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

FLT # ZC 002

June 2004

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 7-1-2004
INITIALS: SJ
PUMP NUMBER: [illegible]

1. Run zero air 10 minutes ✓ (✓)
2. PUMP CURRENT: 77mA
3. PUMP PRESSURE: 13
4. PUMP VAC: 25.5
5. 30 MINUTES HIGH O3 ✓ (✓)
6. 5-10 MINUTES NO O3 ✓ (✓)

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: – 0.31 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): 7-7-04
INITIALS: SJ LM
Cathode solution # or date written on bottle: 6/14/04
CHANGE CATHODE SOLUTION (3cc): ✓ (✓)
CHANGE ANODE SOLUTION (1.5cc): ✓ (Yes/No)
RUN ON NO O_3 FOR 5 MINUTES: ✓ (✓)
RECORD THE NO O_3 BACKGROUND: BG= 0 µamps
RUN ON 5 microamps of O_3 for 5 Minutes: ✓ (✓)

T100 FLOWRATE TIMES:
FLOWRATE #1: 28.53 sec
FLOWRATE #2: 28.50
FLOWRATE #3: 28.43
FLOWRATE #4: 28.35
FLOWRATE #5 28.47
AVERAGE T100: 28.47

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: 22.2 sec.
*T100 Flowrate correction: 0 %
RECORD: ROOM TEMP (C) 20.2 ROOM REL. HUMID. (%) 47
RECORD: 5 - T100 FLOWRATE TIMES:

SONDE= ppbv @ CALIB=

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: ZC002
GMT DATE (YYMMDD): ~~[illegible]~~ 040707
LOCAL DATE: 07/07/04
GMT LAUNCH TIME: 19:06
LOCAL TIME: 7:06 pm

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

O_3 BACKGROUND (µamps or HEX value in Y channel): 0027

VAISALA NUMBER (9 digit): 1785135
SURFACE PRESSURE: 76.3 cm Hg
SURFACE TEMP (C): 24.3
SURFACE HUMIDITY: 65%

SKY CONDITIONS: Scattered high clouds

~ BURST PRESSURE (mb):

REMARKS: lost contact at 4:10 pm
ascent rate too slow 200 - 250 ft/min

Verification Holes:

weighoff = grams

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