In the Orion region, the work done at Harvard is being repeated in more detail and in a larger region. Detailed correlation is found between dark clouds and intensity of 21-cm line radiation.

In Perseus, individual clouds have been found at over 1000 pc from the galactic plane. The extragalactic nebulae M33, M101, M81, IC 1613, NGC 6822 and NGC 4236 have been investigated in detail in a similar manner as M31 (Van de Hulst *et al.* 1957; Raimond and Volders 1957). The density distribution and rotation in M33 and M101 could be derived, from which it was possible to find the total amount of hydrogen ($10^9 M_\odot$ and $3 \times 10^9 M_\odot$) and the total mass ($18 \times 10^9 M_\odot$ and $140 \times 10^9 M_\odot$). The irregular nebula NGC 6822 is also rather bright, while the radiation from M81, IC 1613 and NGC 4236 is very faint. The hydrogen content of irregular nebulae is much higher than that of regular types.

From a survey of the continuous radiation at 22 cm, the gross distribution of ionized hydrogen throughout the Galaxy was derived (Westerhout 1958). The total mass of ionized hydrogen is of the order of $4 \times 10^7 M_\odot$. Values of the emission measure of many emission nebulae could be determined.

A survey of the continuous radiation at 75 cm is partly reduced, and shows many interesting details in the Milky Way and the galactic corona.

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