

Sensor List

To help with using data_dump, here is the list of all DSM ids (did) and sample ids (sid) for SAVANT.

Example to dump sonic data from 6m.rel:

data_dump -i 13,60 (raw)

data_dump -i 13,61 -p (parsed; note adding 1 to sid)

Example to look at grass mote data:

data_dump + 22,0x8100-0x9000 -p (parsed)

Now have converted this into table, adding serial numbers and Multi-station-derived positions and orientation.

For now, x,y,z positions are referenced to an arbitrary initial location where the theodolite was placed, near the init tower. Orientation with respect to north was determined from the vector between the GPS locations of the first 2 theodolite positions, and thus is not as accurate as the relative positions.

dsm:port	did	sid	sensor	SN	x (m)	y (m)	z (m)	azimuth (deg)	pitch (deg)	roll (deg)	lean	leanaz
initb:/dev/ttyUSB2	1	2	Gill 2D sonic									
initb:/dev/ttyUSB0	1	4	TRH.0.2m		17.41	-4.69	217.24					
initb:/dev/ttyUSB1	1	10	CSAT3A+EC150 (EC100).1.5m	P1003; 1276; 1312	15.88	-6.73	218.44	36.3	0.02	NA	0.3	86.1
initb:/dev/ttyUSB3	1	12	TRH.1.5m		17.44	-4.63	218.45					
initb:/dev/ttyUSB4	1	30	CSAT3A (EC100).3.0m	2035; 1814	15.88	-6.72	219.76	36.8	-0.69	0.86	1.2	126.2
initb:/dev/gps_pty0	1	1000	GPS									
initb:/dev/ttyUSB8	1	1020	Power Monitor									
initm:/dev/ttyUSB0	3	40	CSAT3.4.5m	0540	15.60	-7.11	221.00	36.3	1.20	-1.19	1.2	-8.6
initm:/dev/ttyUSB2	3	42	TRH.4.5m		17.42	-4.63	221.01					
initm:/dev/ttyUSB1	3	60	CSAT3A+EC150 (EC100).6.0m	20454?; 1433; 1817	15.90	-6.71	222.32	36.1	-0.29	-0.86	0.7	-114.1
initm:/dev/ttyUSB6	3	100	CSAT3.10m	0800	15.60	-7.11	225.78	36.3	0.51	-0.61	0.8	-46.7
initm:/dev/ttyUSB7	3	102	TRH.10m		17.42	-4.63	225.73					
initm:/dev/ttyUSB8	3	1020	Power Monitor									
initm:/dev/gps_pty0	3	1000	GPS									
rel1:/dev/ttyUSB0	11	2	Gill 2D sonic									
rel1:/dev/ttyUSB2	11	4	TRH.0.2m	TRH28	313.62	18.71	214.28					
rel1:/dev/gps_pty0	11	1000	GPS									
rel1:/dev/ttyUSB1	11	1110	CSAT3A (EC100).1.5m.aux1		309.87	15.02	215.60	106.94	0.14	-0.24	0.1	19.0
rel1:/dev/ttyUSB3	11	1112	TRH.1.5m.aux1		312.37	14.24	215.60					
rel1:/dev/ttyUSB7	11	0x8000	NR01+soils.c (corn)	mote32 NR24; TS32; HF23/HF14; QS15/QS14 (Teardown); TP28								
rel2:/dev/ttyUSB0	12	10	CSAT3A+EC150 (EC100).1.5m	2046; 1389;1702	311.03	19.39	215.50	105.44	-1.09	1.34	2.0	-123.1
rel2:/dev/ttyUSB2	12	12	TRH.1.5m		313.55	18.71	215.48					
rel2:/dev/ttyUSB6	12	14	Nanobarometer.1.5m									
rel2:/dev/ttyUSB4	12	30	CSAT3A (EC100).3.0m	P1005; 1800	311.03	19.40	216.78	105.73	-0.27	1.14	1.2	-103.7
rel2:/dev/gps_pty0	12	1000	GPS									
rel2:/dev/ttyUSB3	12	1212	TRH.1.5m.aux2		312.17	23.90	215.72					
rel2:/dev/ttyUSB5	12	1214	CSAT3.1.5m.aux2		309.74	24.55	215.80	103.49	-0.31	-1.75	0.9	110.8
relm:/dev/ttyUSB0	13	40	CSAT3.4.5m	0536	310.59	19.53	218.12	105.62	0.74	-0.46	0.8	13.5
relm:/dev/ttyUSB2	13	42	TRH.4.5m		313.55	18.70	218.12					
relm:/dev/ttyUSB1	13	60	CSAT3A+EC150 (EC100).6.0m	1009; 1387; 1700	311.04	19.41	219.40	105.78	-0.31	0.56	1.4	-102.6
relm:/dev/ttyUSB4	13	80	CSAT3.8.5m	0538	310.60	19.54	221.19	106.01	0.81	-0.98	1.2	48.8
relm:/dev/ttyUSB5	13	82	TRH.8.5m		313.55	18.69	221.18					
relm:/dev/ttyUSB6	13	100	CSAT3.10m	0537	310.60	19.54	223.18	106.03	0.99	-1.22	1.6	50.7

