

LoRa Payload – Antarikchya Pratisthan Nepal



PHI-I Awardee

Antarikchya Pratisthan Nepal (APN)

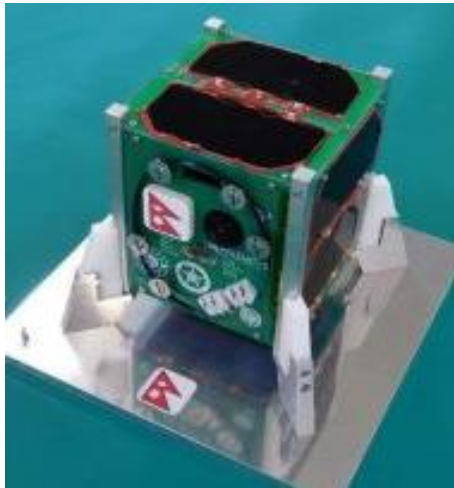
Presented By: Trishna Shrestha

info@antrikchya.org.np
<https://antrikchya.org.np>

Antarikchya Pratisthan Nepal

Space Foundation Nepal
Non Profit Organization Founded in 2021, Dr. Abhas Maskey

**“Vision 2050: a vision to launch
Nepal’s First Astronaut in Space
by 2050”**



GS Operation of BIRDS-3 and BIRDS-4

Antarikchya Pratisthan Nepal

“Train space engineers
and R&D in space
technology in Nepal”

- 8 Senior Engineers
- 9 High School Students
- 13 interns
[Undergrads, Trainee]



Next Generation Space Activity



TINKER
LAB

Grade 3-7



PaperSat Art Program

Grade 6-10



**Tinker Lab S-PBL
Electronics Lab
Program**

Grade 7-12



**SastoCube Satellite
Program**

Grade 11-12



**Nepal's 1st High
School CubeSat**



Danfe Space Mission



- Design, and build a mission payload for a 3U CubeSat, Multi Payload CubeSat Platform (MPCP), to be launched within 2023
- 3U Satellite, INSTED Thailand



Picture for Reference only



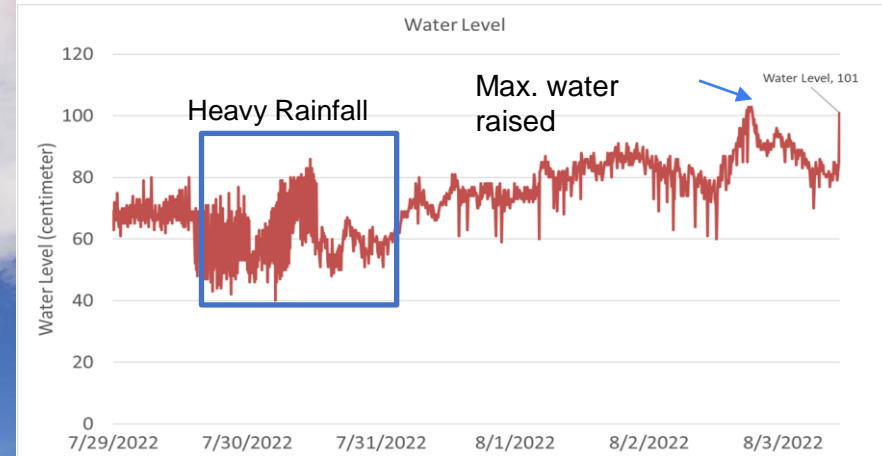
Source: Aalto-1, multi-payload CubeSat: Design, integration and launch

KITSUNE GST Installation for Early Flood Warning

- Ground Sensor Terminal (GST) for KITSUNE Store and Forward mission
- Installed in Melamchi River
- Handover to Melamchi Municipality

