ASCA X-RAY OBSERVATIONS OF TWO CONTACT BINARIES: SW LACERTAE AND W URSAE MAJORS

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We present X-ray light curves and the energy spectra obtained from the ASCA observations of the contact binaries, SW Lac and W UMa. We find that both the sources show appreciable flux variations during the observations. The variations are erratic and show no orbital phase dependence. From a spectral analysis, we also find that the W UMa spectrum is reproduced by a variable-abundance plasma model having a single temperature of $T_1 = 6.8 \text{ x}$ 10^6 K , while the SW Lac spectrum requires two different temperatures, $T_1 = 6.5 \text{ x} \cdot 10^6 \text{ K}$ and $T_2 = 1.4 \text{ x} \cdot 10^7 \text{ K}$, to be fitted acceptably.