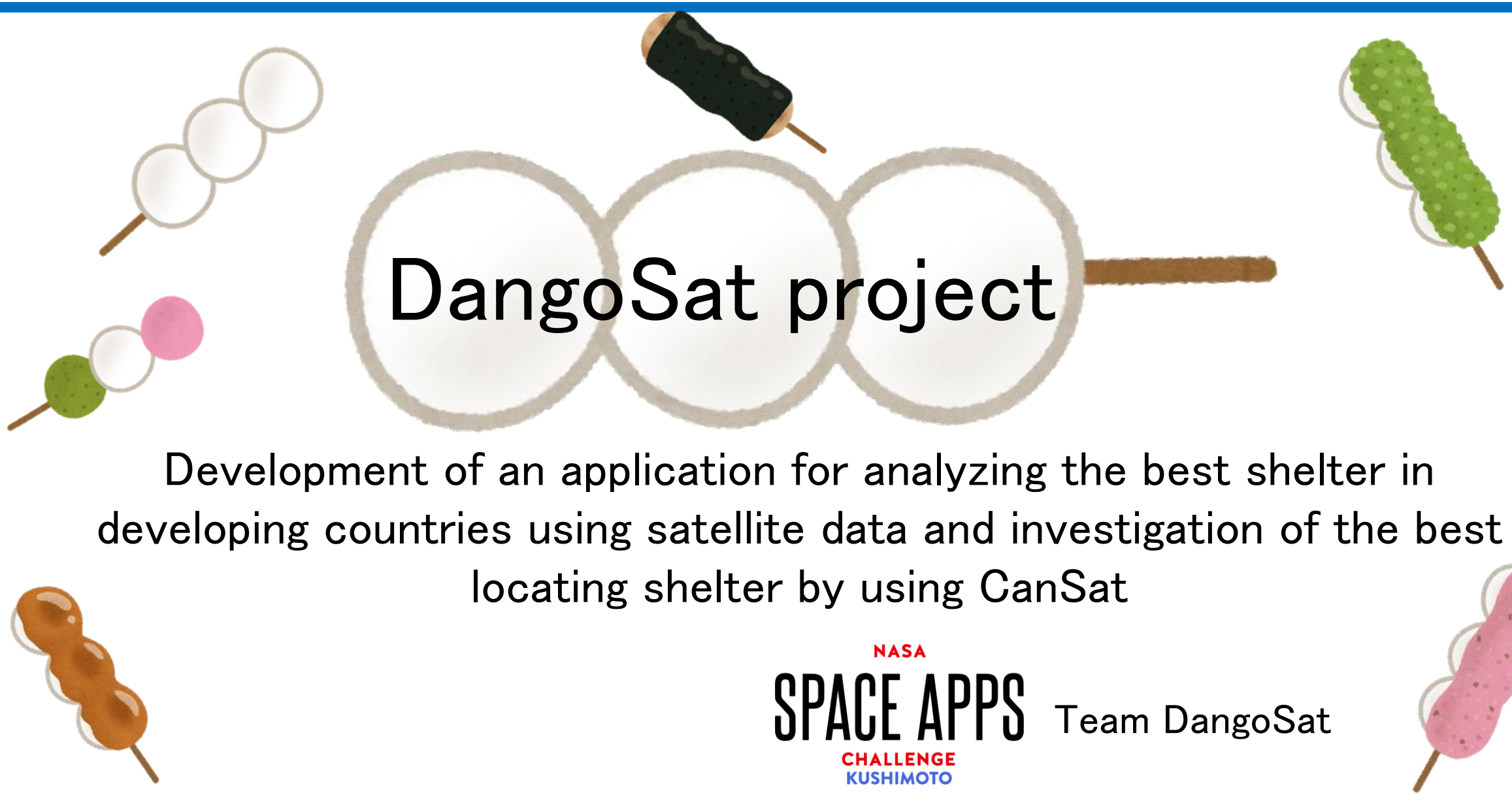


DangoSat project

Development of an application for analyzing the best shelter in developing countries using satellite data and investigation of the best locating shelter by using CanSat

NASA SPACE APPS CHALLENGE KUSHIMOTO

Team DangoSat

Our Mission Theme.

