

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

FLT # HU 585

Huntsville

**INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.**

DATE (LOCAL): 8/27/09  
 INITIALS: WC  
 PUMP NUMBER: 228476

PUMP CURRENT: 93.33  
 PUMP PRESSURE: 11  
 PUMP VACUUM: 23

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

ADD 3.0 CC CATHODE SOLUTION:   
 WAIT 2 MINUTES:   
 ADD 1.5 CC ANODE SOLUTION:   
 RUN 20 MINUTES ON NO O<sub>3</sub>:   
 Record the current after the 20 MINUTES ON NO O<sub>3</sub>: = 0.333  $\mu$ amps

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

**FLIGHT PREPARATION IN LAB.**

DATE (LOCAL): 09/05/2009  
 INITIALS: BH  
 Cathode solution date written on bottle: 04/17/09  
 CHANGE CATHODE SOLUTION (3cc):   
 CHANGE ANODE SOLUTION (1.5cc):  (Yes/No)  
 RUN ON NO O<sub>3</sub> FOR 5 MINUTES:   
 RECORD THE NO O<sub>3</sub> BACKGRND#1: BG1 = 0.020  $\mu$ amps  
 RUN ON 5 microamps of O<sub>3</sub> for 10 Minutes:

T100 FLOWRATE TIMES:  
 FLOWRATE #1: 28.93 sec  
 FLOWRATE #2: 28.97  
 FLOWRATE #3: 28.93  
 FLOWRATE #4: 28.97  
 FLOWRATE #5: 28.89  
 AVERAGE T100: 28.94

**DRY T100**  
 #1: 28.10  
 #2: 28.26  
 #3: 28.07  
 DRY AVG: 28.14  
**WET T100**  
 #1: 28.55  
 #2: 28.81  
 #3: 28.69  
 WET AVG: 28.68

**RESPONSE TIME**

SWITCH TO NO O<sub>3</sub> AIR.  
 RECORD: THE TIME TO DROP FROM 4 TO 1.5  $\mu$ amps: 28.02 sec.  
 RECORD: ROOM TEMP (C) 24 ROOM REL. HUMID. (%) 47  
 RECORD: 5 - T100 FLOWRATE TIMES:

\*T100 Flowrate correction 1.92 %

**DAY OF FLIGHT @ THE LAUNCH SITE.**

FLIGHT NUMBER: HU 585  
 GMT DATE: 09/05/2009 LOCAL DATE: \_\_\_\_\_  
 GMT LAUNCH TIME: 09/05/2009 LOCAL TIME: \_\_\_\_\_

BALLOON TYPE \_\_\_\_\_ Gram: \_\_\_\_\_ Kaymont \_\_\_\_\_ Scientific Sales \_\_\_\_\_ (None)

O<sub>3</sub> BACKGROUND ( $\mu$ amps from F9 key): \_\_\_\_\_  
 VAISALA NUMBER (9 digit): 723200103  
 SURFACE PRESSURE: \_\_\_\_\_  
 SURFACE TEMP. (C): \_\_\_\_\_  
 SURFACE HUMIDITY: \_\_\_\_\_  
 SKY CONDITIONS: Cloudy  
 - BURST PRESSURE (mb): 40.821  
2.521

REMARKS: \_\_\_\_\_

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

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