U.S. DEPT. OF COMMERCE
NOAA Earth System Research Lab

Seacions August 2013

DIGITAL OZONESONDE CHECKLIST

FLT # 7/21 809

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 08/15/2013
INITIALS: NLP
PUMP# (add x,y,z,R): 2224638

1. Run zero air 10 minutes ✓ (√)
2. PUMP CURRENT: 95.82
3. PUMP PRESSURE: >10
4. ENSCI Press/vac: 28/20 in Hg
5. Bypass cell ✓ (√)
6. Add 5-6cc cathode ✓
7. 30 MINUTES HI O_3 ✓ (√)
8. 3 MINUTES NO O_3 ✓ (√)

9. DUMP CATHODE RINSE: ✓ (√)
10. ADD 3.0 CC FRESH CATHODE # ✓
11. ADD 1.5 CC ANODE SOLUTION: ✓ (√)
12. RUN 10 MINUTES on NO O_3 ✓ (√)
13. RECORD CURRENT: **BG** = 0.143 µamps
14. RUN 10 MINUTES on 5 µamps O_3 ✓ (√) - then switch to NO O_3 AIR.
15. **RECORD:** TIME TO DROP FROM 4 TO 1.5 µamps: 34.80 sec.
16. Run sonde for 10 minutes on NO O_3 AIR ✓ (√)
17. Short the cell leads: ___ (√)
18. Intake tube stored in sonde frame: ___ (√)
19. Place Instrument inside plastic bag: ___ (√)
20. Store inside Styrofoam flight box: ___ (√)

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/17/2013

1. Replace Cathode/Anode ✓ (√)
2. RUN 5 MINS on NO O_3 ✓ (√)
3. RECORD CURRENT: 0.161 µamps
4. RUN 5 MINS on 5 µamps O_3 ✓ (√)
5. Switch to NO O_3 AIR
6. RECORD TIME TO DROP FROM 4 TO 1.5 µamps: 31.62 sec
7. RUN 5 MINS on NO O_3 ✓ (√)
8. Short cell leads ✓ (√)
9. Store inside Styrofoam flight box: ✓ (√)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/20/2013
INITIALS: NLP

1. Cathode solution # or date written on bottle: #238
2. CHANGE CATHODE SOLUTION (3cc): ✓ (√)
3. CHANGE ANODE SOLUTION (1.5cc): ✓ (Yes/No)
4. RUN ON NO O_3 FOR 10 MINUTES: ✓ (√)
5. RECORD THE NO O_3 BACKGRND#1: **BG1**= 0.057 µamps
6. RUN ON 5 microamps of O_3 for 10 Minutes: ✓ (√)
7. SWITCH TO NO O_3 AIR.
8. **RECORD:** THE TIME TO DROP FROM 4 TO 1.5 µamps: 23.72 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 24.1, ROOM RH (%): 43%
Flowrate Correction: 1.74 (%)

FLOWRATE #1: 29.69 sec
FLOWRATE #2: 29.61 sec
FLOWRATE #3: 29.43 sec
FLOWRATE #4: 29.63 sec
FLOWRATE #5: 29.76 sec
•**AVERAGE T100:** 29.62 **sec**

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: 7/21 809
GMT DATE (YYMMDD): 08/20/2013 LOCAL DATE: 08/20/2013
GMT LAUNCH TIME: 18:03 LOCAL TIME: 13:03
Operator Initials: NLP
BALLOON SIZE: 1000 Grams: TOTEX ___ Hwoyee ✓ (√ one)
PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 27.95 (km)

O_3 sn: 2Z20730 **O_3 CELL BACKGROUND (µamps):** 0.057
O_3 Flowrate: 29.62 (sec) **O_3 Flowrate Correction:** 1.74 (%)

Radiosonde s/n: 17766 Freq: 403 (MHz)

SURFACE PRES: 995 (hPa)
SURFACE TEMP: 30 (C)
SURFACE RH: 63 (%)
Sky Conditions: Partly Cloudy, 40% chance of showers & SE Wind around 5 mph per NOAA Weathe
REMARKS: ___