

# SOME STATISTICS OF SOUTHERN R CORONAE BOREALIS VARIABLES

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**Abstract.** *UBV* observations of RCB stars with  $\delta \leq 30^\circ$  were made at La Silla, Chile in the summer of 1972. Of 26 stars, 5 were below maximum brightness, including R CrB and RY Sgr. On the basis of a comparison of the dispersion in observations of the RCB stars and nearby non-variable comparison stars, 9 RCB stars were found to show significant variation at maximum brightness. They are W Men, UX Ant, UW Cen, DY Cen, AE Cir, S Aps, RT Nor, RZ Nor, and V CrA. The amplitude of these variations ranges from  $0^m2$  to  $0^m4$  and tentative periods from 19 to 54 days and  $>90$  days for S Aps. Similar variations at maximum are already known for R CrB, RY Sgr and XX Cam. Of the 5 stars which showed no significant variation at maximum, DZ And, Z Cir and V 973 Oph (see Orlov and Rodriguez, and Feast, this Symposium) are not RCB stars and SY Hyi is a questionable RCB star; only Y Mus is listed as a definite RCB variable.

4 RCB stars in the Large Magellanic Cloud were observed: W Men, SY Hyi, HV 5637, and HV 12842. Absolute magnitudes at maximum of  $-4^m8$ ,  $-6^m6$ ,  $-3^m2$  and  $-4^m9$  respectively were derived. When plotted on a colour-colour diagram, most of these stars show an UV-excess for average colours at maximum. In the H-R diagram, they fall in a region where one would expect to find stars which are losing mass.