

Remote Sensing Educational Ground Receiving System for interest creation in space science and technology in education.

ABSTRACT

The Remote Sensing Educational Ground Receiving System or the EGRS is a system proposed in creating interest in innovation and scientific environment in space science and technology. EGRS is an Automated Picture Transmission (APT) system which is capable to receive imagery data from the National Oceanic and Atmospheric Administration (NOAA) weather satellite. It can be used as an early part of introducing and understanding remote sensing and also as value added products (VAPs) in education. This effort will help to create awareness in school about the earth and its environment by introducing real time observation of climatic changes from space and to practically relate to the real happening on the ground. In order to create interest in innovation and scientific environment at school level besides providing an affordable system, the gizmo in kits form will be introduced to provide hands-on for teachers and students to set up part of the receiving system. The design of the system is based on the three levels of the system: signal acquisition, conversion and processing. As VAPs, the system is hopeful to complement the existing syllabus and school subjects. Teachers will be provided with remote sensing training and guides to: install and operate the system, teach remote sensing and use the data for applications. In order to assess the effectiveness of the system in creating interest, a pilot study is proposed by having the system installed at selected schools and impact study will be carried out. Finally, the educational system will pave the way for school children to understand the importance of remote sensing and the imaging satellite program of the nation such as the RazakSAT. Thus, by introducing the system, we are creating the future beneficiaries of remote sensing data and ensuring data exploitation to enable sustainability and success in space related technologies and also for future remote sensing satellite program.

Keyword: Information systems; Automated Picture Transmission; Remote sensing; Space related technologies.