

SIDPAC Standard Data Channels

E.A. Morelli
NASA Langley Research Center
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CH. NO.	SYMBOLS	DESCRIPTION	UNITS
1	time	time	sec
2	V	airspeed	ft/sec
3	beta	sideslip angle	deg
4	alpha	angle of attack	deg
5	p	roll rate	deg/sec
6	q	pitch rate	deg/sec
7	r	yaw rate	deg/sec
8	phi	Euler roll angle	deg
9	the	Euler pitch angle	deg
10	psi	Euler heading angle	deg
11	ax	x body axis acceleration	g
12	ay	y body axis acceleration	g
13	az	z body axis acceleration	g
14	el	elevator deflection	deg
15	ail	aileron deflection	deg
16	rdr	rudder deflection	deg
17	tef	trailing edge flap deflection	deg
18	lef	leading edge flap deflection	deg
19	d1	auxiliary control surface 1 deflection	deg
20	d2	auxiliary control surface 2 deflection	deg
21	d3	auxiliary control surface 3 deflection	deg
22	d4	auxiliary control surface 4 deflection	deg
23	d5	auxiliary control surface 5 deflection	deg
24	d6	auxiliary control surface 6 deflection	deg
25	d7	auxiliary control surface 7 deflection	deg
26	d8	auxiliary control surface 8 deflection	deg
27	qbar	dynamic pressure	lbf/ft ²
28	mach	Mach number	--
29	rho	air density	slug/ft ³
30	h	altitude	ft
31	lonstk	longitudinal stick deflection	in
32	latstk	lateral stick deflection	in
33	rudped	rudder pedal deflection	in
34	thtl1	throttle – engine #1	deg
35	thtl2	throttle – engine #2	deg
36	thtl3	throttle – engine #3	deg
37	thtl4	throttle – engine #4	deg
38	thrust1	thrust – engine #1	lbf
39	thrust2	thrust – engine #2	lbf
40	thrust3	thrust – engine #3	lbf
41	thrust4	thrust – engine #4	lbf
42	pdot	roll acceleration	deg/sec ²
43	qdot	pitch acceleration	deg/sec ²
44	rdot	yaw acceleration	deg/sec ²

45	xcg	x cg position	in
46	ycg	y cg position	in
47	zcg	z cg position	in
48	mass	aircraft mass	slug
49	Ixx	roll inertia	slug-ft ²
50	Iyy	pitch inertia	slug-ft ²
51	Izz	yaw inertia	slug-ft ²
52	Ixz	x-z cross inertia	slug-ft ²
53	axm	measured x body axis acceleration	g
54	aym	measured y body axis acceleration	g
55	azm	measured z body axis acceleration	g
56	alpdot	angle of attack rate	deg/sec
57	btadot	sideslip angle rate	deg/sec
58	rtv	roll thrust vectoring	deg
59	ptv	pitch thrust vectoring	deg
60	ytv	yaw thrust vectoring	deg
61	CX	x body axis aerodynamic force coefficient	--
62	CY	y body axis aerodynamic force coefficient	--
63	CZ	z body axis aerodynamic force coefficient	--
64	Cl	aerodynamic rolling moment coefficient	--
65	Cm	aerodynamic pitching moment coefficient	--
66	Cn	aerodynamic yawing moment coefficient	--
67	CD	aerodynamic drag force coefficient	--
68	CYw	wind axis aerodynamic side force coefficient	--
69	CL	aerodynamic lift force coefficient	--
70	CT	thrust force coefficient	--
71	phat	non-dimensional roll rate	--
72	qhat	non-dimensional pitch rate	--
73	rhat	non-dimensional yaw rate	--
74	u	x body axis velocity component	ft/sec
75	v	y body axis velocity component	ft/sec
76	w	z body axis velocity component	ft/sec
77	sarea	wing reference area	ft ²
78	bspan	wing span	ft
79	cbar	mean aerodynamic chord	ft
80	betam	measured sideslip angle	deg
81	alpham	measured angle of attack	deg
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