

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

FLT # H4591

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 10/03/2009  
INITIALS: BN  
PUMP NUMBER: 2289  
228394

PUMP CURRENT: 77.54  
PUMP PRESSURE: >10  
PUMP VACUUM: 22

30 MINUTES HI O<sub>3</sub>  (N)  
5 MINUTE NO O<sub>3</sub>  (N)

ADD 3.0 CC CATHODE SOLUTION:  (N)  
WAIT 2 MINUTES:  (N)  
ADD 1.5 CC ANODE SOLUTION:  (N)  
RUN 20 MINUTES ON NO O<sub>3</sub>:  (N)  
Record the current after the 20 MINUTES ON NO O<sub>3</sub>: = 0.462  $\mu$ amps

Short the cell leads:  (N)  
Add about 2.5 CC more Cathode Solution (2Z)  (N)  
Place Instrument inside plastic bag:  (N)  
Store inside Styrofoam flight box:  (N)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 10/17/09  
INITIALS: WC

Cathode solution date written on bottle: 4/17/09  
CHANGE CATHODE SOLUTION (3cc):  (N)  
CHANGE ANODE SOLUTION (1.5cc):  (N) (Yes/No)  
RUN ON NO O<sub>3</sub> FOR 5 MINUTES:  (N)  
RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1 = 0.035  $\mu$ amps  
RUN ON 5 microamps of O<sub>3</sub> for 10 Minutes:  (N)

T100 FLOWRATE TIMES:  
FLOWRATE #1: 28.23 sec  
FLOWRATE #2: 28.21  
FLOWRATE #3: 28.14  
FLOWRATE #4: 28.38  
FLOWRATE #5: 28.43  
AVERAGE T100: 28.28

**DRY T100**  
#1: 28.01  
#2: 28.06  
#3: 28.11  
DRY AVG: 28.06

**WET T100**  
#1: 28.33  
#2: 28.37  
#3: 28.37  
WET AVG: 28.36

RESONSE TIME

SWITCH TO NO O<sub>3</sub> AIR.  
RECORD: THE TIME TO DROP FROM 4 TO 1.5  $\mu$ amps: 28.52 sec.  
RECORD: ROOM TEMP (C) 19 ROOM REL. HUMID. (%) 33  
RECORD: 5 - T100 FLOWRATE TIMES:

\*T100 Flowrate correction: 1.07%

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: H4591  
GMT DATE: 10/17/09  
GMT LAUNCH TIME: 1

LOCAL DATE: 10/17/09  
LOCAL TIME: 10:52

BALLOON TYPE 1200 Gram: Kaymont  Scientific Sales  (None)

O<sub>3</sub> BACKGROUND ( $\mu$ amps from F9 key): 0.035

VAISALA NUMBER (9 digit): 723105208  
SURFACE PRESSURE: \_\_\_\_\_  
SURFACE TEMP. (C): \_\_\_\_\_  
SURFACE HUMIDITY: \_\_\_\_\_

SKY CONDITIONS: Cloudy, cold, windy

BURST PRESSURE (mb): 8.81  
Alt: 31.86 km

REMARKS: Interference problems around 13-km.  
Adjusted antenna occasionally to compensate.

weighoff = \_\_\_\_\_ grams

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