

U.S. DEPT. OF COMMERCE  
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 CLIMATE MONITORING AND DIAGNOSTICS LABORATORY  
**DIGITAL OZONESONDE CHECKLIST**

FLT# VU004

June 2004

RICE UNIV. (0.5% buffered)

**INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.**

- DATE (LOCAL): 4/18/06 1. Run zero air 10 minutes  (v)  
 INITIALS: AM 2. PUMP CURRENT: OK 4. PUMP VAC: OK  
 PUMP NUMBER: 275614-GPS 3. PUMP PRESSURE: OK 5. 30 MINUTES HI O<sub>3</sub>  (v)  
 6. 5 MINUTES NO O<sub>3</sub>  (v)
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7. ADD 3.0 CC FRESH CATHODE:  (v) 14. Run sonde for 10 minutes on NO O<sub>3</sub> AIR  (v)  
 8. WAIT 2 Minutes:  (v) 15. Short the cell leads:  (v)  
 9. ADD 1.5 CC ANODE SOLUTION:  (v) 16. Add about 2 to 2.5 CC more Cathode Solution  (v)  
 10. RUN 10 MINUTES on NO O<sub>3</sub>:  (v) 17. Place Instrument inside plastic bag:  (v)  
 11. RECORD CURRENT: = 0.6  $\mu$ amps 18. Store inside Styrofoam flight box:  (v)  
 12. RUN 10 MINUTES on 5  $\mu$ amps O<sub>3</sub>  (v) - then switch to NO O<sub>3</sub> AIR.  
 13. RECORD: TIME TO DROP FROM 4 TO 1.5  $\mu$ amps: OK sec.

**FLIGHT PREPARATION IN LAB.**

- DATE (LOCAL): 4/22/06  
 INITIALS: AM  
 Cathode solution # or date written on bottle: 1/25/06  
 CHANGE CATHODE SOLUTION (3cc):  (v)  
 CHANGE ANODE SOLUTION (1.5cc): y (Yes/No)  
 RUN ON NO O<sub>3</sub> FOR 5 MINUTES:  (v)  
 RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1=0.0  $\mu$ amps  
 RUN ON 5 microamps of O<sub>3</sub> for 5 Minutes:  (v)

**T100 FLOWRATE TIMES:**

- FLOWRATE #1: 28.87 sec  
 FLOWRATE #2: 28.50  
 FLOWRATE #3: 28.50  
 FLOWRATE #4: 28.47  
 FLOWRATE #5: 28.53  
**AVERAGE T100:** 28.57

**DRY T100**

- #1: \_\_\_\_\_  
 #2: \_\_\_\_\_  
 #3: \_\_\_\_\_  
 DRY AVG: \_\_\_\_\_

**WET T100**

- #1: \_\_\_\_\_  
 #2: \_\_\_\_\_  
 #3: \_\_\_\_\_  
 WET AVG: \_\_\_\_\_

**RESONSE TIME**

SWITCH TO NO O<sub>3</sub> AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5  $\mu$ amps: 25 sec.

RECORD: ROOM TEMP (C) 21.3 ROOM REL. HUMID. (%) 33

RECORD: 5 - T100 FLOWRATE TIMES:

\*T100 Flowrate correction. \_\_\_\_\_ %

SONDE= \_\_\_\_\_ ppbv @ CALIB= \_\_\_\_\_

**DAY OF FLIGHT @ THE LAUNCH SITE.**

FLIGHT NUMBER: VU004

GMT DATE (YYMMDD): 060422

LOCAL DATE: 4/22/06

GMT LAUNCH TIME: 19:02:05

LOCAL TIME: 2:02:05

BALLOON TYPE 600 Gram: Kaymont  Scientific Sales \_\_\_\_\_ (None)

O<sub>3</sub> BACKGROUND ( $\mu$ amps or HEX value in Y channel): \_\_\_\_\_

VAISALA NUMBER (9 digit): \_\_\_\_\_

SKY CONDITIONS: partly cloudy

SURFACE PRESSURE: 985

SURFACE TEMP. (C): 20.8

SURFACE HUMIDITY: 34

~ BURST PRESSURE (mb): 12.43 mb 29.66 in

REMARKS: original prep sheet blown away in wind

41.54°N 85.55°W predicted landing location

Reproduced from numbers stored in computer

Adley, Amy, Bruce

Ventilation Holes: \_\_\_\_\_

weighoff = 1900 grams

\*T100 flow corr (%) = [(WET/DRY)-1.0] X 100