

U.S. DEPARTMENT OF COMMERCE
NATIONAL OZONE RESEARCH AND ATMOSPHERIC ADMINISTRATION
CLIMATE MONITORING AND DIAGNOSTICS LABORATORY
DIGITAL OZONESONDE CHECKLIST

FLT # HU556

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 02/28/09
INITIALS: RL
PUMP NUMBER: 277961

PUMP CURRENT: 899
PUMP PRESSURE: >10
PUMP VACUUM: 22

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: = ~~0.021~~ 0.205 μ amps

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 02/28/09
INITIALS: SL

Cathode solution date written on bottle: 3/4/08
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**= 0.021 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 29.73 sec
FLOWRATE #2: 29.70
FLOWRATE #3: 29.67
FLOWRATE #4: 29.75
FLOWRATE #5: 29.75

AVERAGE T100: 29.72

DRY T100

#1: 28.44
#2: 28.35
#3: 28.40
DRY AVG: 28.396

WET T100

#1: 28.67
#2: 28.72
#3: 28.73
WET AVG: 28.706

RESPONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 25.59 sec.

RECORD: ROOM TEMP (C) 18 ROOM REL. HUMID. (%) 35

RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction. 1.09 %

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU556
GMT DATE: 2/28/09
GMT LAUNCH TIME: 18:59:34

LOCAL DATE: 2/28/09
LOCAL TIME: 12:59:34

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

O₃ BACKGROUND (μ amps from F9 key): 0.021

VAISALA NUMBER (9 digit): 188322641
SURFACE PRESSURE: _____
SURFACE TEMP. (C): _____
SURFACE HUMIDITY: _____

SKY CONDITIONS: cloudy & overcast

~ BURST PRESSURE (mb): 6.994 at 33.14kV

REMARKS: _____

weighoff = _____ grams

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