İTÜ pSAT I Update

B. Tayfun Aydın
Can Kurtuluş
Asst. Prof. Gökhan İnalhan
Prof. A. Rüstem Aslan
Project İTÜ pSAT I

PROJECT OBJECTIVES
- Mission objectives
- Educational objectives

PROJECT REALM
- SATELLITE
- GROUND STATION
- TEST & INTEGRATION

Istanbul Technical University - Faculty of Aeronautics and Astronautics
http://usl.itu.edu.tr
Overview of İTÜ pSAT I

MISSION OBJECTIVES

Primary: Image Capturing
Secondary: Examination of the passive stabilization system

BUDGETS:
- Mass: 820 g (!!! NOT FINAL MASS !!!)
- Power: ~6 W, 1,155 A (peak values)
Improvements on pSAT I
Improvements on pSAT I (2)

- B&W video transmission (for testing)
- Accelerometer operational
- Beacon operational
- Image recording to memory & transmission
Improvements on pSAT I (3)

- Conceptual design
- Deployment mechanism
- Integration to the body of İTÜ pSAT I
- Contribution to the mass budget
- Vibration tests & analysis
Survival in the harsh environment of Istanbul…

“TA1KS ITU pSAT I Hallo ”
Sensors Operational !!!
Improvements on the Ground Station

- Hardware fully functional
- Ground tests for the ground station
- GENSO
New Generation of Aerospace Engineers
Future plans…

- Finalization of the antenna deployment system
- Operational software
- Finalization of the design phase of the payload circuit
- Tests of the power circuit
- Functionality of the ground station & tests for GENSO
Thank you, any questions