

Goodness of fit

```
library(knitr)
library(dplyr)
library(ggplot2)

load("data/goodness_of_fit_dc_2.RData")

for(i in 2:nrow(tab_results)) {
  tab_results[i,] = tab_results[i,] - tab_results[1,]
}
kable(tab_results, digits = 4)
```

	Home	Draw	Away
Observed	-0.7171	-1.3146	-1.4136
Model 0 (min 0)	-0.0113	-0.0293	0.0529
Model 3 (min 0)	-0.0073	0.0375	-0.0280
Model 8 (min 0)	-0.0059	0.0291	-0.0210
Model 9 (min 0)	0.0138	-0.0057	-0.0218
Model 10 (min 0)	0.0133	-0.0042	-0.0226
Model 0 (min 15)	-0.0252	-0.0058	0.0549
Model 3 (min 15)	-0.0146	0.0412	-0.0174
Model 8 (min 15)	-0.0131	0.0329	-0.0108
Model 9 (min 15)	0.0049	0.0002	-0.0101
Model 10 (min 15)	0.0045	0.0011	-0.0104
Model 0 (min 30)	-0.0441	0.0290	0.0527
Model 3 (min 30)	-0.0263	0.0526	-0.0076
Model 8 (min 30)	-0.0242	0.0434	-0.0010
Model 9 (min 30)	-0.0075	0.0132	0.0004
Model 10 (min 30)	-0.0079	0.0138	0.0005
Model 0 (min 45)	-0.0291	0.0304	0.0232
Model 3 (min 45)	-0.0114	0.0438	-0.0271
Model 8 (min 45)	-0.0085	0.0342	-0.0215
Model 9 (min 45)	0.0054	0.0064	-0.0180
Model 10 (min 45)	0.0052	0.0069	-0.0182
Model 0 (min 60)	-0.0242	0.0415	0.0011
Model 3 (min 60)	-0.0102	0.0470	-0.0333
Model 8 (min 60)	-0.0080	0.0384	-0.0276
Model 9 (min 6)	0.0021	0.0174	-0.0239
Model 10 (min 60)	0.0021	0.0178	-0.0244
Model 0 (min 75)	-0.0189	0.0414	-0.0092
Model 3 (min 75)	-0.0074	0.0382	-0.0286
Model 8 (min 75)	-0.0058	0.0324	-0.0250
Model 9 (min 75)	0.0002	0.0189	-0.0217
Model 10 (min 75)	0.0002	0.0191	-0.0219

```
for(i in 2:nrow(tab_results)) {
  tab_home_goals[i,] = tab_home_goals[i,] - tab_home_goals[1,]
}
kable(tab_home_goals, digits = 4)
```

	0	1	2	3	4	5+
Observed	-1.4775	-1.0170	-1.4004	-2.1428	-3.3529	-4.4827
Model 0 (min 0)	0.1191	-0.0921	-0.0685	-0.0203	0.2722	0.6662
Model 3 (min 0)	0.0452	-0.0542	0.0003	-0.0038	0.1555	0.2379
Model 8 (min 0)	0.0283	-0.0299	-0.0013	-0.0443	0.1242	0.3572
Model 9 (min 0)	0.0144	-0.0425	0.0025	-0.0173	0.1776	0.4453
Model 10 (min 0)	0.0142	-0.0416	0.0040	-0.0181	0.1719	0.4274
Model 0 (min 15)	0.1648	-0.0744	-0.0835	-0.0757	0.1697	0.4771
Model 3 (min 15)	0.0581	-0.0464	-0.0020	-0.0215	0.1110	0.1344
Model 8 (min 15)	0.0440	-0.0226	-0.0051	-0.0644	0.0816	0.2635
Model 9 (min 15)	0.0327	-0.0345	-0.0020	-0.0395	0.1322	0.3521
Model 10 (min 15)	0.0337	-0.0340	-0.0019	-0.0396	0.1282	0.3372
Model 0 (min 30)	0.2112	-0.0539	-0.1008	-0.1425	0.0363	0.2525
Model 3 (min 30)	0.0734	-0.0366	-0.0048	-0.0472	0.0509	0.0313
Model 8 (min 30)	0.0622	-0.0159	-0.0087	-0.0872	0.0264	0.1674
Model 9 (min 30)	0.0530	-0.0274	-0.0047	-0.0640	0.0722	0.2468
Model 10 (min 30)	0.0543	-0.0268	-0.0056	-0.0648	0.0704	0.2379
Model 0 (min 45)	0.1511	-0.0365	-0.0712	-0.1174	0.0643	0.2598
Model 3 (min 45)	0.0139	-0.0315	0.0163	-0.0146	0.1140	0.1205
Model 8 (min 45)	0.0034	-0.0152	0.0118	-0.0476	0.0991	0.2737
Model 9 (min 45)	-0.0042	-0.0262	0.0142	-0.0264	0.1378	0.3457
Model 10 (min 45)	-0.0032	-0.0260	0.0137	-0.0268	0.1380	0.3364
Model 0 (min 60)	0.1219	-0.0188	-0.0507	-0.1025	0.0135	0.0271
Model 3 (min 60)	0.0070	-0.0202	0.0178	-0.0061	0.0685	-0.0521
Model 8 (min 60)	0.0025	-0.0088	0.0131	-0.0370	0.0654	0.1049
Model 9 (min 60)	0.0002	-0.0182	0.0143	-0.0230	0.0979	0.1625
Model 10 (min 60)	0.0004	-0.0179	0.0144	-0.0232	0.0968	0.1549
Model 0 (min 75)	0.0946	0.0170	-0.0565	-0.0954	-0.0815	-0.1843
Model 3 (min 75)	0.0019	0.0080	-0.0019	-0.0148	0.0123	-0.1502
Model 8 (min 75)	0.0011	0.0141	-0.0066	-0.0336	0.0152	-0.0400
Model 9 (min 75)	0.0022	0.0080	-0.0046	-0.0296	0.0338	-0.0068
Model 10 (min 75)	0.0023	0.0085	-0.0049	-0.0300	0.0339	-0.0123

```
for(i in 2:nrow(tab_results)) {
  tab_away_goals[i,] = tab_away_goals[i,] - tab_away_goals[1,]
}
kable(tab_away_goals, digits = 4)
```

