BD-CanSat
Raihana Shams Islam Antara
Bangladesh
Email: antara.anto@gmail.com

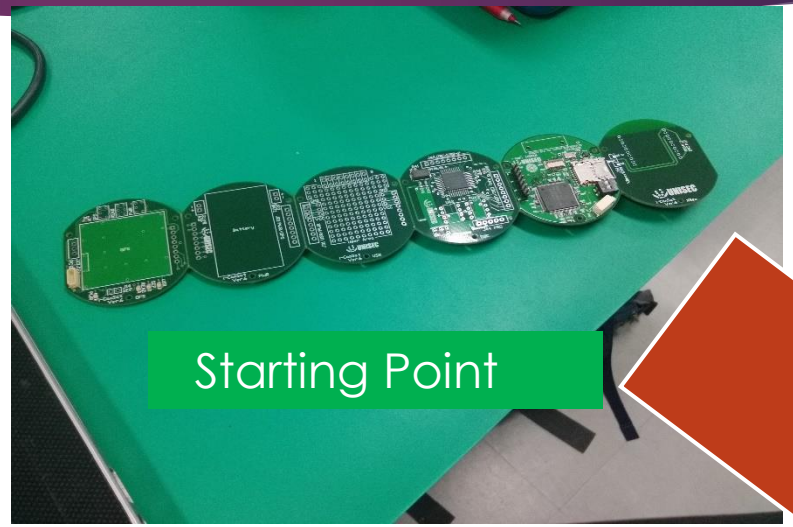
What Is CanSat

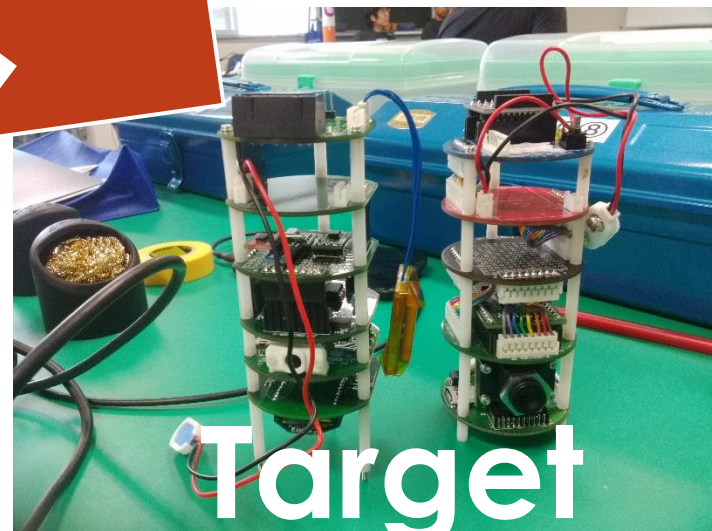
CanSat is a simulation of a real satellite which offer a unique opportunity for one to have a first satellite experience of a real space project. It is a combination of the complex world of satellite design into a small and easy design, integrated within the volume and shape of a soft drink can. The challenge for the Cansat is to fit all the major subsystems found in a satellite, such as power, sensors and a communication system, into this minimal volume. The CanSat is then launched to an altitude of a few hundred metres by a rocket or dropped from a platform or captive balloon and its mission begins: to carry out a scientific experiment and achieve a safe landing.

Mission 1:
Mounting Parts & Interfaces for each Board

1st Day: Got 6 circular board

1. GPS board for GPS, Switches & Indicators
2. Power board for on board battery
3. User board for sensors. Actuators
4. On board computer board for on board computer & memory
5. A complete camera board for mounting camera called CanCam where some electronics part already mounted
6. Xbee board for communication

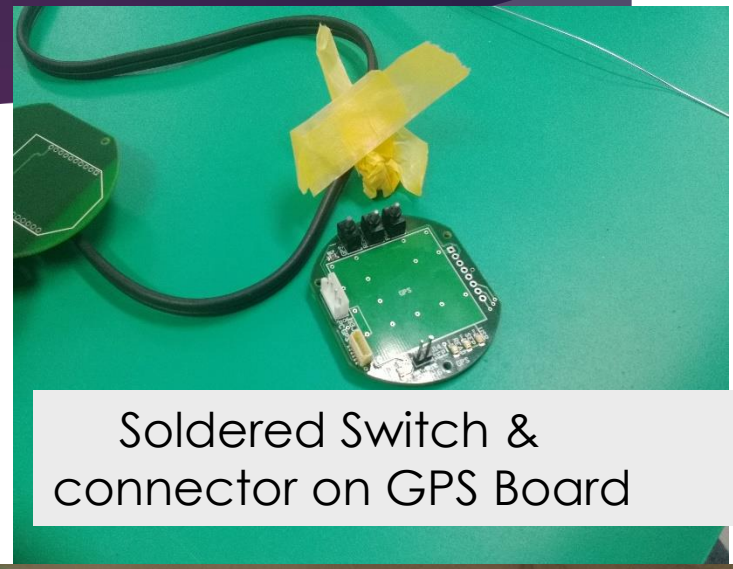




CLTP6: Day 1

SELF Introduction

Invitation Lunch

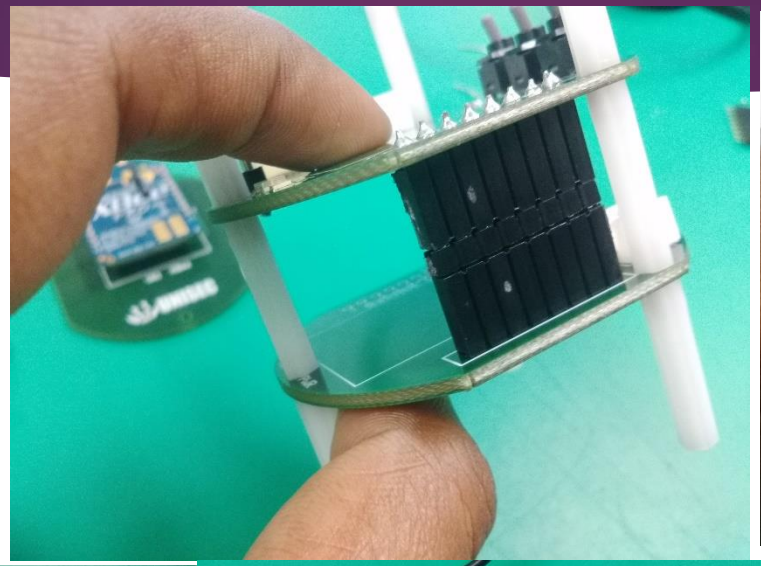


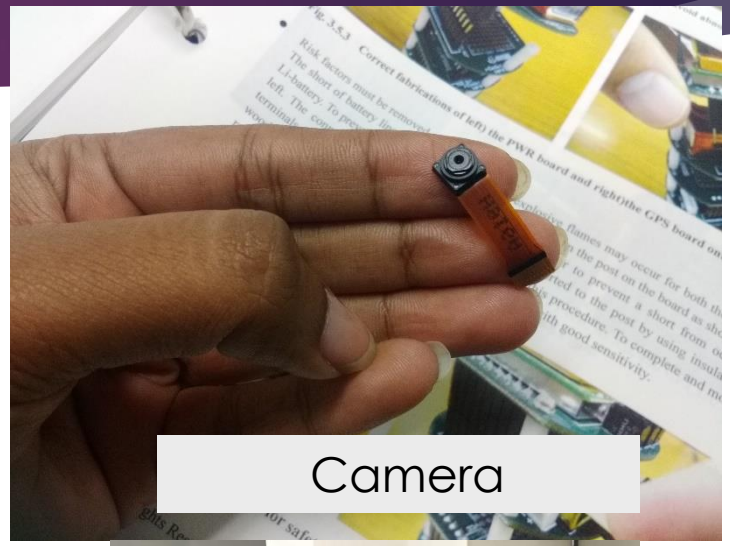
Soldered Switch & connector on GPS Board

