•Editorial•

Special Topic: China's First X-ray Astronomy Satellite *Insight-HXMT*

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Editorial

This special topic on *Insight-HXMT*, composed of four articles, aims to help the current and potential users of *Insight-HXMT* to better understand its instrumentation, observational modes, performance, and data products. The first article [1] gives a general mission overview of *Insight-HXMT*, including a brief description of *Insight-HXMT* history and its payload, the core scientific problems, ground calibration/facility, ground segment, data archive, software, in-orbit performance, calibration, background model, observations and some early scientific results. The next three articles are focused on the detailed descriptions on the design and performance of the three X-ray telescopes onboard, namely, the High Energy (HE: 20-250 keV for pointed observations and 200-3000 keV for all-sky monitoring) X-ray telescope [2], the Medium Energy (ME: 5-30 keV) X-ray telescope [3], and the Low Energy (LE: 1-15 keV) X-ray telescope [4].

China's first X-ray astronomy satellite, *Insight-HXMT* was successfully launched on June 15, 2017. Also serving as China's first space observatory, *Insight-HXMT* has its observational targets (celestial X-ray sources) and times evaluated and scheduled by a review panel, and its observational data released first to its users of the proposed observations and then to the whole scientific community, in line with the data policy of *Insight-HXMT*. Since X-ray astronomy has entered into its maturity and is capable of addressing a variety of scientific problems, space X-ray telescopes are currently in common use, similar to the ground-based optical and radio telescopes. To obtain unique data as well as complementary information to other X-ray telescopes, it is important to optimize the observational program of *Insight-HXMT*. Thanks to the unique characteristics of *Insight-HXMT*, some interesting results have been obtained.

Insight-HXMT has been working well in orbit since its launch. Though its nominal mission lifetime is four years, it is anticipated to operate for several more years, since there is no consumable needed to operate the scientific instruments and there is an abundant gas reserve for maintaining its orbit. We therefore look forward to a productive X-ray astronomy mission of *Insight-HXMT* for many more years to come. Readers are referred to the official website of *Insight-HXMT* (hxmt.org) for news, scientific results and updates.

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