

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

FLT# VU014

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 5/2/06
INITIALS: RS
PUMP NUMBER: 225618-GB
1. Run zero air 10 minutes (v)
 2. PUMP CURRENT: 90 mA
 3. PUMP PRESSURE: 12.5 psi
 4. PUMP VAC: 22.5 psi
 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: = 0.57 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: 51.16 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): May 9th 2006
INITIALS: RS
Cathode solution # or date written on bottle: 1/25/06
CHANGE CATHODE SOLUTION (3cc): (v)
CHANGE ANODE SOLUTION (1.5cc): Yes (Yes/No)
RUN ON NO O₃ FOR 5 MINUTES: (v)
RECORD THE NO O₃ BACKGRND#1: BG1=0.0 μ amps
RUN ON 5 microamps of O₃ for 5 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 28.88 sec
FLOWRATE #2: 28.75
FLOWRATE #3: 28.81

FLOWRATE #4: 28.75
FLOWRATE #5: 28.78
AVERAGE T100: 28.79

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: 20.19 sec.

*T100 Flowrate correction. _____ %

RECORD: ROOM TEMP (C) 23.2 ROOM REL. HUMID. (%) 37

RECORD: 5 - T100 FLOWRATE TIMES:

SONDE= _____ ppbv @ CALIB= _____

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: VU014
GMT DATE (YYMMDD): 6/9/06
GMT LAUNCH TIME: 13:59:40

LOCAL DATE: 6/9/06 41.83°N
LOCAL TIME: 2:00pm 85.90°W

BALLOON TYPE 825 Gram: Kaymont Scientific Sales (v one)

O₃ BACKGROUND (μ amps or HEX value in Y channel): 0.020 μ A

VAISALA NUMBER (9 digit): 634537614 634537613 *bad pressure readings on board - replaced*

SURFACE PRESSURE: 981
SURFACE TEMP. (C): 23.4
SURFACE HUMIDITY: 36

SKY CONDITIONS: broken high cirrus

~ BURST PRESSURE (mb): 30 km 11.838 mb
29.15

REMARKS: initial run rate @ 1200 327-337 DU = Microtops readings

Ventilation Holes: _____

weighoff = 2200 grams

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

call south Bend