reim:/dev/gps_pty0	13	1000	GPS									
relt:/dev/ttyUSB0	14	150	CSAT3.15m	0677	310.59	19.53	227.52	105.31	0.28	-1.40	1.2	76.6
relt:/dev/ttyUSB2	14	152	TRH.15m		313.55	18.70	227.47					
relt:/dev/ttyUSB1	14	200	CSAT3A+EC150 (EC100).20m	P1006; 13286?; 1704	311.04	19.42	231.67	105.27	-1.95	-0.18	2.1	158.1
relt:/dev/ttyUSB3	14	202	TRH.20m		313.55	18.68	231.68					
relt:/dev/ttyUSB4	14	204	Nanobarometer.20m	123998								
relt:/dev/gps_pty0	14	1000	GPS									
relt:/dev/ttyUSB8	14	1020	Power Monitor									
relt:/dev/ttyUSB5	14	0x8000	NR01.20m	NR26								
uconv1:/dev/ttyUSB2	21	2	Gill 2D sonic	1422017 1536012 replaced with 1335016 on 23 Oct								
uconv1:/dev/ttyUSB0	21	4	TRH.0.2m		460.30	-48.67	212.53					
uconv1:/dev/gps_pty0	21	1000	GPS									
uconv1:/dev/ttyUSB8	21	1020	Power Monitor									
uconv1:/dev/ttyUSB1	21	1110	CSAT3A (EC100).1.5m.aux1		454.06	-52.34	213.87	130.15	0.14	0.16	0.4	70.6
uconv1:/dev/ttyUSB3	21	1112	TRH.1.5m.aux1		456.06	-54.03	213.86					
uconv2:/dev/ttyUSB0	22	10	CSAT3A+EC150 (EC100).1.5m	P1010; 1467; 1818	458.32	-46.94	213.64	131.19	-0.23	-0.01	0.2	-157.4
uconv2:/dev/ttyUSB2	22	12	TRH.1.5m		460.30	-48.66	213.71					
uconv2:/dev/ttyUSB4	22	30	CSAT3A (EC100).3.0m	2036; 1822	458.32	-46.95	215.01	131.12	-0.48	0.86	1.1	-116.7
uconv2:/dev/gps_pty0	22	1000	GPS (currently disabled)									
uconv2:/dev/ttyUSB1	22	1210	CSAT3A (EC100).1.5m.aux2		462.03	-40.77	213.75	131.80	-0.03	-0.48	0.2	-97.7
uconv2:/dev/ttyUSB3	22	1212	TRH.1.5m.aux2		463.98	-42.50	213.75					
uconv2:/dev/ttyUSB7	22	0x8000	NR01+soils.g (grass)	mote31 NR25; TS30/TS23?(Teardown); HF17; QS29; TP33								
uconvm:/dev/ttyUSB0	23	40	CSAT3.4.5m	0855	457.96	-46.65	216.29	130.56	0.22	0.17	0.9	-76.4
uconvm:/dev/ttyUSB2	23	42	TRH.4.5m		460.30	-48.66	216.25					
uconvm:/dev/ttyUSB1	23	60	CSAT3A+EC150 (EC100).6.0m	2037; 1385; 1813	458.30	-46.96	217.81	130.62	0.03	0.92	1.7	-89.1
uconvm:/dev/ttyUSB6	23	100	CSAT3.10m	1120	457.97	-46.63	221.04					
uconvm:/dev/ttyUSB7	23	102	TRH.10m		460.27	-48.68	221.08	131.29	0.86	-1.71	1.1	40.9
uconvm:/dev/gps_pty0	23	1000	Power Monitor									
uconvm:/dev/ttyUSB8	23	1020	GPS									
iconv1:/dev/ttyUSB2	31	2	Gill 2D sonic									
iconv1:/dev/ttyUSB0	31	4	TRH.0.2m		593.46	-132.97	211.19					
iconv1:/dev/gps_pty0	31	1000	GPS									
iconv1:/dev/ttyUSB1	31	1110	CSAT3A+EC150 (EC100).1.5m.aux1		589.40	-139.21	212.56	51.63	0.16	1.01	1.7	84.6
iconv1:/dev/ttyUSB3	31	1112	TRH.1.5m.aux1		591.46	-137.59	212.56					
iconv2:/dev/ttyUSB0	32	10	CSAT3A (EC100).1.5m	P1008; 1388; 1694	591.41	-134.54	212.43	51.58	-0.22	0.04	0.5	113.6
iconv2:/dev/ttyUSB2	32	12	TRH.1.5m		593.46	-132.97	212.44					
iconv2:/dev/ttyUSB6	32	14	Nanobarometer.1.5m									
iconv2:/dev/ttyUSB4	32	30	CSAT3A (EC100).3.0m	P1001; 1810	591.39	-134.56	213.61	52.31	-0.51	0.52	0.8	132.0
iconv2:/dev/gps_pty0	32	1000	GPS									
iconv2:/dev/ttyUSB1	32	1210	CSAT3A (EC100).1.5m.aux2	2044->2045 on 27 Oct	593.35	-129.90	212.61	49.54	-0.22	-1.14	0.4	120.2
iconv2:/dev/ttyUSB3	32	1212	TRH.1.5m.aux2		595.35	-128.21	212.60					

