

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

FLT# VU006

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 4-19-06
 INITIALS: MT
 PUMP NUMBER: 225638-695

- 1. Run zero air 10 minutes (v)
- 2. PUMP CURRENT: 90
- 3. PUMP PRESSURE: 13
- 4. PUMP VAC : 23
- 5. 30 MINUTES HI O₃ (v)
- 6. 5 MINUTES NO O₃ (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 O₃ (v)
- 11. RECORD CURRENT: = 0.50 μ amps
- 12. RUN 10 MINUTES on 5 μ amps O₃ (v) - then switch to NO O₃ AIR.
- 13. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: 50.74 sec.
- 14. Run sonde for 10 minutes on NO O₃ 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): 4/25/06 4/26/06
 INITIALS: SK MT
 Cathode solution # or date written on bottle: Jan 25, 2006
 CHANGE CATHODE SOLUTION (3cc): (v)
 CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 RUN ON NO O₃ FOR 5 MINUTES: (v)
 RECORD THE NO O₃ BACKGRND#1: BGI=0.01 μ amps
 RUN ON 5 microamps of O₃ for 5 Minutes: (v)

T100 FLOWRATE TIMES: 28.38
 FLOWRATE #1: 28.12 26.69
 FLOWRATE #2: 28.19 28.18 AVG:
 FLOWRATE #3: 28.16 27.97

DRY T100

#1: _____
 #2: _____
 #3: _____
 #1: _____
 #2: _____
 #3: _____

WET T100

FLOWRATE #4: 28.16 28.25
 FLOWRATE #5: 28.18 28.25
 AVERAGE T100: 28.16 27.95
 WET AVG: _____

RESPONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 21.59 ~~20.38~~ sec.

RECORD: ROOM TEMP (C) 22.8 ROOM REL. HUMID. (%) 32

RECORD: 5 - T100 FLOWRATE TIMES:

22.5

31.70

SONDE= _____ ppbv @ CALIB= _____

*T100 Flowrate correction. _____ %

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: VU006
 GMT DATE (YYMMDD): 060426
 GMT LAUNCH TIME: 19:00:03

LOCAL DATE: 4/26/06
 LOCAL TIME: 2:00:03 pm

BALLOON TYPE 800 Gram : Kaymont Scientific Sales _____ (v one)

O₃ BACKGROUND (μ amps or HEX value in Y channel): 0.005

VAISALA NUMBER (9 digit): 635306708
 SURFACE PRESSURE: 989
 SURFACE TEMP. (C): 16.9
 SURFACE HUMIDITY: 29

SKY CONDITIONS: clear - beautiful

~ BURST PRESSURE (mb): 28.44 kcm

REMARKS: Ashley + Dave - about 1000 ft/min ascent rate 41.2465° N
86.2947° W

Ventilation Holes: _____

weighoff = 2100 grams

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