

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

FLT # HU495

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 02/02/08
INITIALS: SL
PUMP NUMBER: 227248

PUMP CURRENT: 105.45
PUMP PRESSURE: >10
PUMP VACUUM: 23

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: = 0.259 μ amps

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): 02/16/08
INITIALS: SL

Cathode solution date written on bottle: 8-24-07
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=0.010 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 28.84 sec
FLOWRATE #2: 28.77
FLOWRATE #3: 28.81
FLOWRATE #4: 28.77
FLOWRATE #5: 28.73
AVERAGE T100: 28.784

DRY T100

#1: 28.50
#2: 28.50
#3: 28.49
DRY AVG: 28.496

WET T100

#1: ~~28.8~~ 28.8
#2: 28.87
#3: 28.87
WET AVG: 28.876

RESPONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 23.29 sec.

*T100 Flowrate correction: 1.33 %

RECORD: ROOM TEMP (C) 19 ROOM REL. HUMID. (%) 43

RECORD: 5 - T100 FLOWRATE TIMES:

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 495
GMT DATE: 02/16/08
GMT LAUNCH TIME: 19:29

LOCAL DATE: 02/16/08
LOCAL TIME: 13:29

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

O₃ BACKGROUND (μ amps from F9 key): 0.010

VAISALA NUMBER (9 digit): 320510104
SURFACE PRESSURE: _____
SURFACE TEMP. (C): _____
SURFACE HUMIDITY: _____

SKY CONDITIONS: overcast / cloudy

- BURST PRESSURE (mb): 8.717
burst at: 31.62 km

REMARKS: Bill Brown attached small experiment.

weighoff = _____ grams

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