

July 2, 2014

NOAA Earth System Research Lab
DIGITAL OZONESONDE CHECKLIST

FLI # 110001

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 10/15/14
 INITIALS: CLC
 PUMP#: 2227545
- Run zero air 10 minutes (✓)
 - PUMP CURRENT: 88.53 (mA)
 - PUMP PRESSURE: >10 (psi)
 - DMT Press/vac: 26 / 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 # 245
 - ADD 1.5 CC ANODE SOLUTION: (✓)
 - RUN 10 MINUTES on NO O₃ (✓)
 - RECORD CURRENT BEFORE O₃: BG = .183 μ A
 - RUN 10 MINS on 5 μ A O₃ (✓) - then switch to NO O₃ AIR.
 - RECORD: TIME TO DROP FROM 4 TO 1.5 μ A: 30.31 sec.
 - Run sonde for 10 mins on NO O₃ (✓)
 - RECORD CURRENT: BG = _____ μ A
 - 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): 10/23/14

- RUN 5 MINS on NO O₃ (✓)
- RECORD CURRENT: 0.100 μ amps
- RUN 5 MINS on 5 μ amps O₃ (✓) - then switch to NO O₃ AIR
- RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: 22.92 sec
- Short cell leads and Store in Styrofoam flight box: (✓)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 11-1-14
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: (✓)
- RECORD THE NO O₃ BACKGRND#1: BG1=0.030 μ amps
- RUN ON 5 microamps of O₃ for 10 Minutes: (✓)
- SWITCH TO NO O₃ AIR
- RECORD: DECAY TIME TO DROP FROM 4 TO 1.5 μ amps: 25.59 sec
- RECORD: 5 - T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 21.4, ROOM RH (%): 17%
 Flowrate Correction: 4.5 (%)

FLOWRATE #1:	<u>28.81</u>	sec
FLOWRATE #2:	<u>28.90</u>	sec
FLOWRATE #3:	<u>28.78</u>	sec
FLOWRATE #4:	<u>28.77</u>	sec
FLOWRATE #5:	<u>28.74</u>	sec
AVERAGE T100:	<u>28.80</u>	sec

Dry	<u>27.71</u>	<u>27.71</u>	<u>27.81</u>	<u>27.77</u>
wet	<u>29.81</u>	<u>29.05</u>	<u>25.14</u>	<u>29.01</u>

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: 40889
 GMT DATE (YYMMDD): 11-1-14 LOCAL DATE: 11-1-14
 GMT LAUNCH TIME: 6:05 LOCAL TIME: 1:05

Operator Initials: _____
 BALLOON SIZE: 1200 Grams: _____ TOTEX _____ Hwoyee _____ PAWAN _____ (✓ one)
 PAY-OFF-WEIGHT: _____ Grams: _____ Burst Alt: 36.6 (km) Turn/Burst: 3

O₃ sn: 2227545 O₃ CELL BACKGROUND (μ amps): 0.030 O₃ Ventilation Holes: N
 O₃ Flowrate: _____ (sec) O₃ Flowrate Correction: 4.5 (%)

Radiosonde sn: 28930 Freq: 403 (MHz)

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

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

Sky Conditions: _____

REMARKS: Let the sonde just stop or stop and starts, the pump quit working. I think I fixed the problem, but if I'm wrong we know the cause.