iHAB-4 Flight Data

Time	Reporting Period (s)	lat	lng	Speed (Kts)	Speed (MPH)	Course	Altitude (m)	Altitude (ft)	Comment	Ascent Rate (m/min)	AVG Ascent Rate (m/min)	Ascent Rate (m/sec)	AVG Ascent Rate (m/sec)	Ascent Rate (ft/min)	AVG Ascent Rate (ft/min)	Ascent Rate (ft/sec)	AVG Ascent Rate (ft/min)
15:10:39		41.755000	-91.719500	39	45	334	317	1040	08.3V 22C HDOP01.1 SATS10								
15:10:55	16	41.756330	-91.720330	35	40	319	413	1356	08.3V 22C HDOP01.1 SATS10	361	361	6.02	6.02	1185	1185.04	19.75	19.75
15:11:11	16	41.758500	-91.721000	57	66	340	497	1629	08.3V 22C HDOP01.1 SATS10	312	337	5.20	5.61	1024	1104.39	17.06	18.41
15:11:28	17	41.760670	-91.721830	50	58	349	578	1897	08.3V 22C HDOP01.1 SATS10	288	307	4.81	5.12	946	1051.57	15.77	17.53
15:11:44	16	41.763170	-91.722500	65	75	353	663	2176	08.3V 22C HDOP01.1 SATS10	319	325	5.31	5.41	1046	1050.21	17.44	17.50
15:12:17	33	41.769170	-91.722170	81	93	11	841	2758	08.2V 22C HDOP01.1 SATS10	323	190	5.38	3.17	1058	1051.81	17.64	17.53
15:12:35	18	41.772500	-91.720500	85	98	24	916	3006	08.2V 22C HDOP01.1 SATS09	252	333	4.20	5.55	827	1014.29	13.78	16.90
15:12:49	14	41.775830	-91.718170	78	90	32	1005	3298	08.2V 22C HDOP01.1 SATS10	381	421	6.36	7.02	1251	1048.16	20.86	17.47
15:13:07	18	41.778830	-91.716000	74	85	27	1094	3590	08.2V 22C HDOP01.1 SATS09	297	324	4.94	5.40	973	1038.81	16.22	17.31
15:13:22	15	41.781670	-91.713830	72	83	37	1178	3866	08.2V 22C HDOP01.1 SATS10	337	383	5.61	6.38	1104	1046.06	18.40	17.43
15:13:39	17	41.784170	-91.711830	83	96	25	1264	4146	08.2V 22C HDOP01.1 SATS10	301	334	5.02	5.57	988	1040.27	16.47	17.34
15:13:55	16	41.787170	-91.709670	83	96	30	1362	4467	08.2V 22C HDOP01.1 SATS10	367	356	6.11	5.93	1204	1055.13	20.06	17.59
15:14:11	16	41.789670	-91.707830	67	77	23	1456	4778	08.2V 22C HDOP01.0 SATS10	355	356	5.92	5.93	1166	1064.39	19.44	17.74
15:14:27	16	41.792000	-91.706330	56	64	33	1556	5104	08.2V 22C HDOP01.0 SATS10	373	357	6.21	5.96	1223	1076.56	20.38	17.94
15:14:44	17	41.794330	-91.704830	72	83	23	1663	5455	08.2V 22C HDOP01.1 SATS09	378	339	6.29	5.65	1239	1088.14	20.65	18.14
15:15:00	16	41.796500	-91.703170	67	77	34	1767	5797	08.2V 22C HDOP01.0 SATS10	391	362	6.52	6.04	1283	1101.11	21.38	18.35
15:15:16	16	41.798500	-91.701830	61	70	22	1857	6092	08.2V 22C HDOP01.0 SATS10	337	361	5.62	6.02	1106	1101.42	18.44	18.36
15:15:33	17	41.800500	-91.700670	41	47	21	1962	6438	08.2V 22C HDOP01.0 SATS10	372	342	6.20	5.69	1221	1108.47	20.35	18.47
15:15:49	16	41.802500	-91.699500	48	55	7	2060	6758	08.2V 22C HDOP01.0 SATS10	366	363	6.10	6.05	1200	1113.56	20.00	18.56
15:16:06	17	41.804500	-91.698830	65	75	7	2165	7102	08.2V 22C HDOP01.0 SATS10	370	343	6.17	5.72	1214	1118.85	20.24	18.65
15:16:22	16	41.806830	-91.698670	63	72	359	2268	7440	08.2V 22C HDOP01.0 SATS10	386	366	6.44	6.10	1267	1126.28	21.12	18.77
15:16:38	16	41.809670	-91.698670	78	90	2	2376	7795	08.2V 22C HDOP01.1 SATS09	406	368	6.76	6.13	1331	1136.04	22.19	18.93
15:16:55	17	41.812830	-91.698830	67	77	352	2478	8130	08.2V 22C HDOP01.0 SATS10	360	347	6.01	5.78	1182	1138.14	19.70	18.97
15:17:11	16	41.815670	-91.699170	71	82	0	2569	8428	08.2V 22C HDOP01.0 SATS10	341	367	5.68	6.12	1117	1137.25	18.62	18.95
15:17:27	16	41.818330	-91.699500	59	68	359	2653	8703	08.2V 22C HDOP01.0 SATS10	314	365	5.24	6.08	1031	1132.83	17.19	18.88
15:17:44	17	41.821000	-91.699670	67	77	0	2734	8970	08.2V 22C HDOP01.0 SATS10	287	341	4.79	5.69	942	1125.21	15.71	18.75
15:18:00	16	41.823500	-91.700170	69	79	347	2837	9309	08.2V 22C HDOP01.0 SATS10	387	364	6.46	6.06	1271	1130.83	21.19	18.85
15:18:16	16	41.826170	-91.701000	69	79	347	2932	9619	08.2V 22C HDOP01.0 SATS10	354	363	5.91	6.05	1163	1132.00	19.38	18.87
15:18:33	17	41.828830	-91.701830	63	72	345	3023	9918	08.2V 22C HDOP01.0 SATS10	322	341	5.36	5.68	1055	1129.26	17.59	18.82
15:18:49	16	41.831670	-91.702670	81	93	345	3125	10252	08.2V 22C HDOP01.0 SATS10	382	363	6.36	6.05	1252	1133.51	20.87	18.89
15:19:05	16	41.834170	-91.702830	56	64	0	3207	10520	08.2V 22C HDOP01.0 SATS10	306	361	5.11	6.02	1005	1129.23	16.75	18.82
15:19:22	17	41.837170	-91.703000	78	90	358	3285	10779	08.2V 22C HDOP01.0 SATS10	279	338	4.64	5.63	914	1122.29	15.23	18.70
15:19:38	16	41.840000	-91.702170	63	72	19	3385	11107	08.2V 22C HDOP01.0 SATS10	375	360	6.25	5.99	1230	1125.65	20.50	18.76
15:19:54	16	41.842830	-91.700500	67	77	31	3484	11432	08.2V 22C HDOP01.0 SATS10	371	360	6.19	6.00	1219	1128.47	20.31	18.81
15:20:11	17	41.845330	-91.699000	81	93	30	3561	11682	08.2V 22C HDOP01.0 SATS10	269	337	4.48	5.61	882	1121.24	14.71	18.69
15:20:28	17	41.847830	-91.697330	59	68	20	3647	11964	08.2V 22C HDOP01.0 SATS10	303	336	5.06	5.60	995	1117.64	16.59	18.63
