

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

FLT# HU 608

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT

DATE (LOCAL): 01/30  
INITIALS: BT  
PUMP NUMBER: 228523

PUMP CURRENT: 8781  
PUMP PRESSURE: 210  
PUMP VACUUM: 21

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>: = 0.642  $\mu$ 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): 2/13/10  
INITIALS: SL  
Cathode solution date written on bottle: 4/17/09  
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=0.042  $\mu$ amps  
RUN ON 5 microamps of O<sub>3</sub> for 10 Minutes:

T100 FLOWRATE TIMES:  
FLOWRATE #1: 28.47 sec  
FLOWRATE #2: 28.29  
FLOWRATE #3: 28.36  
FLOWRATE #4: 28.41  
FLOWRATE #5: 28.25  
AVERAGE T100: 28.30

DRY T100  
#1: 27.85  
#2: 27.81  
#3: 27.68  
DRY AVG: 27.78

WET T100  
#1: 28.23  
#2: 28.14  
#3: 28.13  
WET AVG: 28.17

RESPONSE TIME

SWITCH TO NO<sub>2</sub>O<sub>3</sub> AIR.  
RECORD: THE TIME TO DROP FROM 4 TO 1.5  $\mu$ amps: 26.09 sec.  
RECORD: ROOM TEMP (C) 17 ROOM REL. HUMID. (%) 13  
RECORD: 5 - T100 FLOWRATE TIMES:

\*T100 Flowrate correction: 1.4%

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 608  
GMT DATE: 2/13/10  
GMT LAUNCH TIME: 19:52

LOCAL DATE: 2/13/10  
LOCAL TIME: 1:52

BALLOON TYPE 1200 Gram: Kaymont  Scientific Sales  (one)

O<sub>3</sub> BACKGROUND ( $\mu$ amps from F9 key): 0.042

VAISALA NUMBER (9 digit): 309016052  
SURFACE PRESSURE: \_\_\_\_\_  
SURFACE TEMP. (C): \_\_\_\_\_  
SURFACE HUMIDITY: \_\_\_\_\_

SKY CONDITIONS: partly cloudy

~ BURST PRESSURE (mb): 3.82 hPa at 37.2 km

REMARKS: late launch due to science fair team delays

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

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