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

FLT# RCØØ6

Shell

June 2004

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 7/2/04
INITIALS: SH
PUMP NUMBER: 2Z3831

1. Run zero air 10 minutes ✓ (√)
2. PUMP CURRENT: 93 mA
3. PUMP PRESSURE: 11
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: = 0.59 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: 56 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): 7-14-04
INITIALS: SH
Cathode solution # or date written on bottle: 6/18/04
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= 0.0 μamps
RUN ON 5 microamps of O_3 for 5 Minutes: ✓ (√)

T100 FLOWRATE TIMES:
FLOWRATE #1: 29.00 sec
FLOWRATE #2: 29.15
FLOWRATE #3: 28.97
FLOWRATE #4: 29.13
FLOWRATE #5 29.13
AVERAGE T100: 29.07

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

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

RESONSE TIME
SWITCH TO NO O_3 AIR.
RECORD: THE TIME TO DROP FROM 4 TO 1.5 μamps: 22.2 sec.
RECORD: ROOM TEMP (C) 21.4 ROOM REL. HUMID. (%) 56
RECORD: 5 - T100 FLOWRATE TIMES:

***T100 Flowrate correction** ____ %

SONDE= ____ **ppbv @ CALIB=** ____

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: RCØØ6
GMT DATE (YYMMDD): 040714
GMT LAUNCH TIME : 19:30
LOCAL DATE: 040714
LOCAL TIME: 2:30

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

O_3 BACKGROUND (μamps or HEX value in Y channel): 0.06

VAISALA NUMBER (9 digit): 178851353
SURFACE PRESSURE: 1016.6
SURFACE TEMP. (C): 33
SURFACE HUMIDITY : 51

SKY CONDITIONS: partly cloudy

~ BURST PRESSURE (mb) : ____

REMARKS: lost contact @ 4:09 PM local time ; ~ 56,000 ft 23 km 1:21 hrs descent rate = ~ 2000 ft/min may lost.

Ventilation Holes: ____

weighoff = 52 fill grams 64 end 02 ← good rate rate ~ initially 1500 ft/min slows to 750 ft/min

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