15:20:43	15	41.849830	-91.695500	69	79	39	3760	12337	08.2V 22C HDOP01.0 SATS10	455	383	7.58	6.38	1492	1128.04	24.87	18.80
15:21:01	18	41.851830	-91.693000	69	79	47	3865	12679	08.2V 22C HDOP01.0 SATS10	347	320	5.79	5.33	1140	1128.36	19.00	18.81
15:21:16	15	41.853670	-91.690330	63	72	43	3965	13009	08.2V 22C HDOP01.0 SATS10	402	384	6.71	6.40	1320	1133.40	22.00	18.89
15:21:32	16	41.855500	-91.687330	85	98	55	4066	13339	08.2V 22C HDOP01.0 SATS10	377	360	6.29	6.01	1238	1136.07	20.63	18.93
15:21:49	17	41.857330	-91.684000	83	96	56	4184	13726	08.2V 22C HDOP01.0 SATS10	416	341	6.94	5.69	1366	1141.82	22.76	19.03
15:22:21	32	41.860000	-91.676670	65	75	71	4355	14287	08.2V 22C HDOP01.0 SATS10	321	185	5.34	3.08	1052	1139.62	17.53	18.99
15:22:38	17	41.861500	-91.672670	80	92	66	4447	14589	08.2V 22C HDOP01.0 SATS10	325	347	5.41	5.78	1066	1137.87	17.76	18.96
15:22:54	16	41.862830	-91.669330	80	92	65	4525	14846	08.2V 22C HDOP01.0 SATS10	294	367	4.90	6.12	964	1133.82	16.06	18.90
15:23:27	33	41.867000	-91.662830	81	93	46	4680	15354	08.2V 22C HDOP01.0 SATS10	282	180	4.69	3.00	924	1129.04	15.39	18.82
15:23:43	16	41.868830	-91.659500	89	102	49	4765	15634	08.2V 22C HDOP01.0 SATS10	320	371	5.33	6.18	1050	1127.28	17.50	18.79
15:23:59	16	41.870830	-91.656000	87	100	58	4861	15947	08.2V 22C HDOP01.0 SATS10	358	370	5.96	6.17	1174	1128.30	19.56	18.80
15:24:16	17	41.873000	-91.652000	85	98	56	4958	16265	08.2V 22C HDOP01.0 SATS10	342	348	5.70	5.81	1122	1128.17	18.70	18.80
15:24:32	16	41.875500	-91.648170	83	96	44	5051	16570	08.2V 22C HDOP01.0 SATS10	349	370	5.81	6.16	1144	1128.49	19.06	18.81
15:24:48	16	41.878170	-91.644500	100	115	45	5132	16838	08.2V 22C HDOP01.0 SATS10	306	369	5.11	6.14	1005	1125.97	16.75	18.77
15:25:05	17	41.880500	-91.640170	78	90	53	5217	17115	08.2V 22C HDOP01.0 SATS10	298	346	4.97	5.76	978	1123.01	16.29	18.72
15:25:21	16	41.882830	-91.636500	107	123	47	5308	17416	08.2V 22C HDOP01.0 SATS10	344	367	5.73	6.12	1129	1123.12	18.81	18.72
15:25:37	16	41.885330	-91.632830	81	93	45	5390	17685	08.2V 22C HDOP01.0 SATS10	307	366	5.12	6.10	1009	1120.92	16.81	18.68
15:25:54	17	41.887670	-91.628830	102	117	49	5494	18024	08.2V 22C HDOP01.0 SATS10	365	345	6.08	5.75	1197	1122.35	19.94	18.71
15:26:10	16	41.890330	-91.625000	106	122	47	5592	18345	08.2V 22C HDOP01.0 SATS10	367	366	6.12	6.10	1204	1123.85	20.06	18.73
15:26:26	16	41.893000	-91.621000	98	113	52	5680	18634	08.2V 22C HDOP01.0 SATS10	330	366	5.51	6.09	1084	1123.12	18.06	18.72
15:26:43	17	41.896000	-91.617000	100	115	39	5796	19016	08.2V 22C HDOP01.0 SATS10	411	345	6.85	5.76	1348	1127.14	22.47	18.79
15:26:59	16	41.899000	-91.612830	119	137	45	5905	19374	08.2V 22C HDOP01.0 SATS10	409	368	6.82	6.13	1343	1130.92	22.38	18.85
15:27:16	17	41.901830	-91.608670	124	143	50	6015	19734	08.2V 22C HDOP01.0 SATS10	387	347	6.45	5.78	1270	1133.33	21.17	18.89
15:27:32	16	41.905500	-91.603830	126	145	43	6121	20082	08.2V 22C HDOP01.0 SATS10	398	369	6.63	6.15	1305	1136.24	21.75	18.94
15:29:10	98	41.930170	-91.573500	133	153	45	6670	21883	08.2V 22C HDOP01.0 SATS10	336	65	5.60	1.08	1103	1135.68	18.38	18.93
15:29:26	16	41.934330	-91.567830	146	168	42	6734	22092	08.1V 22C HDOP01.0 SATS10	239	394	3.98	6.57	784	1129.91	13.06	18.83
15:29:59	33	41.942500	-91.558670	126	145	38	6879	22568	08.1V 22C HDOP01.0 SATS10	264	192	4.40	3.21	865	1125.64	14.42	18.76

Time	Reporting Period (s)	lat	lng	Speed (Kts)	Speed (MPH)	Course	Altitude (m)	Altitude (ft)	Comment	Ascent Rate (m/min)	AVG Ascent Rate (m/min)	Ascent Rate (m/sec)	AVG Ascent Rate (m/sec)	Ascent Rate (ft/min)	AVG Ascent Rate (ft/min)	Ascent Rate (ft/sec)	AVG Ascent Rate (ft/min)
15:30:15	16	41.946000	-91.554000	115	132	47	6974	22881	08.1V 22C HDOP01.0 SATS10	358	396	5.96	6.60	1174	1126.41	19.56	18.77
15:30:32	17	41.949500	-91.548330	122	140	55	7065	23179	08.1V 22C HDOP01.0 SATS10	321	372	5.34	6.20	1052	1125.24	17.53	18.75
15:30:48	16	41.952000	-91.543500	107	123	53	7141	23427	08.1V 22C HDOP01.0 SATS10	283	394	4.72	6.56	930	1122.24	15.50	18.70
15:31:04	16	41.955170	-91.538670	117	135	50	7220	23688	08.1V 22C HDOP01.0 SATS10	298	392	4.97	6.54	979	1120.06	16.31	18.67
15:32:10	66	41.965330	-91.516500	133	153	61	7553	24780	08.1V 22C HDOP01.0 SATS10	303	98	5.04	1.64	993	1118.16	16.55	18.64
15:32:26	16	41.967830	-91.510000	135	155	62	7635	25049	08.1V 22C HDOP01.0 SATS10	308	404	5.13	6.73	1009	1116.55	16.81	18.61
15:32:42	16	41.970170	-91.503830	117	135	63	7718	25322	08.1V 22C HDOP01.0 SATS10	312	402	5.20	6.70	1024	1115.21	17.06	18.59
15:32:59	17	41.972670	-91.497170	128	147	61	7815	25639	08.1V 22C HDOP01.0 SATS10KE5Y	341	378	5.68	6.30	1119	1115.26	18.65	18.59
15:33:15	16	41.975170	-91.490670	152	175	64	7902	25924	08.1V 22C HDOP01.0 SATS10	326	401	5.43	6.68	1069	1114.61	17.81	18.58