Learn Soldering

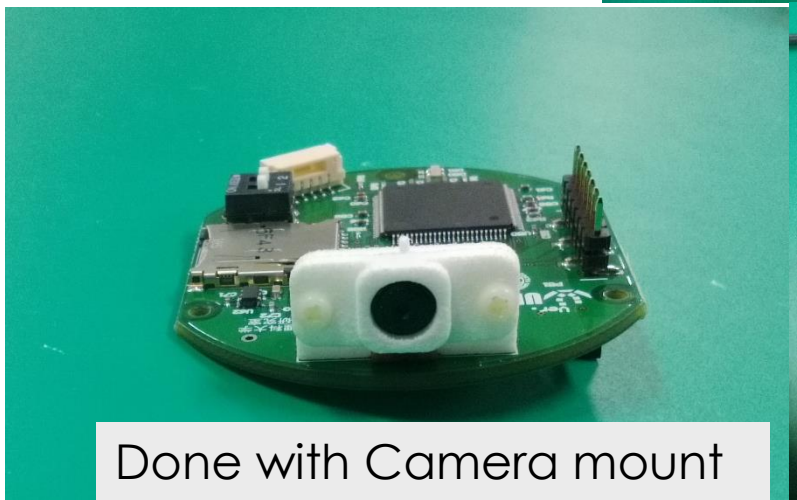
Got 1 box for keeping my equipment

CLTP6: Day 2

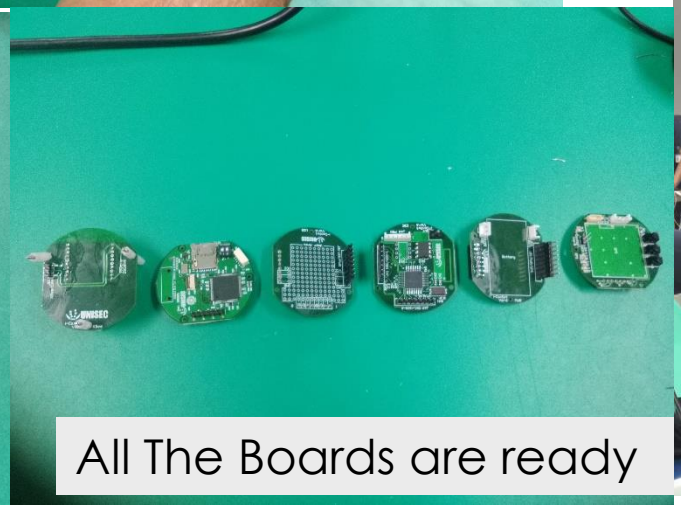




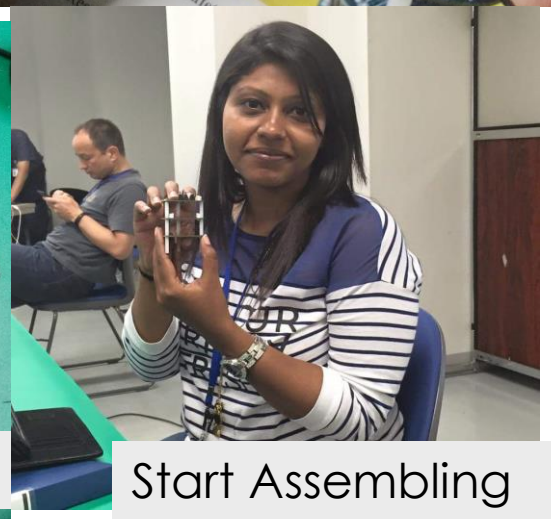
Camera



Done with Camera mount



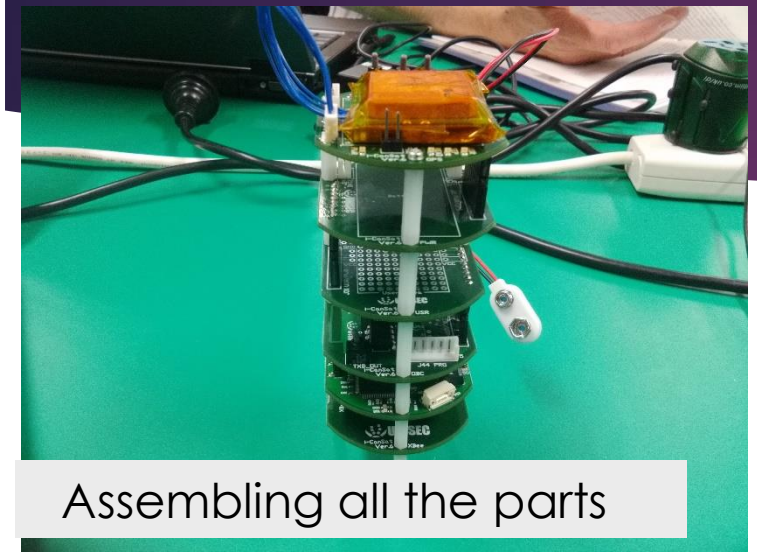
All The Boards are ready



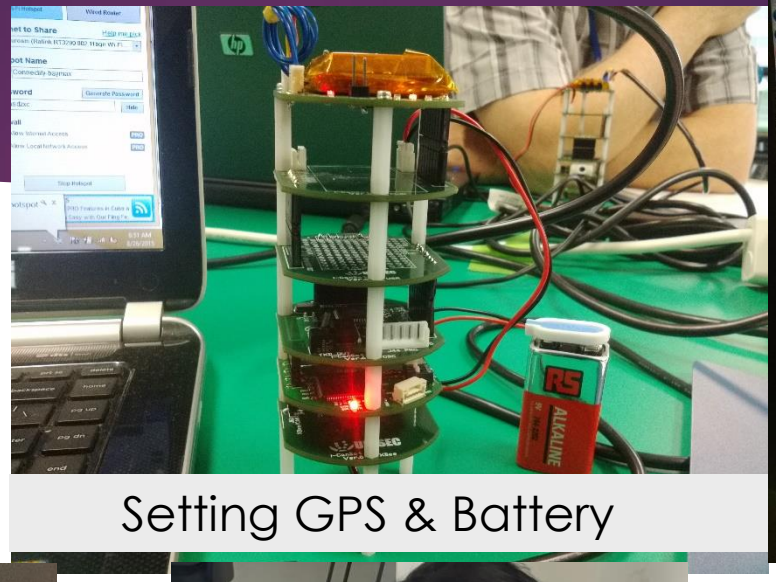
Start Assembling

MISSION: 2
