Dear Editor-in-Chief,

Please consider our manuscript, “Kicking for Goal or Touch? An Expected Points Framework for Penalty Decisions in Rugby Union,” for publication in the *Journal of Quantitative Analysis in Sports*.

Novelty & contribution. We develop a decision-ready Expected Points (EP) framework for one of rugby union’s central strategic choices: whether to kick for goal or kick to touch following a penalty. Our approach combines (i) an EP model for possessions beginning with a lineout, estimated from phase-level Premiership Rugby data, with (ii) an angle–distance model of penalty kick success and (iii) a continuation-value treatment of missed kicks. The result is a unified, context-aware framework that produces decision maps, regret measures, and scenario analyses for penalty strategy—tools that we believe are new to the rugby analytics literature.

Data & methods. Using phase-level data from the 2018/19 English Premiership season (35,199 phases across 132 matches), we estimate the expected next-score value of lineouts as a function of field position, manpower imbalances, and team strength. We pair this with an angle–distance generalized additive model fit to 3,802 international penalty kicks, and approximate the continuation value of misses using restart sequences from the same phase-level data. These components are combined into a penalty decision surface that compares kicking for goal versus kicking to touch by field location and game state. We illustrate the framework through decision maps, situational analyses, and a case study of a New Zealand–South Africa test match, which evaluates both individual decisions and aggregate decision quality using a regret metric.

Fit for JQAS. The work blends interpretable statistical modeling with domain-specific structure to answer a concrete decision-making question in a major global sport. The methodology is modular and reproducible, and can be adapted to other competitions or extended to win-probability modeling and additional decision branches (e.g., scrums, quick taps). We believe this combination of rigor, transparency, and practical relevance makes the manuscript a strong fit for the *Journal of Quantitative Analysis in Sports*.

We confirm that the manuscript is original, not under consideration elsewhere, and that all authors approve the submission. We would be happy to share supporting materials (e.g., code and documentation) to facilitate reproducibility, subject to data-licensing constraints.

Thank you for your consideration.

Sincerely,

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