

ARLISS2012

Tequila Sunrise

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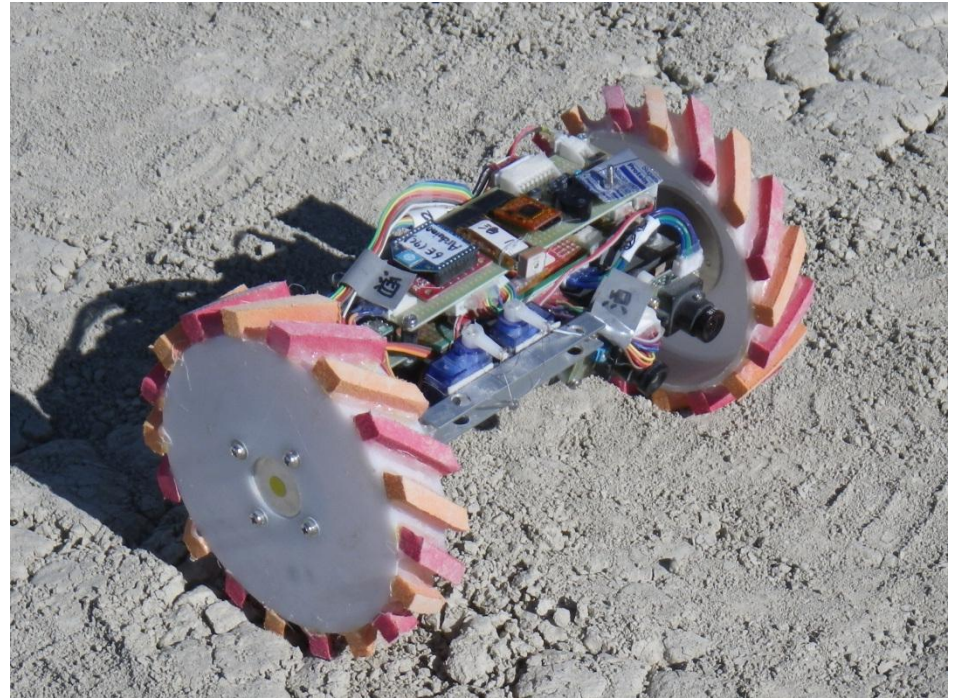
The University of Electro-Communications

2012/09/14

Our Rover's Design



Tequila Sunrise

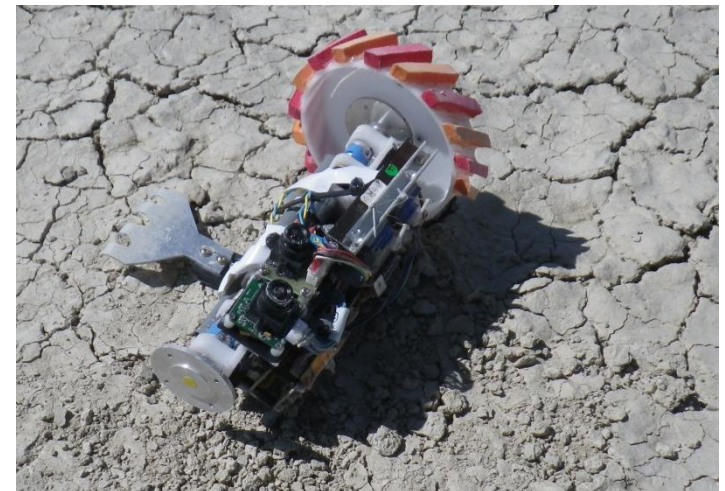


Tequila Sunrise Rover

Result : First Flight

Result	Free Fall
Control History	—
Flier	Mr. Jonathan

- Parachute is cut in the sky
 - From about 1500m height
 - Software problem



Result : Second flight (1)

