

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
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KIBO HI-VISION EARTHVIEW EDUCATIONAL SYSTEM DEVELOPMENT

Abstract

"KIBO Hi-Vision EarthView" is a JSF lead Educational System enabling students, teachers, and the public to receive "live" high definition television (Hi-Vision) images from KIBO, nick name of Japanese Experimental Module of International Space Station (ISS). We expect that Hi-Vision images will be distributed to young generations of not only Japan but also any other countries, especially Asia and US. KIBO module was completed to assemble on ISS in 2009. Our system development is cooperated with Japan Aerospace exploration Agency (JAXA) that planes to launch and install 2 sets of Hi-Vision camera on KIBO's exposed facility in summer 2012. High school or Junior High school students request us to take live images of specific locations around the world. Based on such requests from schools, we take Hi-Vision images from KIBO and send them to requested-school at real time. Concept of this system comes from ISS EarthKAM, a NASA educational system, which is managed and operated by the team of University of California at San Diego under direction of Professor Sally Ride who is a first American woman astronaut. She initiated original project called KidSat in 1995, in which KidSat's camera was flew on three space shuttle flights. In 1998, they renamed this to ISS EarthKAM. Both system uses electronic-still-camera. NASA and JSF basically agreed working together once KIBO Hi-Vision EarthView will be operational. The live Hi-Vision image viewing and accompanying learning guides are fantastic resources to study global environmental problems, natural disasters, Earth and space science, geography, geology, social study, culture, communications, and so on. We also would like to expand this program to Asian-Pacific region countries by using the framework of APRSAF (Asian Pacific Region Space Agency Forum). In December 2011, we had 18th APRSAF meeting at Singapore, and presented our program for asking participation and support from each country, because it is obvious that we are facing difficulties of local languages in Asian countries. That is why we need strong support by each space agency. Our project was started from December 2009 with project fund from the Ministry of Education, Culture, Sports, Science and Technology and we will complete system development by the end of March 2012. Last IAC meeting in Cape Town, we introduced outlines of system. In this presentation, we would like to introduce updated progress of our development activities.