
- 3. CHANGE ANODE SOLUTION (1.5cc):  (Yes/No)
- 4. RUN ON NO O<sub>3</sub> FOR 10 MINUTES:  (✓)
- 5. RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1 = 0.021 μamps
- 6. RUN ON 5 microamps of O<sub>3</sub> for 10 Minutes:  (✓)
- 7. SWITCH TO NO O<sub>3</sub> AIR.
- 8. RECORD: THE TIME TO DROP FROM 4 TO 1.5 μamps: 24.44 sec
- 9. RECORD: 5 - T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): <u>23</u>	ROOM RH (%): <u>26</u>	
Flowrate Correction: <u>2.62</u> (%)		<u>Wat</u>
FLOWRATE #1: <u>28.23</u> sec		<u>29.33</u>
FLOWRATE #2: <u>28.17</u> sec		<u>29.33</u>
FLOWRATE #3: <u>28.29</u> sec		<u>29.44</u>
FLOWRATE #4: <u>28.28</u> sec		<u>29.33</u>
FLOWRATE #5: <u>28.23</u> sec		<u>Day</u>
AVERAGE T100: <u>28.24</u> sec		<u>28.54</u>
		<u>28.56</u>
		<u>28.65</u>
		<u>28.54</u>

DAY OF FLIGHT @ THE LAUNCH SITE.

Results: O<sub>3</sub> Sonde TCO extrap: \_\_\_\_\_ (DU)  
O<sub>3</sub> Sonde TCO SBUV: \_\_\_\_\_ (DU)

FLIGHT NUMBER: 44861  
GMT DATE (YYMMDD): 140419 LOCAL DATE: 140419  
GMT LAUNCH TIME: 18:03 LOCAL TIME: 13:03  
Operator Initials: WTC

BALLOON SIZE: 1200 Grams: TOTEX \_\_\_\_\_ Hwoyee  PAWAN \_\_\_\_\_ (✓ one)  
PAY-OFF-WEIGHT: 2438 Grams: Burst Alt: \_\_\_\_\_ (km) Turn/Burst: \_\_\_\_\_

O<sub>3</sub> sn: 2324658 O<sub>3</sub> CELL BACKGROUND (μamps): 0.021 O<sub>3</sub> Ventilation Holes: (Y/N) Y  
O<sub>3</sub> Flowrate: 28.24 (sec) O<sub>3</sub> Flowrate Correction: 2.62 (%)  
Radiosonde #: 26594 Freq: 403 (MHz) If Vais RS-80, Pressure offset written on bag: \_\_\_\_\_ (hPa)  
NOAA FPH sn: \_\_\_\_\_  
Other instruments: \_\_\_\_\_

SURFACE PRES: \_\_\_\_\_ (hPa)  
SURFACE TEMP: \_\_\_\_\_ (C)  
SURFACE RH: \_\_\_\_\_ (%)

Sky Conditions: \_\_\_\_\_  
REMARKS: \_\_\_\_\_