



## **ASU- High Altitude Tracking Solar Survey (HATS 2.0)**

Project Update: April '13  
Project Manager: Pye Pye Zaw

Date: 4/25/2013  
Contact: Pye2zaw@asu.edu

### **Summary:**

This month, our team was focused on writing and submitting the PSIP document for HASP on April 19<sup>th</sup>. Our senior design class requires a Critical Design Review for HATS 2.0 on May 7<sup>th</sup> given for engineers from the Jet Propulsion Laboratory as well as planetary scientists from ASU. For the next two weeks, the HATS 2.0 team will be focusing on finalizing the HATS 2.0 structure and testing so a working model will be ready for CDR. Also, programming our Arduino has progressed and should be finished in the next few weeks. Further research on Fresnel lenses and the expected parameters for solar collection is being conducted. New smaller solar panels and metal geared servos for the tracker have been acquired to meet our requirements better. Outreach efforts are continuing and will be focused on more ASU events to raise awareness about HATS 2.0 and the HASP program. There have been no additional personnel to the team.

The following is division of labor and responsibilities:

- Project Management: Pye Pye Zaw
- Systems Engineer: Jose Lopez
- Mechanical: Jacob Kloos
- Software: John Paul Jones and Elizabeth Dyer
- Electrical: Jason Babbel and Josh Lincoln

### **Key Accomplishments:**

- PSIP document complete and submitted to HASP
- Continued programming- Arduino
- 3D printing of tracker base
- Additional research
- Solar tracker mechanics and parts

### **Upcoming Continued Tasks:**

- Electronics inventory and finalizing thermal (Josh and team)
- Putting together CDR (Pye and Liz)
- Further integration preparation (entire team)
- Machine top plate and solar panel with key stock (John and Jake)
- Initializing transfer of project management to Liz after Pye's graduation
- Blogging (Liz)

### **Questions for HASP:**

Comment: Pye Pye met the HASP team from Embry Riddle at Arizona Space Grant Symposium on April 13<sup>th</sup> and was able to share/discuss how each team was preparing for integration & flight as well as discusses our challenges where ideas were traded.