

## Output Variable Descriptions

OUTPUT CODE	PRINT TITLE	DESCRIPTION	UNITS
1	AY CY	Trimmed lateral acceleration (for Cn-Ay) or Normalized Lateral Force (for Cn-Cy)	g's
2	CN	Normalized yaw moment (yaw moment divided by wheelbase times weight)	-
3	YAW MOM	Total yaw moment (also called N)	lb-ft
4	F YAW MOM	Front axle yaw moment about the c.g. due to front track forces	lb-ft
5	R YAW MOM	Rear axle yaw moment about the c.g. due to rear track forces	lb-ft
6	ROLL ANG	Sprung mass roll angle (relative to ground)	deg
7	PTCH ANG	Sprung mass pitch angle (relative to ground)	deg
8	C.G.HGT	Sprung mass c.g. height above ground	in
9	SLIP RF	Right front tire slip angle	deg
10	SLIP LF	Left front tire slip angle	deg
11	SLIP RR	Right rear tire slip angle	deg
12	SLIP LR	Left rear tire slip angle	deg
13	INCLN RF	Right front tire inclination angle (relative to ground)	deg
14	INCLN LF	Left front tire inclination angle (relative to ground)	deg
15	INCLN RR	Right rear tire inclination angle (relative to ground)	deg
16	INCLN LR	Left rear tire inclination angle (relative to ground)	deg

OUTPUT CODE	PRINT TITLE	DESCRIPTION	UNITS
17	W DEF RF	Right front wheel ride position for IFS (relative to the initial position)	in
17	S DEF RF	Right front wheel ride position for AFS (relative to the initial position)	in
18	W DEF LF	Left front wheel ride position for IFS (relative to the initial position)	in
18	W DEF LF	Left front wheel ride position for AFS (relative to the initial position)	in
19	W DEF RR	Right rear wheel ride position for IRS (relative to the initial position)	in
19	S DEF RR	Right rear spring deflection for ARS (relative to the initial position)	in
20	W DEF LR	Left rear wheel ride position for IRS (relative to the initial position)	in
20	S DEF LR	Left rear spring deflection for ARS (relative to the initial position)	in

Note — For all wheel/spring ride position outputs, the deflections (DEF) are changes in wheel center position, relative to the chassis. Zero (0) is the static ride position, rebound is positive and jounce is negative.

21	TR FR RF	Right front tire tractive force	lb
22	TR FR LF	Left front tire tractive force	lb
23	TR FR RR	Right rear tire tractive force	lb
24	TR FR LR	Left rear tire tractive force	lb
25	SD FR RF	Right front tire side force	lb
26	SD FR LF	Left front tire side force	lb
27	SD FR RR	Right rear tire side force	lb
28	SD FR LR	Left rear tire side force	lb

OUTPUT CODE	PRINT TITLE	DESCRIPTION	UNITS
29	NR FR RF	Right front tire normal force (relative to road surface)	lb
30	NR FR LF	Left front tire normal force (relative to road surface)	lb
31	NR FR RR	Right rear tire normal force (relative to road surface)	lb
32	NR FR LR	Left rear tire normal force (relative to road surface)	lb
33	OV MO RF	Right front overturning moment	lb-ft
34	OV MO LF	Left front overturning moment	lb-ft
35	OV MO RR	Right rear overturning moment	lb-ft
36	OV MO LR	Left rear overturning moment	lb-ft
37	AL TQ RF	Right front aligning torque	lb-ft
38	AL TQ LF	Left front aligning torque	lb-ft
39	AL TQ RR	Right rear aligning torque	lb-ft
40	AL TQ LR	Left rear aligning torque	lb-ft
41	PSIW RF	Right front wheel steer angle (relative to the vehicle)	deg
42	PSIW LF	Left front wheel steer angle (relative to the vehicle)	deg
43	PSIW RR	Right rear wheel steer angle (relative to the vehicle)	deg
44	PSIW LR	Left rear wheel steer angle (relative to the vehicle)	deg

OUTPUT CODE	PRINT TITLE	DESCRIPTION	UNITS
45	PHIW RF	Right front wheel camber (not inclination) angle (relative to the vehicle)	deg
46	PHIW LF	Left front wheel camber (not inclination) angle (relative to the vehicle)	deg
47	PHIW RR	Right rear wheel camber (not inclination) angle (relative to the vehicle)	deg
48	PHIW LR	Left rear wheel camber (not inclination) angle (relative to the vehicle)	deg
49	F POWER	Front axle tractive force power	hp
50	R POWER	Rear axle tractive force power	hp
51	YAW VEL	Vehicle yaw velocity (relative to space)	deg/sec
52	RADIUS	Vehicle path radius	ft
53	R AX DEF	Rear axle ride position (relative to the initial position)	in
54	R AX ANG	Rear axle roll angle (relative to the vehicle)	deg
55	F AX DEF	Front axle ride position (relative to the initial position)	in
56	F AX ANG	Front axle roll angle (relative to the vehicle)	deg
57	AXV	Vehicle acceleration along the vehicle x axis	g's
58	AX	Vehicle acceleration along the space x axis	g's
59	V	Vehicle speed along the space x axis	mph
60	AYP	Previous iteration value of vehicle acceleration along space y axis	g's

OUTPUT CODE	PRINT TITLE	DESCRIPTION	UNITS
61	RF FXU	Right front tire force along vehicle x axis	lb
62	LF FXU	Left front tire force along vehicle x axis	lb
63	RR FXU	Right rear tire force along vehicle x axis	lb
64	LR FXU	Left rear tire force along vehicle x axis	lb
65	RF FYU	Right front tire force along vehicle y axis	lb
66	LF FYU	Left front tire force along vehicle y axis	lb
67	RR FYU	Right rear tire force along vehicle y axis	lb
68	LR FYU	Left rear tire force along vehicle y axis	lb
69	RF FZU	Right front tire force along vehicle z axis	lb
70	LF FZU	Left front tire force along vehicle z axis	lb
71	RR FZU	Right rear tire force along vehicle z axis	lb
72	LR FZU	Left rear tire force along vehicle z axis	lb
73	AERO DRG	Aerodynamic drag force (including rolling resistance and viscous loss terms)	lb
74	F AERO Z	Front axle aerodynamic downforce	lb
75	R AERO Z	Rear axle aerodynamic downforce	lb
76	AERO PWR	Aerodynamic drag power (including rolling resistance and viscous loss terms)	hp
77	FXU PWR	Longitudinal tire force power	hp
78	AYV	Vehicle acceleration along vehicle y axis	g's
79	AZ	Vehicle acceleration along space z axis	g's
80	AZV	Vehicle acceleration along vehicle z axis	g's