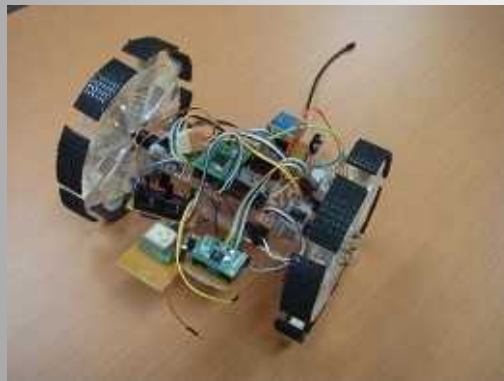


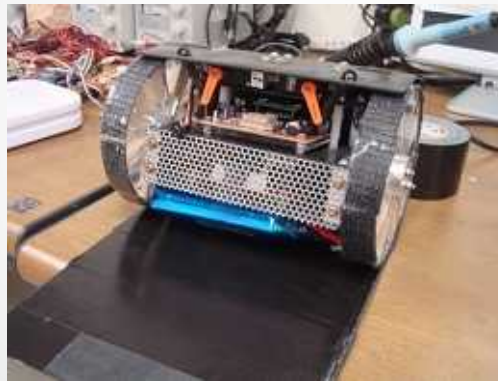
Tokyo Institute of Technology

Structural Dynamics Design Laboratory

We Congratulate 10th Anniversary of ARLISS!
We thank very much especially to Aero Pac!



BBM



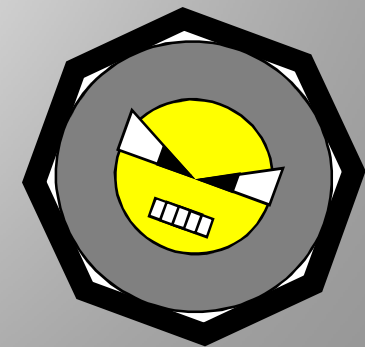
EM



FM

Members:

