For d is the maximum distance any point can be from the line. A weakness in the standard RANSAC implementation is the possibility that a point will fit this line without being a member of the point group in the set. This algorithm takes this into consideration by with a slight modification. Taking d = maximum distance any point can be from the line, this algorithm also requires that no point can be more that d units in the x direction or the y direction. This balances the requirement that points are grouped in a reasonable and predictable fashion without burdening the computation with a true Euclidean distance between each point.