SOFTWARE INSTALLATION
&
GROUND STATION

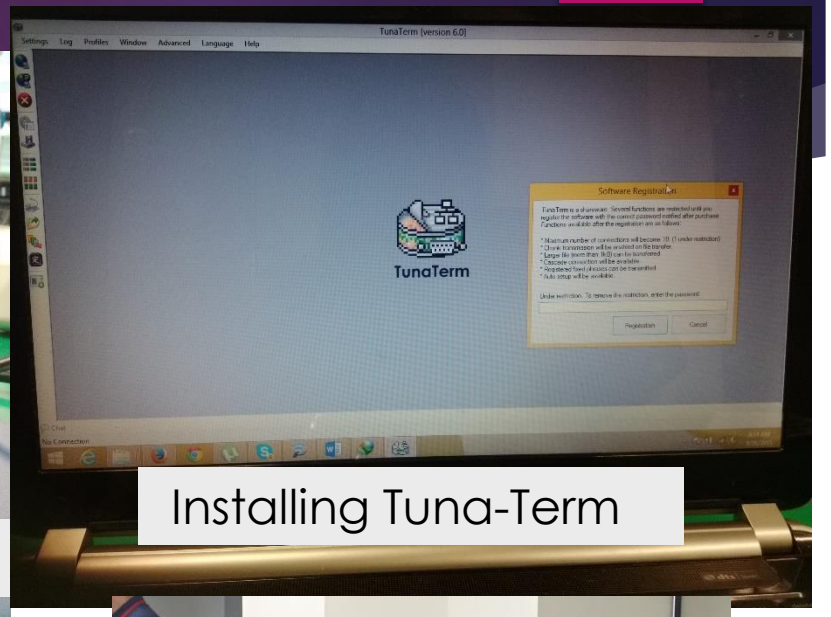
CLTP6: Day 3



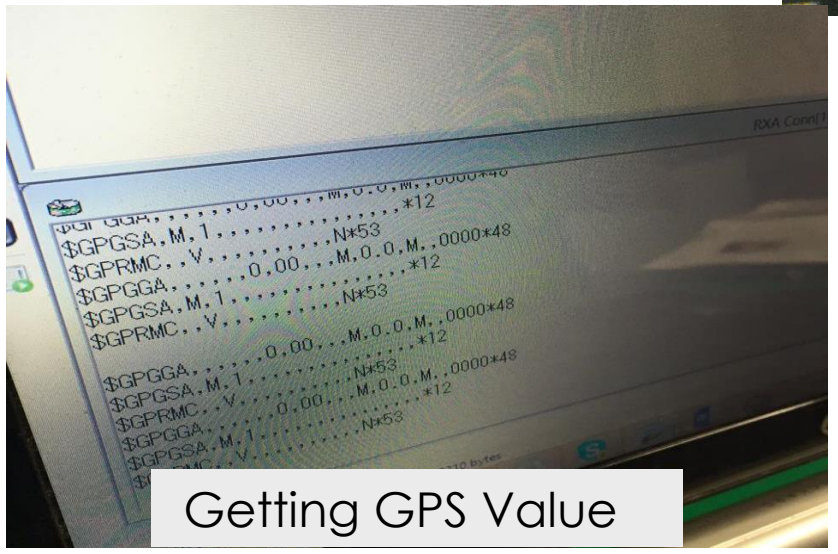
Assembling all the parts



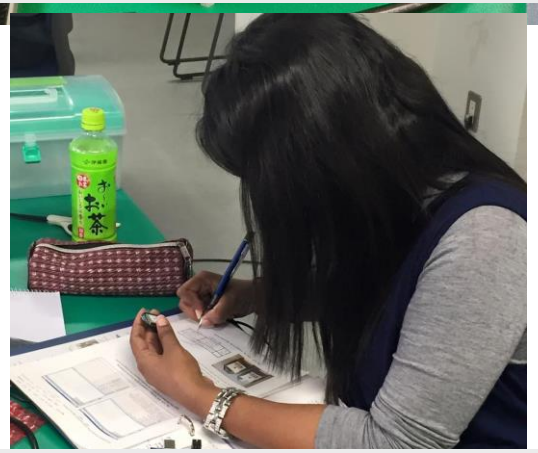
Setting GPS & Battery



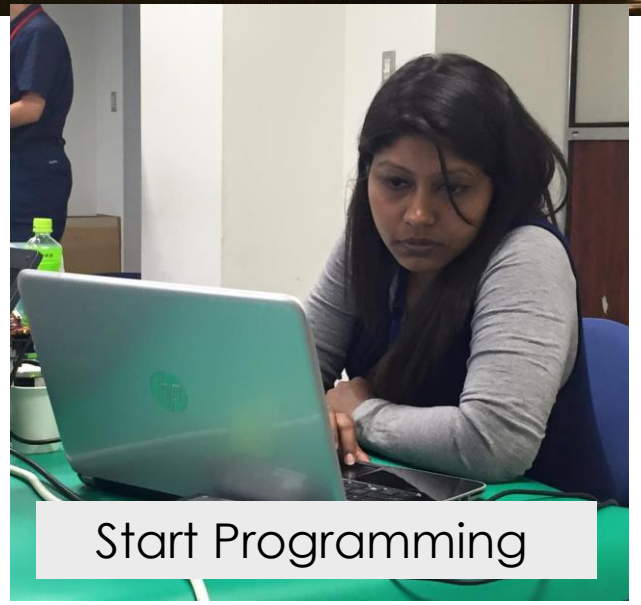
Installing Tuna-Term



Getting GPS Value



Setting of Ground Station



Start Programming

