

PROJECT REVIEW

TEAM “joytoy”
University of Tokyo



CONTENTS

1. Our Team
2. Our CANSAT
3. Results
4. Consideration
5. Acquisition
6. Thanks



OUR TEAM

- Team name: “joytoy”
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OUR TEAM

- Why did we start the ARLISS project?
 - We wanted to study engineering by actually making something: “monozukuri”



OUR CANSAT

- Mission
 - Come-back only
- Structure
 - Control: servo, parafoil
 - Communication: MU-1
 - OBC: H8
 - Batteries: Li-Ion batteries
 - GPS: GH80



OUR CANSAT

In Japan...

- Attending Noshiro Competition
 - Come-back competition for parafoil CANSATs and open class
 - Mission: Coming-back from a drop 250m high from a balloon
- Result:
 - Controlled
 - 47m from target, but...
 - We have to admit that conditions were advantageous for us

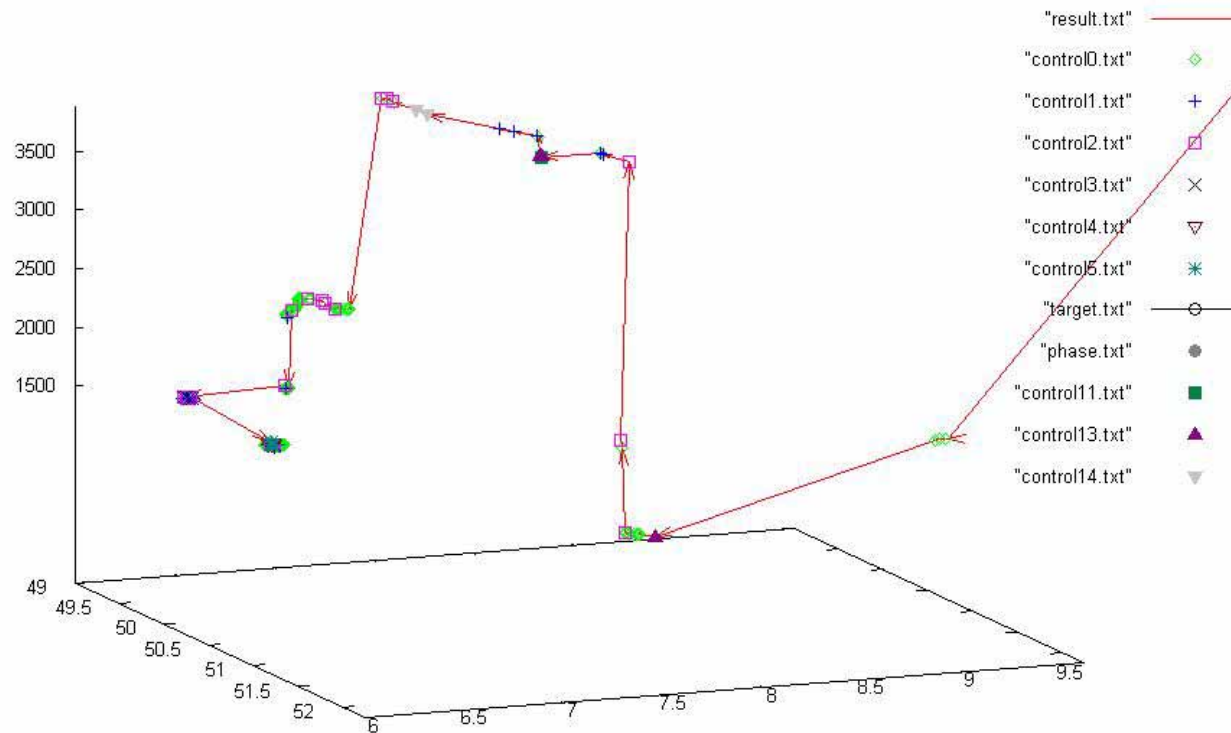


RESULTS

- 1st flight
 - 3.2km; moved but uncontrolled
- 2nd flight
 - programs and noise shields improved
 - 4.5km, moved but uncontrolled
 - GPS data was not received during the flight
- 3rd flight
 - battery circuits changed; supplied to GPS receiver individually
 - Unfortunately, flight was canceled...(terrible weather!)



RESULTS



CONSIDERATION

- Needed to devise a method to receive GPS data more quickly and stably
 - Whether the CANSAT is able to receive GPS data equals to whether it is able to come-back
- We must hand down all the information we have now to teams that compete next year and the years after
- We must get good sleep!



ACQUISITION

- We learned how difficult it is to make an integrated machine
- We learned how meaningful it is to make something “engineeringly”
- It was a very interesting project after all!



THANKS

- Thank you to
 - Prof. Twiggs
 - all members of AEROPAC
 - All members of UNISEC
 - All the teams that participated the ARLISS project
 - Everybody who made their best effort to make ARLISS a meaningful and wonderful project



THANKS

THANK YOU!
Our CANSAT will
“Come back”
next year!

