

THE HOROLOGIUM SUPERCLUSTER

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We measured redshifts for a random subsample of 286 objects, m (Shapley) ≤ 16.5 , drawn from the catalogue of the Horologium region published by Shapley. The distribution of the sample objects on the celestial sphere is shown in Fig. 1, the characteristics of the redshift distribution are represented in Figs. 2 and 3.

The Shapley magnitudes correlate fairly well with blue magnitudes derived from photoelectric observations, Fig. 4. The two point angular correlation function of the subsample is similar to that of the whole catalogue. The clumpy distribution in depth, Fig. 2, bias, however, the determination of Ω by Peeble's $\xi(\sigma, \pi)$ method. The clump at $\langle v \rangle \simeq 13450$ km/sec has a velocity dispersion of $\simeq 480$ km/sec and is consistent with the idea that some of these structures are rather thin and filamentary rather than pancake-structures (Chincarini 1982, Chincarini, Giovanelli and Haynes 1982, and Giovanelli, these Proceedings).

REFERENCES

- Chincarini, G., 1982. Summer School of Cosmology and Relativity. Rio de Janeiro, January 1982, preprint.
Chincarini, G., Giovanelli, R. and Haynes, M., 1982, submitted to A.A.
Shapley, H., 1935, *Annals of Harvard College Observations*, Vol. 88, No. 5.

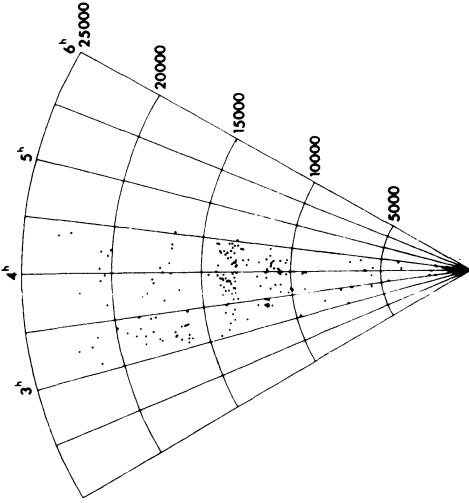


FIGURE 2. THE CONE DIAGRAM OF THE REDSHIFT SAMPLE. A STRUCTURE IS CLEARLY VISIBLE AT ABOUT $V_0 = 13000$ KM/SEC.

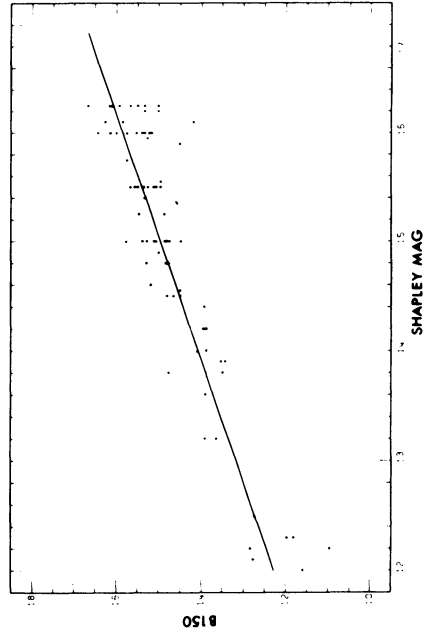


FIGURE 4. THE CORRELATION BETWEEN SHAPLEY'S MAGNITUDES IN HOROLOGIUM AND PHOTOELECTRIC OBSERVATIONS REDUCED TO B150 ACCORDING TO IRON AND SHANE.

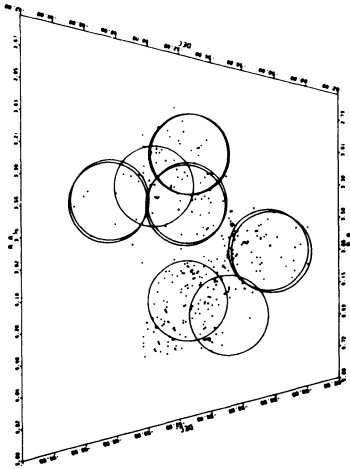


FIGURE 1. THE REDSHIFT SUBSAMPLE OF THE HOROLOGIUM CATALOGUE BY SHAPLEY. THE CIRCLES INDICATE THE AREAS OVER WHICH THE SURVEY BY SHAPLEY IS PROBABLY COMPLETE. $SMAG < 16.5$.

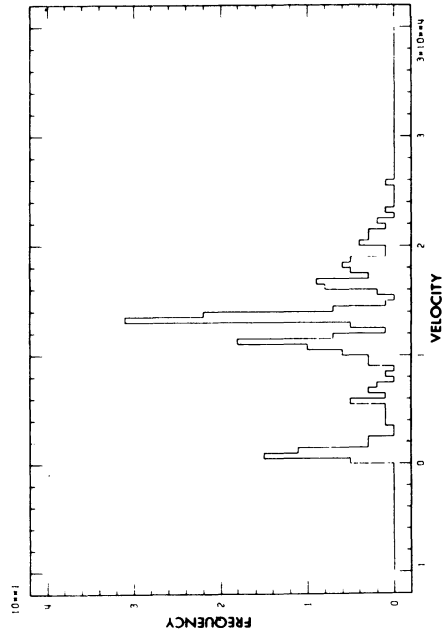


FIGURE 3. HISTOGRAM OF THE DISTRIBUTION OF REDSHIFTS FOR THE HOROLOGIUM SAMPLE.