

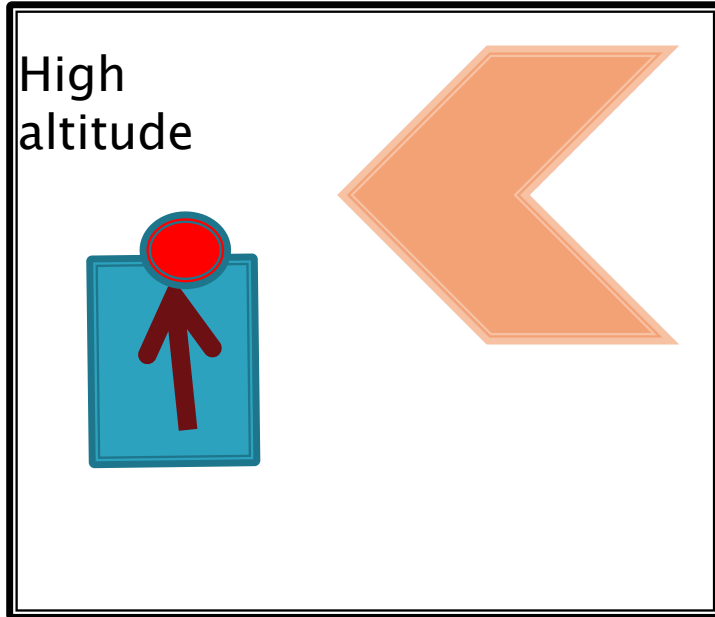


# Team NASU TOKYO Univ. Breakfast Review

Member

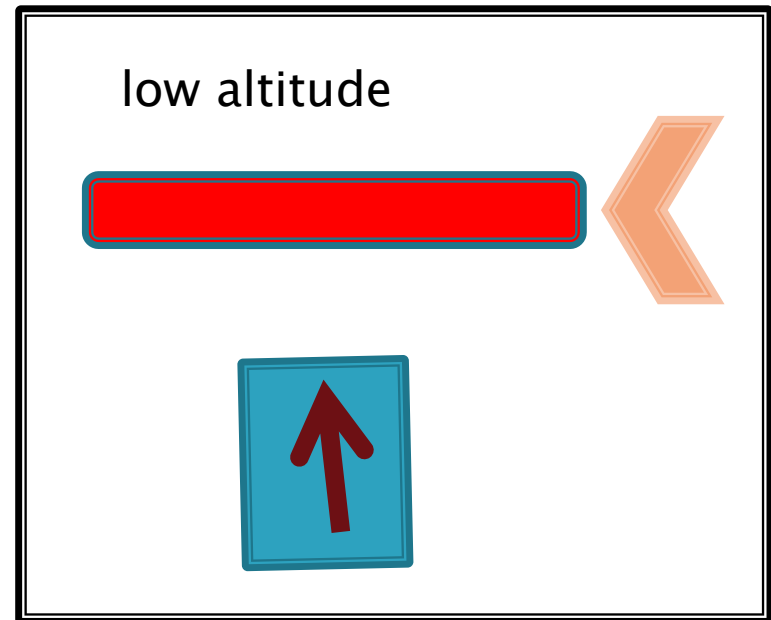
Sugiyama Atsushi/Shimizu Atsushi/Shinohara Takeshi  
/Masuko Tetsuyuki/Kawahara Hiroki/Nakajima Shintaro  
Sakai Kento/Niwa Shoma/Yamagishi Yuki

