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SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

New Worlds - Innovative Space Education And Outreach (5)

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SCIFEST AFRICA AND THE FRENCH SPACE LABORATORY: 10 YEARS OF SPACE-RELATED OUTREACH IN SOUTH AFRICA

Abstract

The Embassy of France in South Africa has supported the promotion of science and technology at Scifest Africa, South Africa's annual National Science Festival held in Grahamstown, Eastern Cape, since 2001. The workshops presented by French volunteers mostly address space-related topics, and through the years, the contents of workshops have evolved to meet the ever-growing interest of those in attendance in space. The French workshops have become a laboratory for the development of original activities and best practice in partnerships with organisations in South Africa.

The following activities and topics have been customised for the South African context, and are inspired by best practice developed in France, with support from CNES:

- 3 hours to build and launch rockets to step into space, 3 hours to learn more about satellites: their missions, their applications, challenging their results,
- 1 hour to experience the engineering or control of satellites,
- 3 hours per day, over five days, to prepare experiments launched with a weather balloon to explore the space above us,
- 3 hours to build a walking robot to achieve a specific mission, such as for planet exploration

These are some of the challenges of the hands-on activities and exhibitions met by more than 2 300 young South Africans, in parallel to the challenges South Africa is facing to develop its own space activities.

This paper will discuss the opportunities offered by Scifest Africa and the recipe for successful science and space awareness in South Africa. It will explain the original motivations of the French presence in South African education, before giving an overview of the workshops contents and the local constraints. We will then detail collaboration with the national Weather Service or Satellite Application Center as an important part of the development of localised activities. Lastly, we will discuss training activities initiated to develop and establish workshop contents for the South African context, and train science centre facilitators, educators and parents in the presentation of the workshops, so that the young South African generation may benefit throughout the year.