

U.S. DEPT. OF COMMERCE  
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 CLIMATE MONITORING AND DIAGNOSTICS LABORATORY

FLT # HU484

DEC 2005 RECONDITIONED

DIGITAL OZONESONDE CHECKLIST

BOULDER

INITIAL PREPARATION 14 DAYS BEFORE FLIGHT.

DATE (LOCAL): 11/26/07 1. Run zero air 10 minutes  (v) 5. Bypass cell  (v)  
 INITIALS: ACQ 2. PUMP CURRENT: 96 6. Add 5-6cc cathode  (v)  
 PUMP# (add x,y,z,R): 2E5535X 3. PUMP PRESSURE: 14 7. 30 MINUTES HI O<sub>3</sub>  (v)  
 4. PUMP VACUUM: 10 8. 3 MINUTES NO O<sub>3</sub>  (v)

9. DUMP CATHODE RINSE:  (v) 16. Run sonde for 10 minutes on NO O<sub>3</sub> AIR  (v)  
 10. ADD 3.0 CC FRESH CATHODE  (v) # 160 17. Short the cell leads:  (v)  
 11. ADD 1.5 CC ANODE SOLUTION:  (v) 18. Add about 2 to 2.5 CC more Cathode Solution  (v)  
 12. RUN 10 MINUTES on NO O<sub>3</sub>  (v) 19. Place Instrument inside plastic bag:  (v)  
 13. RECORD CURRENT: = .031 μamps 20. Store inside Styrofoam flight box:  (v)  
 14. RUN 10 MINUTES on 5 μamps O<sub>3</sub>  (v) - then switch to NO O<sub>3</sub> AIR.  
 15. RECORD: TIME TO DROP FROM 4 TO 1.5 μamps: 29.8 sec.

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): \_\_\_\_\_

- 5 MINUTES on NO O<sub>3</sub>  (v)
- RECORD CURRENT: \_\_\_\_\_ μamps
- RUN 5 MINUTES on 5 μamps O<sub>3</sub> \_\_\_\_\_ (v) - then switch to NO O<sub>3</sub> AIR.
- TIME TO DROP FROM 4 TO 1.5 μamps: \_\_\_\_\_ sec. RUN 5 minutes: Add 2 CC more cathode: STORE.

FLIGHT PREPARATION IN LAB.

Lab Gauge Pressure =  
 Lab Vaisala Pressure =

DATE (LOCAL): 11/26/07  
 INITIALS: BSJ

T100 FLOWRATE TIMES:

Cathode solution # or date written on bottle: 159 FLOWRATE #1: 28.75 sec  
 CHANGE CATHODE SOLUTION (3cc):  (v) FLOWRATE #2: 28.75  
 CHANGE ANODE SOLUTION (1.5cc):  (Yes/No) 159 FLOWRATE #3: 28.67  
 RUN ON NO O<sub>3</sub> FOR 10 MINUTES:  (v) FLOWRATE #4: 28.69  
 RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1= .023 μamps FLOWRATE #5: 28.63  
 RUN ON 5 microamps of O<sub>3</sub> for 10 Minutes:  (v) AVERAGE T100: \_\_\_\_\_

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

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μamps: 21.2 sec.

RECORD: ROOM TEMP (C) 22.2 ROOM REL. HUMID. (%) 21 Flowrate Correction 3.6 % (Tables)

RECORD: 5 - T100 FLOWRATE TIMES: SONDE= 99.8 ppbv @ CALIB= 100

DAY OF FLIGHT @ THE LAUNCH SITE.

Marshall Gauge Pressure =  
 Marshall Vaisala Pressure =

FLIGHT NUMBER: \_\_\_\_\_

GMT DATE (YYMMDD): \_\_\_\_\_

LOCAL DATE: \_\_\_\_\_

GMT LAUNCH TIME: \_\_\_\_\_

LOCAL TIME: \_\_\_\_\_

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

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

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

SURFACE PRESSURE: \_\_\_\_\_

SURFACE TEMP. (C): \_\_\_\_\_

REMARKS: cell needs to be taped to sonde

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

weighoff =

grams

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