H. Akagi, Y. Okada, M. Wang, and D. Haraguchi



Hybrid Mechanism Cansat

1. Flyback with Paraglider



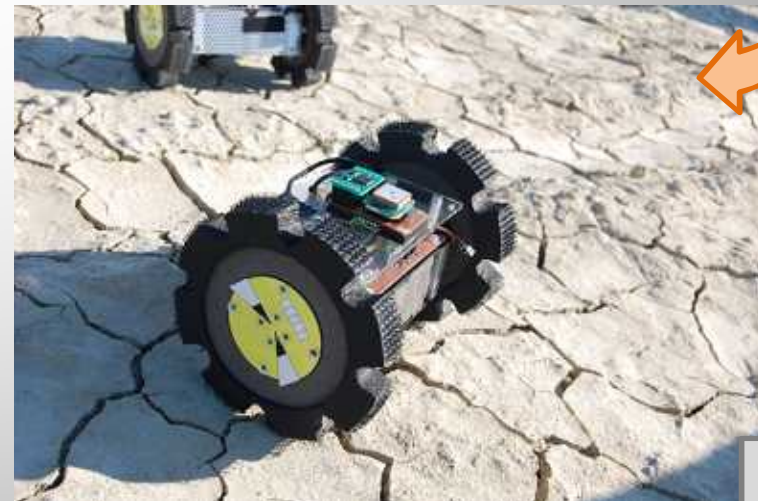
2. Flight Module Separation



3. Cover Separation

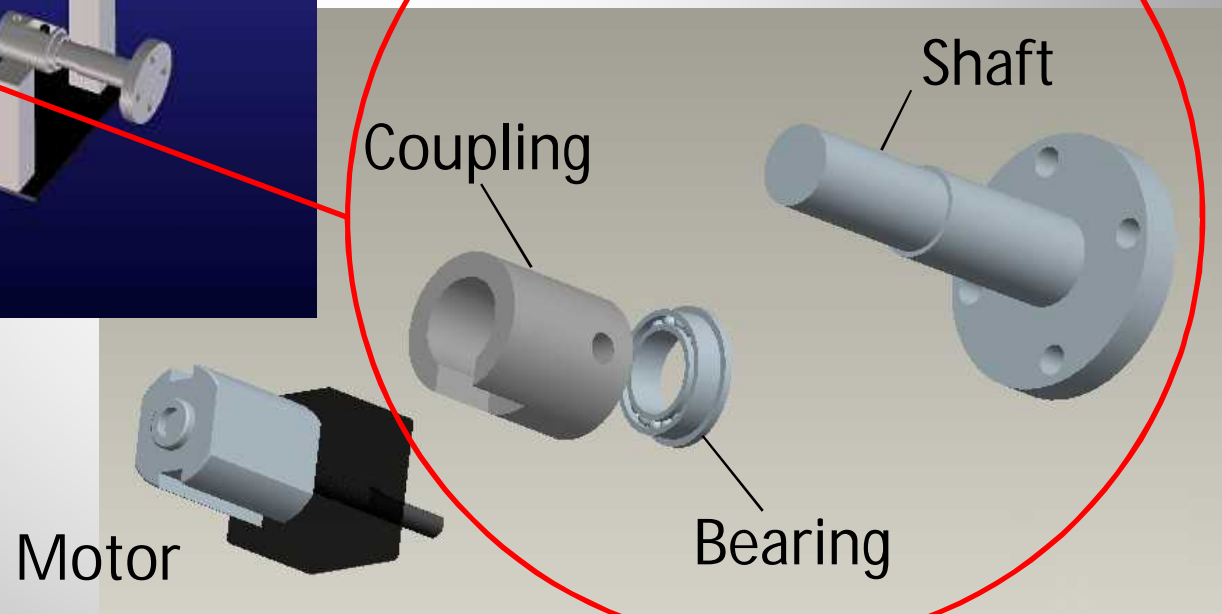
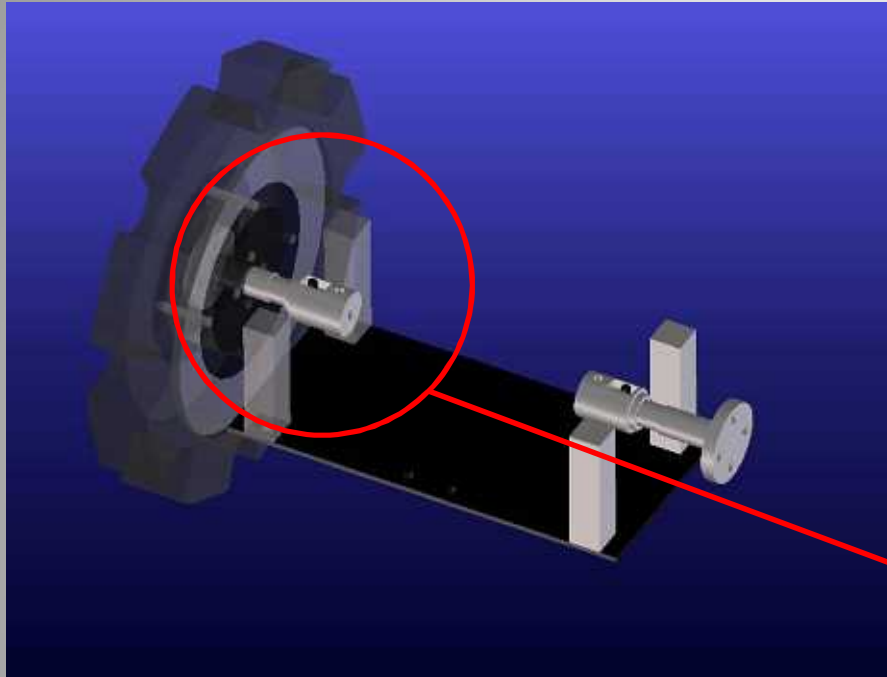


