HASP 2013
UND-UNF Payload
Monthly Status Report for August 2013

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UND-UNF team did the following work during August 2013:

(1) Kenneth Emanuel (Student) and Dr. Nirmal Patel (Faculty) from UNF participated the HASP Integration workshop at the NASA-CSBF during July 28-Augst 3 at, Palestine, TX.
(2) UND-UNF payload successfully integrated the payload the cleared all thermal vacuum tests. The payload was certified for the balloon flight. We are now waiting for the launch of HASP balloon flight during the end of this month.

(3) Some of test results of thermal vacuum are given below.
Fig. 1 shows variation of temperature of three ozone sensors boxes during thermal vacuum test. Note that the horizontal axis has arbitrary time unit. The temperature of all three boxes was nearly constant at about 300 K during most of time of thermal vacuum test. This shows the good thermal stability of sensors payload.

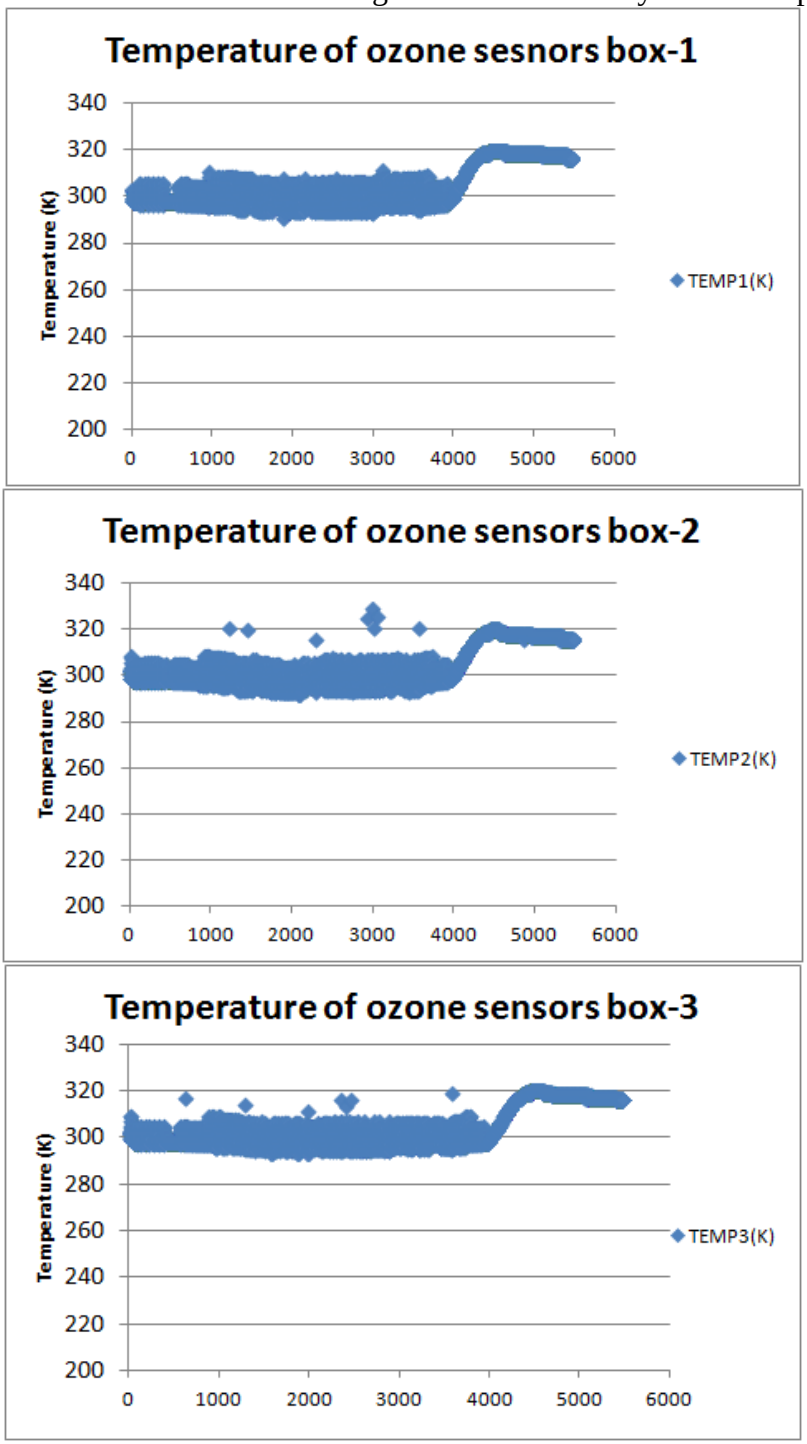

Fig.1 Temperature of ozone sensors box-1, 2 and 3 during thermal vacuum test

Fig. 2 shows the variation of resistance of ozone sensors during thermal vacuum test. Note that the horizontal axis has arbitrary time unit. The resistance of sensor was nearly constant during most of time except it was decreased at the higher temperature cycle. This experimental behavior of sensor is expected.