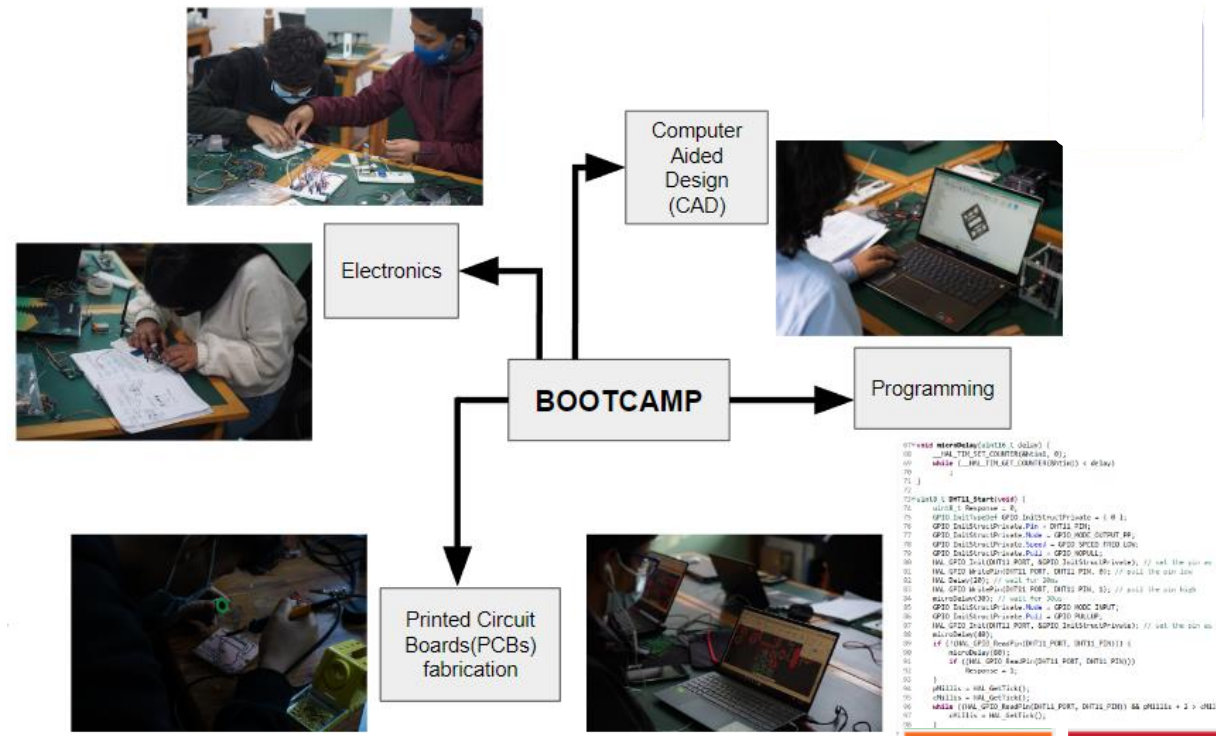


GST Melamchi River Data



High School Satellite: MUNAL

- 9 High School Students builds 1U CubeSat Munal
- Mission: Dual AI RGB and NIR Camera, Inhouse COM/OBC Demo.



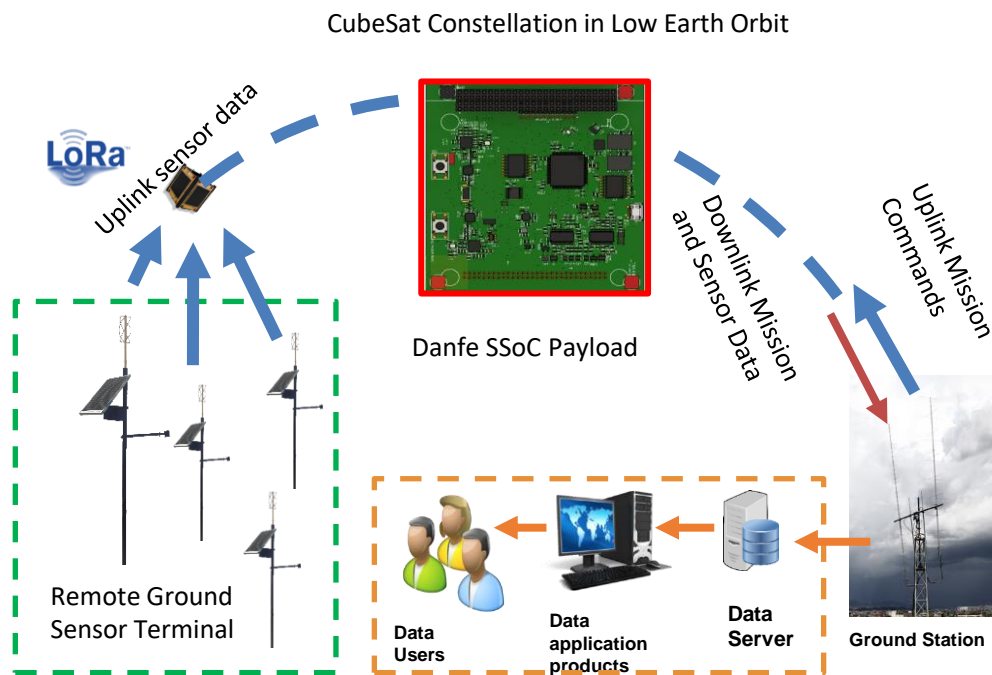
```

07: void main() {
08:   // Set up the serial port
09:   Serial.begin(9600);
10:   while (!Serial) {
11:     ; // wait for serial port to connect. Needed for native USB
12:   }
13: }
14:
15: // =====
16: // =====
17: // =====
18: // =====
19: // =====
20: // =====
21: // =====
22: // =====
23: // =====
24: // =====
25: // =====
26: // =====
27: // =====
28: // =====
29: // =====
30: // =====
31: // =====
32: // =====
33: // =====
34: // =====
35: // =====
36: // =====
37: // =====
38: // =====
39: // =====
40: // =====
41: // =====
42: // =====
43: // =====
44: // =====
45: // =====
46: // =====
47: // =====
48: // =====
49: // =====
50: // =====
51: // =====
52: // =====
53: // =====
54: // =====
55: // =====
56: // =====
57: // =====
58: // =====
59: // =====
60: // =====
61: // =====
62: // =====
63: // =====
64: // =====
65: // =====
66: // =====
67: // =====
68: // =====
69: // =====
70: // =====
71: // =====
72: // =====
73: // =====
74: // =====
75: // =====
76: // =====
77: // =====
78: // =====
79: // =====
80: // =====
81: // =====
82: // =====
83: // =====
84: // =====
85: // =====
86: // =====
87: // =====
88: // =====
89: // =====
90: // =====
91: // =====
92: // =====
93: // =====
94: // =====
95: // =====
96: // =====
97: // =====
98: // =====
99: // =====
100: // =====
  