4. Runback with 2 Gears



Structural Design

- Driving System

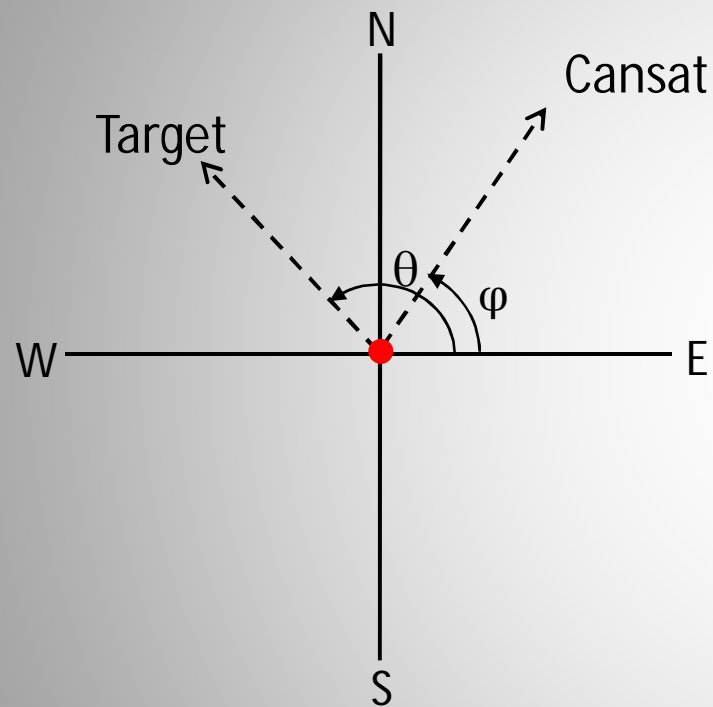


Most parts of Cansat are HANDMADE!!

