

DETECTION OF SUPERHUMPS DURING THE OUTBURST OF BC UMA

CHATIEF KUNJAYA

Bosscha Observatory, Indonesia

AND

TAICHI KATO AND RYUKO HIRATA

Kyoto University, Japan

BC UMa was observed during its rare outburst in 1994. The superhumps with period 0.0619 day are clearly apparent, accompanied by secondary superhumps. This confirms the classification of BC UMa as an SU UMa type dwarf nova. The maximum brightness is 12.5 mag, which is about six magnitude brighter than quiescence phase, and it makes BC UMa be classified as a TOAD (Tremendous Outburst Amplitude Dwarf-nova). The superoutburst's magnitude was fainter than the preceding normal outburst in September 1990. This faint superoutburst is uncommon among SU UMa stars and also among TOADs. The period analysis of the lightcurve taken after the end of the outburst yields the period of 0.0618 day which shows that late superhumps is in operation.