

SEVA



ANDROID

Results of ARLISS 2012

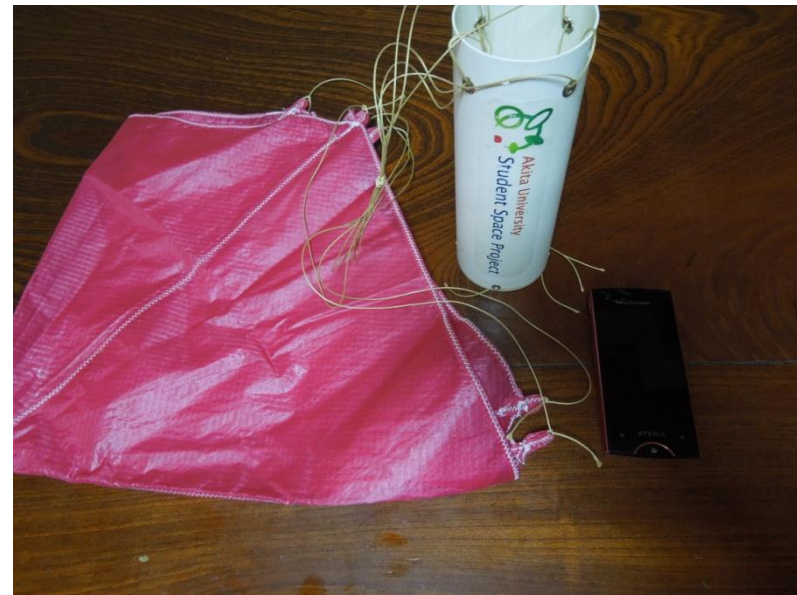
- ASSP / Akita Univ.
- ARLISS 2012 9-14 SEP, NEVADA



Introduction of our CanSat



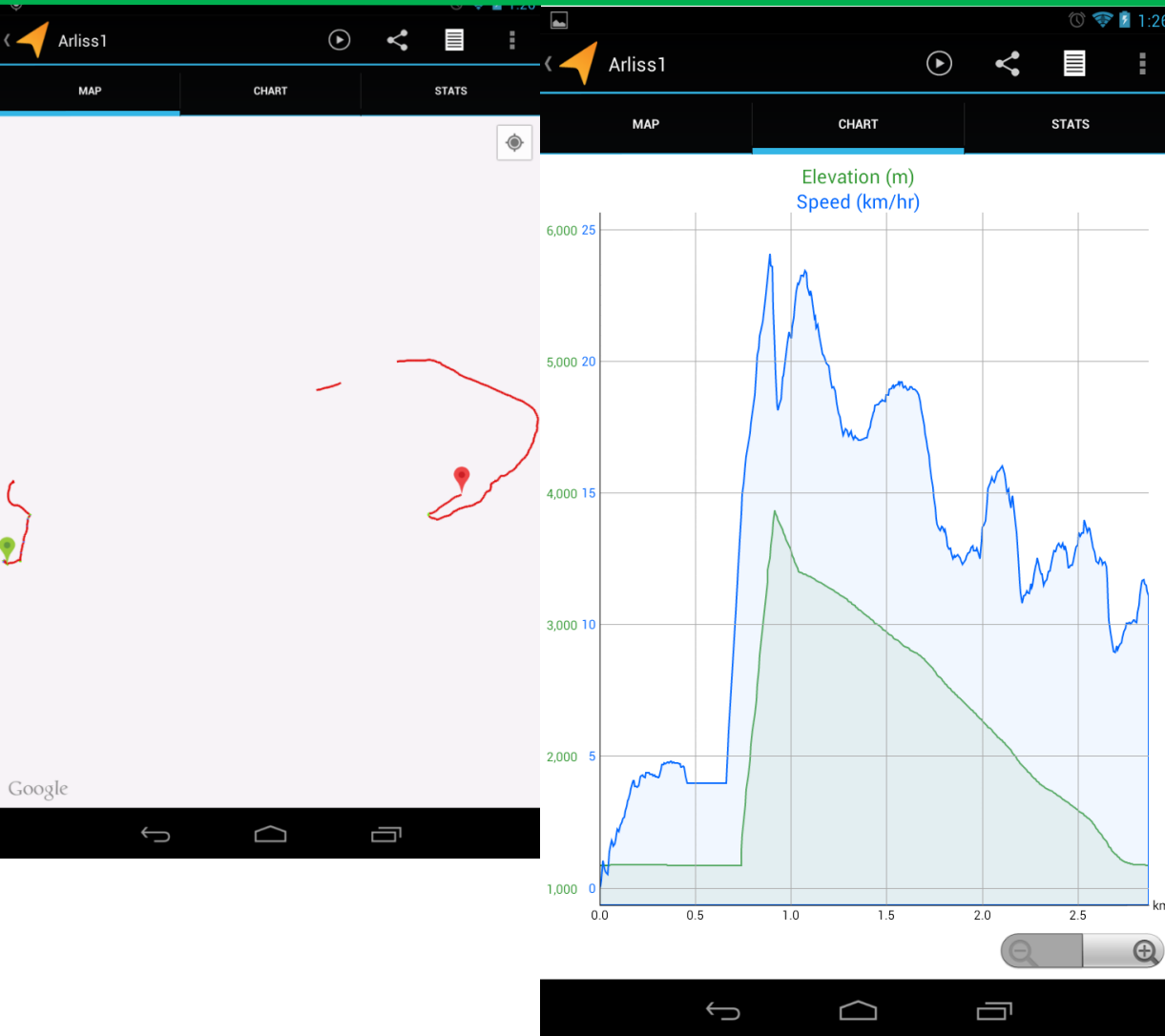
- The purpose of our CanSat is to get the flight data by Android smartphone
- This CanSat equip a parachute. Fall speed is assumed to be 4.5m/s
- Applications installed is based on the open-source project from Google





