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The galactic metre wave radiation. A two-frequency survey between declinations $+25^\circ$ and -25° and the preparation of a map of the whole sky. By T. L. Landecker and R. Wielebinski

Abstract. A survey of the sky between $\delta +25^\circ$ and $\delta -25^\circ$ at 85 and 150 MHz is described, made with aerial beams $3.8^\circ \times 3.5^\circ$ and $2.2^\circ \times 2.2^\circ$. Absolute measurements of aerial temperature are tabulated for points spaced 2° . A computer program is described which has enabled these results to be reduced to brightness temperatures, which are tabulated for the same points. The derivation of the radiation properties of the aerals is described.

The 150 MHz brightness temperatures are combined with the results of other surveys to produce a map of the whole sky. 150 MHz brightness temperatures are presented as a map in galactic coordinates and are tabulated at points spaced 5° .

NUMBER 17, NOVEMBER 1970

Atlas of OH₁₆₆₇ line profiles near the galactic centre. By R. X. McGee

Abstract. An atlas of OH absorption line profiles at frequency 1667.358 MHz is given for the region $358^\circ 30' < l^{\text{II}} < 2^\circ 30'$, $-0^\circ 20' < b^{\text{II}} < +0^\circ 10'$. The aerial beamwidth was 12.2 arc, the frequency resolution 37 kHz, and the radial velocity range -250 to $+125$ km sec $^{-1}$ (L.S.R.).

NUMBER 18, DECEMBER 1970

Parkes hydrogen-line survey of the Milky Way. III. A synoptic view of the galactic equator, $l^{\text{II}} = 185^\circ$ to 63° . By F. J. Kerr and J. V. Hindman

Abstract. Six velocity-longitude maps are presented which cover the galactic equator from $l^{\text{II}} = 185^\circ$ to 63° . The data were obtained from points at 1° intervals of longitude.

Parkes hydrogen-line survey of the Milky Way. IV. Absorption by low-latitude continuum sources in the region $l^{\text{II}} = 296^\circ$ to $63^\circ.5$. By F. J. Kerr and Gillian R. Knapp

Abstract. This paper contains a discussion of HI line absorption profiles observed in the directions of 39 continuum sources near the galactic plane. Diagrams of the profiles are presented for each source and estimates are made where feasible for the distances to the continuum sources and the optical depths of the intervening hydrogen concentrations. The reliability of such estimates from absorption observations is discussed and some comparisons are made with optical information.

Parkes hydrogen-line survey of the Milky Way. V. The section $l^{\text{II}} = 190^\circ$ to 299° , perpendicular tracks. By J. V. Hindman and F. J. Kerr

Abstract. A set of HI velocity-latitude maps is presented for scans across the galactic plane in the region $l^{\text{II}} = 190^\circ$ to 299° at 5° intervals. The 210 ft telescope was used with a frequency resolution of 36 kHz.