15:33:31	16	41.977830	-91.484000	148	170	63	7986	26200	08.1V 22C HDOP01.0 SATS09	315	399	5.26	6.66	1035	1113.50	17.25	18.56
15:33:48	17	41.980330	-91.476170	156	180	66	8096	26563	08.1V 22C HDOP01.0 SATS10	390	376	6.51	6.27	1281	1115.80	21.35	18.60
15:34:37	49	41.987330	-91.452330	137	158	64	8378	27486	08.1V 22C HDOP01.0 SATS10	344	133	5.74	2.22	1130	1115.99	18.84	18.60
15:34:53	16	41.989330	-91.445170	148	170	71	8467	27778	08.1V 22C HDOP01.0 SATS10	334	407	5.56	6.79	1095	1115.71	18.25	18.60
15:35:09	16	41.991170	-91.437170	167	192	72	8562	28092	08.1V 22C HDOP01.0 SATS10	359	407	5.98	6.78	1178	1116.52	19.63	18.61
15:35:26	17	41.993330	-91.428670	165	190	69	8654	28392	08.1V 22C HDOP01.0 SATS09	323	382	5.38	6.37	1059	1115.77	17.65	18.60
15:35:43	17	41.995330	-91.420830	154	177	68	8733	28651	08.1V 22C HDOP01.0 SATS10	279	381	4.64	6.35	914	1113.19	15.23	18.55
15:35:58	15	41.997500	-91.412500	163	188	71	8806	28892	08.1V 22C HDOP01.0 SATS10	294	430	4.90	7.16	964	1111.30	16.07	18.52
15:36:15	17	41.999330	-91.403500	165	190	72	8906	29219	08.1V 20C HDOP01.0 SATS10	352	379	5.86	6.32	1154	1111.84	19.24	18.53
15:36:31	16	42.001500	-91.395330	170	196	70	8991	29499	08.0V 20C HDOP01.0 SATS10	320	402	5.33	6.69	1050	1111.07	17.50	18.52
15:36:47	16	42.003500	-91.387170	159	183	73	9066	29745	08.0V 20C HDOP01.0 SATS10	281	400	4.69	6.67	922	1108.77	15.37	18.48
15:37:04	17	42.005670	-91.378830	150	173	70	9167	30077	08.0V 20C HDOP01.0 SATS10	357	376	5.95	6.27	1172	1109.53	19.53	18.49
15:37:20	16	42.007330	-91.370500	170	196	75	9246	30334	08.0V 20C HDOP01.0 SATS10	294	399	4.90	6.64	964	1107.80	16.06	18.46
15:37:37	17	42.009500	-91.362330	159	183	75	9332	30616	08.0V 20C HDOP01.0 SATS10	303	374	5.06	6.24	995	1106.47	16.59	18.44
15:37:53	16	42.011500	-91.353670	169	194	74	9424	30917	08.0V 20C HDOP01.1 SATS08	344	397	5.73	6.62	1129	1106.73	18.81	18.45
15:38:09	16	42.014000	-91.345330	167	192	67	9510	31201	08.0V 20C HDOP01.0 SATS10	325	396	5.41	6.60	1065	1106.25	17.75	18.44
15:38:42	33	42.018330	-91.327830	159	183	72	9665	31709	08.0V 20C HDOP01.0 SATS10	282	193	4.69	3.22	924	1104.18	15.39	18.40
15:39:15	33	42.023170	-91.310330	170	196	70	9828	32243	08.0V 20C HDOP01.0 SATS10	296	194	4.93	3.24	971	1102.68	16.18	18.38
15:39:31	16	42.025330	-91.301670	176	203	71	9906	32501	08.0V 20C HDOP01.0 SATS10	295	400	4.91	6.66	967	1101.18	16.12	18.35
15:39:47	16	42.027170	-91.292830	172	198	77	10014	32854	08.0V 20C HDOP01.0 SATS10	404	400	6.73	6.66	1324	1103.62	22.06	18.39
15:40:04	17	42.029330	-91.283670	167	192	72	10089	33100	08.0V 20C HDOP01.0 SATS10	265	375	4.41	6.25	868	1101.06	14.47	18.35
15:40:20	16	42.031000	-91.275170	172	198	74	10166	33354	08.0V 20C HDOP01.0 SATS10	290	397	4.84	6.62	953	1099.47	15.88	18.32
15:40:36	16	42.032500	-91.266330	170	196	74	10248	33623	08.0V 20C HDOP01.0 SATS10	307	396	5.12	6.60	1009	1098.50	16.81	18.31
15:40:53	17	42.034330	-91.257000	169	194	76	10323	33868	08.0V 20C HDOP01.0 SATS10	264	372	4.39	6.20	865	1096.04	14.41	18.27
15:41:09	16	42.036000	-91.248170	170	196	76	10400	34121	08.0V 20C HDOP01.0 SATS10	289	394	4.82	6.56	949	1094.51	15.81	18.24
15:41:25	16	42.037670	-91.239670	159	183	74	10478	34376	08.0V 19C HDOP01.0 SATS10	291	393	4.86	6.55	956	1093.08	15.94	18.22
15:41:58	33	42.041170	-91.221500	174	200	75	10634	34887	08.0V 19C HDOP01.0 SATS10	283	191	4.72	3.19	929	1091.41	15.49	18.19
15:42:31	33	42.044830	-91.203000	183	211	76	10785	35385	08.0V 19C HDOP01.0 SATS10	276	192	4.60	3.20	905	1089.53	15.09	18.16
15:42:47	16	42.046670	-91.193670	176	203	74	10859	35626	08.0V 19C HDOP01.0 SATS10	275	395	4.59	6.59	904	1087.67	15.06	18.13
15:43:04	17	42.048500	-91.184670	172	198	75	10935	35875	08.0V 19C HDOP01.1 SATS09	268	371	4.46	6.18	879	1085.60	14.65	18.09
15:43:20	16	42.050330	-91.175330	165	190	73	11019	36151	08.0V 19C HDOP01.0 SATS10	315	393	5.26	6.56	1035	1085.11	17.25	18.09
15:43:36	16	42.052330	-91.166670	170	196	73	11095	36402	08.0V 19C HDOP01.0 SATS10	287	392	4.78	6.54	941	1083.71	15.69	18.06
15:43:52	16	42.054500	-91.157500	187	215	70	11183	36690	08.0V 19C HDOP01.0 SATS09	329	392	5.49	6.53	1080	1083.68	18.00	18.06
15:44:09	17	42.056670	-91.148000	172	198	74	11269	36972	08.0V 19C HDOP01.1 SATS09	303	368	5.06	6.14	995	1082.83	16.59	18.05
15:44:41	32	42.060330	-91.130000	172	198	75	11437	37523	08.0V 19C HDOP01.1 SATS09	315	197	5.25	3.28	1033	1082.36	17.22	18.04
15:45:14	33	42.064000	-91.111330	172	198	75	11604	38071	08.0V 19C HDOP01.1 SATS09	304	192	5.06	3.20	996	1081.56	16.61	18.03
15:45:30	16	42.065500	-91.102330	174	200	77	11682	38328	08.0V 19C HDOP01.1 SATS09	294	395	4.90	6.58	964	1080.47	16.06	18.01
15:45:47	17	42.067330	-91.092830	170	196	76	11770	38616	07.9V 19C HDOP01.1 SATS08	310	371	5.16	6.18	1017	1079.88	16.94	18.00
