

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
New Worlds - Innovative Space Education and Outreach (7)

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THE SPATIOBUS, AN INNOVATIVE TOOL FOR OUTREACH AND EDUCATION: LESSONS
LEARNT AFTER FIRST YEARS OF OPERATION

Abstract

For several years, CNES has developed with Planète Sciences Midi-Pyrénées an original traveling tool designed for outreach activities and dissemination of space awareness to a wide audience: the Spatiobus.

Originally designed to provide technical support to passionate people building amateur experimental rockets and stratospheric balloons, the mission of this vehicle has gradually evolved to outreach actions and development of space awareness throughout France. CNES has appointed Planète Sciences Midi-Pyrénées as operator of the Spatiobus. The statement of work is straightforward: to reach as many young people as possible in the largest possible number of regions.

The main innovation relates to the itinerant character of the tool and the type and diversity of actions. Interventions are primarily addressing awareness raising, with animation tools suitable for short interventions in the classroom or outside school hours.

However, with its scalable contents, the Spatiobus may also ensure actions of longer duration, such as training sessions for teachers. It keeps going its initial mission by providing technical support to amateur clubs. Proposed contents focus not only on space infrastructure (launchers, satellites, exploration missions) but also on applications (Earth observation, meteorology, telecommunications, navigation and positioning). The public can also discover directly tangible applications of space in everyday life (meteorology, space telecommunications) from professional equipment directly integrated into the Spatiobus.

Taking benefits from figures and statistics, this paper presents an assessment of the results of actions performed by the Spatiobus, both from quantitative and qualitative point of view. Since its commissioning, the Spatiobus has reached almost 412,000 people (80000 participant- days). It provided the technical support during 278 balloons release campaigns and 355 launches of rockets. It travelled six times around the Earth, with nearly 240000 kilometers and operations in 62 French counties. This is an average of 15 counties visited annually for 16,500 annual kilometers.

Beyond the quantitative aspects, the paper analyzes the relevance and impact of the Spatiobus, in terms of diversity of the targeted public, efficiency of the dissemination of spatial culture and presentation of CNES activities. Thus, Spatiobus is one of the education tools developed by CNES and Planète Sciences Midi-Pyrénées that enabled the use of animation scenarios dealing with space applications and services for the daily life and societal challenges, while activities for youth rely more traditionally on activities using launchers and technologies (rockets and balloons).