

CLTP Presentation

2014 September 8th

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Introduction

* Education

- * 1992 ~ 1996 : Korea University, Bachelor degree for the control engineering
- * 1996 ~ 1998 : Korea University, Master degree for the electrical engineering
- * 2006 ~ 2009 : University of Tokyo, PhD of the engineering of Aeronautics and Astronautics

* Career

- * 1998 ~ 2005 : Hyundai Motor Group
- * 2009 ~ 2014 : Axelspace Corporation

What I did

(2006 ~ 2009)

- * CanSat program
 - * UAV of wing-body craft

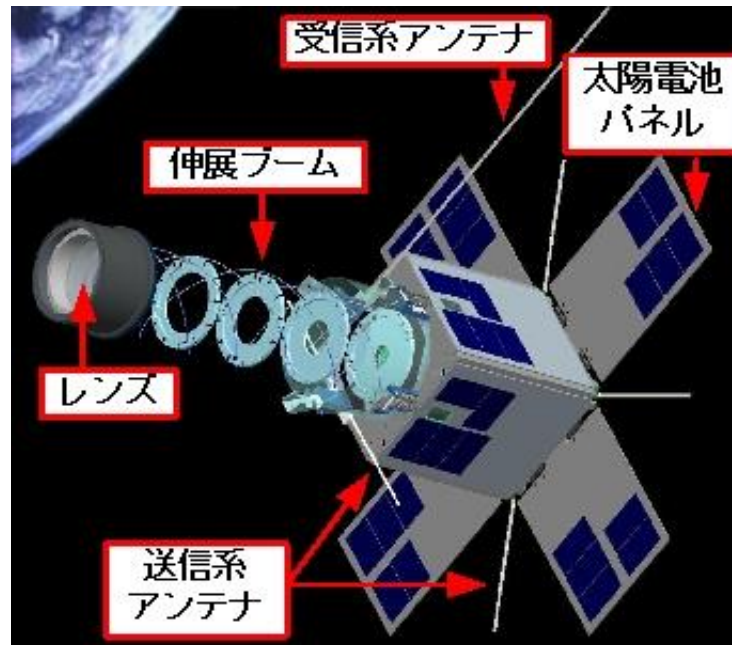


What I did

(2006 ~ 2009)

- * PRISM

- * NAC (Narrow Angle Camera) System
- * WAC (Wide Angle Camera) System

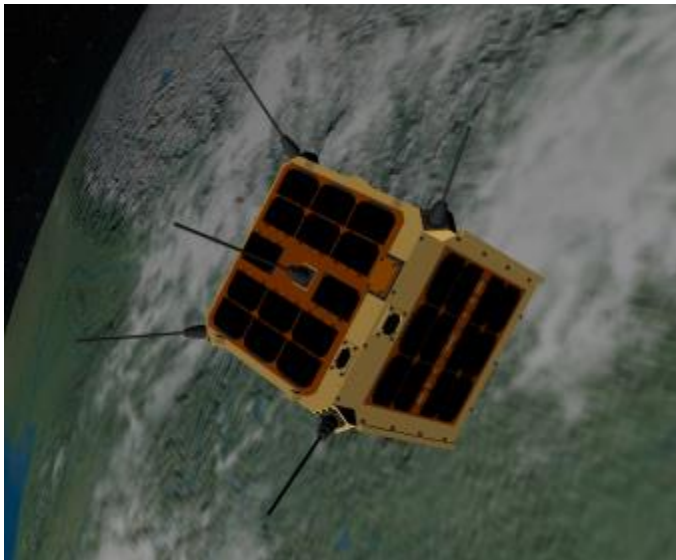


What I did

(2009 ~ 2014)

- * WNISAT-1

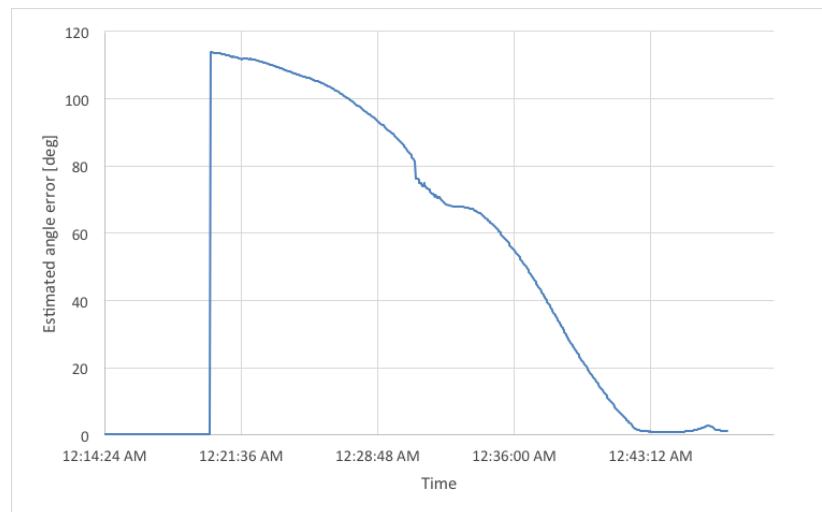
- * 10kg mass
- * Camera mission
- * Laser mission for CO₂ check
- * Launched at November/2013
- * Commissioning operation is over at July/2014



