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SURVEY OBSERVATIONS OF EMISSION-LINE STARS IN THE ORION REGION

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We have conducted survey observations for H α -emission stars in the Orion region using the Kiso Schmidt telescope and partly the CTIO Curtis Schmidt telescope. In the area of about 25 square degrees, centered at R.A. = 5^h40^m and Dec. = 0^o.0, a total of 236 H α -emission objects, mostly supposed to be T Tau type stars, have been detected among which 155 are new ones including 6 non-stellar objects.

Celestial coordinates and V-magnitude are measured for the detected objects. Eye estimation of the H α -emission intensity is also made at three epochs in a time span of about two years, where we found notable variation of H α intensity in 68 out of 236 objects.

Besides a remarkable concentration along the northern dark cloud complex, a loose concentration is noticed near the Orion Belt region, fairly well coinciding with the distribution of the Orion OB1b association members. A comparison with the Av-map is also made to see the relationship between the distribution of emission-line objects and that of interstellar dust.