

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space Education and Outreach (8)

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SUPPORTING GERMAN REXUS STUDENT EXPERIMENTS TO NEW HEIGHTS ONBOARD  
SOUNDING ROCKETS**Abstract**

Within the framework of the REXUS/BEXUS programme (Rocket/Balloon Experiments for University Students) students at a university level, from all over Europe, are able to launch experiments on sounding rockets. For the last four years, German student experiments have been supported from DLR's REXUS/BEXUS Project Office in Bremen. This has led to the capability to support complicated experiments to successful flights onboard the REXUS rockets.

The programme is realized under a bilateral Agency Agreement between the German Aerospace Center (DLR) and the Swedish National Space Board (SNSB). The German share of the payload has been made available to students studying at German universities, the Swedish share to students from other European countries through collaboration with the European Space Agency (ESA). EuroLaunch, a cooperation between the Esrange Space Center of the Swedish Space Corporation (SSC) and the Mobile Rocket Base (MORABA) of DLR, is responsible for the campaign management and operations of the launch vehicles. Experts from DLR, SSC and ESA provide technical support to the student teams throughout their project cycles.

For the students, this means they not only can take part in the full programme and enjoy the educational benefits but also receive the support and information that results in experiments that are fully functional for flight and can bring back a wealth of data for analysis and all the benefits that come from this. For DLR, successful completion of the full project life-cycle by student teams can help to fulfil the objectives of the programme itself by increasing interest and awareness of space science and technology, particularly in the realms of sounding rockets and high altitude balloons.

The dedicated support from the team at DLR Bremen has led many experiment teams to fly experiments onboard REXUS, the most recent having been launched on REXUS 9 and 10 in February 2011 with great results. Through a combination of the REXUS manual, presentations, design reviews, progress reviews, testing, and campaign support, these experiment teams were provided with a wealth of information to support their efforts. As the programme progresses valuable lessons have been learnt and these have been evaluated and measures implemented to improve the assistance provided. The work that goes into supporting the students brings results not only for the experiments but also for the programme and those who contribute towards it.