```



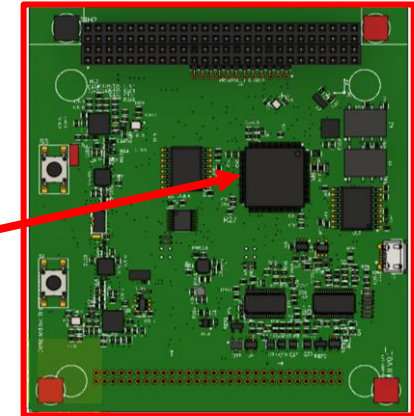
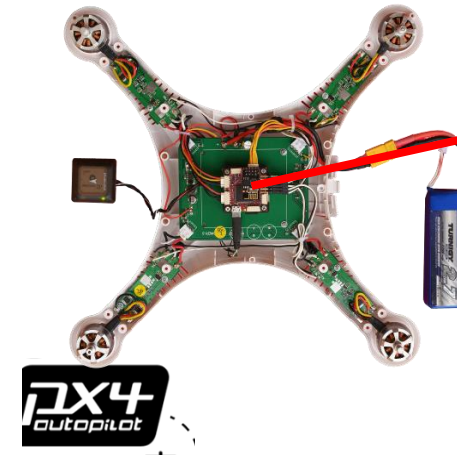
PHI-I Payload

- Nepal's LoRa Payload Mission
- Integrated Bus System for CubeSat



☐ Satellite System-on-Chip Demonstration Mission

Drone Hardware and Software



PX4 Payload

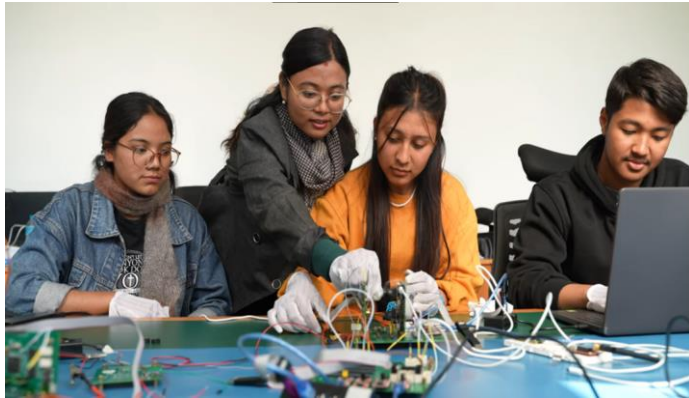
☐ PX4 Demonstration Mission



“Design a payload for CubeSat which contributes in next-generation capacity building for in-house satellite development in Nepal”

Science, Technology, Innovation and Capacity-Building in Nepal

“Train and develop space engineers in Nepal”



Mentoring High School Students



Satellite Research Fellow at Satellite Testing Lab at India



Satellite Testing at India

THANK YOU

