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FOREWORD

India's space science program had its humble beginning in 60s with the balloon experiments and the sounding rocket program at Thumba. Following the launch of India's first satellite Aryabhata, piggyback experiments like X-ray payloads, the Gamma Ray Burst experiment on Stretched Rohini Satellite series and Indian X-ray Astronomy Experiment onboard IRS P3 were carried out by India. This later paved the way for an astronomy mission, AstroSat, a multi-wavelength observatory class satellite capable of simultaneous observations in broad energy band from near UV to hard X-rays. AstroSat has five scientific payloads. Four of the payloads were designed and developed by multiple research institutes from India in collaboration with ISRO centers.



AstroSat was successfully placed into a low earth orbit and a low inclination angle of 6 degree by PSLV C30 rocket on 28th September, 2015. The satellite completed its designed life of five years in September 2020 and continues to work satisfactorily.

AstroSat in addition to its simultaneous multi-wavelength observation ability has other unique capabilities like the highest angular resolution in UV over a large field of view, largest collection area in medium energy X-rays, X-ray polarisation measurement capacity for bright sources, etc. to name a few. With these unique capabilities, AstroSat has produced several interesting results.

AstroSat is operated as a proposal based observatory. It is currently serving around 1500 registered users from all around the globe and has completed five years in orbit. The mission is still operational and is expected to address new scientific investigations and provide many more results with high science impact. The archival data from AstroSat will be serving the astronomy community for many decades.

It gives me immense pleasure, to note that the *Journal of Astrophysics & Astronomy* by the Indian Academy of Sciences is bringing out a special issue highlighting the results from AstroSat, mission operations and onboard performance of different payloads on the occasion of AstroSat completing five years of its operation.

An important legacy of AstroSat will be its role in bringing together scientists and engineers from many academic institution and ISRO centers towards the successful realization of a complex science mission. It is my sincere wish that we will build upon this success, towards future collaborative programs in Space Science.

Dated: March 17, 2021

डॉ. कै. शिवन
17/3/2021
(कै. शिवन / K. Sivan)