What I did

(2009 ~ 2014)

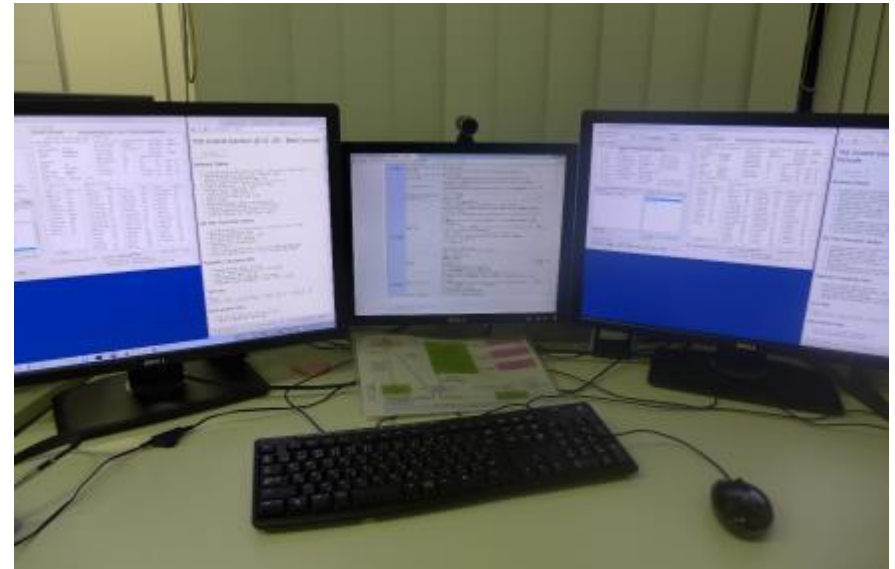
- * Attitude Determination and Control System
 - * Simulation on Matlab/Simulink
 - * Control structure and algorithm
 - * Coding on Linux using C++
 - * Success on 3 axes control (June/2014)



What I did

(2009 ~ 2014)

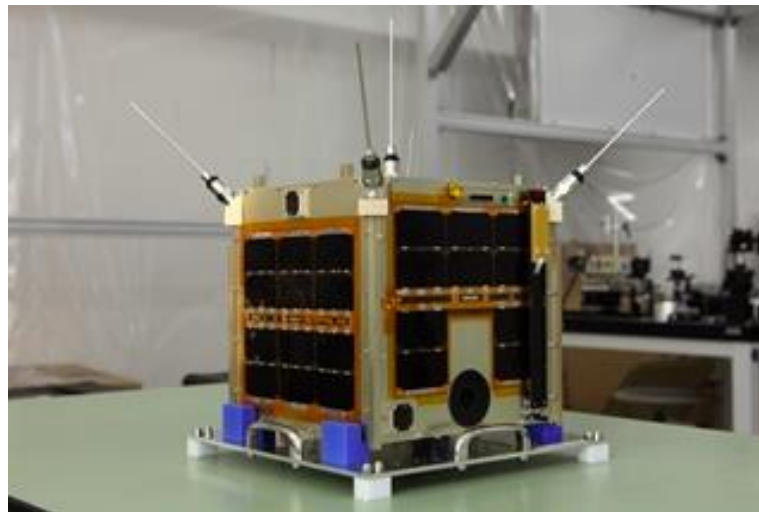
- * AIT(Assembly Integration and Test)
- * Main Operator (November/2013 ~ July/2014)



What I did

(2009 ~ 2014)

- * Magnetic device
 - * Magnetic sensor using magnetic resistor device
 - * Magnetic torquer
 - * Management of residual magnetic moment



What I did

(2009 ~ 2014)

- * Star sensor
 - * Star identification algorithm
 - * Assembly
 - * Environmental test / Night sky view test
 - * Optical calibration
 - * Alignment work



Expectation for CLTP5

- * Good chance for the general knowledge of the small satellite
- * Valuable event of CanSat Kit
- * Sharing experience with many people