

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): 7/29/15
 INITIALS: NL
 PUMP#: 222810Z
- Run zero air 10 minutes (✓)
 - PUMP CURRENT: 97.57 (mA)
 - PUMP PRESSURE: 210 (psi)
 - DMT Press/vac: 32.121 (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 # 258
 - ADD 1.5 CC ANODE SOLUTION: (✓)
 - RUN 10 MINUTES on NO O₃ (✓)
 - RECORD CURRENT BEFORE O₃: BG = .176 μA
 - RUN 10 MINS on 5 μA O₃ (✓) - then switch to NO O₃ AIR.
 - RECORD: TIME TO DROP FROM 4 TO 1.5 μA: 37.57 sec.
 - Run sonde for 10 mins on NO O₃ (✓)
 - RECORD CURRENT: BG = .218 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): 8/5/2015
- RUN 5 MINS on NO O₃ (✓)
 - RECORD CURRENT: .118 μamps
 - RUN 5 MINS on 5 μamps O₃ (✓) - then switch to NO O₃ AIR
 - RECORD TIME TO DROP FROM 4 TO 1.5 μamps: 23.20 sec
 - Short cell leads and Store in Styrofoam flight box: (✓)

FLIGHT PREPARATION IN LAB.

- DATE (LOCAL): 8/15/2015
 INITIALS: NL
- Cathode solution # or date written on bottle: 258
 - 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 = .078 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: 21.86 sec
 - RECORD: 5 - T100 FLOWRATE TIMES:

T100 FLOWRATE TIMES:

ROOM TEMP (C): 26.5, ROOM RH (%): 49
 Flowrate Correction: 1.00 (%)

FLOWRATE #1: 29.71 sec
 FLOWRATE #2: 29.75 sec
 FLOWRATE #3: 29.74 sec
 FLOWRATE #4: 29.79 sec
 FLOWRATE #5: 29.75 sec

AVERAGE T100: 29.75 sec ^{Avg}

~~29.76~~ | ~~29.83~~ | ~~29.83~~ | ~~29.82~~
 Wet | 28.50 | 28.62 | 28.82 | 28.64
 Dry | 28.37 | 28.29 | 28.37 | 28.34

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: H10230
 GMT DATE (YYMMDD): 8/15/2015 LOCAL DATE: 8/15/2015
 GMT LAUNCH TIME: 1800 LOCAL TIME: 1300
 Operator Initials: NL

BALLOON SIZE: 1200 Grams: TOTEX _____ Hwoyee _____ PAWAN _____ (✓ one)
 PAY-OFF-WEIGHT: _____ Grams: Burst Alt: 326 (km) Turn/Burst: _____

O₃ sn: _____ O₃ CELL BACKGROUND (μamps): _____ O₃ Ventilation Holes: 4
 O₃ Flowrate: _____ (sec) O₃ Flowrate Correction: _____ (%)
 Radiosonde sn: 36648 Freq: 403 (MHz)

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

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

Sky Conditions: _____
 REMARKS: _____