MISSION 3

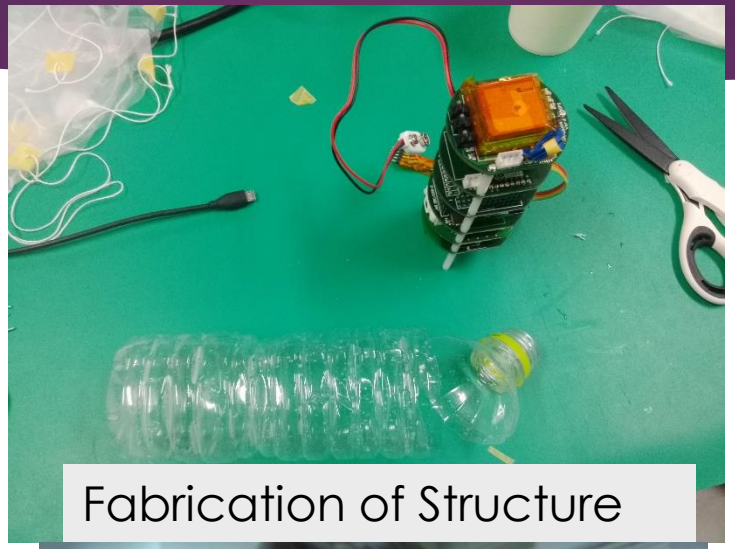
PARACHUTE MAKING

&

DROP TEST

CLTP6: Day 4

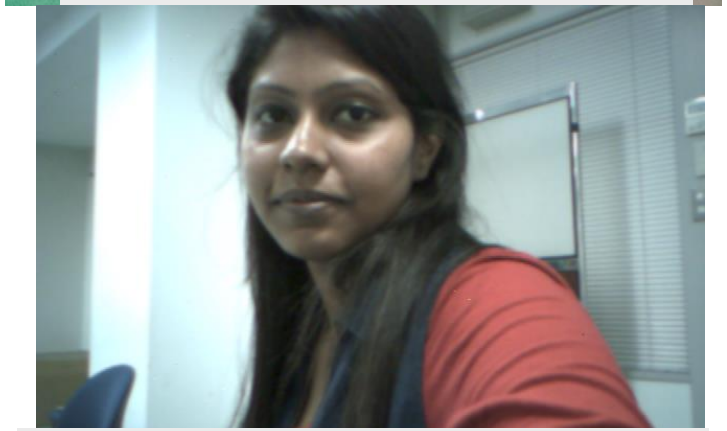
Made Parachuit



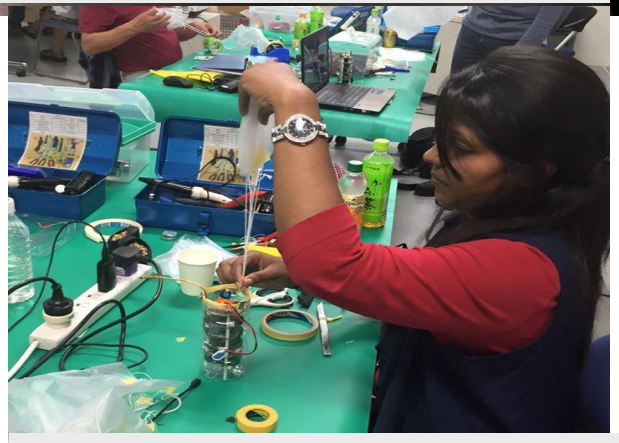
Fabrication of Structure

Fabrication of Structure

Landing Gear



Camera operation check



Get ready for drop test

DROP Test on Day 4

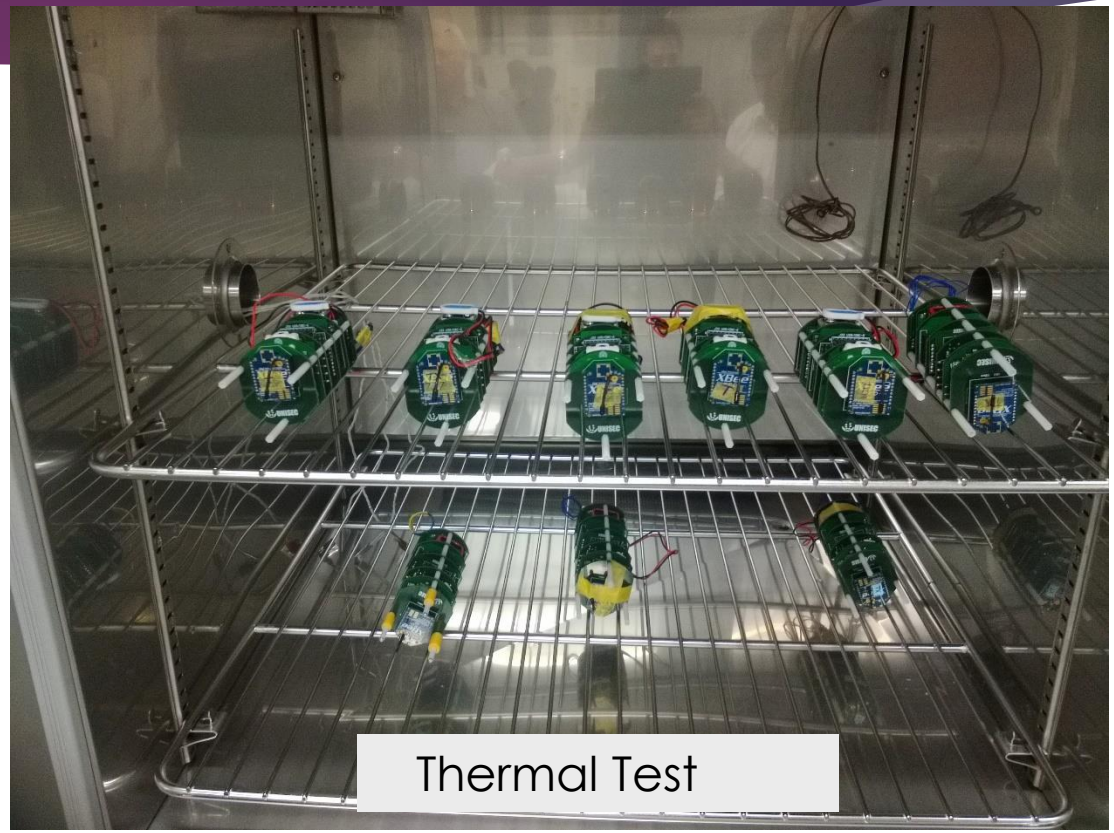
