Spectroscopy and Photometry of the Southern R Stars

T. Lloyd Evans
South African Astronomical Observatory
Observatory 7935, South Africa

UBVRI photometry and 1-2Å resolution spectra have been used to classify 85 stars listed as type R by various authors. Some are N stars, including a few characterized by strong NaD, weak C_2 and enhanced ^{13}C which are distinct from the cooler counterparts of the strong-banded ^{13}C rich stars which are the most numerous of the R stars. The latter are also distinguished from non-^{13}C rich stars by having redder V-I at given B-V in the bifurcated distribution in the B-V, V-I diagram.