A Logistic Regression Analysis of the NFL Overtime.

Over the past few years, football fans, sportscasters, writers, as well as mathematicians have all weighed in on whether the NFL overtime rule is fair to both teams. Some football enthusiasts have offered alternatives to this rule. As a result of all of the controversy, the NFL owners accepted a proposal to alter the overtime rule for postseason games beginning in the 2010-2011 football season. However, the old rule was left in place for games that go into overtime during the regular season. Hence, we pose the question: does the NFL regular season overtime rule give the winner of the coin toss an unfair advantage? In this session, we use logistic regression to examine the coin toss and its effect on the outcome of a regular season overtime game. Additionally, we describe how the NFL kickoff rule change, initiated at the beginning of the 2011-2012 NFL season, may have an impact on regular season overtime games. (Received September 22, 2011)