From 3rd Floor

Picture taken by CanCAm during Drop Test

MISSION 4
VIBRATION TEST
&
THERMAL TEST

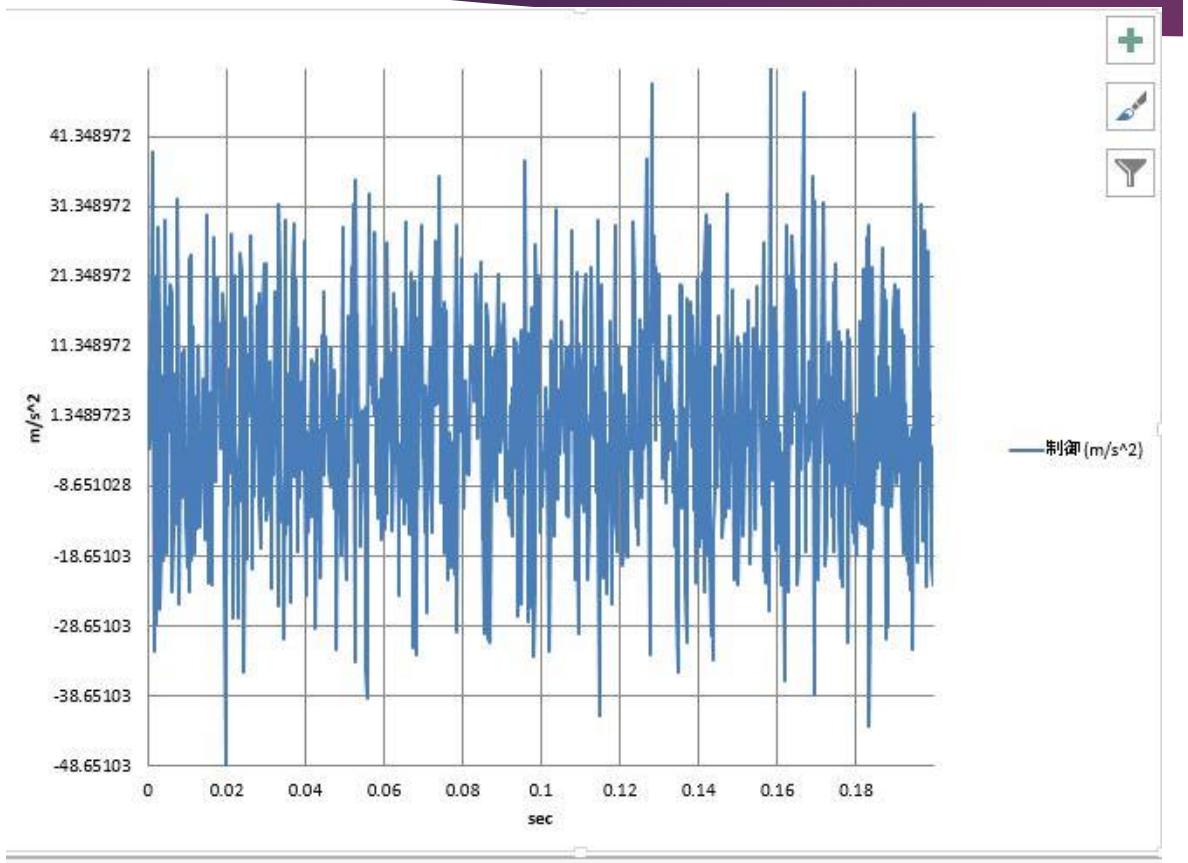
CLTP6: Day 5

Vibration Test

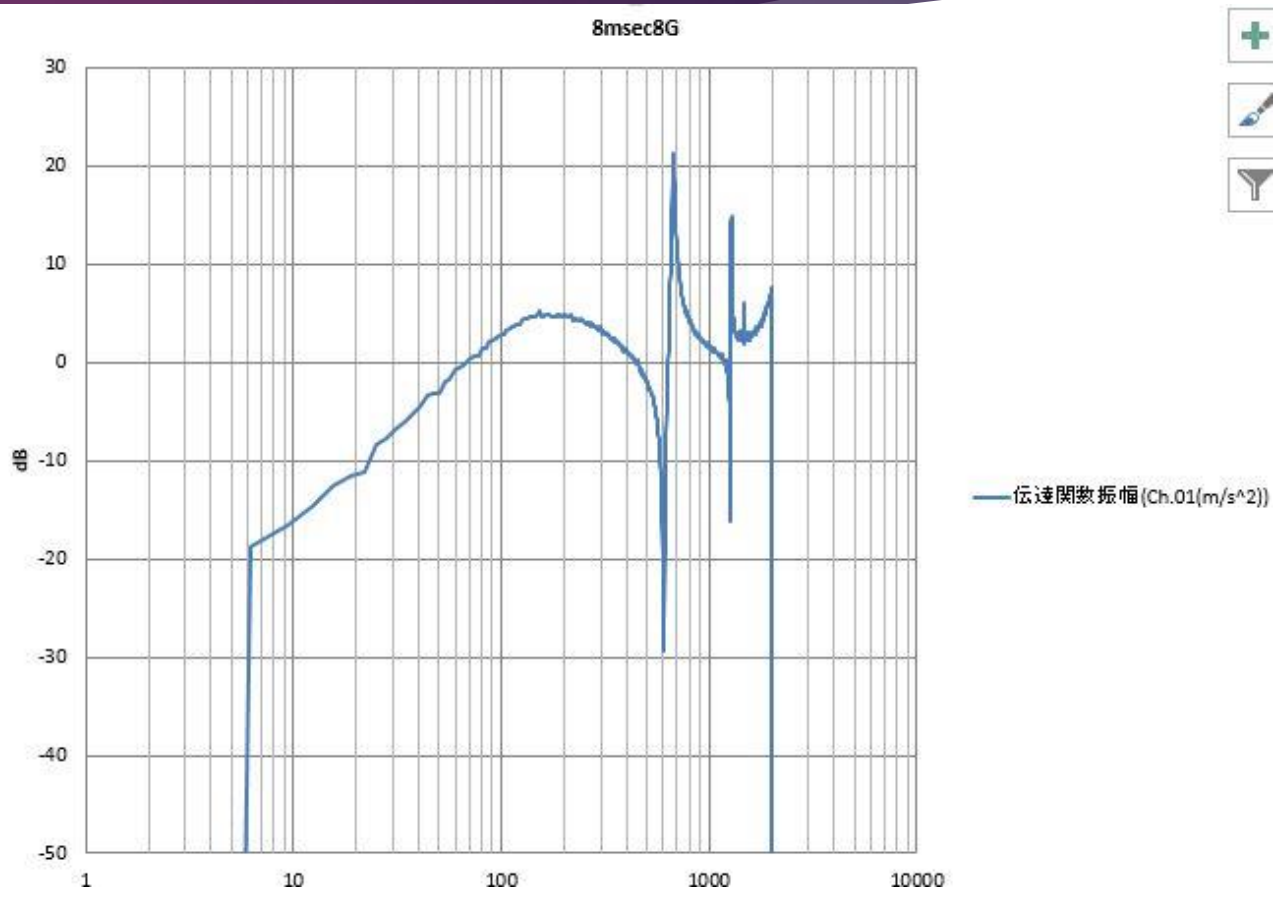


Thermal Test

Vibration Test Graph



Random Vibration_History of acceleration

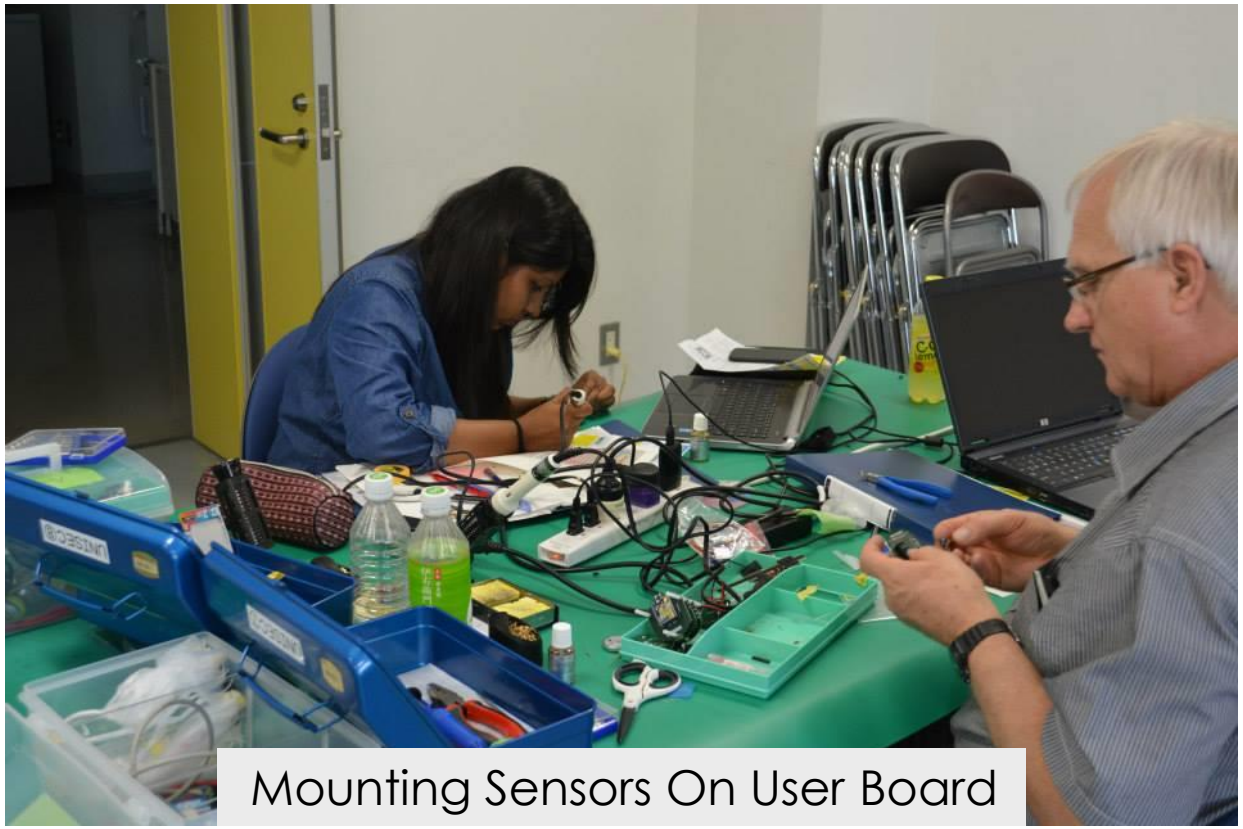


1st shock_Transfer Function