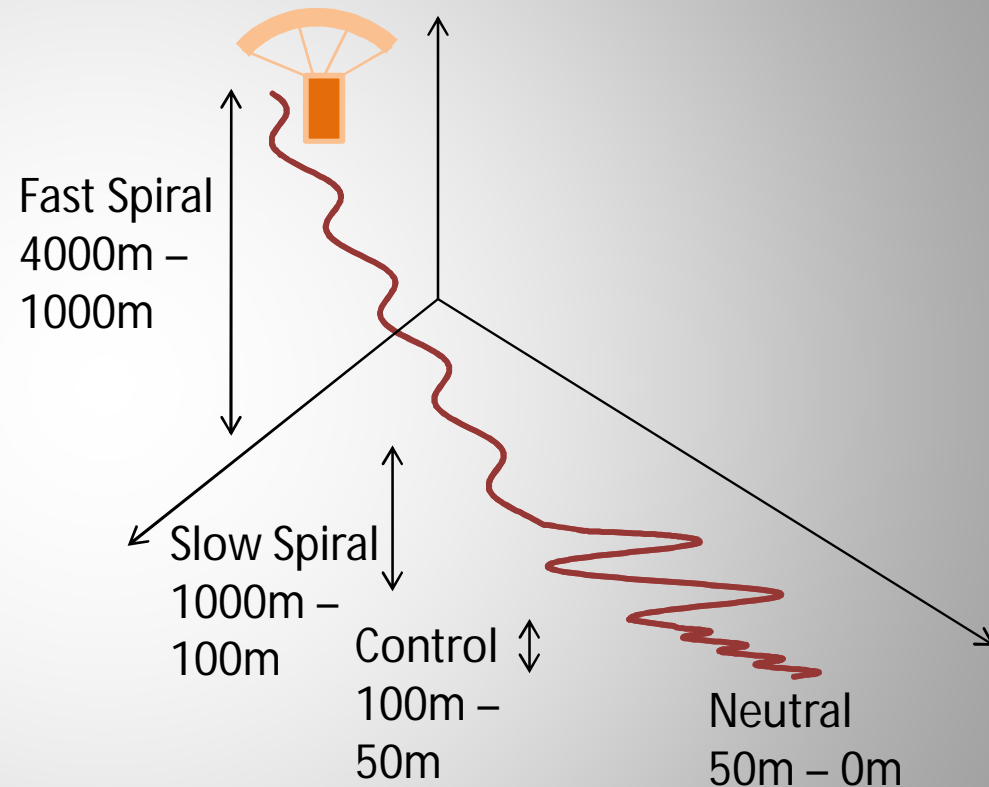


Control Strategy

- Basic Control Algorithm
- Flyback Control Algorithm

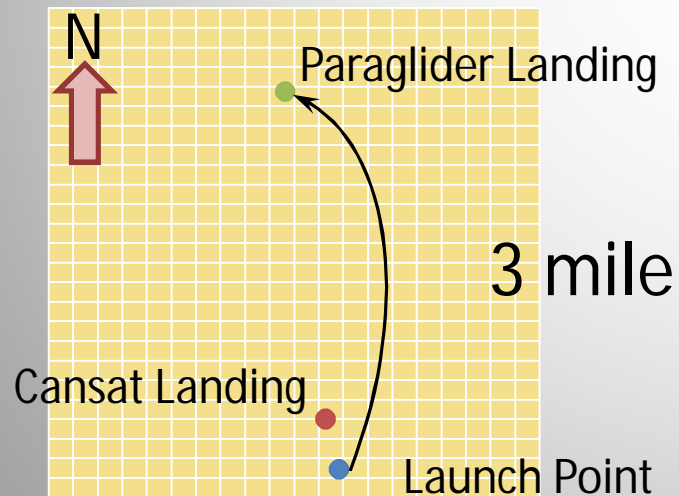


$\theta \quad \varphi > 0$ Turn Right
 $\theta \quad \varphi < 0$ Turn Left
 $\theta \quad \varphi = 0$ Straight



1st Flight (16/9/08) & Results

Mr. Richard Hagen's Rocket "AMERI- CAN"

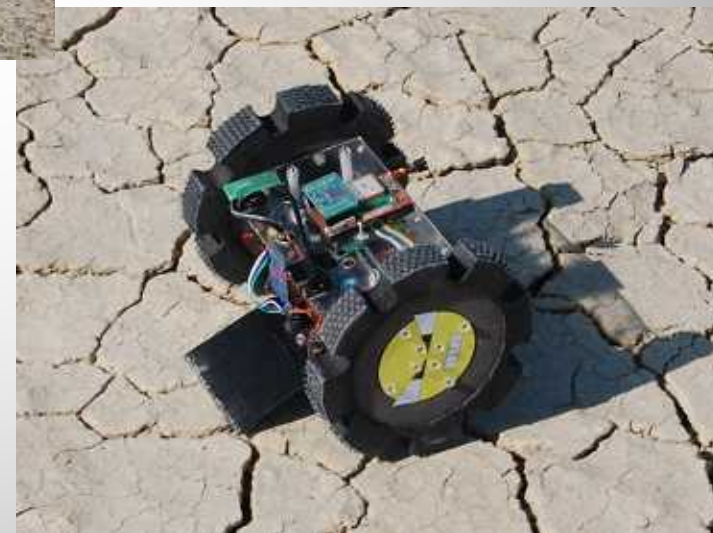


Paraglider blown away
at the deployment!

Mr. Allen H. Farrington found our Paraglider! Thank you!!