Result	Goal 2.74m
Control History	○
Flier	Mr. Jonathan
Running Distance	2km



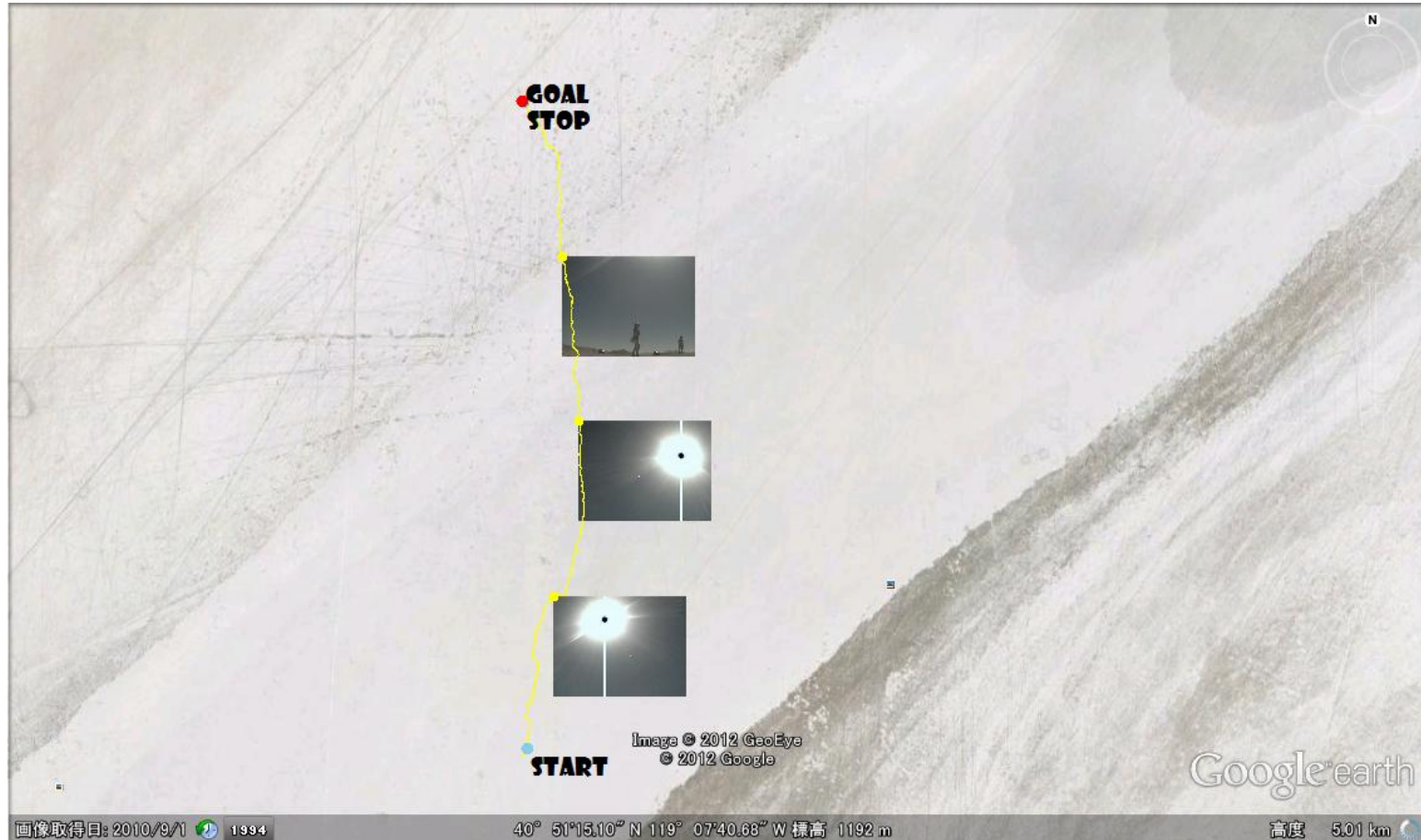
We love Mr. Jonathan!