15:46:03	16	42.069000	-91.083830	169	194	76	11848	38872	07.9V 17C HDOP01.1 SATS08	293	393	4.88	6.55	960	1078.79	16.00	17.98
15:47:13	70	42.070500	-91.075000	169	194	76	11927	39129	07.9V 17C HDOP01.1 SATS09	67	90	1.12	1.49	220	1071.06	3.67	17.85
15:47:24	11	42.073330	-91.056830	167	192	79	12085	39650	08.0V 17C HDOP01.0 SATS10	866	573	14.44	9.55	2842	1086.87	47.36	18.11
15:47:41	17	42.076670	-91.030830	161	185	84	12307	40377	07.9V 17C HDOP01.0 SATS10	782	374	13.03	6.24	2566	1099.96	42.76	18.33
15:47:58	17	42.077330	-91.022500	156	180	84	12384	40630	07.9V 17C HDOP01.1 SATS08	272	374	4.54	6.23	893	1098.14	14.88	18.30
15:48:14	16	42.077830	-91.014000	148	170	84	12468	40905	07.9V 17C HDOP01.1 SATS09	314	396	5.24	6.60	1031	1097.56	17.19	18.29
15:48:30	16	42.078330	-91.006170	144	166	84	12547	41165	07.9V 17C HDOP01.0 SATS10	297	395	4.95	6.59	975	1096.50	16.25	18.28
15:48:47	17	42.079170	-90.998500	130	150	81	12626	41425	07.9V 17C HDOP01.1 SATS09	280	371	4.66	6.19	918	1094.98	15.29	18.25
15:49:03	16	42.080170	-90.991170	135	155	78	12707	41691	07.9V 17C HDOP01.1 SATS09	304	394	5.07	6.56	998	1094.15	16.63	18.24
15:49:19	16	42.081000	-90.983830	126	145	81	12783	41939	07.9V 17C HDOP01.1 SATS08	283	393	4.72	6.55	930	1092.77	15.50	18.21
15:49:36	17	42.082170	-90.976170	141	162	78	12864	42205	07.9V 17C HDOP01.7 SATS06	286	369	4.77	6.15	939	1091.49	15.65	18.19
15:49:52	16	42.083000	-90.968670	143	165	81	12935	42437	07.9V 15C HDOP01.1 SATS08	265	391	4.42	6.52	870	1089.66	14.50	18.16
15:50:26	34	42.083500	-90.953670	122	140	98	13118	43039	07.9V 15C HDOP01.1 SATS09	324	185	5.40	3.09	1062	1089.43	17.71	18.16
15:50:58	32	42.082500	-90.941670	111	128	97	13278	43562	07.9V 15C HDOP01.1 SATS09	299	198	4.98	3.29	981	1088.55	16.34	18.14
15:51:14	16	42.082000	-90.936170	96	110	96	13373	43875	07.8V 15C HDOP01.1 SATS08	358	395	5.96	6.58	1174	1089.24	19.56	18.15
15:51:30	16	42.081500	-90.931170	74	85	104	13466	44181	07.8V 15C HDOP01.1 SATS09	350	394	5.83	6.57	1148	1089.70	19.13	18.16
15:51:46	16	42.081170	-90.926670	83	96	96	13536	44410	07.8V 15C HDOP01.1 SATS08	262	393	4.36	6.56	859	1087.87	14.31	18.13
15:52:19	33	42.080330	-90.918000	69	79	95	13694	44929	07.8V 15C HDOP01.1 SATS07	288	192	4.79	3.19	944	1086.73	15.73	18.11
15:52:35	16	42.080330	-90.914330	67	77	87	13773	45187	07.8V 15C HDOP01.1 SATS08	295	394	4.91	6.57	968	1085.80	16.13	18.10
15:52:52	17	42.080670	-90.910500	70	81	77	13858	45465	07.8V 15C HDOP01.1 SATS08	299	370	4.98	6.17	981	1084.99	16.35	18.08
15:53:08	16	42.081500	-90.906830	74	85	74	13938	45727	07.8V 15C HDOP01.1 SATS08	299	393	4.99	6.55	983	1084.20	16.38	18.07
15:53:24	16	42.082670	-90.902830	85	98	65	14015	45981	07.8V 15C HDOP01.0 SATS09	290	392	4.84	6.54	953	1083.20	15.88	18.05

Time	Reporting Period (s)	lat	lng	Speed (Kts)	Speed (MPH)	Course	Altitude (m)	Altitude (ft)	Comment	Ascent Rate (m/min)	AVG Ascent Rate (m/min)	Ascent Rate (m/sec)	AVG Ascent Rate (m/sec)	Ascent Rate (ft/min)	AVG Ascent Rate (ft/min)	Ascent Rate (ft/sec)	AVG Ascent Rate (ft/min)
15:53:41	17	42.084170	-90.898670	78	90	68	14106	46278	07.8V 15C HDOP01.0 SATS09	319	369	5.32	6.14	1048	1082.93	17.47	18.05
15:54:13	32	42.086670	-90.892170	67	77	58	14268	46812	07.8V 13C HDOP01.0 SATS08	305	197	5.09	3.28	1001	1082.32	16.69	18.04
15:54:30	17	42.088170	-90.889170	65	75	54	14348	47075	07.8V 13C HDOP01.0 SATS09	283	370	4.72	6.16	928	1081.17	15.47	18.02
15:54:46	16	42.089830	-90.886330	67	77	47	14422	47316	07.8V 13C HDOP01.0 SATS09	275	392	4.59	6.53	904	1079.85	15.06	18.00
15:55:02	16	42.092000	-90.883670	72	83	44	14495	47556	07.8V 13C HDOP01.0 SATS08	274	391	4.57	6.52	900	1078.53	15.00	17.98
15:55:35	33	42.096330	-90.877330	78	90	52	14648	48058	07.8V 13C HDOP01.0 SATS09	278	190	4.64	3.17	913	1077.32	15.21	17.96
15:56:08	33	42.099670	-90.869830	70	81	64	14823	48633	07.8V 13C HDOP01.0 SATS09	319	191	5.31	3.19	1045	1077.09	17.42	17.95
15:56:24	16	42.100330	-90.866830	52	60	88	14952	49056	07.8V 13C HDOP01.0 SATS10	483	395	8.06	6.58	1586	1080.75	26.44	18.01
15:56:40	16	42.100830	-90.863670	54	62	79	15032	49316	07.8V 13C HDOP01.0 SATS10	297	394	4.95	6.57	975	1080.00	16.25	18.00
15:56:57	17	42.101000	-90.860000	65	75	87	15114	49585	07.8V 13C HDOP01.0 SATS10	289	370	4.82	6.17	949	1079.07	15.82	17.98
15:57:13	16	42.100830	-90.856500	67	77	96	15194	49850	07.8V 13C HDOP01.0 SATS10	303	393	5.05	6.55	994	1078.47	16.56	17.97
15:58:19	66	42.098500	-90.838500	91	105	101	15504	50866	07.8V 11C HDOP01.0 SATS10	282	97	4.69	1.61	924	1077.39	15.39	17.96
15:58:35	16	42.097830	-90.833670	83	96	99	15586	51136	07.8V 11C HDOP01.0 SATS10	309	398	5.14	6.63	1012	1076.94	16.87	17.95
15:59:08	33	42.096170	-90.826170	72	83	110	15743	51650	07.8V 11C HDOP00.9 SATS11	285	193	4.75	3.22	935	1075.95	15.58	17.93
