Appendix 3

SWIFT parameters

App. 3.1. Parameter values of *Magic Formula* and *SWIFT* model

Table A3.1. (205/60R15 91V, 2.2 bar. ISO sign definition. Also, cf. App.3.2)

R_o (=r_o) = 0.313m ,	F_{zo} (=F_{No}) = 4000N ,	m_o = 9.3kg ,	V_o = 16.67m/s	
p_{Cx1} = 1.685	p_{Dx1} = 1.210	p_{Dx2} =−0.037	p_{Ex1} = 0.344	p_{Ex2} = 0.095
p_{Ex3} =−0.020	p_{Ex4} = 0	p_{Kx1} = 21.51	p_{Kx2} =−0.163	p_{Kx3} = 0.245
p_{Hx1} =−0.002	p_{Hx2} = 0.002	p_{Vx1} = 0	p_{Vx2} = 0	
r_{Bx1} = 12.35	r_{Bx2} =−10.77	r_{Bx3} = 0	r_{Cx1} = 1.092	r_{Hx1} = 0.007
q_{sx1} = 0	q_{sx2} = 0	q_{sx3} = 0		
p_{Cy1} = 1.193	p_{Dy1} =−0.990	p_{Dy2} = 0.145	p_{Dy3} =−11.23	p_{Ey1} =−1.003
p_{Ey2} =−0.537	p_{Ey3} =−0.083	p_{Ey4} =−4.787	p_{Ky1} =−14.95	p_{Ky2} = 2.130
p_{Ky3} =−0.028	p_{Ky4} = 2	p_{Ky5} = 0	p_{Ky6} =−0.92	p_{Ky7} =−0.24
p_{Hy1} = 0.003	p_{Hy2} =−0.001	p_{Hy3} = 0		
p_{Vy1} = 0.045	p_{Vy2} =−0.024	p_{Vy3} =−0.532	p_{Vy4} = 0.039	
r_{By1} = 6.461	r_{By2} = 4.196	r_{By3} =−0.015	r_{By4} = 0	r_{Cy1} = 1.081
r_{Hy1} = 0.009	r_{Vy1} = 0.053	r_{Vy2} =−0.073	r_{Vy3} = 0.517	r_{Vy4} = 35.44
r_{Vy5} = 1.9	r_{Vy6} =−10.71			
q_{Bz1} = 8.964	q_{Bz2} =−1.106	q_{Bz3} =−0.842	q_{Bz5} =−0.227	q_{Bz6} = 0
q_{Bz9} = 18.47	q_{Bz10} = 0	q_{Cz1} = 1.180	q_{Dz1} = 0.100	q_{Dz2} =−0.001
q_{Dz3} = 0.007	q_{Dz4} = 13.05	q_{Dz6} =−0.008	q_{Dz7} = 0.000	q_{Dz8} =−0.296
q_{Dz9} =−0.009	q_{Dz10} = 0	q_{Dz11} = 0		
q_{Ez1} =−1.609	q_{Ez2} =−0.359	q_{Ez3} = 0	q_{Ez4} = 0.174	
q_{Ez5} =−0.896	q_{Hz1} = 0.007	q_{Hz2} =−0.002	q_{Hz3} = 0.147	q_{Hz4} = 0.004
s_{sz1} = 0.043	s_{sz2} = 0.001	s_{sz3} = 0.731	s_{sz4} =−0.238	
q_{Iay} = 0.109	q_{ma} = 0.237	$q_{cbx0,z}$ = 121.4	$q_{kbx,z}$ = 0.228	$q_{cb\theta 0}$ = 61.96
q_{Iaxz} = 0.071	q_{mb} = 0.763	q_{cby} = 40.05	q_{kby} = 0.284	$q_{cb\eta,\psi}$ = 20.33
q_{Iby} = 0.696	q_{mc} = 0.108	q_{ccx} = 391.9	q_{kcx} = 0.910	$q_{cc\psi}$ = 55.82
q_{Ibxz} = 0.357		q_{ccy} = 62.7	q_{kcy} = 0.910	$q_{kb\theta}$ = 0.080
q_{Ic} = 0.055				$q_{kb\eta,\psi}$ = 0.038
				$q_{kc\psi}$ = 0.834
q_{V1}=7.1×10^{-5}	q_{Fz3} = 0	q_{a1} = 0.135	B_{reff} = 9	q_{Fcx1} = 0.1
q_{V2} = 2.489	q_{sy1} = 0.01	q_{a2} = 0.035	D_{reff} = 0.23	q_{Fcy1} = 0.3
q_{Fz1} = 13.37	q_{sy3} = 0	$q_{bvx,z}$ = 3.957	F_{reff} = 0.01	q_{Fcx2} = 0
q_{Fz2} = 14.35	q_{sy4} = 0	$q_{bv\theta}$ = 3.957		q_{Fcy2} = 0