Movie



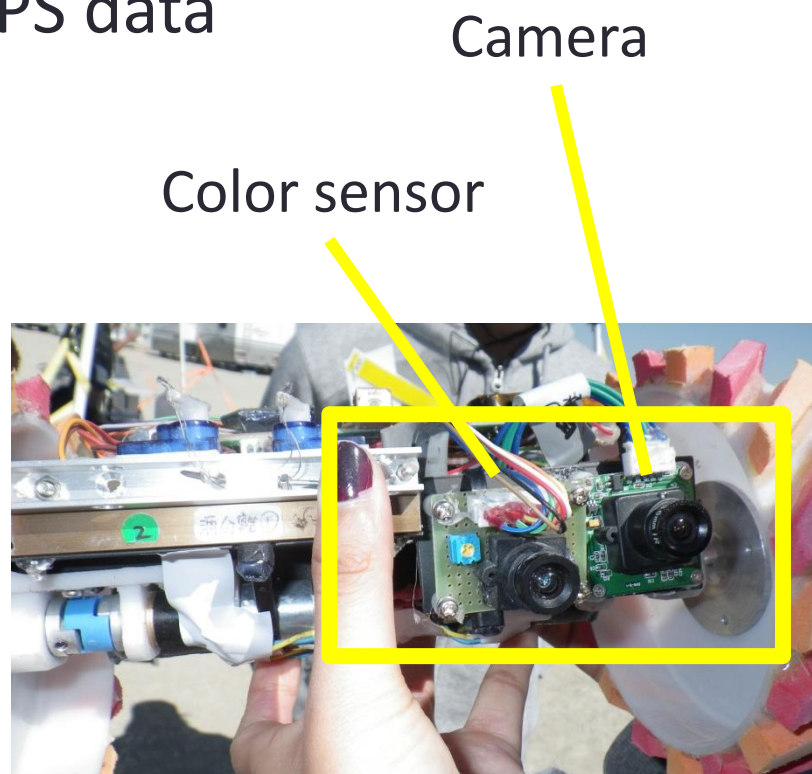
Result : Second Flight (2)



Mission Competition

- **Minimum : Camera mapping**
 - Taking pictures and mapping
 - By using JPEG-camera and GPS data

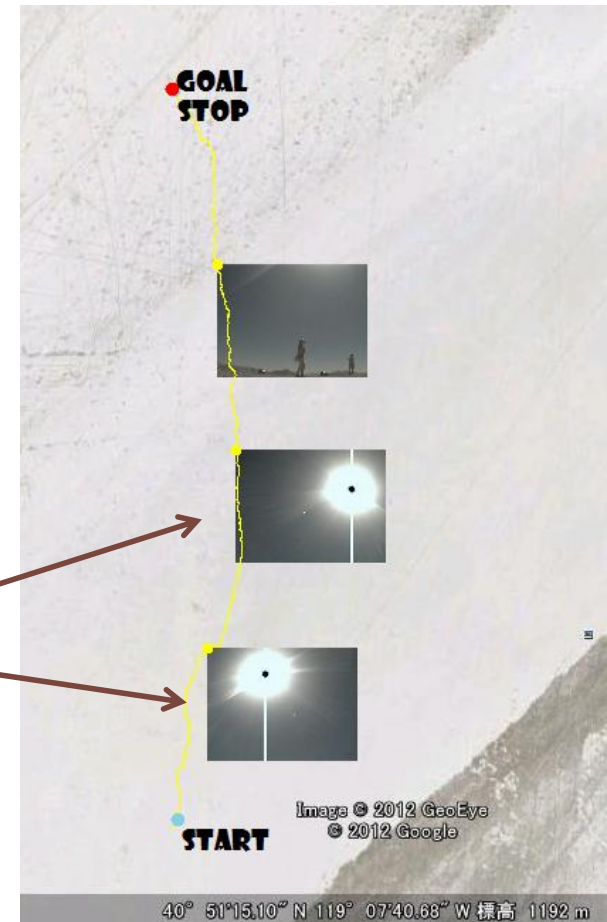
- **Full : Parachute detection**
 - Detection and avoiding when the landing.
 - By using color sensor



Result : Camera Mapping

- **Succeeded!!**
- Second flight
 - The rover takes 3 pictures with GPS data.

Rover fall over



Result : Parachute Detection

- **Succeeded!!**
- Second launch
 - Parachute is not front of the rover



Thank you
for your attention!

