J39a Suzaku observation of an anomalaous X-ray pulsar CXO J164710.2–455216

○ Sachindra Naik, T. Dotani (ISAS/JAXA), N. Kawai (Tokyo Inst. Tech.), Y. Terada, T. Mihara (Riken), M. Kokubun (ISAS/JAXA), M. Morii (Rikkyo Univ), A. Yoshida, Y. Nakagawa (Aoyama Univ), T. Murakami (Kanazawa Univ)

Suzaku TOO observation of the anomalous X-ray pulsar CXO J164710.2-455216 was performed on 2006 September 21 for a net exposure of 38.8 ks. During the observation, the XIS was operated in 1/8 window option to achieve a time resolution of 1 second. Pulsations are clearly detected in the XIS light curves with a barycenter corrected pulse period of 10.61063(1) s. The XIS pulse profile is found to be highly non-sinusoidal. It shows 3 peaks of different amplitudes with pulse fraction of $\sim$ 20% in 0.2-12 keV energy band. Though thesource is detected in the Hard X-ray Detectors (HXD) of Suzaku, the data is highly contaminated by the nearby bright X-ray source GX340+0 which was in the HXD field of view. The 0.2–10.0 keV XIS spectra are well fitted by a model consisting of a power-law component with photon index of $\sim$ 3.0 and a blackbody component of $kT = 0.66$ keV with an absorption column density of 2.5×10^{22} atoms cm^{-2}. The source flux in 0.5–10.0keV energy range is estimated to be 1.9×10^{-11} ergs cm^{-2} s^{-1} with almost equal contribution from the blackbody and power-lawcomponents. The details of the results obtained from the timing and spectral analysis will be presented.