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*The spectra of sources in the  $\pm 4^\circ$  declination zone of the Parkes 2700 MHz survey.**I. Spectra of individual sources. By J. V. Wall*

*Abstract.* A series of observations to determine the spectra of sources in the  $\pm 4^\circ$  declination zone of the Parkes 2700 MHz survey is described. The observations have yielded flux densities for 370 sources at 5009 MHz, 300 sources at 1403 and 468 MHz, and 450 sources at 635 MHz, while additional flux densities for many of the sources have been obtained from published measurements from other observatories. Spectral data have also been tabulated for some of the sources found in the Parkes 2700 MHz deep surveys of selected regions. The spectra of a number of the sources are illustrated and discussed. Several of the sources appear to be variable at high frequencies.

*The spectra of sources in the  $\pm 4^\circ$  declination zone of the Parkes 2700 MHz survey.**II. Statistical analysis. By J. V. Wall*

*Abstract.* An analysis is presented of the spectral data for sources in the  $+4^\circ$  to  $-4^\circ$  declination zone of the Parkes 2700 MHz catalogue. The proportions of the different types of radio spectra in the sample are derived. Spectral differences between quasi-stellar objects and radio galaxies are discussed and the results are used to estimate the proportion of the unidentified sources which belong to each class. The existence of a correlation between spectral index and flux density is established for sources in the present sample and implications of this result for source counts at different frequencies are discussed.

