

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
International Cooperation in Earth Observations (1)

Author: Ms. Kaitlyn Holm  
University of Pennsylvania, United States, kait.holm@gmail.com

DEVELOPMENT OF ONGOING COLLABORATIVE OPPORTUNITIES SURROUNDING EARTH  
OBSERVATION DATA IN AFRICA AND THE MIDDLE EAST

**Abstract**

The availability and use of space data is a growing opportunity to help new countries become more savvy with the technologies and outcomes of space exploration. The products of these Earth observation systems include the open data that is made available. The authors have created a unique training program to provide access to and the use of open space data from these missions in developing countries in Africa and the Middle East. Seven national events, global training sessions, African continental conferences, and national hackathons were created in Uganda, Ghana, Sierra Leone, Tanzania, Kenya, South Africa, and the United Arab Emirates.

More than 4000 people have been trained through these programs and hundreds of projects have been created in the hackathons, many of which use open space data. These projects using satellite data range from topics on improving agriculture, fighting corruption, reducing poverty, and mitigating the impact of climate change. Partnerships with local universities, the national government, and tech companies and startups are crucial to ensuring the success of these events, and the ability for the young people who are trained to find employment or start their ventures.

This paper identifies the most useful type of open space data and effective training methods, particularly in looking at the global south, developing countries, and new entrants to the aerospace field. By developing the global use of Earth observation data, better requirements for new missions and international collaboration on future missions can be guaranteed.