- In order to Establish shelters in developing countries

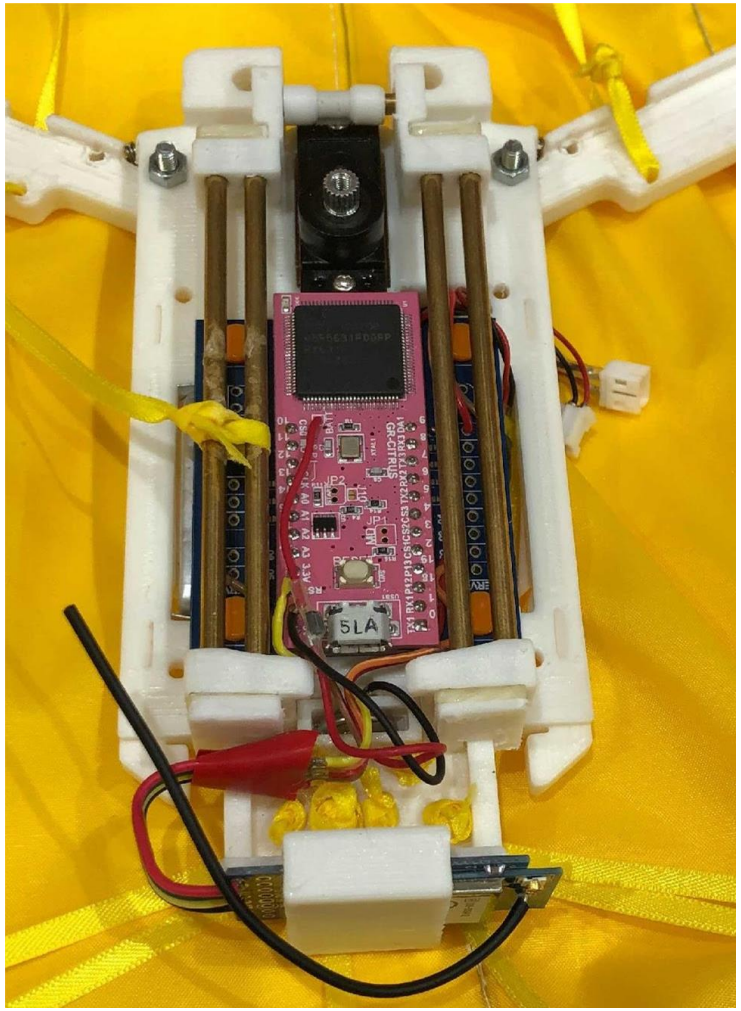
1.finding out where the appropriate place is with satellite data.
2.Investigate whether the place is truly suitable using CanSat.

Reasons why we use CanSat by launching model rocket.

- Developing countries are more likely to have poorly maintained roads.
  - →It's not an easy place to get into.
  - →Approach it from above.
- It is economical to use model rockets
  - →It's cheaper to survey poor developing countries than using drones and other devices to drop CanSats in poor developing countries.

