R CORONAE BOREALIS STARS: LONG-TERM PHOTOMETRIC & SPECTROSCOPIC STUDIES

P.L. COTTRELL, L. SKULJAN, P.M. KILMARTIN AND C. GILMORE Mt John Univ Obs, Univ. of Canterbury, NZ p.cottrell,l.skuljan,p.kilmartin,a.gilmore@phys.canterbury.ac.nz AND W.A. LAWSON Dept of Phys, ADFA, AU wal@phadfa.ph.adfa.oz.au

For more than a decade we have been able to acquire and analyse a significant amount of photometric data of the highly variable R Coronae Borealis (RCB) stars. This has made been possible by a photometric service observing programme instigated at the Observatory. These photometric data have been combined with less extensive spectroscopic coverage, particularly of the decline phase of these stars. These have been supplemented by observations obtained at Mount Stromlo and Siding Spring Observatories for a radial velocity study. Significantly more spectroscopic observations are now being acquired with the development of a new medium resolution spectrograph at Mount John University Observatory.

In this poster we will present recent photometric and spectroscopic results for a number of the RCB stars in our sample. This observational and analysis work can be used to provide further insight into the nature of these stars, their likely progeny and progenitors and the processes that are involved in the formation and evolution of the obscuring dust clouds which cause the decline phase.

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