Call for Ideas for research projects/experiments on rockets and balloons

Summary
The Swedish National Space Board (SNSB) invites researchers and industry in collaboration with researchers to submit their ideas for projects/experiments on sounding rockets and balloons. Deadline for the submission of the ideas is February 27, 2012.

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Background and Objectives

The Swedish National Space Board (SNSB) has been supporting rocket and balloon experiments, conducted by Swedish research groups and launched from Esrange Space Center for many years. Typically, these projects have been initiated within the framework of the annual call for research proposals in competition with all other space research projects. Several successful rocket and balloon experiments have been selected and conducted within the national space research programme during the past years, demonstrating the competitiveness of rockets and balloons as space platforms and high scientific quality of the projects.

SNSB is now investigating the possibility to extend national rocket and balloon activities by establishing a dedicated national rocket and balloon research programme, offering long-term continuity and more frequent launch opportunities to the research groups. Such a programme would also reflect the latest strategy of SNSB, emphasising the importance of Esrange Space Center as a unique Swedish infrastructure enabling access to space and research on rockets and balloons.

In order to investigate the need and objectives for such a programme, the Swedish National Space Board invites researchers to submit their ideas regarding science and science-related technology projects on sounding rockets and balloons.

Aim and Scope of the Call for Ideas

The aim of the call is to gather, evaluate and analyse the different ideas as a basis for future calls for proposals as well as in order to elaborate an adequate approach at SNSB, not least with respect to future budgetary needs for national rocket and balloon programme. At this stage, SNSB will not commit any funding to the ideas submitted, but will use these as an input for the matters above. For this reason, an active participation of Swedish science community and industry, with or without previous space experience, is appreciated.

The ideas are welcome within all fields of science, to be carried out on sounding rockets and balloons from Esrange. Examples of relevant research fields (not limited to) are atmospheric physics and chemistry, astrophysics, space physics, research in microgravity as well as technical research, technology developments, demonstrations and tests on rockets and balloons with a relevance to science and/or research projects.

The main target group of the call is the science community but we also invite Swedish industry, in collaboration with relevant research groups, to submit joint ideas on rocket and balloon experiments.

In order to facilitate active and broad participation of the science community and industry, a simple process for the submission of the ideas is foreseen according to the guidelines below.

The deadline for the submission of the ideas is February 27, 2012.

The ideas will then be analysed and evaluated by SNSB, jointly with relevant advisory bodies of SNSB.

Guidelines for the Call for Ideas for Rocket and Balloon Projects/Experiments

Each idea should be submitted as a single pdf file and sent by e-mail to Kristine Dannenberg, dannenberg@snsb.se no later than February 27, 2012.

The ideas should be described according to the following structure:

1. **Name of the PI**,
   including title, affiliation, address and contact details

2. **Name(s) of co-PI**, if any,
   including title, affiliation, address and contact details

3. **Complete list of the entities behind the idea**.
   For industry, it is mandatory to state scientific collaborators/contact persons at a relevant research establishment.

4. **Description of the idea** (max 2 pages), including
   - background,
   - science and/or technology objectives,
   - science and/or technology content of the experiment,
   - for technology proposals it is mandatory to explain scientific benefits of the experiment (e.g. need for the developments for specific experiment, research field etc).

5. **Technical details of the project/experiment and motivation of the need for balloon and rocket platform** (max 2 pages), including
   - explanation of need for rocket or/and balloon platform
   - estimated mass of the experiment, volume, power needs and environmental constraints etc.
   - requirements of the experiment with respect to platform, such as duration and altitude of the flight, specific technical needs (e.g. microgravity etc).

6. **Rough cost estimate (order of magnitude) of the project/experiment**, excluding costs for a rocket or balloon launch and campaign costs at Esrange, and **indicative**

time schedule (i.e. “estimated milestones” of the project from the start to final results).

7. **CV of the PI(s)** (max 1 page)

For any questions, contact Kristine Dannenberg, Dannenberg@snsb.se

Information about rockets and balloons and facilities at Esrange, can be found on the homepage of SSC, http://www.sscspace.com/products-services/rocket-balloon-services/launch-services-esc