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

Seacions August 2013

# DIGITAL OZONESONDE CHECKLIST

FLT # HU 830

## INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 09/18/2013
INITIALS: NLP
PUMP# (add x,y,z,R): 225190

1. Run zero air 10 minutes ✓ (√)
2. PUMP CURRENT: 90,34
3. PUMP PRESSURE: 710
4. ENSCI Press/vac: 30/19 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** = 0,134 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: 29,01 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): 09/20/2013

1. Replace Cathode/Anode ✓ (√)
2. RUN 5 MINS on NO $O_3$ ✓ (√)
3. RECORD CURRENT: 0,070 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: 21,88 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): 09/21/2013
INITIALS: NLP

1. Cathode solution # or date written on bottle: 239
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**= 0,030 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: 21,16 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

*T100 FLOWRATE TIMES:*

ROOM TEMP (C): 24, ROOM RH (%): 53
Flowrate Correction: 3,14 (%)

FLOWRATE #1: 27.81 sec
FLOWRATE #2: 27.61 sec
FLOWRATE #3: 27.27 sec
FLOWRATE #4: 27.68 sec
FLOWRATE #5: 27.59 sec
**AVERAGE T100:** 27,69 sec

## DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 830
*GMT* DATE (YYMMDD): 09/21/2013 LOCAL DATE: 09/21/2013
*GMT* LAUNCH TIME: ~~18:00~~ 18:00 LOCAL TIME: ~~13:00~~ 13:00
Operator Initials: NLP
BALLOON SIZE: 1200 Grams: TOTEX ___ Hwoyee ✓ (√ one)
PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 38,14 (km)

$O_3$ sn: 225190 $O_3$ CELL BACKGROUND (µamps): 0,030
$O_3$ Flowrate: 27,69 (sec) $O_3$ Flowrate Correction: 3.14 (%)

Radiosonde s/n: 174321 Freq: 403 (MHz)

SURFACE PRES: 986,0 (hPa)
SURFACE TEMP: 21.1 (C)
SURFACE RH: 85.4 (%)
Sky Conditions: Partly cloudy w/a high near 76. North wind around 15 mph per NOAA
REMARKS: