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

FLT # HU916

July 2, 2014

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

DATE (LOCAL): 4-23-15
INITIALS: MC
PUMP#: 27281A

1. Run zero air 10 minutes ____ (√)
2. **PUMP CURRENT:** 109-80 **(mA)**
3. **PUMP PRESSURE:** 510 **(psi)**
4. **DMT Press/vac:** 30 / 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 # 751
11. ADD 1.5 CC ANODE SOLUTION: √ (√)
12. RUN 10 MINUTES on NO O_3 √ (√)
13. **RECORD CURRENT BEFORE O3: BG =** .201 **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:** 43.03 **sec.**
16. Run sonde for 10 mins on NO O_3 √ (√)
17. **RECORD CURRENT: BG =** .183 **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): 9-30-15

1. RUN 5 MINS on NO O_3 √ (√)
2. RECORD CURRENT: .084 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: 25.23 sec
5. Short cell leads and Store in Styrofoam flight box: √ (√)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 5-9-15
INITIALS: BW

1. Cathode solution # or date written on bottle: Dec 1, 2014
2. CHANGE CATHODE SOLUTION (3cc): √ (√)
3. CHANGE ANODE SOLUTION (1.5cc): Yes (Yes/No)
4. RUN ON NO O_3 FOR 10 MINUTES: √ (√)
5. RECORD THE NO O_3 BACKGRND#1: BG1= 0.037 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: 26.88 sec
9. **RECORD:** 5 – T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 23.2, ROOM RH (%): 47
Flowrate Correction: 1.2 (%)
FLOWRATE #1: 29.71 sec
FLOWRATE #2: 29.65 sec
FLOWRATE #3: 29.66 sec
FLOWRATE #4: 29.64 sec
FLOWRATE #5: 29.63 sec
AVERAGE T100: 29.66 sec

	1	2	3	average
dry	28.37	28.52	28.43	28.44
wet	28.73	28.86	28.74	28.78

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: ____
GMT DATE (YYMMDD): 5-9-2015 LOCAL DATE: 5-9-2015
GMT LAUNCH TIME: 5:58 PM LOCAL TIME: 12:58 PM
Operator Initials: BW
BALLOON SIZE: 1000 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: ____ Freq: ____ (MHz)

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

SURFACE PRES: ____ (hPa)
SURFACE TEMP: ____ (C)
SURFACE RH: ____ (%)
Sky Conditions: ____
REMARKS: ____