

Seacions August 2013

DIGITAL OZONESONDE CHECKLIST

FLT# HU 819

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

DATE (LOCAL): <u>08/24/2013</u>	1. Run zero air 10 minutes <input checked="" type="checkbox"/> (v)	5. Bypass cell <input checked="" type="checkbox"/> (v)
INITIALS: <u>NLP</u>	2. PUMP CURRENT: <u>113.93</u>	6. Add 5-6cc cathode <input checked="" type="checkbox"/> (v)
PUMP# (add x,y,z,R): <u>2222247</u>	3. PUMP PRESSURE: <u>>10</u>	7. 30 MINUTES HI O ₃ <input checked="" type="checkbox"/> (v)
	4. ENSCI Press/vac: <u>28/21 in Hg</u>	8. 3 MINUTES NO O ₃ <input checked="" type="checkbox"/> (v)

9. DUMP CATHODE RINSE: <input checked="" type="checkbox"/> (v)	16. Run sonde for 10 minutes on NO O ₃ AIR <input checked="" type="checkbox"/> (v)
10. ADD 3.0 CC FRESH CATHODE # <input checked="" type="checkbox"/> (v)	17. Short the cell leads: <input checked="" type="checkbox"/> (v)
11. ADD 1.5 CC ANODE SOLUTION: <input checked="" type="checkbox"/> (v)	18. Intake tube stored in sonde frame: <input checked="" type="checkbox"/> (v)
12. RUN 10 MINUTES on NO O ₃ <input checked="" type="checkbox"/> (v)	19. Place Instrument inside plastic bag: <input checked="" type="checkbox"/> (v)
13. RECORD CURRENT: BG = <u>0.236</u> μ amps	20. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v)
14. RUN 10 MINUTES on 5 μ amps O ₃ <input checked="" type="checkbox"/> (v) - then switch to NO O ₃ AIR.	
15. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: <u>33.95</u> sec.	

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/28/2013

1. Replace Cathode/Anode <input checked="" type="checkbox"/> (v)	6. RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: <u>20.76</u> sec
2. RUN 5 MINS on NO O ₃ <input checked="" type="checkbox"/> (v)	7. RUN 5 MINS on NO O ₃ <input checked="" type="checkbox"/> (v)
3. RECORD CURRENT: <u>0.196</u> μ amps	8. Short cell leads <input checked="" type="checkbox"/> (v)
4. RUN 5 MINS on 5 μ amps O ₃ <input checked="" type="checkbox"/> (v)	9. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v)
5. Switch to NO O ₃ AIR	

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/31/2013
INITIALS: NLP

T100 FLOWRATE TIMES:

ROOM TEMP (C): 25.9, ROOM RH (%): 47
 Flowrate Correction: 1.94 (%)
 FLOWRATE #1: 28.89 sec
 FLOWRATE #2: 28.83 sec
 FLOWRATE #3: 28.75 sec
 FLOWRATE #4: 28.61 sec
 FLOWRATE #5: 28.75 sec
 *AVERAGE T100: 28.77 sec

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 = 0.041 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: 22.48 sec
 9. RECORD: 5 - T100 FLOWRATE TIMES:

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 819
 GMT DATE (YYMMDD): 08/31/2013 LOCAL DATE: 08/31/2013
 GMT LAUNCH TIME: 17:41 LOCAL TIME: 12:41
 Operator Initials: NLP

BALLOON SIZE: 1000 Grams: TOTEX _____ Hwoyee (v one)
 PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 32 (km)

O₃ sn: 2222247 O₃ CELL BACKGROUND (μ amps): 0.041
 O₃ Flowrate: 28.77 (sec) O₃ Flowrate Correction: 1.94 (%)

Radiosonde s/n: 17773 Freq: 403 (MHz)

SURFACE PRES: 989.8 (hPa)
 SURFACE TEMP: 34°C (C)
 SURFACE RH: 45.1 (%)

Sky Conditions: Scattered showers + thunderstorms, Mostly Sunny, w/a high near 93, Heat Index
 REMARKS: values as high as 10%. SW wind around 5 mph becoming calm.
Chance of ptecipitation is 40%. per NOAA Weather