

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

FLT# VU001

June 2004

RICE UNIV. (0.5% buffered)

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

DATE (LOCAL): 4/13/06  
 INITIALS: MT / AG  
 PUMP NUMBER: 225631-6PS

1. Run zero air 10 minutes  (v)  
 2. PUMP CURRENT: 85  
 3. PUMP PRESSURE: 14

4. PUMP VAC : 22.5  
 5. 30 MINUTES HI O<sub>3</sub>  (v)  
 6. 5 MINUTES NO O<sub>3</sub>  (v)

7. ADD 3.0 CC FRESH CATHODE:  (v)  
 8. WAIT 2 Minutes :  (v)  
 9. ADD 1.5 CC ANODE SOLUTION:  (v)  
 10. RUN 10 MINUTES on NO O<sub>3</sub>  (v)  
 11. RECORD CURRENT: = 0.56  $\mu$ amps  
 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: 84.75 sec.

14. Run sonde for 10 minutes on NO O<sub>3</sub> AIR  (v)  
 15. Short the cell leads:  (v)  
 16. Add about 2 to 2.5 CC more Cathode Solution  (v)  
 17. Place Instrument inside plastic bag:  (v)  
 18. Store inside Styrofoam flight box:  (v)

**FLIGHT PREPARATION IN LAB.**

DATE (LOCAL): 4/19/06

INITIALS: MT

Cathode solution # or date written on bottle: 1-25-06

CHANGE CATHODE SOLUTION (3cc):  (v)

CHANGE ANODE SOLUTION (1.5cc):  (Yes/No)

RUN ON NO O<sub>3</sub> FOR 5 MINUTES:  (v)

RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1 = 0.08  $\mu$ amps

RUN ON 5 microamps of O<sub>3</sub> for 5 Minutes:  (v)

**T100 FLOWRATE TIMES:**

FLOWRATE #1: 28.59 sec

FLOWRATE #2: 28.44

FLOWRATE #3: 28.44

FLOWRATE #4: 28.40

FLOWRATE #5: 28.44

**AVERAGE T100:** 28.46

**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: 24.05 sec. *25.72*

RECORD: ROOM TEMP (C) 24.8 ROOM REL. HUMID. (%) 32 *31*

RECORD: 5 - T100 FLOWRATE TIMES:

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

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

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

FLIGHT NUMBER: VU001

GMT DATE (YYMMDD): 060419

GMT LAUNCH TIME: 18:56:35

LOCAL DATE: 4/19/06

LOCAL TIME: 1:56:35

BALLOON TYPE 600 Gram : Kaymont  Scientific Sales \_\_\_\_\_ (v one)

O<sub>3</sub> BACKGROUND ( $\mu$ amps or HEX value in Y channel): 0.08

VAISALA NUMBER (9 digit): 635300604

SURFACE PRESSURE: 985

SURFACE TEMP. (C): 20.5

SURFACE HUMIDITY: 37

SKY CONDITIONS: clear

~ BURST PRESSURE (mb): 12.75 mb  
~42.2 kF

REMARKS: initial use 1200 feet

Scott Stewart, Beth Litteral, Paul Werd, Marc Taylor,  
Tony Leveto, David Peterson Ventilation Holes: \_\_\_\_\_

weighoff ~1200 grams

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

predicted landing location 41.58° N 86.19° W

*6/1 hand  
321  
New FD*