

Tokyo Tech SDDL

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SPACE CRAWLER



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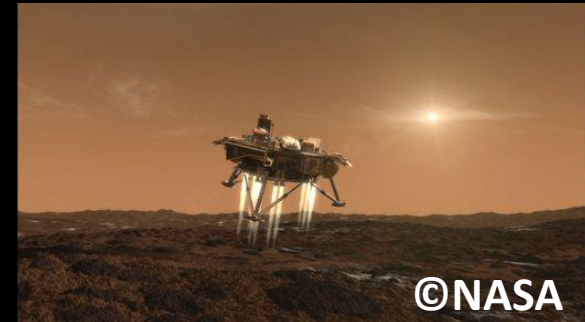
Space Probe Vehicles

Two kinds of observation areas in ARLISS

Observation in the air

Video recording

Sampling air ingredient



Observation on the ground

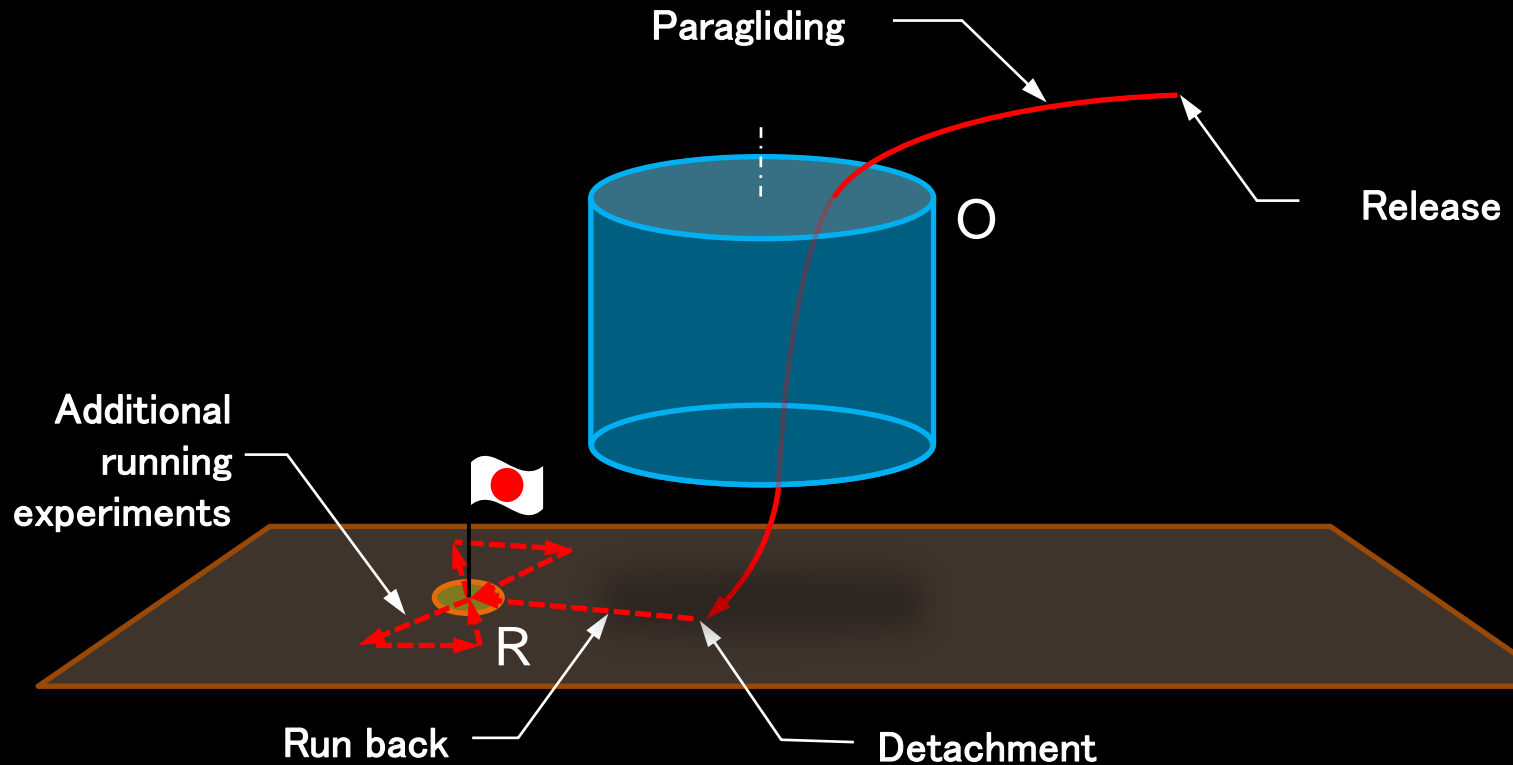
Video recording

Sampling ground ingredient



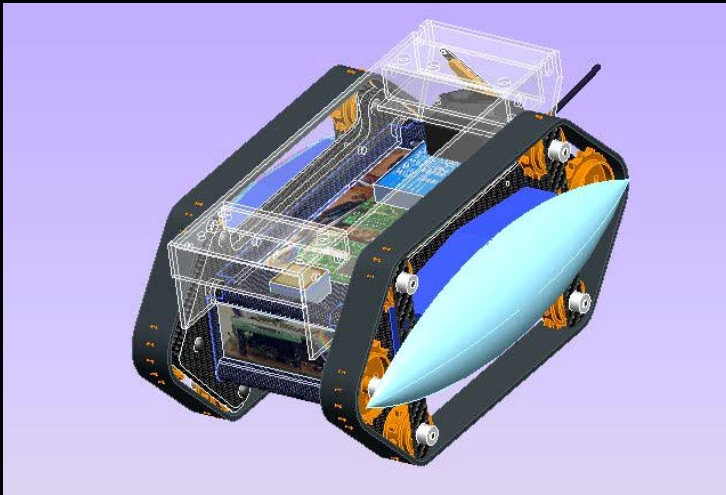
Aim: Designing a satellite which navigates itself to both targets in air and on ground