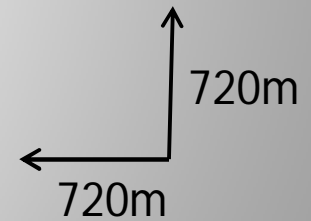
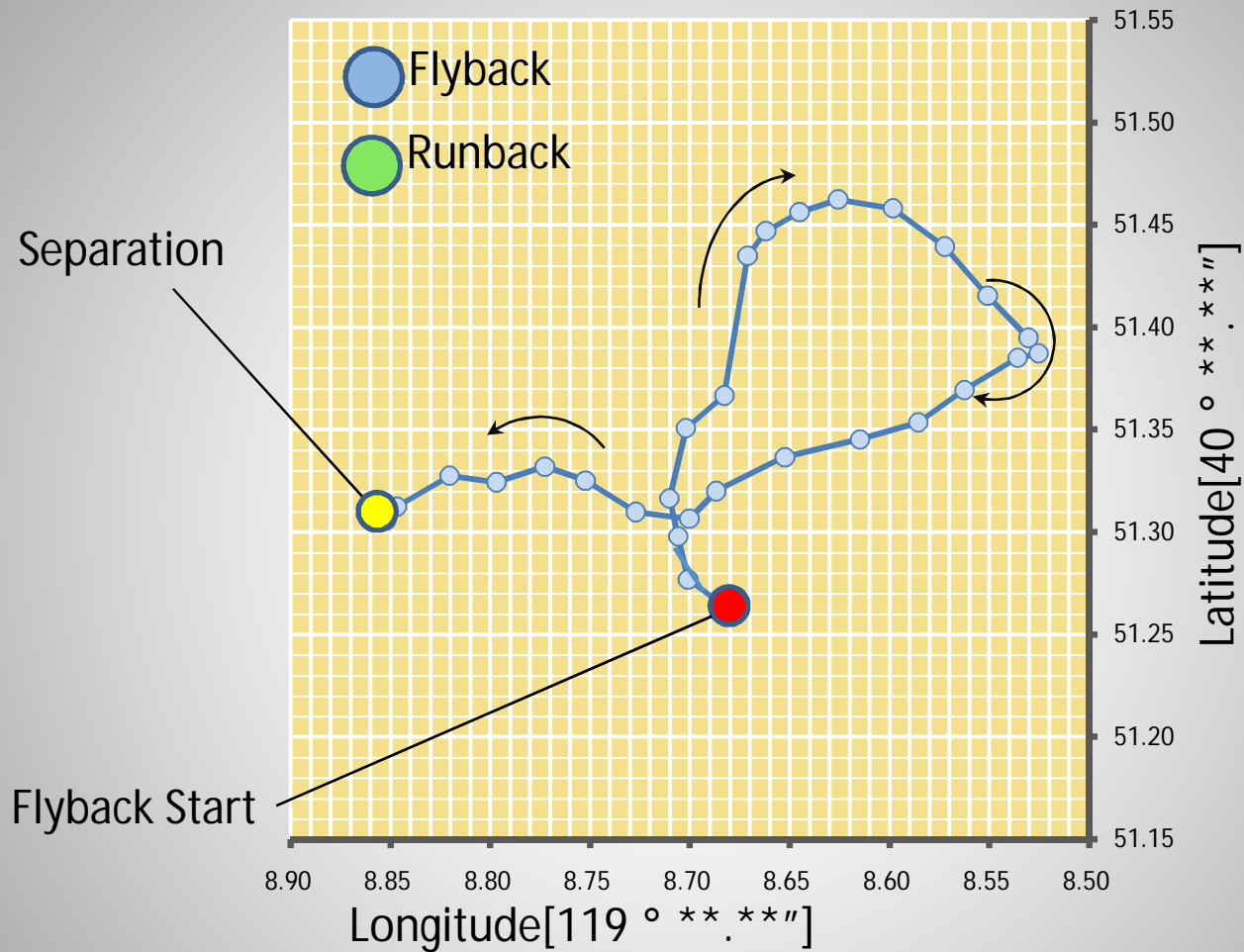
2nd Flight (18/9/08)

Dave Kenyon's Rocket for our Cansat!!

