1067-15-2062   **Thomas Milligan*** (`tmilligan1@uco.edu`), 100 N. University Drive, Box 129, Edmond, OK 73034. *Euclidean Squared Distance Matrices.* Preliminary report.

Distance geometry deals with the configuration of n points in metric space. For points $x_1, \ldots, x_n$ in Euclidean space, then $(A)_{i,j} = ||x_i - x_j||^2)_{i,j}$ is the corresponding Euclidean Squared-Distance (ESD) matrix. Recent results involving ESD matrices will be presented, including some results involving the geometry of the convex cone of ESD matrices. (Received September 22, 2010)