That is why we adopt CanSat by launching model rockets

CanSat for optimal evacuation site identification



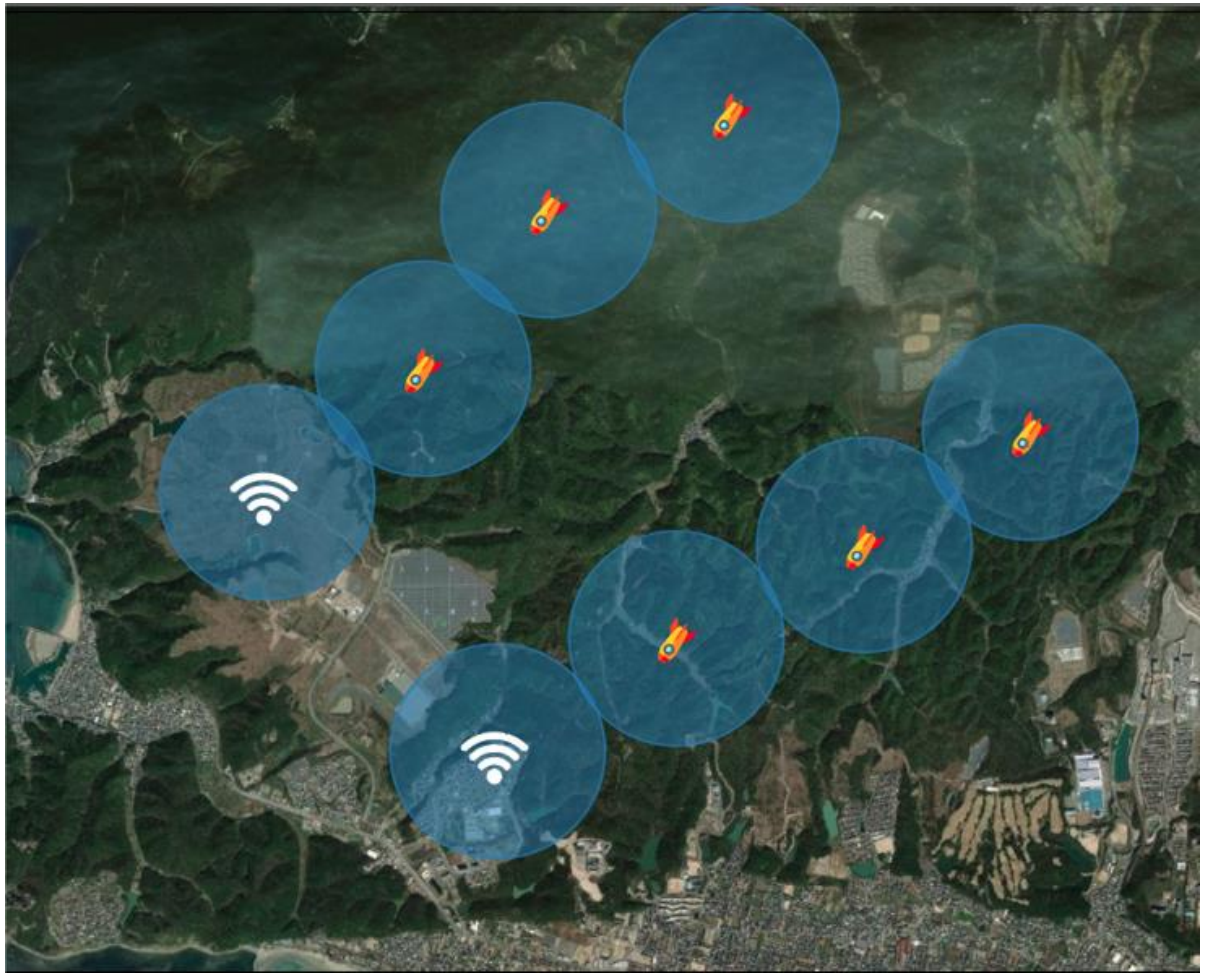
We named this original CanSat DangoSat.

- By using LoRa network

→Get latitude, longitude, temperature, humidity and illumination

→Determine from the data whether it is appropriate for a shelter

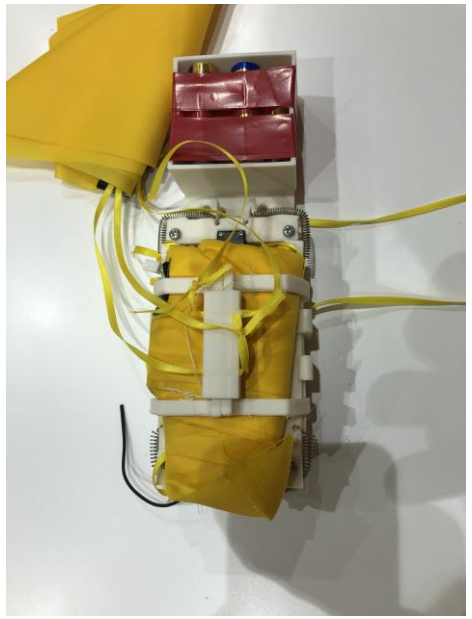
LoRa networking to judge the appropriate site



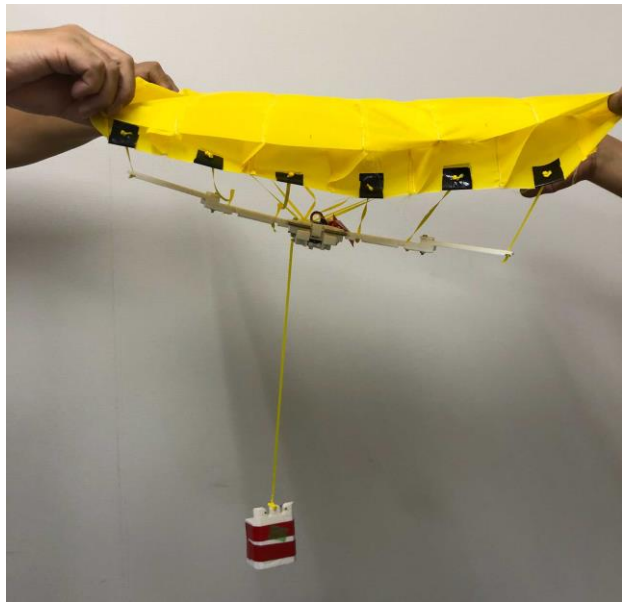
- Pre-arranged list of places to drop with satellite images
- Probability of the network with LoRa repeaters
- Enable sensor data to be sent and received by LoRa networking

