

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

FLT # HU 553

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 1/3/09
INITIALS: YR/SL
PUMP NUMBER: 278047

PUMP CURRENT: 75.91
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: = 0.0644 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): 2/7/09
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=0.043 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 29.05 sec
FLOWRATE #2: 29.06
FLOWRATE #3: 29.00
FLOWRATE #4: 28.83
FLOWRATE #5: 29.05

AVERAGE T100: 28.998

DRY T100

#1: 28.05
#2: 28.23
#3: 28.23
DRY AVG: 28.17

WET T100

#1: 28.57
#2: 28.34 52
#3: 28.48 50
WET AVG: 28.48 53

RESONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 28.03 sec.

RECORD: ROOM TEMP (C) 19 ROOM REL. HUMID. (%) 27

RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction: 1.27%

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 553

GMT DATE: 18:59:17 02/07 LOCAL DATE: 12:59:17 02/07/09

GMT LAUNCH TIME: 18:59:17 LOCAL TIME: 12:59:17

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

O₃ BACKGROUND (μ amps from F9 key): 0.043

VAISALA NUMBER (9 digit): 018225346
SURFACE PRESSURE: _____
SURFACE TEMP. (C): _____
SURFACE HUMIDITY: _____

SKY CONDITIONS: clear, windy

~ BURST PRESSURE (mb): 7.232 @

REMARKS: No problems with prep or launch. STRATU stopped plotting at ~11km, restarted program but no use. O₃ pressure N/A but strong signal & clear skies. Everything else works, ascent rate, current, voltage...

weighoff = _____ grams

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