High energy astronomy missions in Japan - from Suzaku to NeXT towards high resolution and a wide energy band

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High resolution X-ray spectroscopy and high-sensitivity wide-band imaging spectroscopy are expected to provide new insights in study of high energy universe. The Suzaku mission, launched on July 10, 2005, carries five X-ray mirrors, an X-ray microcalorimeter array (XRS), four X-ray CCD camera, and a hard X-ray detector. The XRS and its accompanying X-ray telescope was supposed to provide high energy resolution spectroscopy of FWHM $<$ 10 eV in 0.3 to 10 keV energy band. However, the functionality was lost about a month after the launch due to failure in the cryogenic system. The remaining instruments provide a high-sensitivity wide band (0.3 - 700 keV) spectroscopy. Low background, hence high sensitivity, and good energy resolution have been confirmed in orbit. In order to recover the science lost due to the XRS failure, and in order to extend the science with wide-band spectroscopy, we proposed the NeXT (New X-ray Telescope) mission to launch in early 2010's. NeXT aims at wide-band imaging spectroscopy and high resolution spectroscopy utilizing supermirror technology and microcalorimeter, respectively. We will present the scientific objectives of NeXT in relation to the latest Suzaku results, and the present design of NeXT.