

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

FLT# HU 638

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 8/14/10 PUMP CURRENT: 72.92 30 MINUTES HI O₃
INITIALS: SL E SC PUMP PRESSURE: 510 5 MINUTE NO O₃
PUMP NUMBER: 229270-V2D PUMP VACUUM: 23

ADD 3.0 CC CATHODE SOLUTION: Short the cell leads:
WAIT 2 MINUTES: Add about 2.5 CC more Cathode Solution (2Z)
ADD 1.5 CC ANODE SOLUTION: Place Instrument inside plastic bag:
RUN 20 MINUTES ON NO O₃ Store inside Styrofoam flight box:
Record the current after the 20 MINUTES ON NO O₃: = 0.453 μ amps

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 8/28/2010
INITIALS: SC W C
Cathode solution date written on bottle: 10/14/2009
CHANGE CATHODE SOLUTION (3cc):
CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
RUN ON NO O₃ FOR 5 MINUTES:
RECORD THE NO O₃ BACKGRND#1: BG1=0.021 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes:

T100 FLOWRATE TIMES:

FLOWRATE #1: 28.73 sec
FLOWRATE #2: 28.84
FLOWRATE #3: 28.73
FLOWRATE #4: 28.80
FLOWRATE #5: 28.82
AVERAGE T100: 28.82

DRY T100

#1: 27.83
#2: 27.81
#3: 27.90
DRY AVG: 27.85

WET T100

#1: 28.32
#2: 28.40
#3: 28.44
WET AVG: 28.39

RESONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 26.59 sec.

RECORD: ROOM TEMP (C) 24.6 ROOM REL. HUMID. (%) 52%

RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction. 1.93%

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 638
GMT DATE: 08/28/2010 LOCAL DATE: 08/28/2010
GMT LAUNCH TIME: 18:45:26 LOCAL TIME: 13:45:26

BALLOON TYPE 800 Gram: Kaymont Scientific Sales (none)

O₃ BACKGROUND (μ amps from F9 key): _____

VAISALA NUMBER (9 digit): 229111944
SURFACE PRESSURE: _____
SURFACE TEMP. (C): _____
SURFACE HUMIDITY: _____

SKY CONDITIONS: Sunny, partly cloudy.

~ BURST PRESSURE (mb): 32.269 km

REMARKS: _____

weighoff = _____ grams

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