



Preface

Space science in India had its inception with balloon and rocket-borne experiments. This led to the first science experiments on the very first Indian satellite Aryabhata. With the advent of Indian launch vehicles, scientists in India made use of the opportunities of the Stretched Rohini Series of Satellites (SROSS) to fly the Gamma Ray Burst (GRB) and the Retarded Potential Analyser experiments. This was followed by the Indian X-ray Astronomy Experiment (IXAE) onboard the IRS-P3 satellite which is the first Indian satellite to inertially point to several X-ray emitting sources in the sky. This led to the conceptualization of a dedicated astronomy satellite, which is realized in the form of the astronomy satellite – AstroSat. This is the first Indian satellite to be operated as a space observatory.

It gives me great pleasure to note that *Journal of Astrophysics and Astronomy* is bringing out a Special Section of AstroSat giving details of the different payloads, their initial performance, and mission operations.

AstroSat has to its credit several indigenous developments like UV optics, X-ray optics, high pressure large proportional counters, position sensitive detectors and solid state high energy detectors.

AstroSat is also one of the missions where the complex experiments (payloads) have been designed, developed and integrated with the active participation of institutes outside ISRO in conjunction with ISRO centres.

It is also heartening to note that the accuracies achieved by these instruments are very close to the predicted values. This Special Section provides the reader a glimpse of how the project evolved, the initial performance of various payloads and how the mission operations are conducted.

AstroSat has successfully completed one and a half years in orbit and is expecting many more results of scientific impact in the years to come.

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