

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

FLT # HU550

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 01/09/09
INITIALS: SL
PUMP NUMBER: 228050

PUMP CURRENT: 85.50
PUMP PRESSURE: >10
PUMP VACUUM: 18

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)

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)

Record the current after the 20 MINUTES ON NO O₃: = 0.477 μ amps

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 1/17/09
INITIALS: YR/SL

Cathode solution date written on bottle: 7/14/08
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**= 0.013 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 28.49 sec
FLOWRATE #2: 28.46
FLOWRATE #3: 28.69
FLOWRATE #4: 28.55
FLOWRATE #5: 28.59

AVERAGE T100: 28.55

DRY T100

#1: 28.65
#2: 28.59
#3: 28.62
DRY AVG: 28.62

WET T100

#1: 28.81
#2: 28.86
#3: 28.94
WET AVG: 28.87

RESPONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 33.9 sec.

RECORD: ROOM TEMP (C) 11 ROOM REL. HUMID. (%) 11

RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction: 0.27 %

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU550
GMT DATE: 1/17/09
GMT LAUNCH TIME: 19:16:56

LOCAL DATE: 1/17/09
LOCAL TIME: 13:16:36

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

O₃ BACKGROUND (μ amps from F9 key): 0.013

VAISALA NUMBER (9 digit): 320602811

SKY CONDITIONS: overcast

SURFACE PRESSURE: _____

SURFACE TEMP. (C): _____

SURFACE HUMIDITY: _____

~ BURST PRESSURE (mb): 7.217
32.546 km

REMARKS: signal problems starting at 12 km.

weighoff = _____ grams

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