* 1. The tests were conducted with the YOLO algorithm’s confidence score set to 0.5. This number was chosen as the sweet spot with trial and error. increasing this factor would result in a more precise detection of the ball but it might not detect the ball in some frames and decreasing it would make the algorithm more reliable for finding the ball but it would introduce some false positive detections. As the name suggests this factor indicates the confidence of the algorithm in the result it is presenting. YOLO models have two types of confidence, box confidence and class confidence. Box confidence is the probability of a bounding box containing an object and the and class confidence is the likelihood that a detected object belongs to a particular class. The confidence score is calculated based on these two factors, a more detailed explanation of this calculation can be found in YOLO’s [documentation.](https://docs.ultralytics.com/)