

GR:MER

23rd May, 1962.

Dr. Bart J. Bok,
Professor of Astronomy,
National University,
CANBERRA...A.C.T.

Dear Dr. Bok,

Quite some time ago Higgins of Radio Physics made a series of observations for me with their 20 megacycle cross antenna. These I assembled into a map covering the area bounded by Declination -22° to -32° and Right Ascension 2200 to 0220. Various complex features turned up. The most prominent are two dark patches at declination -31° . One is about $2^{\circ} \times 4^{\circ}$ centred on RA.0120. The other is about $3^{\circ} \times 5^{\circ}$ centred on RA.2230.

These dark patches are presumably due to ionized hydrogen. Since they are at high galactic latitude it appears the material is quite close. Do you have any photographic information which might confirm the above? Please refer me to a book giving a conversion tables from celestial to galactic coordinates so that I may put the latter on my map.

It is my opinion that a lot more good data may be secured from the 20 mc cross antenna with a very small effort. The next couple of years of low solar activity will be most auspicious. Such data will be an important compliment to the surveys being undertaken here by Professor Ellis at 5 mc, and by me at 2 mc.

Best regards.

Grote Reber.