

U.S. DEPT. OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
CLIMATE MONITORING AND DIAGNOSTICS LABORATORY
DIGITAL O₃ SONDE CHECKLIST

FLT # Hu 849

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 01/11/2014
INITIALS: NLP
PUMP NUMBER: 2225178

PUMP CURRENT: 97.86
PUMP PRESSURE: >10
PUMP VACUUM: 20

30 MINUTES HI O₃
5 MINUTE NO O₃

ADD 3.0 CC CATHODE SOLUTION:
WAIT 2 MINUTES:
ADD 1.5 CC ANODE SOLUTION:
RUN 20 MINUTES ON NO O₃:
Record the current after the 20 MINUTES ON NO O₃: = 0.594 μ amps

Short the cell leads:
Add about 2.5 CC more Cathode Solution (2Z):
Place Instrument inside plastic bag:
Store inside Styrofoam flight box:

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 01/25/2014
INITIALS: NLP
Cathode solution date written on bottle: 239
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 = 0.055 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes: 8.185

T100 FLOWRATE TIMES:
FLOWRATE #1: 29.55 sec
FLOWRATE #2: 29.64
FLOWRATE #3: 29.31
FLOWRATE #4: 29.67
FLOWRATE #5: 29.67
AVERAGE T100: 29.57

DRY T100

#1: 29.20
#2: 29.13
#3: 29.12
DRY AVG: 29.15

WET T100

#1: 29.59
#2: 29.58
#3: 29.52
WET AVG: 29.56

RESPONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 31.85 sec.

*T100 Flowrate correction: 1.41 %

RECORD: ROOM TEMP (C) 15.4 ROOM REL. HUMID. (%) 11

RECORD: 5 - T100 FLOWRATE TIMES:

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: Hu 849
GMT DATE: 01/25/2014
GMT LAUNCH TIME: 19:00

LOCAL DATE: 01/25/2014
LOCAL TIME: 13:00

BALLOON TYPE 1200 Gram: Kaymont Scientific Sales (None) Hwoyee

O₃ BACKGROUND (μ amps from P9 key): 0.055

VAISALA NUMBER (5 digit): 21374
SURFACE PRESSURE: 987.6
SURFACE TEMP. (C): 5.2
SURFACE HUMIDITY: 29.4

SKY CONDITIONS: Mostly sunny with a high near 45, West wind 10 to 15 mph, w/gusts as high as 25 mph
- BURST PRESSURE (mb): 25 mph

REMARKS: _____

weighoff = 1700 grams

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