

	Putt Description	Putt Distance (ft)	Slope Description		Quintic
1	Jack Nicklaus, 1986 Masters 17 th Green	8ft	1% Downhill	1% Left to Right	Red
2	Seve Ballesteros, 1984 Open Championship, St Andrews 18th Green	11ft	1% Uphill	1.5% Right to Left	Green
3	Graeme McDowell, 2010 Ryder Cup Celtic Manor 16th Green	13ft	2% Downhill	2.5% Left to Right	Purple
4	Tiger Woods 2008 US Open, Torrey Pines 18th Green	11ft	1% Downhill	1.5% Right to Left	Dark Blue
5	Phil Mickelson, 2004 Masters, Augusta National 18 th Green	13ft	2.5% Downhill	1% Right to Left	Light Blue
6	Jon Rahm, 2021 US Open Torrey Pines 17 th Green	13ft	1.5% Downhill	4.5% Left to Right	Orange

Number of Putts	Start Direction (°)	Start Direction (in)	Impact Ball Speed (mph)	Zero Skid (ins)	Ball Speed at Zero Skid (mph)	Ball Speed at Hole (mph)	Total Distance Travelled (ft)
Putt 1 (37%)							
Average	-6.64	-11	5.19	19	3.54	1.22	8' 0"
Std. Dev ±	2.12	4	0.49	3	0.17	0.32	0' 1"
Range	8.15	14	1.29	9	0.52	1.07	0' 2"
Putt 2 (11%)							
Average	3.82	9	6.36	30	4.43	1.53	10' 11"
Std. Dev ±	0.32	1	0.22	1	0.10	0.07	0' 0"
Range	0.76	3	0.27	1	0.14	0.09	0' 1"
Putt 3 (9%)							
Average	-5.93	-16	6.20	29	4.43	1.92	12' 10"
Std. Dev ±	2.16	6	0.36	7	0.31	0.61	0' 2"
Range	2.07	12	0.79	13	0.60	1.06	0' 3"
Putt 4 (11%)							
Average	1.87	4	5.33	21	3.87	0.96	10' 11"
Std. Dev ±	0.10	1	0.30	0	0.16	0.39	0' 1"
Range	0.18	1	0.47	0	0.22	0.55	0' 1"
Putt 5 (26%)							
Average	4.47	12	5.88	24	4.17	1.57	12' 11"
Std. Dev ±	0.89	2	0.76	5	0.38	0.57	0' 1"
Range	2.81	8	1.96	16	0.90	1.38	0' 1"
Putt 6 (9%)							
Average	-21.96	-66	6.06	25	4.38	1.35	14' 5"
Std. Dev ±	7.47	25	0.30	4	0.17	0.68	1' 0"
Range	14.92	49	0.62	7	0.33	1.32	1' 11"

Number of Putts n=35	Start Direction (°)	Start Direction (in)	Impact Ball Speed (mph)	Zero Skid (ins)	Ball Speed at Zero Skid (mph)	Ball Speed at Hole (mph)	Total Distance Travelled (ft)
Putt 1 (37%)	-4.61	-8	5.07	18	3.49	1.28	8' 5"
Average							
Std. Dev ±	2.79	5	0.45	3	0.25	0.46	0' 10"
Range	13.07	23	1.61	13	1.01	1.85	3' 0"
Putt 2 (11%)	6.63	15	6.13	27	4.24	1.30	11' 1"
Average							
Std. Dev ±	2.89	7	0.39	3	0.28	0.39	1' 0"
Range	11.40	27	1.76	13	1.25	1.68	3' 10"
Putt 3 (9%)	-5.98	-16	5.96	25	4.21	1.62	13' 11"
Average							
Std. Dev ±	2.38	7	0.50	4	0.34	0.59	0' 9"
Range	11.52	32	2.07	18	1.37	2.33	3' 4"
Putt 4 (11%)	1.75	4	5.58	23	3.91	1.32	11' 5"
Average							
Std. Dev ±	2.29	5	0.44	4	0.30	0.50	0' 11"
Range	9.23	21	2.22	18	1.38	2.19	3' 6"
Putt 5 (26%)	3.90	11	5.78	25	4.12	1.50	13' 9"
Average							
Std. Dev ±	3.21	9	0.53	5	0.30	0.49	0' 9"
Range	13.85	38	2.13	21	1.17	2.18	3' 3"
Putt 6 (9%)	-23.45	-71	6.20	27	4.38	1.69	15' 7"
Average							
Std. Dev ±	7.06	24	0.58	5	0.33	0.50	0' 11"
Range	28.98	104	2.68	20	1.34	2.03	4' 0"

Number of Putts	Straight-Line Distance (ft)	Total Distance Travelled (ft)	% Difference (Increase)	Area (sq ft)	Apex Distance (ft)	Time Taken (seconds)
Putt 1 (37%)						0' 4"
Average	7' 11"	8' 0"	0.5	1.7		2.28
Std. Dev ±	0' 0"	0' 1"	0.0	0.3	0' 1"	2.21
Range	0' 1"	0' 2"	0.1	1.3	0' 3"	1.06
Putt 2 (11%)						0' 2"
Average	10' 10"	10' 11"	0.5	1.1		2.40
Std. Dev ±	0' 0"	0' 0"	0.0	0.5	0' 1"	0.07
Range	0' 1"	0' 1"	0.1	0.7	0' 1"	0.19
Putt 3 (9%)						0' 6"
Average	12' 8"	12' 10"	0.9	4.5		2.79
Std. Dev ±	0' 1"	0' 2"	0.1	2.0	0' 3"	0.53
Range	0' 2"	0' 3"	0.3	4.0	0' 5"	1.13
Putt 4 (11%)						0' 2"
Average	10' 10"	10' 11"	0.5	1.1		3.18
Std. Dev ±	0.1	0' 1"	0.0	0.5	0' 1"	0.18
Range	0.1	0' 1"	0.1	0.7	0' 1"	0.45
Putt 5 (26%)						0' 3"
Average	12' 10"	12' 11"	0.5	2.1		3.10
Std. Dev ±	0' 0"	0' 1"	0.0	0.5	0' 1"	0.64
Range	0' 1"	0' 1"	0.1	1.4	0' 2"	1.59
Putt 6 (9%)						2' 6"
Average	13' 3"	14' 5"	8.4	18.8		3.90
Std. Dev ±	0' 0"	1' 0"	2.2	9.0	1' 1"	1.05
Range	0' 0"	1' 11"	4.4	18.0	1' 8"	2.56