# OUR MISSION



MERIT  
Smooth  
breakthrough  
of high wind area

## Fly back type



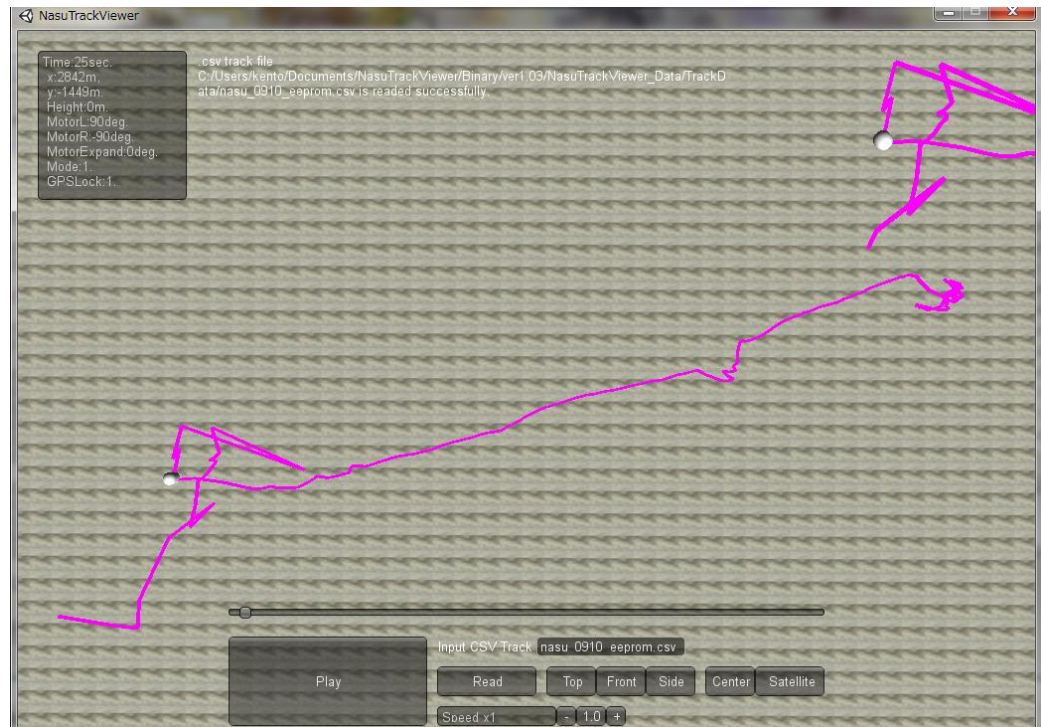
# the RESULT

Flight number	Longitude	Latitude	Distance from the goal (m)
1	W119° 5'35.52"	N40° 51'29.16"	6308
2	W119° 8'30.66"	N40° 49'52.02"	3682

- Succeed to get control record and to down link its flight data in both flight

- Succeed to delay the deployment of parafoil and to control its flight.

But the wind was too strong..



# about PARAFOIL

No.1 (which we made 4 months ago)



No.2



No.3



No.4



No.5



No.6



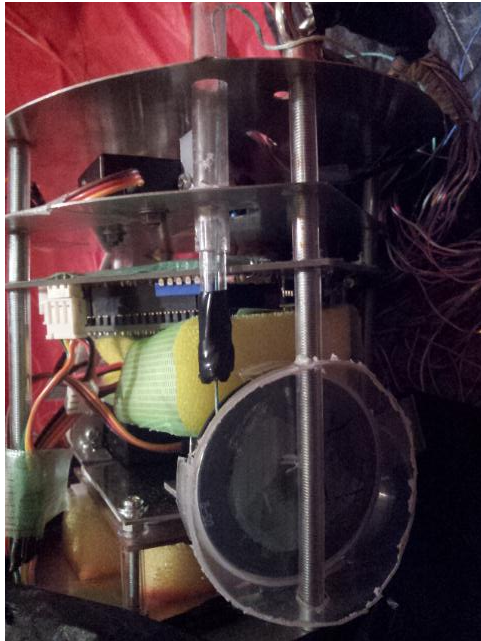
No.7 (which we used in ARLISS competition)



No.8 (prepared as a spare)

# about FRAME

Around the control  
rope



How to fold  
parafoil



The whole  
image

Around flight pin



# about its ALGORITHM

Processes starts from ①to⑧.

①Before the flight , turn on GPS, servo regulator, communicator regulator, micro computer board.

②Cut flight pin

③count 25 seconds(free fall phase)

④deploy parafoil

⑤control the flight(while counting the time)

⑥count 20 minutes

⑦turn off all electric device

# SUCCESS CRITERIA

## ▶ Full success

- reaching within 0.5-kilometers radius from the target.(FAILED)
- Manipulate the break code attached onto the parafoil and control the direction of the CanSat motion.(Succeed)
- Use our original parafoil after certificating the reliability in auto-deployment.(Succeed)

## ▶ Minimum Success

- Decent the CanSat by free fall when it is in high wind area, and after it get through the unstable and uncontrollable area with strong wind, the CanSat will deploy it's parafoil successfully and approach slowly to the ground.(Succeed)
- Downlink with communication station and send it's GPS data.(succeed)
- Write it's flight data on memory card( which is boarded on the CanSat).