

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

July 2, 2014

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 10/11/14
 INITIALS: CLC
 PUMP#: 2E27546
- Run zero air 10 minutes (✓)
 - PUMP CURRENT: 99.53(mA)
 - PUMP PRESSURE: 710 (psi)
 - DMT Press/vac: 301.20 (in Hg)
 - Bypass cell (✓)
 - Add 5-6cc cathode (✓)
 - 30 MINUTES HI O₃ (✓)
 - 3 MINUTES NO O₃ (✓)
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- DUMP CATHODE RINSE: (✓)
 - ADD 3.0 CC FRESH CATHODE # 244
 - ADD 1.5 CC ANODE SOLUTION: (✓)
 - RUN 10 MINUTES on NO O₃ (✓)
 - RECORD CURRENT BEFORE O₃: BG = 0.197 μA
 - RUN 10 MINS on 5 μA O₃ (✓) - then switch to NO O₃ AIR.
 - RECORD: TIME TO DROP FROM 4 TO 1.5 μA: 42.36sec.
 - Run sonde for 10 mins on NO O₃ (✓)
 - RECORD CURRENT: BG = 265 μA
 - Short the cell leads: (✓)
 - Intake tube stored in sonde frame: (✓)
 - Place Sonde inside plastic bag: (✓)
 - Store inside Styrofoam flight box: (✓)

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 10-6-14

- RUN 5 MINS on NO O₃ (✓)
- RECORD CURRENT: 0.078 μamps
- RUN 5 MINS on 5 μamps O₃ (✓) - then switch to NO O₃ AIR
- RECORD TIME TO DROP FROM 4 TO 1.5 μamps: 25.26 sec
- Short cell leads and Store in Styrofoam flight box: (✓)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 10/11/14
INITIALS: CLC

- Cathode solution # or date written on bottle: 245
- CHANGE CATHODE SOLUTION (3cc): (✓)
- CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
- RUN ON NO O₃ FOR 10 MINUTES: 0.35 (✓)
- RECORD THE NO O₃ BACKGRND#1: BG1 = 0.35 μamps
- RUN ON 5 microamps of O₃ for 10 Minutes: (✓)
- SWITCH TO NO O₃ AIR
- RECORD: DECAY TIME TO DROP FROM 4 TO 1.5 μamps: 24.03 sec
- RECORD: 5 - T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 24, ROOM RH (%): 38%
 Flowrate Correction: 1.8 (%)

FLOWRATE #1: 29.96 sec
 FLOWRATE #2: 29.86 sec
 FLOWRATE #3: 29.93 sec
 FLOWRATE #4: 29.89 sec
 FLOWRATE #5: 29.78 sec
 AVERAGE T100: 29.878 sec

	<u>2</u>	<u>2</u>	<u>3</u>	<u>avg</u>
Wet	<u>28.72</u>	<u>28.72</u>	<u>28.87</u>	<u>28.77</u>
Dry	<u>28.20</u>	<u>28.24</u>	<u>28.31</u>	<u>28.25</u>

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: H0886
 GMT DATE (YYMMDD): 10/11/14 LOCAL DATE: 10/11/14
 GMT LAUNCH TIME: 6:00 LOCAL TIME: 1:00

Operator Initials: CLC
 BALLOON SIZE: 1200 Grams: TOTEX _____ Hwoyee
 PAY-OFF-WEIGHT: _____ Grams: Burst Alt: 35 (km) PAWAN _____ (✓one)
 Turn/Burst: _____

O₃ sn: 2E27546 O₃ CELL BACKGROUND (μamps): _____ O₃ Ventilation Holes: ✓
 O₃ Flowrate: _____ (sec) O₃ Flowrate Correction: _____ (%)

Radiosonde sn: 28328 Freq: 403 (MHz)

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

SURFACE PRES: _____ (hPa)
 SURFACE TEMP: _____ (C)
 SURFACE RH: _____ (%)

Sky Conditions: Rainy earlier, but cleared up while prepping

REMARKS: No good signal for ~800m @ 27300m. The sfc was activated and we started getting signal again. Pretty windy, balloon made it over to Tennessee above Georgia.