

THE SPACE DISTRIBUTION OF FAINT CFHT QUASARS

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The space distribution of quasars discovered in our CFHT blue greys survey is discussed in detail. Redshifts for about 200 of the quasar candidates show that the sample is relatively complete for $0.2 < z < 3.4$ and $m < 20.5$. Two-thirds of the quasars have $z < 1.8$ and only 5% have $z > 2.5$, indicating that high redshift quasars are rare. The surface density of quasars brighter than $m = 20.5$ is 30 deg^{-2} . Seven quasars with $z = 1.165 \pm 0.007$ discovered in one of the fields have typical separations of ≈ 20 Mpc and may belong to a very large structure. Statistical tests on our data indicate that clustering among quasars is not common, however. The luminosity dependent density evolution models proposed by Schmidt and Green (1983) combined with a redshift cutoff at high redshift are consistent with our data and that of Schmidt and Green (1983), Marshall *et al.* (1984), Koo, Kron and Cudworth (1986), and Schmidt, Schneider and Gunn (1986). The model indicates that there was a broad maximum in the comoving density of quasars near $z = 1.7$. The results will be reported in detail in the March 1987 issue of The Astrophysical Journal.