

Joint Research of Student Rocket Launch with University of Alaska

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<http://www.ea.u-tokai.ac.jp/srp/>

We have worked collaborative researches for student rocket experiments together University of Alaska Fairbanks since 1995. The third student rocket SRP-5 was launched at the Poker Flat Research Range on January 10, 2009 in Alaska. The rocket was Orion solid motor that was provided by NASA and the apogee of the flight was 98.5km in altitude. All of the instruments, payload tube and nose-cone were designed and manufactured by students themselves. The acquisition data is very good and it is under analysis. We have constructed Ultra-Violet sensor for observation of the Arctic ozone layer, 3-axial fluxgate magnetometer for detection of currents in the lower ionosphere and a sun sensor for determination of the vehicle attitude.

We describe a summary of the rocket experiment, preliminary results and the meaning of an international cooperation for student-lead rocket project.