- Size : 120mm x 235mm
- Weight : 267g (1st flight)
370g(2nd flight)
- Body : GFRP (Glass Fiber Reinforced Plastics)
- Battery : Li-ion (3.7V, 1500mAh, 5.6Wh)

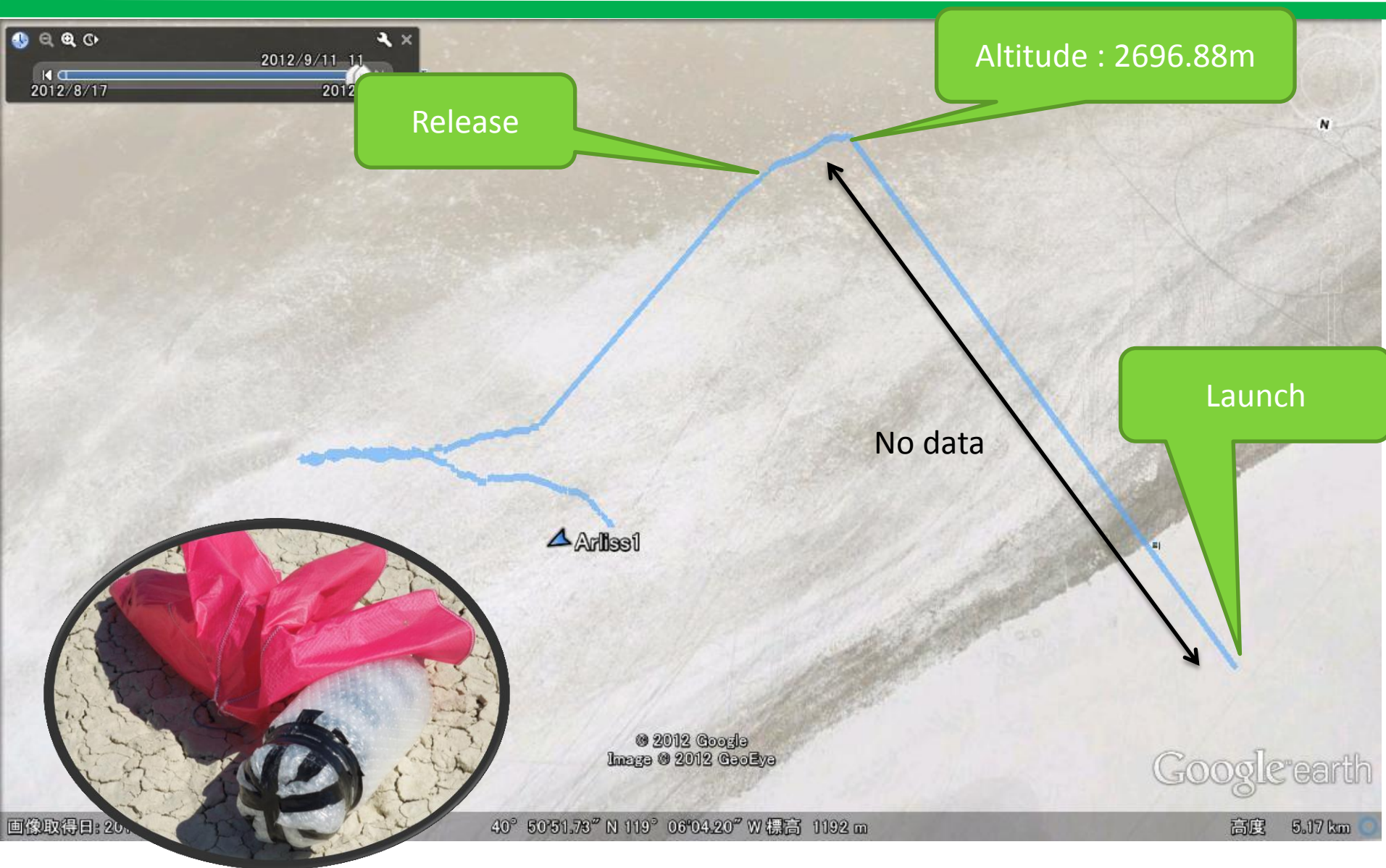
Result of 1st flight



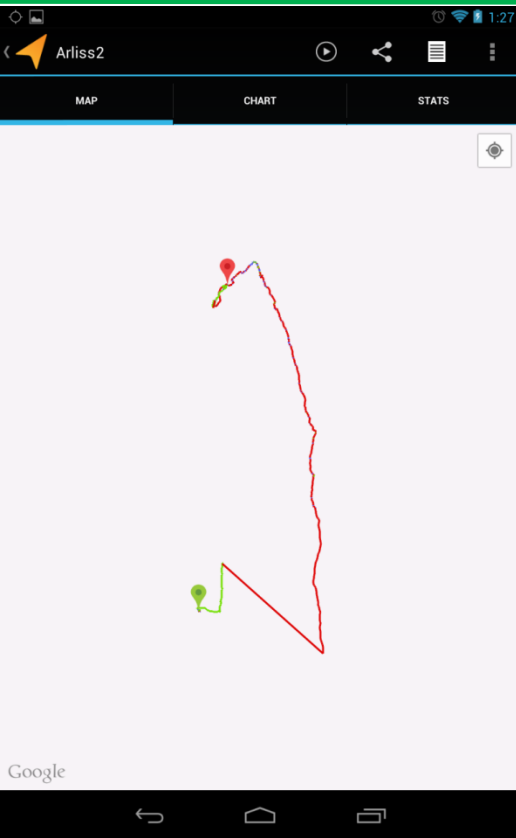
The screenshot shows the STATS tab of the cycling app, displaying various performance metrics for the flight. The metrics are organized into two columns.

Speed	-
Total distance	4.86 km
Total time	2:00:48
Average speed	2.42 km/h
Max speed	65.95 km/h
Elevation	-
Elevation gain	2696.88 m
Min elevation	1164.00 m
Max elevation	3865.44 m
Min grade	-191 %
Max grade	144 %
Latitude	-
Longitude	-