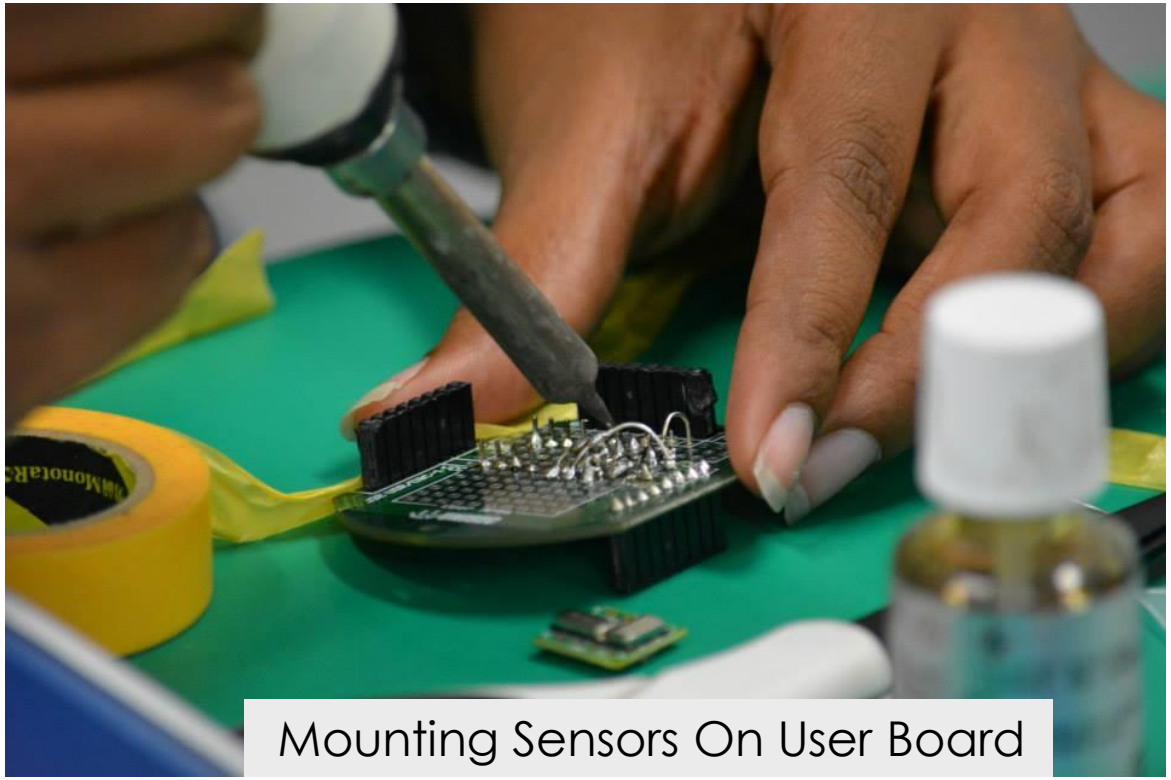
MISSION 5

SENSORS

CLTP6 : Day 6



Mounting Sensors On User Board



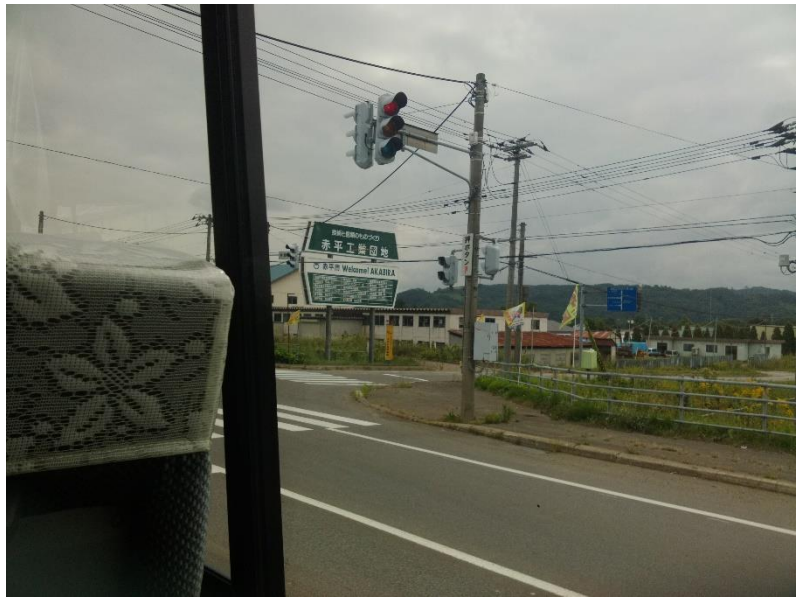
Mounting Sensors On User Board

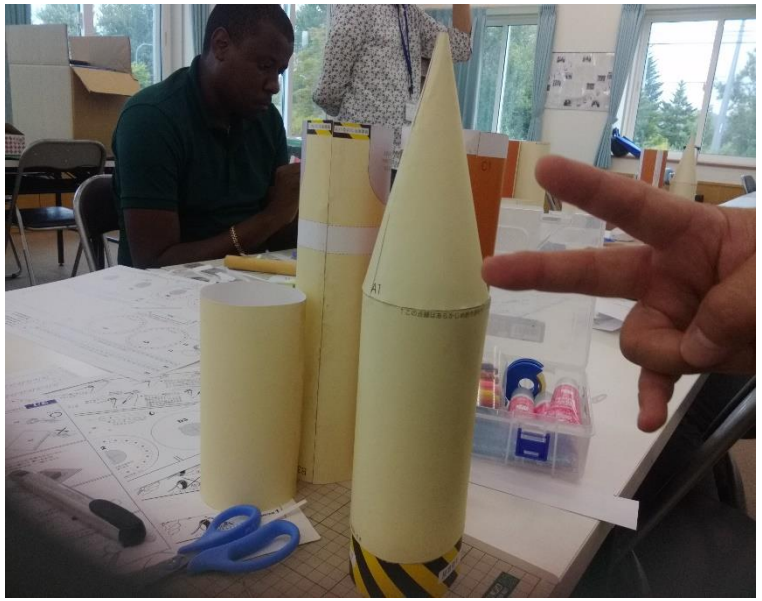
CLTP6: Day 7 : Refreshment Day

MISSION 6

PAPER ROCKET

CLTP6: Day 8

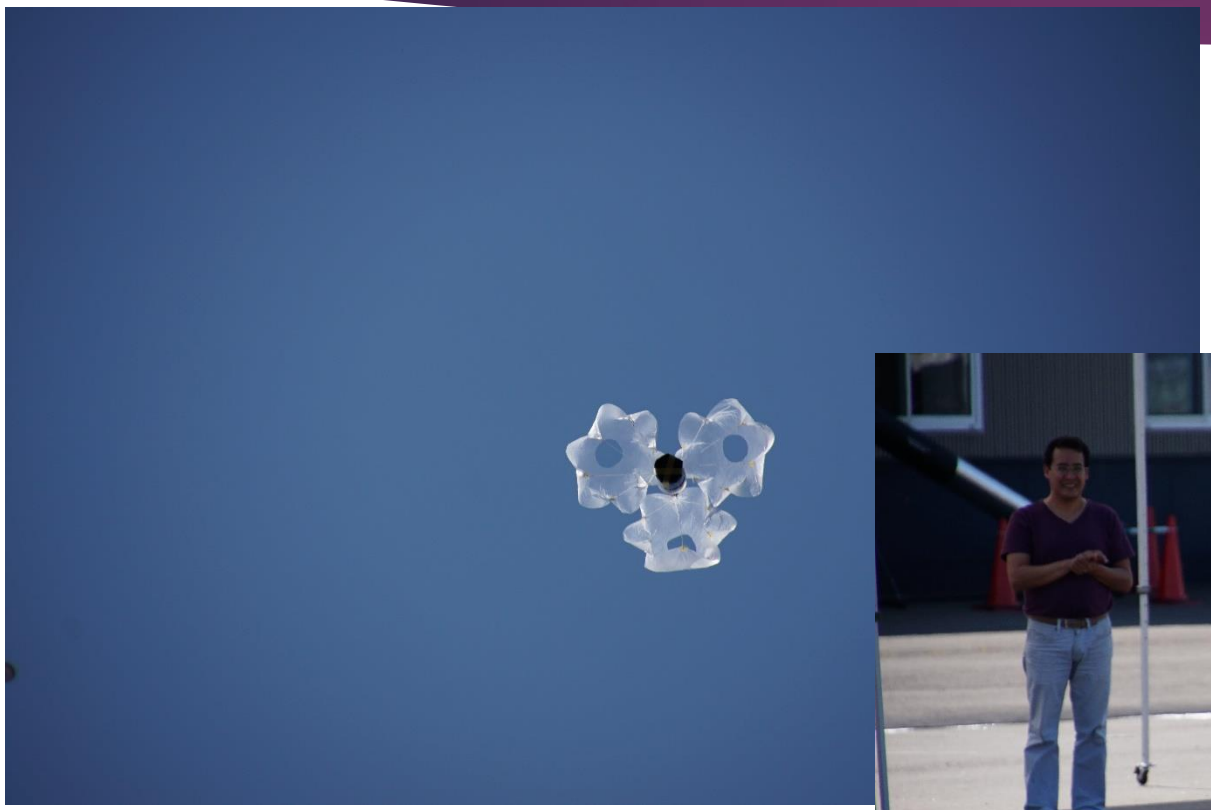




