Abstract
New, intelligent systems have been developed recently to improve the quality of match analysis. These systems analyze the tactical behavior of the teams. However, the existing methods leave room for improvement. Thus, the main goal of this study is to refine the team centroid metric by considering all of the players on the team and the ball position. Furthermore, this study analyzes the relationship between the centroids of the two opposing teams. One 11-on-11 soccer match was analyzed to test the new centroid algorithm. The results provided strong evidence of the positive relation between the centroids of the two teams over time in the $x$-axis ($r = 0.781$) and the $y$-axis ($r = 0.707$). This study confirmed the results of previous studies that analyzed the relationship between team centroids. Furthermore, it was possible to prove the effectiveness of the new tactical metric and its relevance for adding information during a match.

Keywords
Match Analysis, Soccer, Tactics, Collective Behavior, Centroid.