

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

FLT # HU 584

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 08/15/2009
 INITIALS: BH
 PUMP NUMBER: 228474

PUMP CURRENT: 91.45
 PUMP PRESSURE: 22
 PUMP VACUUM: 210

30 MINUTES HI O₃ (v)
 5 MINUTE NO O₃ (v)

ADD 3.0 CC CATHODE SOLUTION: (v)
 WAIT 2 MINUTES: (v)
 ADD 1.5 CC ANODE SOLUTION: (v)
 RUN 20 MINUTES ON NO O₃: (v)
 Record the current after the 20 MINUTES ON NO O₃: = 2.412 μamps

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

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/29/09
 INITIALS: SL

Cathode solution date written on bottle: 4/17/09
 CHANGE CATHODE SOLUTION (3cc): (v)
 CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 RUN ON NO O₃ FOR 5 MINUTES: (v)
 RECORD THE NO O₃ BACKGRND#1: BG1 = 0.024 μamps
 RUN ON 5 microamps of O₃ for 10 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 28.53 sec
 FLOWRATE #2: 28.57
 FLOWRATE #3: 28.46
 FLOWRATE #4: 28.49
 FLOWRATE #5: 28.58
AVERAGE T100: 28.526

DRY T100
 #1: 28.04
 #2: 28.19
 #3: 28.18
DRY AVG: 28.14

WET T100
 #1: 28.57
 #2: 28.47
 #3: 28.44
WET AVG: 28.49

RESONSE TIME

SWITCH TO NO O₃ AIR.
RECORD: THE TIME TO DROP FROM 4 TO 1.5 μamps: 25.75 sec.
RECORD: ROOM TEMP (C): 24 **ROOM REL. HUMID. (%):** 56
RECORD: 5 - T100 FLOWRATE TIMES:

***T100 Flowrate correction: 1.24 %**

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 584
 GMT DATE: 08/29/09
 GMT LAUNCH TIME: _____

LOCAL DATE: 08/29/09
 LOCAL TIME: _____

BALLOON TYPE 1200 Gram: Kaymont Scientific Sales _____ (v one)

O₃ BACKGROUND (μamps from F9 key): 0.024

VAISALA NUMBER (9 digit): 723200804
 SURFACE PRESSURE: _____
 SURFACE TEMP. (C): _____
 SURFACE HUMIDITY: _____

SKY CONDITIONS: mostly cloudy
NW wind 5mph

- BURST PRESSURE (mb): 2.710 @

REMARKS: Some weird readings at take off 1-5 km and
at ~ 10-15 km 39.7km

weighoff = _____ grams

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