15:59:24	16	42.095170	-90.822170	69	79	107	15830	51937	07.8V 11C HDOP00.9 SATS11	328	398	5.47	6.64	1076	1075.96	17.94	17.93
15:59:40	16	42.094500	-90.818830	69	79	102	15918	52223	07.8V 11C HDOP00.9 SATS11	327	398	5.45	6.63	1072	1075.93	17.87	17.93
15:59:57	17	42.094000	-90.815170	72	83	97	15995	52476	07.8V 11C HDOP00.9 SATS11	272	374	4.54	6.23	893	1074.70	14.88	17.91
16:00:29	32	42.093330	-90.806830	65	75	96	16159	53014	07.7V 11C HDOP00.9 SATS10	307	199	5.12	3.32	1009	1074.25	16.81	17.90
16:01:02	33	42.091830	-90.799830	57	66	116	16342	53616	07.7V 11C HDOP00.9 SATS11	334	194	5.56	3.24	1095	1074.39	18.24	17.91
16:01:18	16	42.090330	-90.797170	46	53	125	16433	53914	07.7V 11C HDOP00.9 SATS11	341	400	5.68	6.67	1117	1074.67	18.62	17.91
16:01:51	33	42.087000	-90.793000	39	45	139	16649	54623	07.7V 11C HDOP00.9 SATS11	393	195	6.55	3.26	1289	1076.09	21.48	17.93
16:02:07	16	42.085670	-90.791330	43	49	139	16741	54924	07.7V 11C HDOP00.9 SATS11	344	403	5.73	6.71	1129	1076.43	18.81	17.94
16:02:24	17	42.084170	-90.789830	44	51	144	16826	55203	07.7V 11C HDOP00.9 SATS11	300	378	5.00	6.31	985	1075.83	16.41	17.93
16:02:56	32	42.081830	-90.786670	41	47	131	16985	55724	07.7V 09C HDOP00.9 SATS10	298	202	4.96	3.36	977	1075.20	16.28	17.92
16:03:13	17	42.081000	-90.784830	43	49	125	17070	56004	07.7V 09C HDOP00.9 SATS10	301	379	5.02	6.32	988	1074.64	16.47	17.91
16:03:29	16	42.080500	-90.783170	43	49	111	17148	56259	07.7V 09C HDOP00.9 SATS10	291	402	4.86	6.70	956	1073.88	15.94	17.90
16:03:45	16	42.080000	-90.781330	37	43	109	17228	56523	07.7V 09C HDOP00.9 SATS10	302	401	5.03	6.69	990	1073.35	16.50	17.89
16:04:02	17	42.079330	-90.779330	46	53	115	17316	56810	07.7V 09C HDOP00.9 SATS10	309	377	5.15	6.29	1013	1072.97	16.88	17.88
16:04:18	16	42.079000	-90.777330	48	55	102	17401	57090	07.7V 09C HDOP00.9 SATS10	320	400	5.33	6.67	1050	1072.83	17.50	17.88
16:04:51	33	42.078670	-90.772500	57	66	97	17574	57657	07.7V 09C HDOP00.9 SATS10	314	195	5.24	3.25	1031	1072.57	17.18	17.88
16:05:08	17	42.078500	-90.769830	54	62	99	17656	57927	07.6V 09C HDOP00.9 SATS10	290	378	4.84	6.30	953	1071.83	15.88	17.86
16:05:23	15	42.078000	-90.767330	44	51	105	17741	58207	07.6V 09C HDOP00.9 SATS10	341	428	5.69	7.13	1120	1072.13	18.67	17.87
16:05:56	33	42.076670	-90.764000	24	28	127	17923	58804	07.6V 09C HDOP00.9 SATS10	331	195	5.51	3.25	1085	1072.21	18.09	17.87
16:06:12	16	42.076000	-90.763170	22	25	141	18017	59111	07.6V 09C HDOP00.9 SATS10	351	402	5.85	6.70	1151	1072.69	19.19	17.88
16:06:29	17	42.075670	-90.763170	6	7	139	18103	59392	07.6V 09C HDOP00.9 SATS10	302	378	5.04	6.30	992	1072.20	16.53	17.87
16:06:45	16	42.075500	-90.762670	17	20	115	18190	59677	07.6V 09C HDOP00.9 SATS10	326	401	5.43	6.69	1069	1072.18	17.81	17.87
16:07:01	16	42.075330	-90.761500	28	32	118	18277	59965	07.6V 09C HDOP00.9 SATS10	329	401	5.49	6.68	1080	1072.22	18.00	17.87
16:07:18	17	42.075170	-90.760000	33	38	105	18367	60258	07.6V 07C HDOP00.9 SATS10	315	377	5.25	6.28	1034	1072.00	17.24	17.87
16:07:34	16	42.074670	-90.757830	39	45	118	18459	60562	07.6V 07C HDOP00.9 SATS10	347	400	5.79	6.67	1140	1072.40	19.00	17.87
16:07:50	16	42.074170	-90.756670	20	23	116	18548	60854	07.6V 07C HDOP00.9 SATS10	334	400	5.56	6.66	1095	1072.53	18.25	17.88
16:08:07	17	42.074000	-90.755670	19	22	113	18639	61153	07.6V 07C HDOP00.9 SATS10	322	376	5.36	6.27	1055	1072.43	17.59	17.87
16:08:23	16	42.074000	-90.754830	22	25	89	18732	61456	07.6V 07C HDOP00.9 SATS10	346	399	5.77	6.65	1136	1072.80	18.94	17.88
16:08:40	17	42.074000	-90.753830	24	28	77	18815	61730	07.6V 07C HDOP00.9 SATS10	295	375	4.91	6.25	967	1072.19	16.12	17.87
16:08:56	16	42.074170	-90.753170	15	17	91	18904	62022	07.6V 07C HDOP01.0 SATS09	334	398	5.56	6.64	1095	1072.32	18.25	17.87
16:09:12	16	42.074170	-90.752330	6	7	104	18995	62321	07.6V 07C HDOP01.0 SATS09	342	398	5.70	6.63	1121	1072.60	18.69	17.88
16:09:29	17	42.074170	-90.752170	2	2	15	19088	62625	07.6V 07C HDOP01.0 SATS09	327	374	5.45	6.24	1073	1072.60	17.88	17.88
16:09:45	16	42.074500	-90.752330	2	2	359	19173	62903	07.5V 07C HDOP01.0 SATS08	318	397	5.30	6.62	1042	1072.43	17.37	17.87
16:10:01	16	42.074830	-90.752000	9	10	28	19263	63200	07.5V 07C HDOP01.0 SATS08	339	397	5.66	6.62	1114	1072.66	18.56	17.88
16:10:18	17	42.075500	-90.751670	11	13	41	19347	63475	07.5V 07C HDOP01.0 SATS08	296	373	4.93	6.22	971	1072.10	16.18	17.87
16:10:34	16	42.075670	-90.751000	11	13	67	19431	63750	07.5V 07C HDOP01.0 SATS08	314	396	5.24	6.60	1031	1071.87	17.19	17.86
16:10:50	16	42.075830	-90.750170	13	15	98	19518	64034	07.5V 07C HDOP01.0 SATS08	325	396	5.41	6.59	1065	1071.83	17.75	17.86
16:11:07	17	42.075670	-90.749670	13	15	98	19599	64300	07.5V 07C HDOP01.0 SATS08	286	372	4.77	6.20	939	1071.11	15.65	17.85
