EarthKAM: Engaging Middle Schools in Earth Science through Interactive Earth Observation

Tim Klug, Tyler Finley, Earth System Science, UAH

Overview
EarthKAM is an educational outreach program where middle school students can submit requests of image targets to the International Space Station. An automated digital camera captures the targets and uploads them to an online image gallery. The pictures can then be used to produce educational modules to help engage students in STEM research.

Impact
Since its inception in 1995, the EarthKAM program has produced Earth Observations for over 900 schools around the globe. Participating students have gained valuable knowledge of Earth and space science, geography, mathematics, and communications. Originally managed by UCSD, the project has now been moved to the US Space and Rocket Center in conjunction with UAH, where integration with Space Camp will provide even more opportunities for STEM engagement.

Research Explanation
• UAH undergraduate education through research internships (Mission Operations Center)
• Middle school engagement through US Space and Rocket Center network
• Curriculum development using innovative Earth science case studies
• ISS utilization and outreach

Acknowledgements
Dr. Robert Griffin – Department of Atmospheric Science
Angela Burke – Department of Atmospheric Science
UAH Information Technology and Systems Center
Office of the Vice President for Research and Economic Development