

## HASP MONTHLY STATUS REPORT – CRESS Friday September 30, 2016

## Current team members, demographics, and leaders

Team Lead:	Austin Schmitz - Undergraduate, University of Florida.
Engineering Advising:	UF Fabrication Lab
Biological Assistance:	Ana Ward – Undergraduate, University of Florida
Pls:	Dr. Robert Ferl – ICBR, Horticultural Sciences, PMCB, University of Florida
	Dr. Anna-Lisa Paul – Horticultural Sciences, PMCB, University of Florida

## Flight and Recovery

Flight and payload recovery was an overall success. The CRESS containment vessel and support structure withstood the unique temperature, pressure, and *g* environment experienced during the high-altitude balloon launch, 15 hour 8 minute flight, and final impact. Internal temperature and pressure environmental readings from the MSR datalogger show that the containment vessel performed as expected and are consistent with pre-flight environmental testing. The payload was recovered and stored on-ice approximately 12 hours after touchdown. CRESS's integration location within the HASP payload attenuated the harsh desert sunlight and in effect the internal temperature of CRESS only temporarily rose above 30°C; well within the viability limits of the biology.



## **Post-Flight Processing**

The biology and solid state nuclear track detector (ssntd) sheets are de-integrated and currently stored in a 4°C refrigerator and -20°C freezer, respectively. Testing and initial processing of both the biology and the ssntd sheets is underway. Seed processing, plant screening, and facilitation for screening this large quantity of plants is being discussed and tested.