16:11:23	16	42.075830	-90.749170	22	25	56	19688	64593	07.5V 07C HDOP01.0 SATS08	335	395	5.58	6.58	1099	1071.26	18.31	17.85
16:11:56	33	42.075500	-90.748330	7	8	161	19852	65132	07.5V 07C HDOP01.0 SATS08	299	192	4.98	3.20	980	1070.76	16.33	17.85
16:12:12	16	42.075000	-90.748330	11	13	159	19941	65422	07.5V 07C HDOP01.0 SATS08	332	396	5.53	6.59	1088	1070.85	18.13	17.85
16:12:29	17	42.074500	-90.748330	20	23	186	20023	65692	07.5V 05C HDOP01.0 SATS08	290	372	4.84	6.20	953	1070.22	15.88	17.84
16:12:45	16	42.074170	-90.748330	11	13	176	20110	65979	07.5V 05C HDOP01.0 SATS08	328	395	5.47	6.58	1076	1070.26	17.94	17.84
16:13:01	16	42.073670	-90.748670	15	17	237	20194	66252	07.5V 05C HDOP01.0 SATS08	312	394	5.20	6.57	1024	1070.01	17.06	17.83
16:13:17	16	42.073170	-90.749170	17	20	224	20286	66556	07.5V 05C HDOP01.0 SATS08	347	394	5.79	6.57	1140	1070.38	19.00	17.84
16:13:50	33	42.072330	-90.751170	17	20	253	20457	67116	07.5V 05C HDOP01.0 SATS08	310	192	5.17	3.20	1018	1070.10	16.97	17.84
16:14:06	16	42.072000	-90.752170	17	20	243	20542	67395	07.5V 05C HDOP01.0 SATS08	319	395	5.32	6.58	1046	1069.98	17.44	17.83
16:14:23	17	42.071670	-90.753500	30	35	239	20626	67669	07.5V 05C HDOP01.0 SATS08	295	371	4.91	6.19	967	1069.45	16.12	17.82
16:14:39	16	42.071330	-90.755170	31	36	262	20710	67946	07.5V 05C HDOP01.0 SATS08	317	394	5.28	6.57	1039	1069.29	17.31	17.82
16:14:55	16	42.071500	-90.756670	28	32	291	20795	68226	07.5V 05C HDOP01.0 SATS08	320	394	5.33	6.56	1050	1069.19	17.50	17.82
16:15:12	17	42.072000	-90.757830	30	35	293	20880	68504	07.5V 05C HDOP01.0 SATS08	299	370	4.98	6.17	981	1068.74	16.35	17.81
16:15:28	16	42.071830	-90.759170	28	32	279	20965	68782	07.5V 05C HDOP01.0 SATS08	318	393	5.30	6.55	1042	1068.61	17.37	17.81
16:16:01	33	42.072000	-90.761500	20	23	269	21135	69342	07.5V 05C HDOP01.0 SATS08	310	191	5.17	3.19	1018	1068.35	16.97	17.81
16:16:17	16	42.072000	-90.762830	17	20	292	21222	69625	07.5V 05C HDOP01.0 SATS08	323	394	5.39	6.57	1061	1068.32	17.69	17.81
16:16:33	16	42.072170	-90.764000	17	20	268	21311	69917	07.5V 05C HDOP01.0 SATS08	334	394	5.56	6.56	1095	1068.45	18.25	17.81

Time	Reporting Period (s)	lat	lng	Speed (Kts)	Speed (MPH)	Course	Altitude (m)	Altitude (ft)	Comment	Ascent Rate (m/min)	AVG Ascent Rate (m/min)	Ascent Rate (m/sec)	AVG Ascent Rate (m/sec)	Ascent Rate (ft/min)	AVG Ascent Rate (ft/min)	Ascent Rate (ft/sec)	AVG Ascent Rate (ft/min)
16:16:50	17	42.072170	-90.765500	24	28	270	21405	70228	07.5V 05C HDOP01.0 SATS08	335	370	5.58	6.17	1098	1068.60	18.29	17.81
16:17:22	32	42.073000	-90.769330	31	36	306	21595	70849	07.5V 05C HDOP01.0 SATS08	355	198	5.92	3.29	1164	1069.07	19.41	17.82
16:17:39	17	42.073830	-90.770500	22	25	309	21686	71147	07.5V 05C HDOP01.0 SATS08	321	372	5.34	6.19	1052	1068.98	17.53	17.82
16:17:55	16	42.074330	-90.771330	15	17	305	21782	71464	07.5V 05C HDOP01.0 SATS08	362	395	6.04	6.58	1189	1069.57	19.81	17.83
16:18:11	16	42.074670	-90.772170	20	23	274	21873	71761	07.5V 03C HDOP01.0 SATS08	339	394	5.66	6.57	1114	1069.79	18.56	17.83
16:18:28	17	42.074670	-90.773500	39	45	273	21965	72063	07.5V 03C HDOP01.0 SATS08	325	371	5.41	6.18	1066	1069.77	17.76	17.83
16:18:44	16	42.074830	-90.775000	33	38	280	22059	72371	07.5V 03C HDOP01.0 SATS08	352	394	5.87	6.56	1155	1070.18	19.25	17.84
16:19:01	17	42.075000	-90.776500	33	38	265	22148	72664	07.4V 03C HDOP01.0 SATS08	315	370	5.25	6.17	1034	1070.01	17.24	17.83
16:19:18	17	42.074830	-90.778000	35	40	261	22234	72946	07.4V 03C HDOP01.0 SATS08	303	370	5.06	6.17	995	1069.65	16.59	17.83
16:19:33	15	42.074830	-90.779500	31	36	270	22328	73256	07.4V 03C HDOP01.0 SATS08	378	419	6.30	6.99	1240	1070.46	20.67	17.84
16:19:50	17	42.075000	-90.781330	20	23	281	22419	73552	07.4V 03C HDOP01.0 SATS08	318	370	5.31	6.16	1045	1070.34	17.41	17.84
16:20:22	32	42.075830	-90.784330	33	38	299	22605	74165	07.4V 03C HDOP01.0 SATS08	350	197	5.84	3.29	1149	1070.71	19.16	17.85
16:20:39	17	42.076170	-90.785670	28	32	294	22697	74464	07.4V 03C HDOP01.0 SATS08	322	371	5.36	6.18	1055	1070.64	17.59	17.84
16:20:55	16	42.076670	-90.786670	22	25	290	22784	74750	07.4V 03C HDOP01.0 SATS08	327	394	5.45	6.56	1072	1070.65	17.87	17.84
16:21:11	16	42.077330	-90.787500	24	28	323	22880	75064	07.4V 03C HDOP01.0 SATS08	359	394	5.98	6.56	1178	1071.14	19.63	17.85
16:21:28	17	42.077830	-90.788000	20	23	323	22972	75368	07.4V 03C HDOP01.0 SATS08	327	370	5.45	6.17	1073	1071.15	17.88	17.85
16:21:44	16	42.078000	-90.789170	30	35	257	23073	75699	07.4V 03C HDOP01.0 SATS08	378	393	6.31	6.55	1241	1071.94	20.69	17.87
16:22:17	33	42.078170	-90.792000	20	23	276	23260	76311	07.4V 03C HDOP01.0 SATS08	339	191	5.65	3.19	1113	1072.12	18.54	17.87
