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

FLT # HU980

Before new SkySonde

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT

DATE (LOCAL): 7/20/16
OPERATOR INITIALS: DT
SERIAL # (add x,y,z): 27309

1. BYPASS CELL ✓ (√)
2. ADD 5-6cc CATHODE ✓ (√)
3. RUN ON HI O_3 FOR 30 MIN ✓ (√)
4. PUMP PRESSURE: >10 (psi)
5. **PUMP CURRENT:** 107.21 (mA)
6. **EN-SCI Press/Vac:** 30 / 21 (in Hg)
7. RUN ON NO O_3 FOR 3 MIN ✓ (√)
8. DUMP CATHODE RINSE ✓ (√)

9. ADD 3.0 CC FRESH CATHODE: 262 (#)
10. ADD 1.5 CC ANODE SOLUTION ✓ (√)
11. RUN ON NO O_3 FOR 10 MIN ✓ (√)
12. RECORD CURRENT BG = 0.405 µA
13. RUN ON 5 µA O_3 FOR 10 MIN ✓ (√)
14. SWITCH TO NO O_3 AIR ✓ (√)
15. RECORD TIME TO DROP FROM 4 TO 1.5 µA: 47.05 (s)
16. RUN ON NO O_3 FOR 10 MIN ✓ (√)
17. RECORD CURRENT BG = 0.316 µA
18. SHORT CELL LEADS, STORE INTAKE TUBE ✓ (√)
20. PLACE OZONESONDE IN PLASTIC BAG ✓ (√)
20. STORE IN STRYOFOAM BOX ✓ (√)

INTERMEDIATE PREPARATION 3-7 DAYS BEFORE FLIGHT

DATE (LOCAL): 27 JUL 16

1. REPLACE BOTH SOLUTIONS ✓ (√)
2. RUN ON NO O_3 FOR 10 MIN ✓ (√)
3. RECORD CURRENT: 0.73 µA
4. RUN ON 5 µA O_3 FOR 10 MINS 1 (√)
5. RECORD TIME TO DROP FROM 4 TO 1.5 µamps: 26.65 sec
6. RUN ON NO O_3 FOR 10 MIN RECORD CURRENT BG = 0.180 µA
7. SHORT CELL LEADS AND STORE IN STYROFOAM BOX: ✓ (√)

FLIGHT PREPARATION IN LAB

DATE (LOCAL): 7/30/16 INITIALS: MG

T100 FLOWRATE TIMES:

1. **CATHODE SOLUTION # ON BOTTLE:** 262
2. CHANGE CATHODE SOLUTION (3cc): ✓ (√)
3. CHANGE ANODE SOLUTION (1.5cc): Y / S (Yes/No)
4. RUN ON NO O_3 FOR 10 MINUTES: ✓ (√)
5. **RECORD CURRENT I_{B0}** = 0.033 µA
6. RUN ON 5 µA O_3 FOR 10 Minutes: ✓ (√)
7. SWITCH TO NO O_3 AIR ✓ (√)
8. **RECORD TIME TO DROP FROM 4 TO 1.5 µamps:** 21.93 sec
9. RUN ON NO O_3 FOR 10 MINUTES **RECORD I_{B1}** = 0.072 µA
10. **RECORD:** 5 – T100 FLOWRATE TIMES
11. IF BG CURRENT > 0.04 µA, WAIT ADDITIONAL 5 MIN
12. **RECORD CURRENT I_{B2}**= 0.042 µA

ROOM TEMP (C): 25.2, **ROOM RH (%):** 44
SAMPLING AIR RH (%):_____, **PUMP TEMP (C):**_____
FLOWRATE CORRECTION (%): 0.8

FLOWRATE #1: 27.49 sec
FLOWRATE #2: 27.43 sec
FLOWRATE #3: 27.47 sec
FLOWRATE #4: 27.53 sec
FLOWRATE #5: 27.67 sec
AVERAGE T100: 27.52 sec

SONDE=_____ **ppbv @ CALIB =** _____ **ppbv**

DAY OF FLIGHT AT THE LAUNCH SITE

	1	2	3	Avg
Dry	30.04	30.09	29.77	29.9
Wet	30.26	30.05	30.1	30.21

OPERATOR INITIALS: MG
FLIGHT NUMBER: HU980
GMT DATE (YYMMDD): _____
GMT LAUNCH TIME: _____
LOCAL DATE: 7/30/16
LOCAL TIME: 1:20pm
BALLOON SIZE: 1200 Grams:
PAY-OFF-WEIGHT: _____ Grams:
TOTEX ____ Hwoyee ____ PAWAN ____ (√ one)
Burst Alt: 36.1 (km) Turn/Burst: _____
Davis Unwinder: _____ (120ft) or: _____ (170ft)
Parachute: _____ (orange 4ft dia. Circular plastic chute) or: _____ (other)
Ozonesonde Serial #: _____
Ozonesonde BG (I_{B2}): _____ **(µA)** O_3 Ventilation Holes: _____
Ozonesonde Flowrate: _____ **(sec)**
Ozonesonde Flowrate Correction: _____ **(%)**
Radiosonde 1 sn: 426GR Freq: _____ (MHz) **Location:** Attached to O_3 Sonde: _____ (√), OTHER: _____
Radiosonde 2 sn: _____ Freq: _____ (MHz) **Location:** 3ft boom: _____, Main Package: _____, Below: ____ (ft)

NOAA FPH sn: _____ Other instruments: _____

SURFACE PRES: _____ (hPa)
SURFACE TEMP: _____ (C)
SURFACE RH: _____ (%)
SURFACE WIND SPEED: _____ (m/s), W/S HEIGHT: _____ (m)
SURFACE WIND DIR: _____ (deg)
PTU300 lab Pres for RS-92 Offset: _____ (hPa)
Sky Conditions: _____
REMARKS: _____