

RADIO OBSERVATIONS OF M17 AND THE ORION NEBULA: THE He/H RATIO

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ABSTRACT. From observations of the H53 α and He53 α lines, gathered with the 45-m telescope at the Nobeyama Radio Observatory, it has been found that the He/H ratio for Orion and M17 amounts to 0.099 ± 0.008 and 0.108 ± 0.004 respectively. These values combined with optical O/H data as well as with optical observations of metal poor H II regions in the SMC and in NGC 2366 imply that $\Delta Y/\Delta Z = 3.6 \pm 0.6$. A complete account of these results will be presented in the *Publications of the Astronomical Society of Japan*.

Key words: NEBULAE-ORION — RADIO LINES-MOLECULAR

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