16:22:33	16	42.078670	-90.793170	13	15	303	23355	76624	07.4V 03C HDOP01.0 SATS08	358	394	5.96	6.57	1174	1072.59	19.56	17.88
16:22:49	16	42.079330	-90.794000	15	17	328	23446	76922	07.4V 03C HDOP01.0 SATS08	341	394	5.68	6.57	1117	1072.79	18.62	17.88
16:23:06	17	42.079830	-90.794500	11	13	312	23535	77213	07.4V 03C HDOP01.0 SATS08	313	371	5.22	6.18	1027	1072.58	17.12	17.88
16:23:22	16	42.080000	-90.795500	13	15	311	23631	77529	07.4V 03C HDOP01.0 SATS08	361	394	6.02	6.56	1185	1073.09	19.75	17.88
16:23:38	16	42.080170	-90.796500	20	23	270	23718	77816	07.4V 03C HDOP01.0 SATS08	328	394	5.47	6.56	1076	1073.11	17.94	17.89
16:23:55	17	42.080670	-90.797330	30	35	314	23810	78116	07.3V 03C HDOP01.0 SATS08	323	370	5.38	6.17	1059	1073.04	17.65	17.88
16:24:11	16	42.081330	-90.797670	22	25	332	23903	78422	07.3V 03C HDOP01.0 SATS08	350	393	5.83	6.55	1148	1073.37	19.13	17.89
16:24:27	16	42.081670	-90.798170	19	22	288	23989	78704	07.3V 03C HDOP01.0 SATS08	322	393	5.37	6.55	1057	1073.30	17.62	17.89
16:25:00	33	42.081830	-90.800170	9	10	261	24170	79299	07.3V 01C HDOP01.0 SATS08	330	191	5.50	3.18	1082	1073.34	18.03	17.89
16:25:16	16	42.082170	-90.801500	28	32	297	24258	79587	07.3V 01C HDOP01.0 SATS08	329	394	5.49	6.56	1080	1073.37	18.00	17.89
16:25:33	17	42.082170	-90.802830	20	23	286	24347	79879	07.3V 01C HDOP01.0 SATS08	314	370	5.24	6.17	1031	1073.18	17.18	17.89
16:25:49	16	42.082500	-90.804670	26	30	278	24443	80193	07.3V 01C HDOP01.0 SATS08	359	393	5.98	6.56	1178	1073.64	19.63	17.89
16:26:22	33	42.082830	-90.808170	31	36	295	24633	80817	07.3V 01C HDOP01.0 SATS08	346	191	5.76	3.19	1135	1073.90	18.91	17.90
16:26:39	17	42.083330	-90.809500	33	38	309	24730	81136	07.3V 01C HDOP01.0 SATS08	343	371	5.72	6.19	1126	1074.12	18.76	17.90
16:26:54	15	42.084000	-90.810330	22	25	297	24828	81457	07.3V 01C HDOP01.0 SATS08	391	421	6.52	7.01	1284	1075.02	21.40	17.92
16:27:11	17	42.084170	-90.810670	11	13	34	24926	81778	07.3V 01C HDOP00.9 SATS09	345	371	5.76	6.19	1133	1075.27	18.88	17.92
16:27:27	16	42.084170	-90.810830	4	5	249	25026	82107	07.3V 01C HDOP00.9 SATS09	376	394	6.27	6.57	1234	1075.95	20.56	17.93
16:27:43	16	42.084000	-90.810830	7	8	137	25120	82416	07.3V 01C HDOP00.9 SATS09	353	394	5.89	6.57	1159	1076.30	19.31	17.94
16:28:00	17	42.083830	-90.810830	7	8	197	25215	82725	07.3V 01C HDOP00.9 SATS09	332	371	5.54	6.18	1091	1076.36	18.18	17.94
16:28:16	16	42.083670	-90.811330	20	23	230	25315	83056	07.3V 01C HDOP00.9 SATS09	378	394	6.31	6.56	1241	1077.05	20.69	17.95
16:28:32	16	42.083170	-90.811830	17	20	236	25405	83349	07.3V 01C HDOP00.9 SATS09	335	394	5.58	6.56	1099	1077.14	18.31	17.95
16:29:22	50	42.082170	-90.816170	26	30	260	25683	84261	07.3V 01C HDOP00.8 SATS10	334	127	5.56	2.11	1094	1077.21	18.24	17.95
16:29:38	16	42.081830	-90.817830	22	25	257	25770	84546	07.3V 01C HDOP00.8 SATS10	326	396	5.43	6.60	1069	1077.18	17.81	17.95
16:29:54	16	42.081500	-90.819170	17	20	252	25860	84844	07.3V 01C HDOP00.8 SATS10	341	396	5.68	6.60	1117	1077.34	18.62	17.96
16:30:11	17	42.081170	-90.820170	19	22	229	25947	85128	07.3V 01C HDOP00.8 SATS10	306	372	5.09	6.20	1002	1077.04	16.71	17.95
16:30:27	16	42.080330	-90.821330	39	45	241	25999	85300	07.3V 01C HDOP00.8 SATS10	197	395	3.28	6.58	645	1075.27	10.75	17.92
16:31:00	33	42.079500	-90.823670	22	25	304	24571	80615	07.3V 01C HDOP00.8 SATS10	-2596	180	-43.27	3.00	-8518	1036.11	-141.97	17.27
16:31:16	16	42.079670	-90.825330	7	8	301	23919	78473	07.3V 01C HDOP00.8 SATS10	-2448	360	-40.81	6.00	-8032	999.24	-133.87	16.65
16:31:32	16	42.079830	-90.826330	22	25	272	23249	76276	07.3V 01C HDOP00.8 SATS10	-2511	348	-41.85	5.80	-8239	961.84	-137.31	16.03
16:31:49	17	42.080000	-90.827670	43	49	263	22630	74244	07.3V 01C HDOP00.8 SATS10	-2186	318	-36.43	5.29	-7172	929.05	-119.53	15.48
16:32:05	16	42.080170	-90.829500	33	38	289	22039	72305	07.3V 01C HDOP00.9 SATS09	-2216	327	-36.94	5.45	-7271	896.11	-121.19	14.94
16:32:21	16	42.080330	-90.830670	31	36	295	21503	70549	07.3V 01C HDOP00.9 SATS09	-2007	318	-33.45	5.30	-6585	866.19	-109.75	14.44
16:32:54	33	42.080830	-90.833330	26	30	271	20460	67125	07.3V-01C HDOP00.7 SATS11	-1898	146	-31.63	2.43	-6225	837.94	-103.76	13.97
16:33:10	16	42.080500	-90.834170	15	17	242	19984	65565	07.3V-01C HDOP00.8 SATS10	-1783	293	-29.72	4.88	-5850	811.40	-97.50	13.52
16:33:27	17	42.080330	-90.834170	4	5	79	19554	64155	07.3V-01C HDOP00.7 SATS11	-1517	268	-25.28	4.47	-4976	788.52	-82.94	13.14
16:33:43	16	42.080670	-90.833670	7	8	14	19119	62728	07.3V-01C HDOP00.7 SATS11	-1631	278	-27.18	4.63	-5351	764.35	-89.19	12.74
16:34:00	17	42.080830	-90.833170	6	7	61	18675	61271	07.3V-01C HDOP00.8 SATS10	-1567	254	-26.12	4.23	-5142	741.18	-85.71	12.35
16:34:16	16	42.080670	-90.832000	26	30	116	18273	59952	07.3V-01C HDOP00.8 SATS10	-1508	263	-25.13	4.38	-4946	718.97	-82.44	11.98