Result of 1st flight



Result of 2nd flight



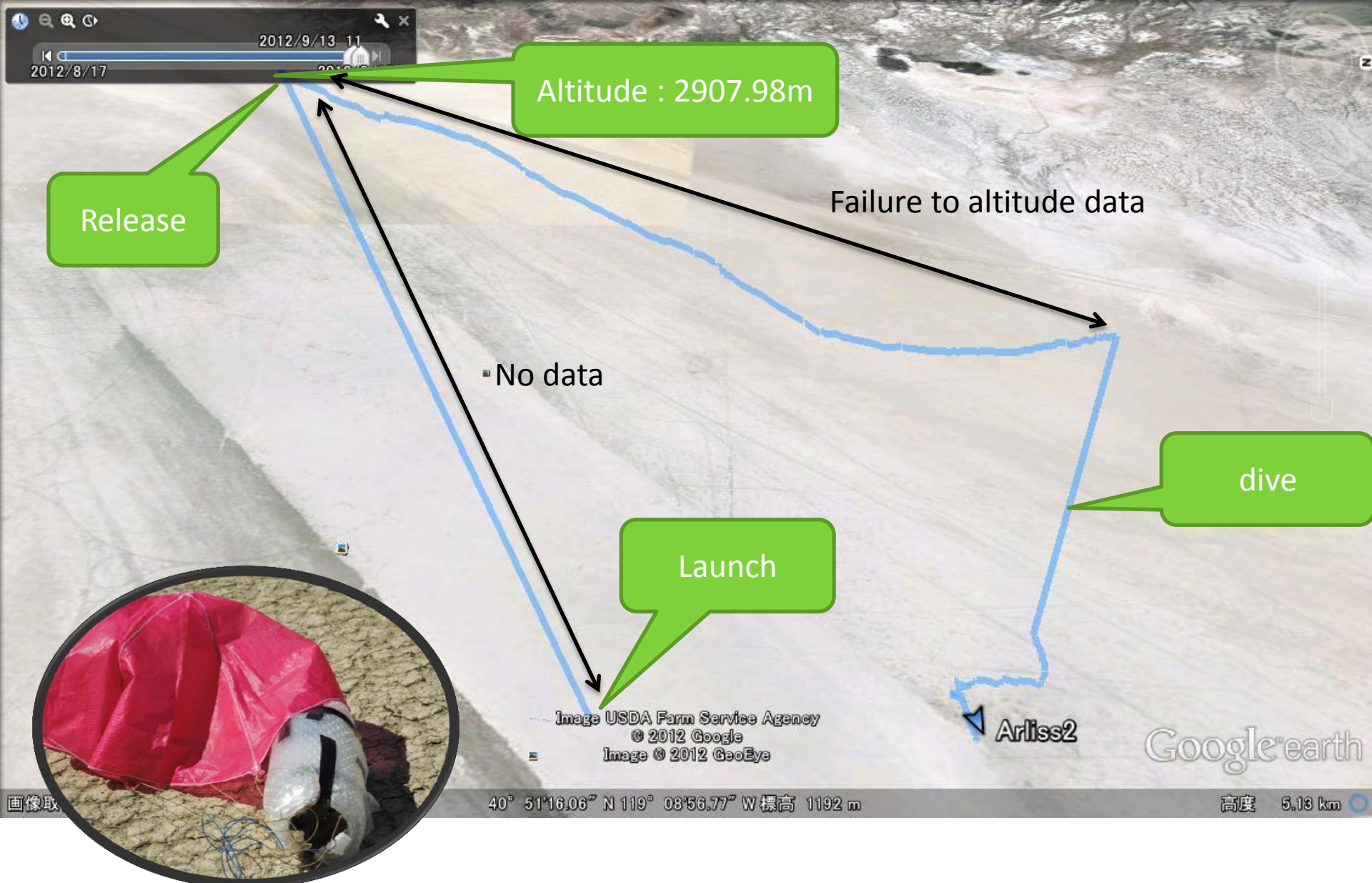
MAP

CHART

STATS

Speed	-
Total distance	4.50 km
Total time	2:18:14
Average speed	1.95 km/h
Max speed	72.53 km/h
Elevation	-
Elevation gain	2907.98 m
Min elevation	1167.96 m
Max elevation	4060.56 m
Min grade	-1075 %
Max grade	380 %
Latitude	-
Longitude	-

Result of 2nd flight



Result of 2nd flight (Fix failure to altitude data)



2012/9/13 11

© 2012 Google
Image USDA Farm Service Agency
Image © 2012 GeoEye
Image © 2012 TerraMetrics

Google earth

Arliss2

画像取得日: 2011/8/31

40° 51'20.21" N 119° 10'12.06" W 標高 1192 m

高度 4.26 km



- Acceleration and gyro data is being analyzed
- our mission achievement is 90% because it can be carried out to analyze the data on the Android smartphone
- For rocket launch speed, lack of acquisition rate of the sensor, which is mounted on the smartphone is an issue.



Thank you for launching