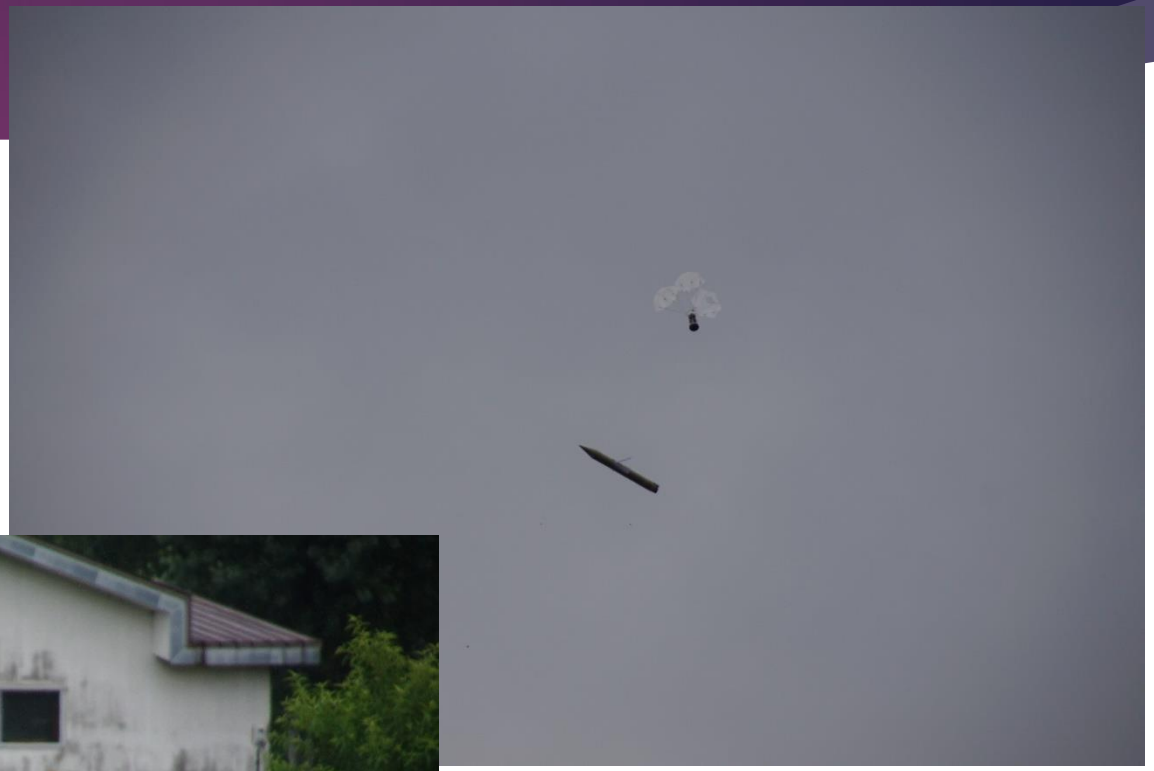
MISSION 7
LAUNCHING

CLTP 6: DAY 9: Launching Day 1

Successful & Perfect landing



CLTP 6: DAY 10: Launch Day 2



CLTP 6: DAY 11: Launch Day 3

MISSION 8

GETTING DATA

Image From The CanCam :1st Day Launch

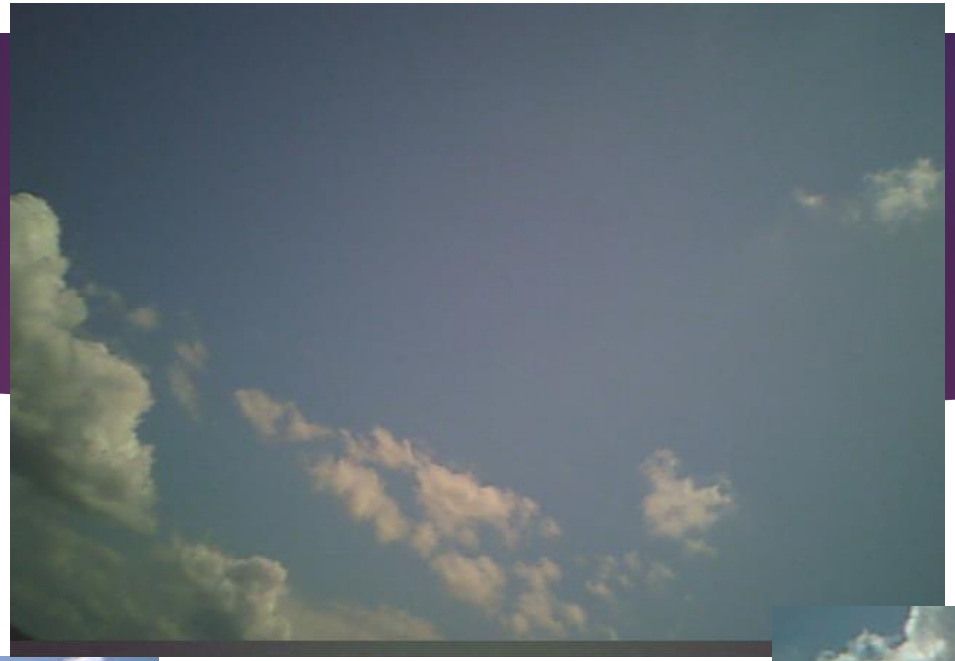
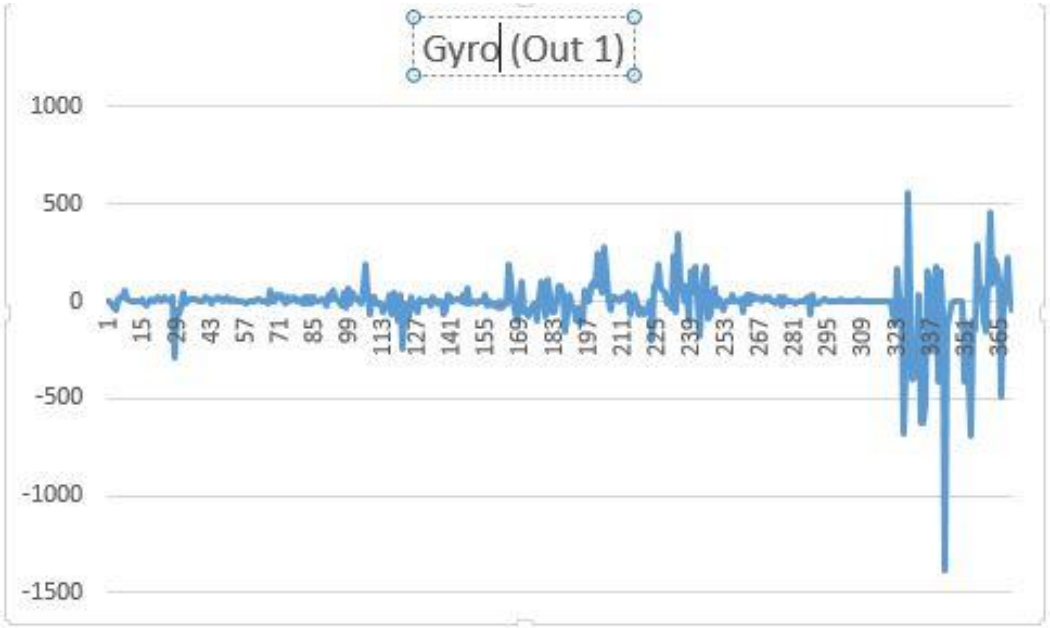
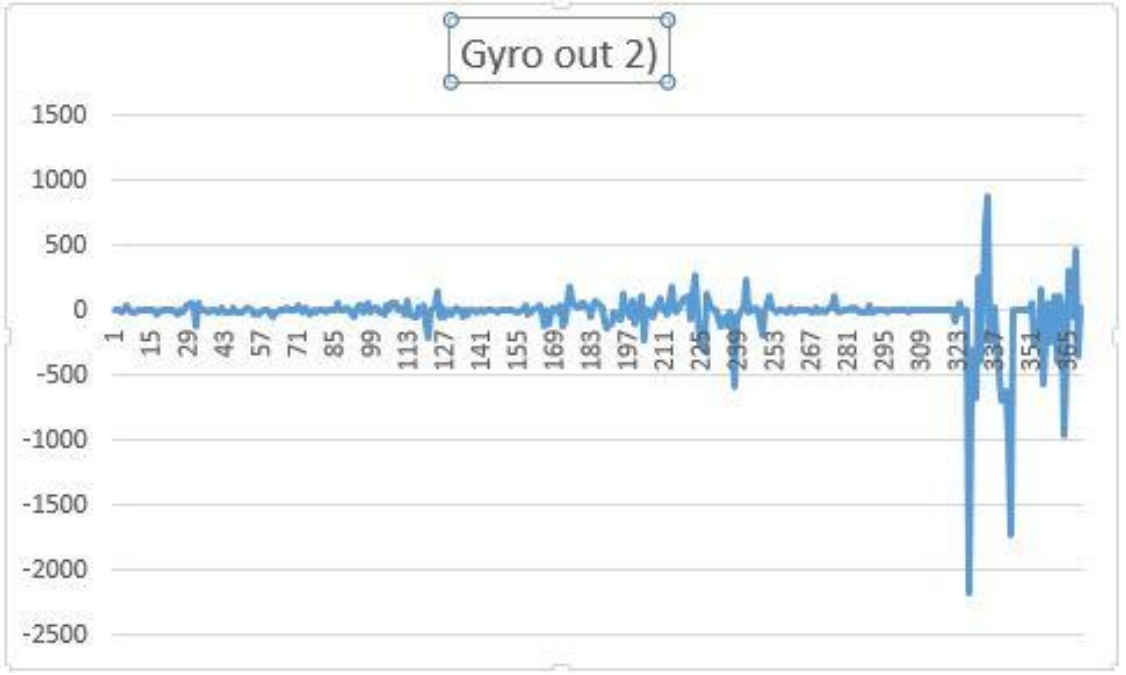


