

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations (IP)

Author: Mr. Sachin Bahmba
India

Dr. Patralekha Mitra
India

ASTRONOMY OUTREACH TO STUDENTS AND THE PUBLIC TO PROMOTE SCIENTIFIC
TEMPER IN INDIA

Abstract

Astronomy is a science that touches our daily lives and appeals across all ages and across all societies. SPACE India has been using Astronomy outreach in a two pronged effort to target two demographics –the students and the public, for more than a decade. These programmes connect with the masses and promote scientific temperament and connect with students to foster interest in science. This is especially important in India where society is guided by superstitions and myths, in an effort to promote rational thinking. In our quest to do so, SPACE India have launched a variety of outreach programmes.

SPACE India have been conducting Public Outreach programmes over many years at locations across India, to showcase the sky and using it as a tool to demonstrate the scientific reasoning behind phenomena. Using celestial occurrences such as eclipses and transits as nature's classroom, SPACE India has organised mass observations at multiple locations involving huge populace. We have also launched the country's first eclipse viewing flight and eclipse cruise. Celestial observations as well as science activities and astronomy fairs are also conducted regularly in popular locations to attract the community. 'Graham' – to observe the Total Solar Eclipse, 'Project Khoj' to measure the IST line and 'Vamana Project' during Venus Transit are some prominent Outreach programmes conducted in the past, which have involved huge numbers and created an impact.

More organised technical projects form the core of outreach in education, to promote an interest in STEM in students. Such programmes have the educational goal of providing a unique platform to students to build advanced science skills as well as soft skills such as leadership, communication and teamwork. Students get the opportunity to participate in national and international platforms. It provides a great opportunity to learn from the experts and interact with peers. Prominent Outreach Educational projects that have been conducted by SPACE India in a large number of schools include All India Asteroid Search Campaign where students have discovered more than 50 asteroids; Project Paridhi where students replicate Eratosthenes Experiment to determine the circumference of the Earth using shadow measurements and ISS EarthKAM where students image the Earth using a camera onboard the International Space Station.

Prominent outreach programmes will be highlighted along with their reach, their achievements and learning outcomes.