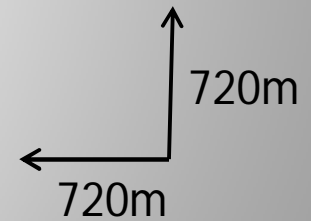
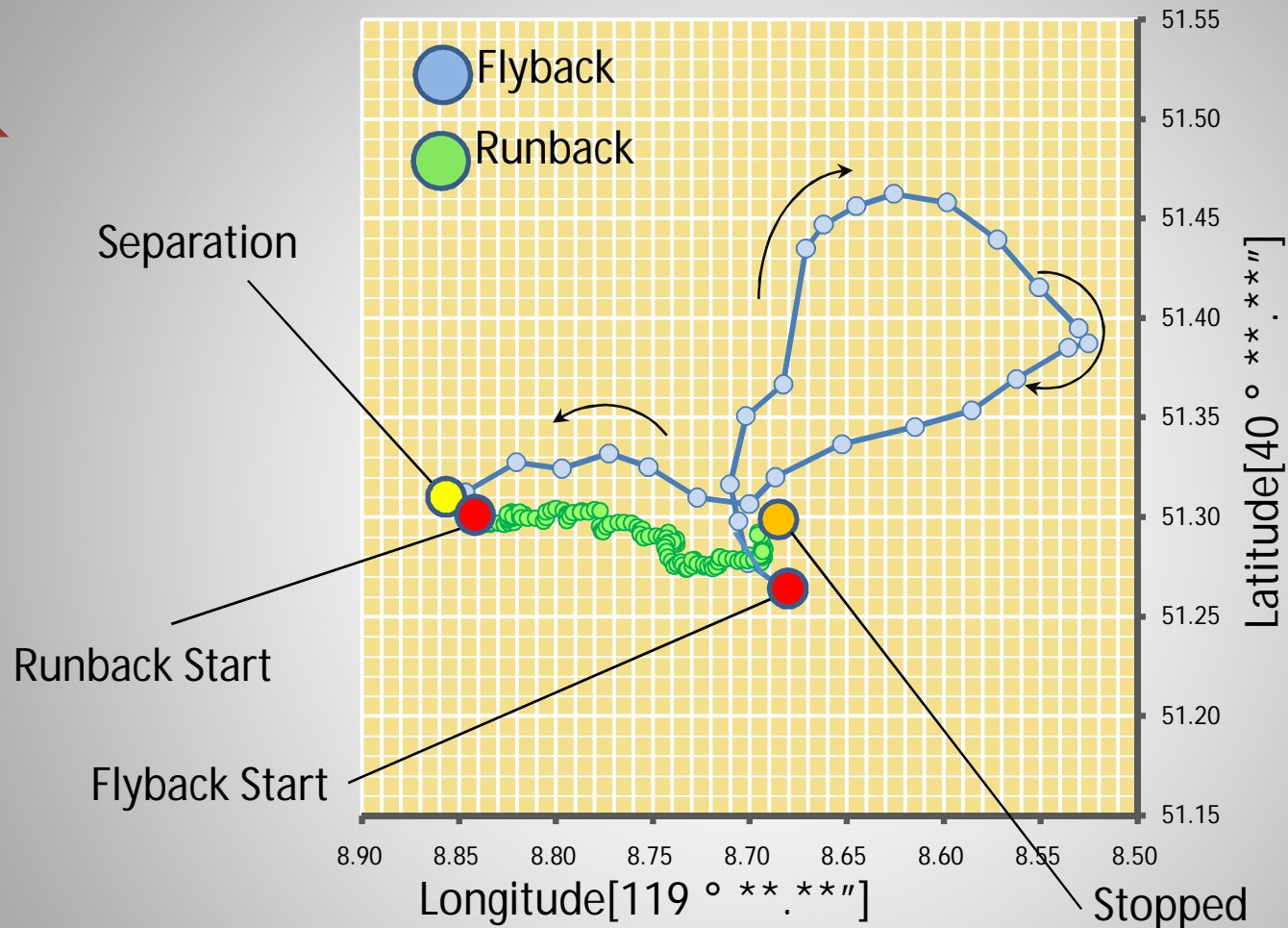


We succeeded the TRANSFORMATION!!