→examine them in detail

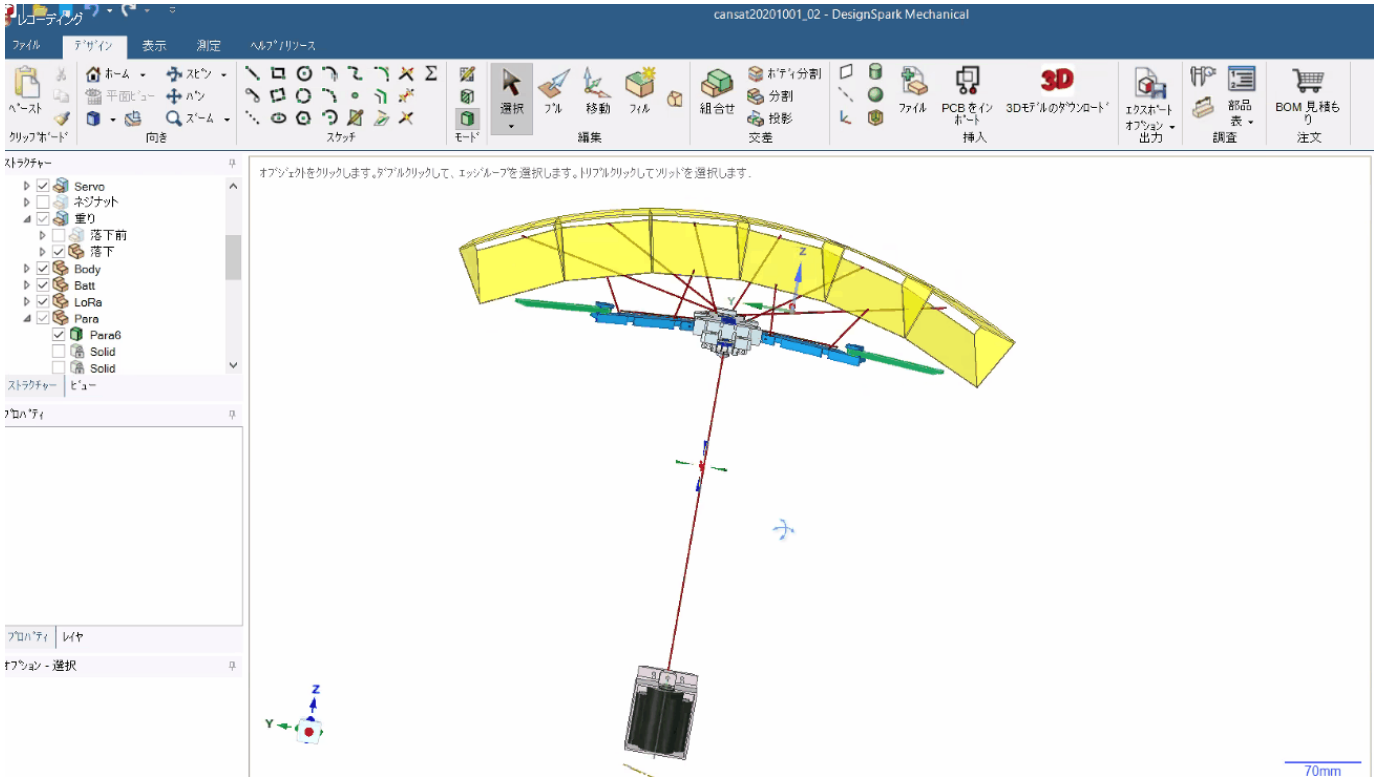
LoRa repeater CanSat



time of storage
in the rocket



time of deployment



CAD

- We developed glider parachute that is controlled and can reach the destination.

All of the CanSat and parachute were designed by CAD, and we actually developed it.

Rockets development with local people.

The model rockets we made this time is made of paper and wood.

9/18, 19

10/4

10/4

- Even people who have no specific skill could develop rocket. This rocket could be launched perfectly..