Combined Offensive and Defensive Position Group F-Statistics

2025-03-26

Table 1: F-Statistics for ALL Offensive Position Variables Combined

| | Starter Models | | | On-Field Models | | | Attempt Models | | |
Dataset	Starter LPM	Starter Probit	Starter Logit	On-Field LPM	On-Field Probit	On-Field Logit	Attempt LPM	Attempt Probit	Attempt Logit
Offense Grades	1.31* [40,3979]	1.46** [40,3979]	1.49** [40,3979]	0.84 [39,3980]	1.02 [39,3980]	1.02 [39,3980]	0.94 [35,25573]	0.92 [35,25573]	0.91 [35,25573]
Offense Yards	1.72*** [40,3979]	1.99*** [40,3979]	2.01*** [40,3979]	0.96 [39,3980]	1.05 [39,3980]	1.06 [39,3980]	0.87 [35,25573]	1.05 [35,25573]	0.96 [35,25573]
Offense Completions	1.56** [40,3979]	1.80*** [40,3979]	1.81*** [40,3979]	1.11 [39,3980]	1.22 [39,3980]	1.21 [39,3980]	0.74 [35,25573]	0.84 [35,25573]	0.76 [35,25573]
Control Variables									
Game Situation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coach Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team Stats	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Season/Team FE	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Coach FE	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
GIMR	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Player Presence	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Control Def. Players	No	No	No	No	No	No	No	No	No
Control Off. Players	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note:

F-statistics reported with degrees of freedom [df1,df2] and significance levels for ALL position variables combined.

* * p < 0.10, ** p < 0.05, *** p < 0.01

Table 2: F-Statistics for ALL Defensive Position Variables Combined

| | Starter Models | | | On-Field Models | | | Attempt Models | | |
Dataset	Starter LPM	Starter Probit	Starter Logit	On-Field LPM	On-Field Probit	On-Field Logit	Attempt LPM	Attempt Probit	Attempt Logit
Defense Grades	1.74*** [47,3972]	1.92*** [47,3972]	1.91*** [47,3972]	0.82 [47,3972]	1.13 [47,3972]	1.16 [47,3972]	0.92 [38,25570]	1.02 [38,25570]	1.04 [38,25570]
Defense Stops	1.29* [47,3972]	1.39*** [47,3972]	1.43** [47,3972]	0.97 [47,3972]	1.07 [47,3972]	1.11 [47,3972]	0.96 [38,25570]	0.86 [38,25570]	0.89 [38,25570]
Defense Tackles	0.81 [47,3972]	0.88 [47,3972]	0.90 [47,3972]	1.04 [47,3972]	1.21 [47,3972]	1.21 [47,3972]	0.92 [38,25570]	0.80 [38,25570]	0.83 [38,25570]
Control Variables									
Game Situation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coach Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Team Stats	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Season/Team FE	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Coach FE	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
GIMR	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Player Presence	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Control Off. Players	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control Def. Players	No	No	No	No	No	No	No	No	No

Note:

F-statistics reported with degrees of freedom [df1,df2] and significance levels for ALL position variables combined.

* * p < 0.10, ** p < 0.05, *** p < 0.01

Table 3: Offensive Model Comparisons - Starter vs On-Field (All Position Variables Combined)

Dataset	LPM		Probit		Logit	
Offense Grades	1.05 [0.293]	(On-Field > Starter)	1.20 [0.228]	(On-Field > Starter)	1.30 [0.194]	(On-Field > Starter)
Offense Yards	1.10 [0.270]	(On-Field > Starter)	1.32 [0.187]	(On-Field > Starter)	1.43 [0.153]	(On-Field > Starter)
Offense Completions	1.08 [0.279]	(On-Field > Starter)	1.29 [0.197]	(On-Field > Starter)	1.42 [0.156]	(On-Field > Starter)

Note:

Z-statistics reported with p-values in brackets. Stars indicate significance level of difference between Starter and On-Field coefficients. Direction indicates which model has larger coefficient values. Tests performed on average coefficients across all position variables combined.

* * p < 0.10, ** p < 0.05, *** p < 0.01

Table 4: Defensive Model Comparisons - Starter vs On-Field (All Position Variables Combined)

Dataset	LPM		Probit		Logit	
Defense Grades	1.49 [0.137]	(Starter > On-Field)	1.47 [0.140]	(Starter > On-Field)	1.51 [0.131]	(Starter > On-Field)
Defense Stops	0.60 [0.550]	(On-Field > Starter)	0.65 [0.513]	(On-Field > Starter)	0.68 [0.500]	(On-Field > Starter)
Defense Tackles	0.48 [0.633]	(On-Field > Starter)	0.50 [0.615]	(On-Field > Starter)	0.51 [0.611]	(On-Field > Starter)

Note:

Z-statistics reported with p-values in brackets. Stars indicate significance level of difference between Starter and On-Field coefficients. Direction indicates which model has larger coefficient values. Tests performed on average coefficients across all position variables combined.

* * p < 0.10, ** p < 0.05, *** p < 0.01