

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
“Hands-On” Space Education (1)

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CROSS-NATIONAL MODEL ROCKET DAYS: AN INTERCULTURAL AND MULTIDISCIPLINARY
OUTREACH FOR SPACE EDUCATION

Abstract

The Community of Ariane Cities (CVA) is a non-profit association, with the aim of strengthening the cooperation among cities and industrial organizations involved in the Ariane space transportation programmes. To reach this goal the CVA primary tries to awaken young people’s awareness of space. It also wants to inform citizens about the social and economic advantages and impact of space activities as well as the importance of an independent access to space.

To plainly demonstrate technical and organisational aspects of space transportation to youngsters, the construction and launch of model rockets is a common tool in space education. Organisations, involved in the field of space education, e.g. the CVA or Planète Science, organise, on a regular basis, workshops in cooperation with schools offering model rocketry as an exiting activity for younger generations.

However, model rocketry had never been used as an approach to organise an international activity where participating cities in different countries interact and worked together in the launch of model rockets as a joined performance. The CVA used this approach successfully to promote space transportation.

As a part of the festivities organised to celebrate its 10th anniversary in 2008, the Community of Ariane Cities brought together all members in a virtual way through the launch of a total of 1000 model rockets by school children. The project involved the design, construction and launch of about 50 model rockets in each member city by pupils. They were coached by their teachers for the design and construction of the model rockets. Launch videos were shared on the Internet.

Additionally, an internet platform was created for the children allowing them to exchange their experiences during the construction process in a web chat and to interact interculturally with children in other cities and countries. The internet platform also included a forum where teachers were able to ask questions about model rocketry.

This paper presents the activities organised to celebrate the 10th anniversary celebration of the CVA and shows how model rocketry can be used to offer an innovative intercultural outreach in space education. We also report on encountered problems and countermeasures during the organisation process and go into detail concerning the safety issues and how this approach can be made as safe as possible for all participants.

Keywords: space education, model rocketry, space transportation, intercultural exchange