	0	1	2	3	4	5+
Observed	-0.9494	-1.0022	-1.7191	-3.0499	-4.1951	-5.4478
Model 0 (min 0)	0.0470	-0.0401	-0.0750	0.1684	0.0034	0.0067
Model 3 (min 0)	0.0160	0.0017	-0.0430	0.1096	-0.2250	-0.5374
Model 8 (min 0)	0.0138	0.0082	-0.0457	0.0874	-0.2379	-0.4383
Model 9 (min 0)	0.0240	0.0025	-0.0551	0.0812	-0.2389	-0.4319
Model 10 (min 0)	0.0231	0.0035	-0.0542	0.0798	-0.2430	-0.4461

	0	1	2	3	4	5+
Model 0 (min 15)	0.0714	-0.0363	-0.1040	0.0945	-0.1248	-0.2023
Model 3 (min 15)	0.0143	0.0076	-0.0421	0.0924	-0.2692	-0.6218
Model 8 (min 15)	0.0135	0.0139	-0.0469	0.0667	-0.2829	-0.5197
Model 9 (min 15)	0.0237	0.0080	-0.0553	0.0603	-0.2879	-0.5231
Model 10 (min 15)	0.0230	0.0090	-0.0548	0.0585	-0.2918	-0.5376
Model 0 (min 30)	0.0870	-0.0296	-0.1210	0.0236	-0.2700	-0.4656
Model 3 (min 30)	0.0060	0.0126	-0.0277	0.0876	-0.3195	-0.7509
Model 8 (min 30)	0.0060	0.0176	-0.0333	0.0646	-0.3205	-0.6233
Model 9 (min 30)	0.0153	0.0117	-0.0414	0.0619	-0.3164	-0.6126
Model 10 (min 30)	0.0149	0.0124	-0.0410	0.0608	-0.3225	-0.6279
Model 0 (min 45)	0.0753	-0.0146	-0.1010	-0.0231	-0.3721	-0.6081
Model 3 (min 45)	-0.0114	0.0238	-0.0047	0.0667	-0.3598	-0.7746
Model 8 (min 45)	-0.0085	0.0251	-0.0104	0.0500	-0.3578	-0.6638
Model 9 (min 45)	-0.0014	0.0192	-0.0156	0.0544	-0.3434	-0.6414
Model 10 (min 45)	-0.0020	0.0200	-0.0151	0.0529	-0.3501	-0.6611
Model 0 (min 60)	0.0612	0.0120	-0.1254	-0.0259	-0.3784	-0.5355
Model 3 (min 60)	-0.0133	0.0395	-0.0357	0.0623	-0.3499	-0.6191
Model 8 (min 60)	-0.0084	0.0375	-0.0405	0.0497	-0.3361	-0.5287
Model 9 (min 6)	-0.0021	0.0326	-0.0456	0.0537	-0.3301	-0.5163
Model 10 (min 60)	-0.0028	0.0337	-0.0456	0.0520	-0.3354	-0.5191
Model 0 (min 75)	0.0509	0.0271	-0.1191	-0.0950	-0.3242	-0.5011
Model 3 (min 75)	-0.0082	0.0432	-0.0463	0.0028	-0.2583	-0.4871
Model 8 (min 75)	-0.0040	0.0411	-0.0503	-0.0065	-0.2428	-0.4268
Model 9 (min 75)	0.0002	0.0380	-0.0527	-0.0084	-0.2397	-0.4262
Model 10 (min 75)	0.0000	0.0383	-0.0527	-0.0079	-0.2465	-0.4276