

Seacions August 2013

DIGITAL OZONESONDE CHECKLIST

FLT# HU 817

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 8/23/2013
- INITIALS: NLP
- PUMP# (add x,y,z,R): 2224748
- 1. Run zero air 10 minutes (v)
- 2. PUMP CURRENT: 82.87
- 3. PUMP PRESSURE: 710
- 4. ENSCI Press/vac: 30/20 inHg
- 5. Bypass cell (v)
- 6. Add 5-6cc cathode (v)
- 7. 30 MINUTES HI O₃ (v)
- 8. 3 MINUTES NO O₃ (v)

- 9. DUMP CATHODE RINSE: (v)
- 10. ADD 3.0 CC FRESH CATHODE # (v)
- 11. ADD 1.5 CC ANODE SOLUTION: (v)
- 12. RUN 10 MINUTES on NO O₃ (v)
- 13. RECORD CURRENT: BG = 0.173 μ amps
- 14. RUN 10 MINUTES on 5 μ amps O₃ (v) - then switch to NO O₃ AIR.
- 15. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: 29.88 sec.
- 16. Run sonde for 10 minutes on NO O₃ AIR (v)
- 17. Short the cell leads: (v)
- 18. Intake tube stored in sonde frame: (v)
- 19. Place Instrument inside plastic bag: (v)
- 20. Store inside Styrofoam flight box: (v)

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/26/2013

- 1. Replace Cathode/Anode (v)
- 2. RUN 5 MINS on NO O₃ (v)
- 3. RECORD CURRENT: 0.077 μ amps
- 4. RUN 5 MINS on 5 μ amps O₃ (v)
- 5. Switch to NO O₃ AIR
- 6. RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: 21.73 sec
- 7. RUN 5 MINS on NO O₃ (v)
- 8. Short cell leads (v)
- 9. Store inside Styrofoam flight box: (v)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/29/2013
INITIALS: NLP

T100 FLOWRATE TIMES:

ROOM TEMP (C): 24.2, ROOM RH (%): 40
Flowrate Correction: 2.08 (%)

- 1. Cathode solution # or date written on bottle: 238
- 2. CHANGE CATHODE SOLUTION (3cc): (v)
- 3. CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
- 4. RUN ON NO O₃ FOR 10 MINUTES: (v)
- 5. RECORD THE NO O₃ BACKGRND#1: BG1 = 0.024 μ amps
- 6. RUN ON 5 microamps of O₃ for 10 Minutes: (v)
- 7. SWITCH TO NO O₃ AIR.
- 8. RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 20.29 sec
- 9. RECORD: 5 - T100 FLOWRATE TIMES:
- FLOWRATE #1: 29.26 sec
- FLOWRATE #2: 29.29 sec
- FLOWRATE #3: 29.43 sec
- FLOWRATE #4: 29.32 sec
- FLOWRATE #5: 29.32 sec
- *AVERAGE T100: 29.32 sec

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 817
GMT DATE (YYMMDD): 08/29/2013 LOCAL DATE: 08/29/2013
GMT LAUNCH TIME: 18:01 LOCAL TIME: 13:01

Operator Initials: NLP
BALLOON SIZE: 1000 Grams: TOTEX _____ Hwoyee (v one)
PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 28.83 (km)

O₃ sn: 2224748 O₃ CELL BACKGROUND (μ amps): 0.024
O₃ Flowrate: 29.32 (sec) O₃ Flowrate Correction: 2.08 (%)

Radiosonde s/n: 20966 Freq: 403 (MHz)

SURFACE PRES: 29.29923 (hPa)
SURFACE TEMP: 29.2 (C)
SURFACE RH: 54.3 (%)

Sky Conditions: mostly sunny, w/a high near 92. NW wind around 5 mph.
REMARKS: _____

per NOAA Weather