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The Hitomi X-ray Observatory

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The Hitomi X-ray Observatory was launched on 17 February 2016. It carried four new-generation x-ray instruments—the Soft X-ray Spectrometer (SXS), the Soft X-ray Imager (SXI), the Hard X-ray Imager (HXI), and the Soft Gamma-ray Detector (SGD). The SXS, SXI, and HXI imagers included high throughput focusing x-ray optics. All four instruments were turned on and were in the process of activation at the time of loss of contact on 26 March 2016. Initial results demonstrated that the instruments were meeting or exceeding

requirements and that Hitomi was on its way to pioneering a new era of broad-band and high-resolution x-ray spectroscopy. The results published herein summarize the in-flight instrument performance, calibration, and data processing accomplishments of the observatory. Initial scientific results have been published elsewhere. Among the papers submitted to this special section, 17 are presented here as Part 1. The remaining papers are scheduled to be presented as Part 2 in the April-June 2018 issue.

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