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# THE SMALL SCALE INTERSTELLAR DUST DISTRIBUTION

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ABSTRACT. THe statistical distribution of interstellar dust at scale distances of a few parsecs is studied in the direction of the cluster NGC 2516 (CO757-607). Models composed of individual clouds that match the cluster's mean color excess and its true dispersion are built. The characteristics of the models are described and their average properties are presented. The interstellar matter structural function is computed from the models and compared to that observed for the cluster. It is concluded that: a) Best fits are obtained with models using clouds having an average size of 3 pc if the clouds are clumped together in a hierarchical way. b) These hierarchical complexes cannot be placed at random, but must have some kind of periodicity in their locations.

*Key words:* INTERSTELLAR-DUST — CLUSTERS-OPEN

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