Mission Area



Set two kinds of area; Observation area (O), retrieve area (R)

SPACE CRAWLER



➤ Hybrid Mechanism

< flyback >

- Flight unit (with paraglider, servomotor)

< runback >

- Crawler mechanism



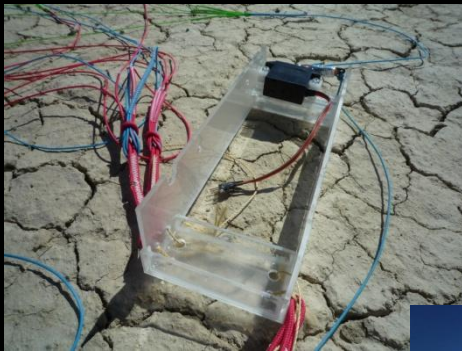
➤ Runback on rough surfaces

- The flexible belts of the caterpillar make it possible to run on rough surfaces

1st flight (Sep. 15)

Mike's rocket for our Cansat !!

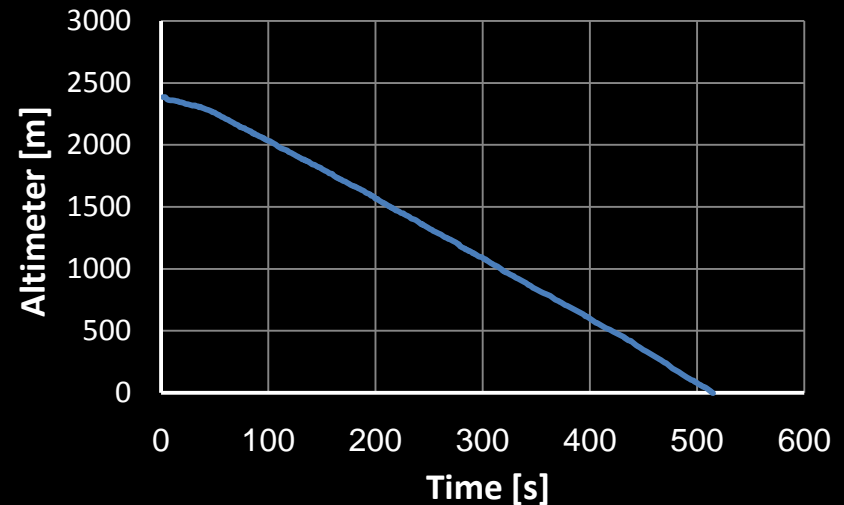
Got altitude data, and succeeded to separate but failed to get GPS data



Flight unit ↑



Rover (with cover) →



2nd flight (Sep. 17)

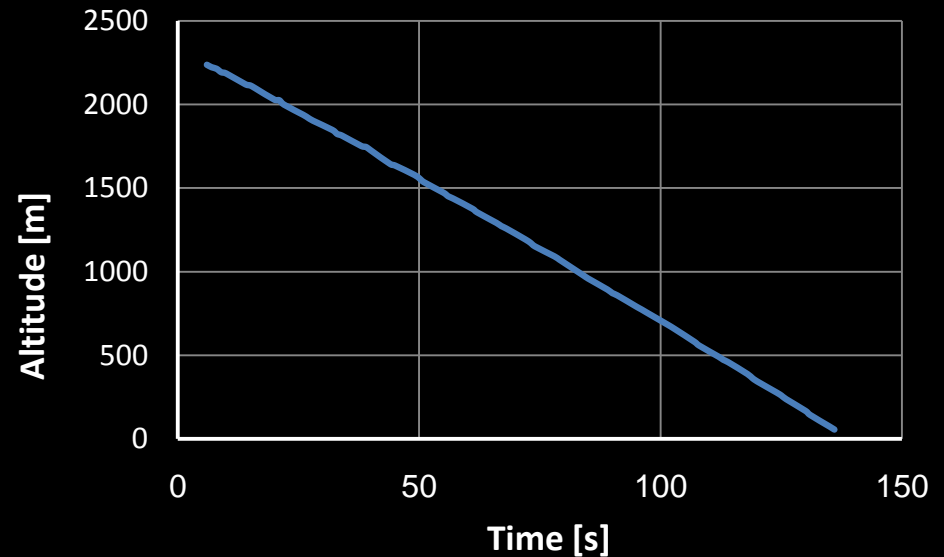
Richard's "Ameri-Can"
for our Cansat !!

Got altitude data, but failed to
get GPS data



Rover ↑

Cover and small
crater →



Special Thanks to

- Aero Pac
- Tokyo Tech
Matsunaga Lab.
- Keiou Univ.
Takahashi Lab. Wolve'z
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- Ph.D. Sakamoto



Thanks a lot!!