

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
ON TRACK - UNDERGRADUATE AND POSTGRADUATE SPACE EDUCATION (2)

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STATUS AND FUTURE PLANS FOR THE NORWEGIAN STUDENT SATELLITE PROGRAM,  
ANSAT

**Abstract**

This paper is about the Norwegian student satellite program, ANSAT and will focus on current status and future plans of the ANSAT program. Status of the ongoing satellite missions will be presented. Through the program there has been much student activity in terms of design reviews, workshops and conferences. The paper will also present how ANSAT and the participating institutions have been in collaboration with the Norwegian space industry, especially within technical guidance and support for the different satellite missions.

The program now has three participants. Narvik University College is building an imaging satellite, HiNCube. The University of Oslo is constructing a space weather satellite, CubeSTAR. In 2010, the Norwegian University of Science and Technology also joined the ANSAT program.

Norway's geographical location gives a unique opportunity and advantage for setting up ground stations for satellite communication. Kongsberg Satellite Services (KSAT) has the leading role of satellite communication through its ground stations in Tromsø and at Svalbard. Cooperating both with KSAT and ESA ESOC has made it possible to adapt this to the ANSAT program in terms of amateur ground stations built and operated at different locations in Norway. This paper will present the different ground stations, how they have been set up and operated by students.

It is a challenge to determine actually how long project period one institution need to design, build and make ready a student satellite for launch. This has shown to be a great challenge in the ANSAT program and has to be taken into account in future plans.