SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
NEW WORLDS - INNOVATIVE SPACE EDUCATION AND OUTREACH (4)

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CANSAT FRANCE: AN INNOVATIVE COMPETITION TO ENCOURAGE WIDE ADOPTION AND PUBLIC AWARENESS

Abstract

Planète Sciences and CNES have been providing young amateurs with programmes, tools and facilities to design, build and launch experimental rockets. Amateurs thus enjoy a structured experimental process to guide them which also ensures a high level of security. However, the reach for space for young amateurs must not be restrained to rockets. Therefore, Planète Sciences and CNES have developed tools (weather balloons, thematic workshops) to highlight the space missions, especially those ensured by satellites and automatic probes. This evolution led to the adoption of CanSat as one of these tools. CanSat competitions are organized in a number of countries; although organizers are facing various difficulties with the technical level of the design, the selection of a launch facility or with the recovery of the modules. For that reason, and leveraging the experience gained with rockets, Planète Sciences and CNES have chosen to release CanSats from a Balloon rather than from a Rocket. This comes along with a number of benefits and synergies with the other activities proposed by Planète Sciences: • Limited mechanical constraints leading to the adoption of CanSat by groups with a nontechnical background, • Focus on the CanSat experiment rather than on the vector, • Ease of recovery • Technical support and guidelines for project development • Interaction with traditional space clubs who develop Experimental Rockets or Weather Balloon projects: knowledge transfer, collaborations for future projects Moreover, the reduced set-up and security constraints enable the competition to be held in a public place rather than a military facility (for safety purpose) with a restricted audience. CanSat France is opened to international teams. The pilot Competition was held in 2008 followed by the first edition in 2009. 2010 is the France-Russia year: two teams from Siberia will join CanSat France and the winning team of the Spanish competition will be invited to compete. The growing number of contestants opens opportunities for wider development and awareness of Space outreach to extended publics. The paper will discuss how CanSat France offers the integration of the CanSat spirit with proven design and setup methods developed by Planète Sciences/CNES. It will review the details of the differences with other CanSat competitions. We will also explain how these differences benefit to a wider adoption and awareness to Space, which will lead to the involvement of additional partners for the establishment of a major International Competition in France in 2011.