July 2, 2014

U.S. DEPT. OF COMMERCE
NOAA Earth System Research Lab
DIGITAL OZONESONDE CHECKLIST

FLT # HU905

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

DATE (LOCAL): 2-6-15
INITIALS: BW
PUMP#: 2324676

1. Run zero air 10 minutes ✓ (√)
2. **PUMP CURRENT:** 88.48 **(mA)**
3. **PUMP PRESSURE:** >10 **(psi)**
4. **DMT 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 BEFORE O3: BG =** 0.061 **µA**
14. RUN 10 MINS on 5 µA O_3 ✓ (√) - then switch to NO O_3 AIR.
15. **RECORD: TIME TO DROP FROM 4 TO 1.5 µA:** 32.18 **sec.**
16. Run sonde for 10 mins on NO O_3 ✓ (√)
17. **RECORD CURRENT: BG =** 0.082 **uA**
18. Short the cell leads: ✓ (√)
19. Intake tube stored in sonde frame: ✓ (√)
20. Place Sonde inside plastic bag: ✓ (√)
21. Store inside Styrofoam flight box: ✓ (√)

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 2-11-15

1. RUN 5 MINS on NO O_3 ✓ (√)
2. RECORD CURRENT: .011 µamps
3. RUN 5 MINS on 5 µamps O_3 ✓ (√) – then switch to NO O_3 AIR
4. RECORD TIME TO DROP FROM 4 TO 1.5 µamps: 23.17 sec
5. Short cell leads and Store in Styrofoam flight box: ✓ (√)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 2-21-15
INITIALS: CLC

1. Cathode solution # or date written on bottle: 251
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=.005 µamps
6. RUN ON 5 microamps of O_3 for 10 Minutes: ✓ (√)
7. SWITCH TO NO O_3 AIR
8. **RECORD:** DECAY TIME TO DROP FROM 4 TO 1.5 µamps: 26.68 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:
ROOM TEMP (C): 15.2, ROOM RH (%): 24%
Flowrate Correction: 1.9 (%)
FLOWRATE #1: 30.16 sec
FLOWRATE #2: 30.25 sec
FLOWRATE #3: 30.34 sec
FLOWRATE #4: 30.14 sec
FLOWRATE #5: 30.15 sec
AVERAGE T100: 30.208 sec avg

wet	29.48	29.49	29.51	29.493
dry	28.91	29.00	28.94	28.95

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU905
GMT DATE (YYMMDD): _____ LOCAL DATE: _____
GMT LAUNCH TIME: _____ LOCAL TIME: _____
Operator Initials: CLC
BALLOON SIZE: 1200 Grams: TOTEX ___ Hwoyee ___ PAWAN ___ (√ one)
PAY-OFF-WEIGHT: _____ Grams: Burst Alt: _____ (km) Turn/Burst: _____

O_3 sn: _____ **O_3 CELL BACKGROUND (µamps):** _____ O_3 Ventilation Holes: ✓
O_3 Flowrate: _____ **(sec)** **O_3 Flowrate Correction:** _____ **(%)**
Radiosonde sn: 29103 Freq: _____ (MHz)

NOAA FPH sn: _____ (if using Frost Point Hygrometer.)

SURFACE PRES: 988.9 (hPa)
SURFACE TEMP: 11.2 (C)
SURFACE RH: 67.4 (%)
Sky Conditions: Rainy
REMARKS: Altitude oscillated ~3 cycles with an amplitude of ~800m