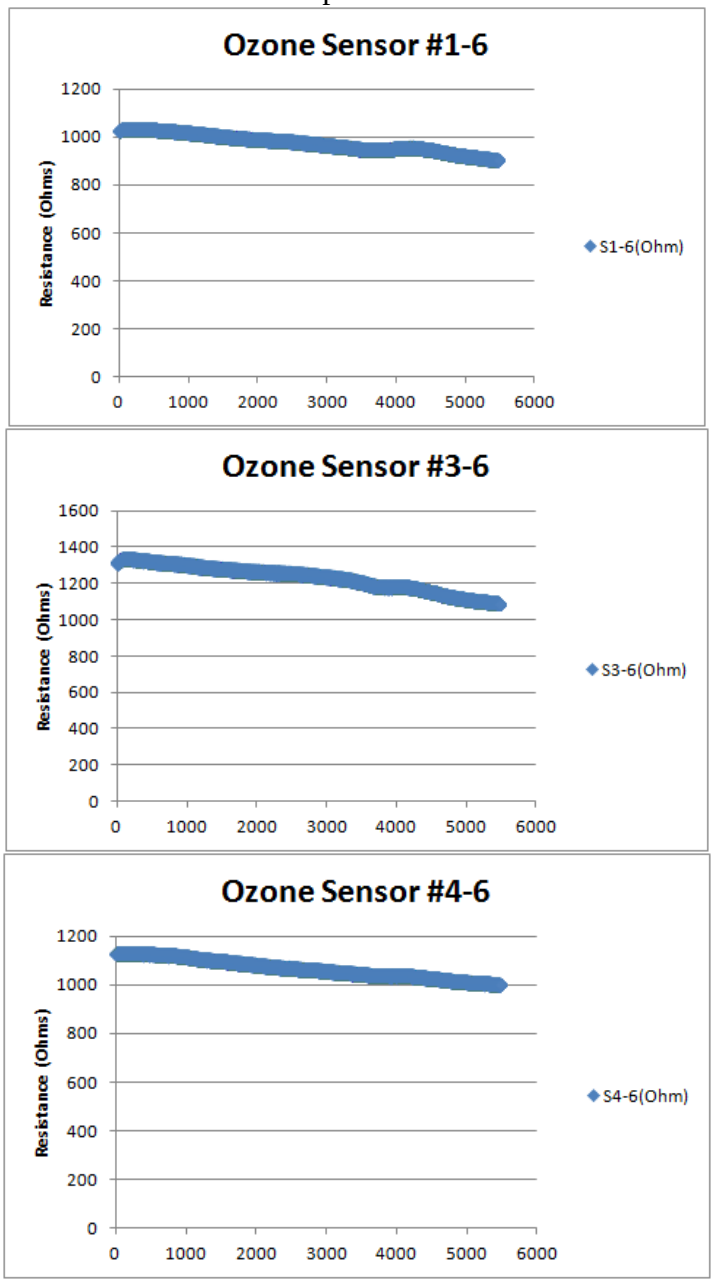

Fig.2 Resistance of ozone sensor in three different boxes during thermal vacuum test

Fig. 3 shows the variation of pressure during thermal vacuum test. Note that the horizontal axis has arbitrary time unit. The response of measured pressure is matched with the thermal test cycles. Our pressure sensor did not measured pressure below 100 mBar due to its limitation. We will replace it next year flight.

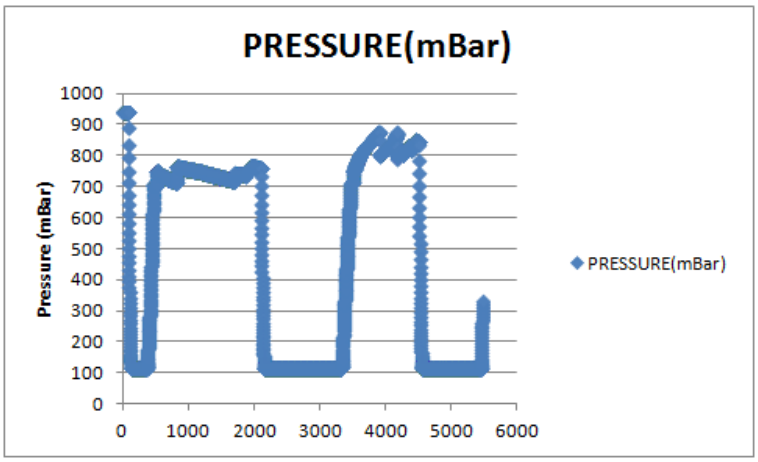

Fig.3 Pressure measured by pressure sensor during thermal vacuum test