Image From The CanCam :3rd Day Launch

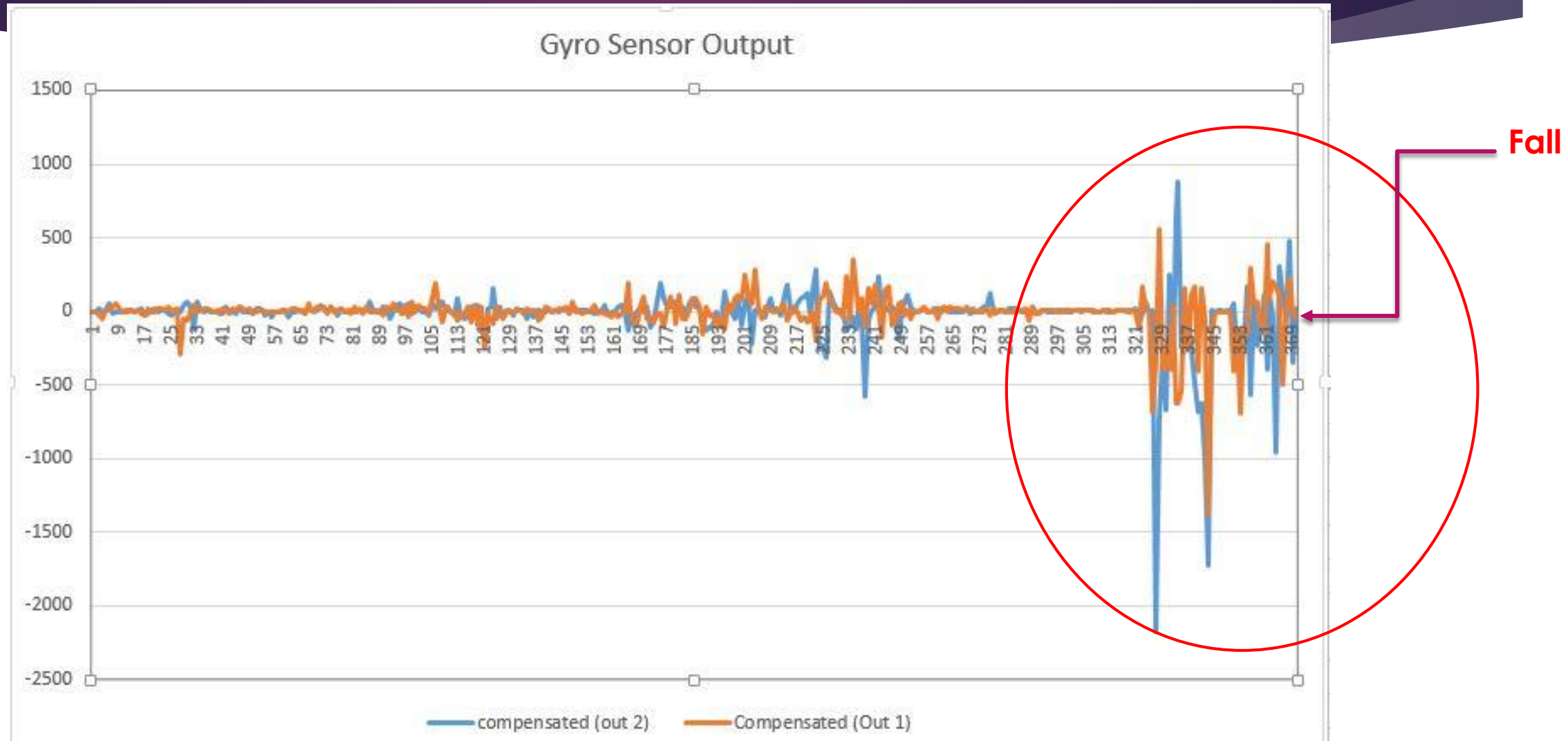
GPS


329
332
250
334
335
337
236
239
338
339
11
2
1
340
346
356
© 2015 ZENRIN
Gray Buildings © 2008 ZENRIN
Google earth


Gyro (Out 1)
1000
500
0
-500
-1000
-1500
1
15
29
43
57
71
85
99
113
127
141
155
169
183
197
211
225
239
253
267
281
295
309
323
337
351
365


Gyro out 2)
1500
1000
500
0
-500
-1000
-1500
-2000
-2500
1
15
29
43
57
71
85
99
113
127
141
155
169
183
197
211
225
239
253
267
281
295
309
323
337
351
365

GYRO Value


Gyro Sensor Output
1500
1000
500
0
-500
-1000
-1500
-2000
-2500
compensated (out 2)
Compensated (Out 1)
Fall

Mission Completed successfully here

My next mission will be in Bangladesh

Thank You