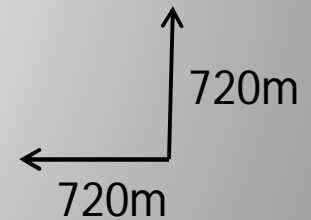
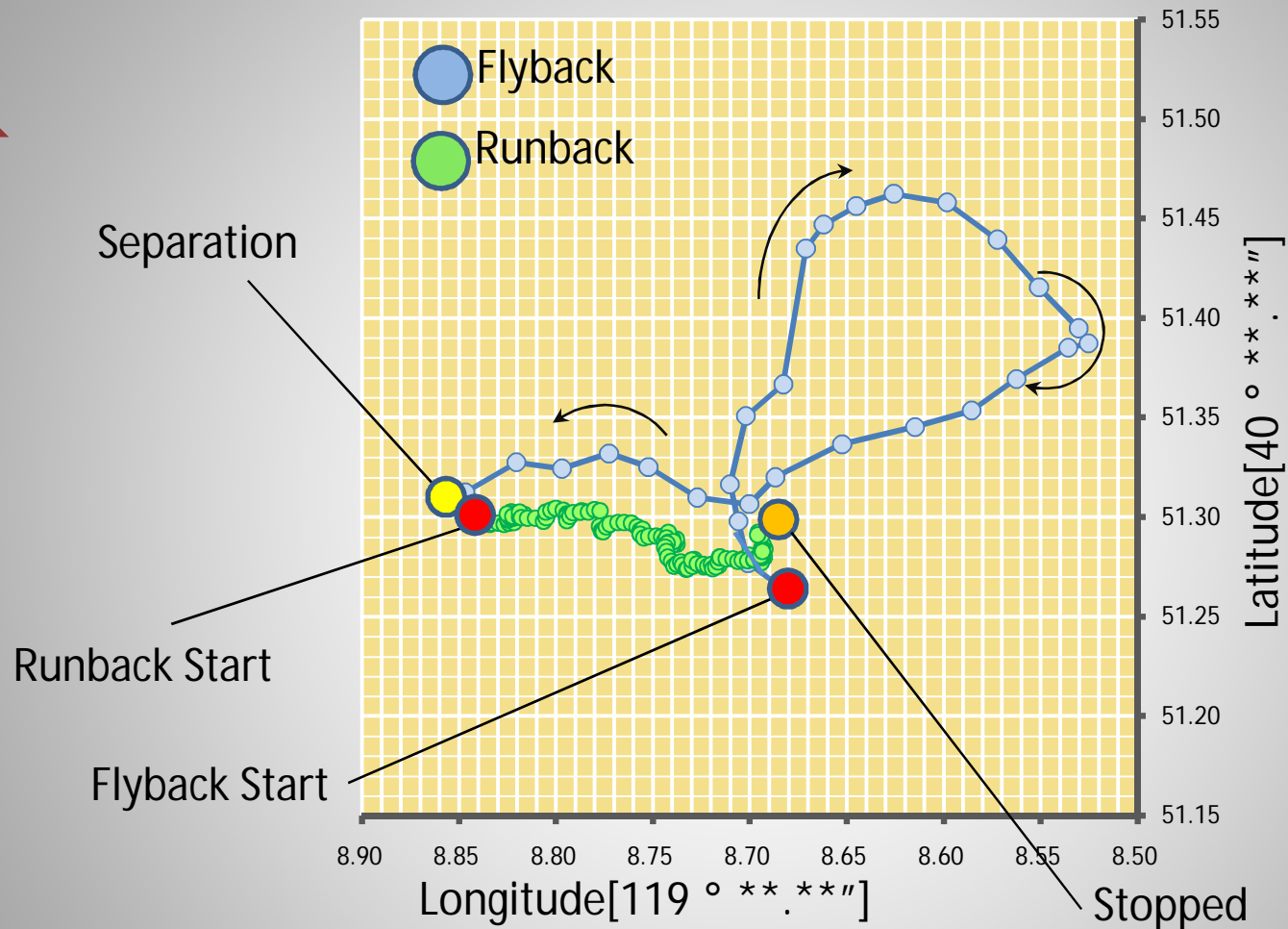
2nd Flight Results



2nd Flight Results



2nd Flight Results



Target

1mile away from target point.
(No control record)

Special Thanks

- Aero Pac
- UNISEC (UNiversity Space Engineering Consortium)
- Tokyo Tech, Matsunaga Lab.
- Nihon University, Miyazaki Lab.

Our Supervisors



Prof. M. Okuma



Prof . I.Kajiwara



Prof . H. Sakamoto
@ Narita Airport

Thanks a lot!! We are having fun!!



We will demonstrate the separation
after this meeting.

