FLT# 2c003

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

June 2004

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION: 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 7-1-2004
INITIALS: SH
PUMP NUMBER: 123537

1. Run zero air 10 minutes ✓ (√)
2. PUMP CURRENT: 85 ma
3. PUMP PRESSURE: ~~[illegible]~~ 13

4. PUMP VAC: 25
5. 30 MINUTES HI O$_3$ ✓ (√)
6. 5-10 MINUTES NO O$_3$ ✓ (√)

7. ADD 3.0 CC FRESH CATHODE: ✓ (√)
8. WAIT 2 Minutes ✓ (√)
9. ADD 1.5 CC ANODE SOLUTION: ✓ (√)
10. RUN 10 MINUTES on NO O$_3$ ✓ (√)
11. RECORD CURRENT: = 0.53 µamps
12. RUN 10 MINUTES on 5 µamps O$_3$ ✓ (√) - then switch to NO O$_3$ AIR.
13. RECORD: TIME TO DROP FROM 4 TO 1.5 µamps: 57 sec.

14. Run sonde for 10 minutes on NO O$_3$ AIR ✓ (√)
15. Short the cell leads: ✓ (√)
16. Add about 2 to 2.5 CC more Cathode Solution ✓ (√)
17. Place Instrument inside plastic bag: ✓ (√)
18. Store inside Styrofoam flight box: ✓ (√)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 7-10-2004
INITIALS: SH
Cathode solution # or date written on bottle: 4/21/04
CHANGE CATHODE SOLUTION (3cc): ✓ (√)
CHANGE ANODE SOLUTION (1.5cc): ✓ (Yes/No)
RUN ON NO O$_3$ FOR 5 MINUTES: ✓ (√)
RECORD THE NO O$_3$ BACKGRND#1: BG1= 0 µamps
RUN ON 5 microamps of O$_3$ for 5 Minutes: ✓ (√)

T100 FLOWRATE TIMES:
FLOWRATE #1: 28.44 sec
FLOWRATE #2: 28.51
FLOWRATE #3: 28.57
FLOWRATE #4: 28.66
FLOWRATE #5 28.72
AVERAGE T100: 28.52

DRY T100
#1:
#2:
#3:
DRY AVG:

WET T100
#1:
#2:
#3:
WET AVG:

RESPONSE TIME:
SWITCH TO NO O$_3$ AIR.
RECORD: THE TIME TO DROP FROM 4 TO 1.5 µamps: 22.25 sec.
RECORD: ROOM TEMP (C) 20.3 ROOM REL. HUMID. (%) 52
RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction. 0 %

SONDE= ppbv @ CALIB=

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: 2c003
GMT DATE (YYMMDD): 040710
GMT LAUNCH TIME:
LOCAL DATE: 040710
LOCAL TIME:

BALLOON TYPE 350 Gram: Kaymont ✓ Scientific Sales (√ one)

O$_3$ BACKGROUND (µamps or HEX value in Y channel): 0.04

VAISALA NUMBER (9 digit): 178851~~[illegible]~~ 4473
SURFACE PRESSURE: 1017 hPa
SURFACE TEMP. (C): 28.8 °C
SURFACE HUMIDITY: 71%

SKY CONDITIONS: clear
~ BURST PRESSURE (mb): 25.5mb

REMARKS:

Ventilation Holes:

weighoff = 500 grams
[illegible]

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