

Table S3. Mean resultant forces and directions, relative to rider direction during cutback for different Skill Levels

Intermediate (Skill Level 6) mean Resultant forces and directions, relative to rider direction during cutback, from 0.25 to 0.8 s. Significant p-values in bold.								
Intermediate	Resultant magnitude (N)				Direction (deg)			
	Control	RW	CR	p-value	Control	RW	CR	p-value
Left fin	194±8	184±8	202±9	0.017	-69±2	-69±2	-70±2	0.770
Center fin	209±9	212±9	226±9	0.016	-65±2	-65±2	-66±2	0.907
Right fin	155±6	179±8	184±8	<0.001	-55±2	-58±2	-59±2	0.011
All fins	554±23	574±25	610±26	0.005	-64±2	-64±2	-65±2	0.631

Expert (Skill Level 7/8) mean Resultant forces and directions, relative to rider direction during cutback, from 0.25 to 0.7 s. Significant p-values in bold.								
Expert	Resultant magnitude (N)				Direction (deg)			
	Control	RW	CR	p-value	Control	RW	CR	p-value
Left fin	213±10	203±10	221±11	0.047	-70±2	-70±2	-71±2	0.779
Center fin	225±11	225±10	238±11	0.130	-66±2	-66±2	-67±2	0.951
Right fin	168±8	189±9	201±10	<0.001	-57±2	-60±2	+61±2	0.019
All fins	605±28	616±29	658±31	0.023	-65±2	-66±2	-66±2	0.673

WCT (Skill Level 9) mean Resultant forces and directions, relative to rider direction during cutback, from 0.25 to 0.6 s. Significant p-values in bold.								
WCT	Resultant magnitude (N)				Direction (deg)			
	Control	RW	CR	p-value	Control	RW	CR	p-value
Left fin	234±13	219±12	240±13	0.058	-74±2	-74±2	-75±2	0.740
Center fin	249±14	244±13	263±14	0.125	-70±2	-70±2	-70±2	0.917
Right fin	174±10	189±11	209±13	<0.001	-60±2	-63±2	-64±2	0.013
All fins	654±36	650±36	710±40	0.046	-69±2	-69±2	-70±2	0.656