

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

FLT# V4027

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 8/28/06
 INITIALS: ST
 PUMP NUMBER: 22 528-605

1. Run zero air 10 minutes (v)
 2. PUMP CURRENT: 98 mA
 3. PUMP PRESSURE: 14 psi

4. PUMP VAC 22 mm Hg
 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: = 0.60 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: 58.44 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): 8/31/06
 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 O₃ FOR 5 MINUTES: (v)
 RECORD THE NO O₃ BACKGRND#1: 0.04 μ amps
 RUN ON 5 microamps of O₃ for 5 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 29.22 sec
 FLOWRATE #2: 29.12
 FLOWRATE #3: 29.10
 FLOWRATE #4: 29.16
 FLOWRATE #5: 29.19
 AVERAGE T100: 29.16

DRY T100

#1: _____
 #2: _____
 #3: _____
 DRY AVG: _____

WET T100

#1: _____
 #2: _____
 #3: _____
 WET AVG: _____

RESONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 16.84 sec.

*T100 Flowrate correction: _____ %

RECORD: ROOM TEMP (C) 20.4 ROOM REL. HUMID. (%) 59

RECORD: 5 - T100 FLOWRATE TIMES:

SONDE= _____ ppbv @ CALIB= _____

DAY OF FLIGHT @ THE LAUNCH SITE.

Microtops: _____

FLIGHT NUMBER: V4027
 GMT DATE (YYMMDD): 060831
 GMT LAUNCH TIME: 19:06:31

LOCAL DATE: 8/31/06
 LOCAL TIME: 2:06:31

BALLOON TYPE 600 Gram: Keymont Scientific Sales _____ (v one)

O₃ BACKGROUND (μ amps or HEX value in Y channel): 0.024

VAISALA NUMBER (9 digit): 510308115
 SURFACE PRESSURE: 992 mb
 SURFACE TEMP. (C): 22.9
 SURFACE HUMIDITY: 66%

SKY CONDITIONS: broken
 ~ BURST PRESSURE (mb): 27.3 km

REMARKS: Stephen, Ashley, Dave

wt 257m 41.5280
87.5020

weighoff = 2200 grams

Ventilation Holes: _____

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