16:34:32	16	42.080500	-90.831170	26	30	122	17887	58684	07.2V-01C HDOP00.7 SATS11	-1449	256	-24.16	4.27	-4755	697.67	-79.25	11.63
16:34:48	16	42.080000	-90.829170	39	45	105	17487	57372	07.2V-01C HDOP00.9 SATS09	-1500	250	-24.99	4.16	-4920	675.89	-82.00	11.26
16:35:05	17	42.079670	-90.827500	35	40	114	17123	56178	07.2V-01C HDOP00.7 SATS11	-1284	229	-21.41	3.82	-4214	657.01	-70.24	10.95
16:35:21	16	42.078670	-90.825830	33	38	125	16741	54926	07.2V-01C HDOP00.8 SATS10	-1431	237	-23.85	3.95	-4695	636.43	-78.25	10.61
16:35:37	16	42.077670	-90.823500	48	55	103	16390	53773	07.2V-01C HDOP00.7 SATS11	-1318	231	-21.96	3.85	-4324	617.42	-72.06	10.29
16:35:54	17	42.077500	-90.820170	57	66	85	16048	52652	07.2V-01C HDOP00.7 SATS11	-1206	212	-20.10	3.53	-3956	599.97	-65.94	10.00
16:36:10	16	42.077000	-90.816330	69	79	105	15698	51503	07.2V-01C HDOP00.8 SATS10	-1313	219	-21.89	3.66	-4309	581.30	-71.81	9.69
16:36:26	16	42.076330	-90.812330	78	90	105	15369	50424	07.2V-01C HDOP00.8 SATS10	-1233	214	-20.55	3.56	-4046	563.77	-67.44	9.40
16:36:43	17	42.076330	-90.808670	54	62	81	15052	49383	07.2V-01C HDOP00.8 SATS10	-1120	196	-18.66	3.27	-3674	547.78	-61.24	9.13
16:36:59	16	42.077500	-90.805170	69	79	63	14728	48319	07.2V-01C HDOP00.8 SATS10	-1216	203	-20.27	3.39	-3990	530.72	-66.50	8.85
16:37:15	16	42.079330	-90.802000	78	90	41	14430	47341	07.2V-01C HDOP00.8 SATS10	-1118	198	-18.63	3.30	-3667	515.00	-61.12	8.58
16:37:32	17	42.081330	-90.798830	69	79	56	14137	46382	07.2V-03C HDOP00.8 SATS10	-1032	182	-17.19	3.03	-3385	500.45	-56.41	8.34
16:37:48	16	42.082830	-90.794830	57	66	73	13835	45389	07.2V-03C HDOP00.8 SATS10	-1135	188	-18.92	3.14	-3724	484.74	-62.06	8.08

Time	Reporting Period (s)	lat	lng	Speed (Kts)	Speed (MPH)	Course	Altitude (m)	Altitude (ft)	Comment	Ascent Rate (m/min)	AVG Ascent Rate (m/min)	Ascent Rate (m/sec)	AVG Ascent Rate (m/sec)	Ascent Rate (ft/min)	AVG Ascent Rate (ft/min)	Ascent Rate (ft/sec)	AVG Ascent Rate (ft/min)
16:38:04	16	42.082830	-90.790830	70	81	90	13554	44468	07.2V-03C HDOP00.8 SATS10	-1053	184	-17.55	3.06	-3454	470.16	-57.56	7.84
16:38:21	17	42.082170	-90.786000	100	115	94	13279	43567	07.2V-03C HDOP00.7 SATS11	-969	169	-16.15	2.81	-3180	456.69	-53.00	7.61
16:38:37	16	42.082000	-90.778670	146	168	88	12992	42626	07.1V-03C HDOP00.8 SATS10	-1076	175	-17.93	2.91	-3529	442.04	-58.81	7.37
16:38:53	16	42.082670	-90.771170	146	168	84	12732	41772	07.1V-03C HDOP00.7 SATS11	-976	171	-16.27	2.84	-3202	428.69	-53.37	7.14
16:39:10	17	42.083670	-90.764330	137	158	83	12474	40924	07.1V-03C HDOP01.2 SATS09	-912	157	-15.20	2.61	-2993	416.20	-49.88	6.94
16:39:26	16	42.084500	-90.756330	135	155	80	12202	40033	07.1V-03C HDOP00.8 SATS10	-1018	162	-16.97	2.70	-3341	402.53	-55.69	6.71
16:39:43	17	42.085670	-90.748170	165	190	77	11958	39233	07.1V-03C HDOP00.7 SATS11	-861	149	-14.34	2.48	-2824	390.85	-47.06	6.51
16:39:59	16	42.087170	-90.739500	174	200	78	11718	38444	07.1V-03C HDOP00.8 SATS10	-902	154	-15.03	2.57	-2959	378.75	-49.31	6.31
16:40:15	16	42.088670	-90.730670	165	190	78	11471	37635	07.1V-03C HDOP00.8 SATS10	-925	150	-15.41	2.51	-3034	366.48	-50.56	6.11
16:40:48	33	42.092500	-90.712830	159	183	71	11002	36097	07.1V-05C HDOP00.8 SATS10	-852	70	-14.21	1.16	-2796	355.14	-46.61	5.92
16:41:04	16	42.094330	-90.704000	176	203	76	10779	35363	07.1V-05C HDOP00.8 SATS10	-839	140	-13.98	2.34	-2753	344.04	-45.88	5.73
16:41:22	18	42.096000	-90.695500	169	194	78	10559	34641	07.1V-05C HDOP00.8 SATS10	-734	121	-12.23	2.02	-2407	334.25	-40.11	5.57
16:42:10	48	42.101000	-90.670000	163	188	75	9915	32531	07.0V-05C HDOP00.8 SATS10	-804	43	-13.40	0.71	-2638	323.72	-43.96	5.40
16:42:26	16	42.103170	-90.661170	152	175	68	9699	31822	07.0V-05C HDOP00.9 SATS09	-810	124	-13.51	2.07	-2659	313.18	-44.31	5.22
16:42:42	16	42.105000	-90.653000	167	192	75	9498	31160	07.0V-05C HDOP00.8 SATS10	-757	121	-12.61	2.02	-2483	303.33	-41.38	5.06
16:43:15	33	42.108330	-90.636830	157	181	73	9083	29799	07.0V-07C HDOP00.7 SATS11	-754	56	-12.57	0.93	-2475	293.59	-41.24	4.89
16:43:31	16	42.109830	-90.628670	159	183	79	8870	29101	07.0V-07C HDOP00.8 SATS10	-798	112	-13.30	1.87	-2618	283.41	-43.63	4.72
16:43:48	17	42.111500	-90.620670	131	151	71	8661	28414	07.0V-07C HDOP00.7 SATS11	-739	103	-12.32	1.71	-2425	273.97	-40.41	4.57
16:44:04	16	42.113170	-90.613000	154	177	73	8463	27765	07.0V-07C HDOP00.7 SATS11	-742	106	-12.36	1.77	-2434	264.57	-40.56	4.41
16:44:20	16	42.115170	-90.605830	120	138	66	8273	27143	07.0V-07C HDOP00.7 SATS11	-711	103	-11.85	1.72	-2332	255.58	-38.87	4.26
16:44:37	17	42.117000	-90.599170	131	151	64	8072	26484	07.0V-07C HDOP00.7 SATS11	-709	94	-11.82	1.57	-2326	246.68	-38.77	4.11
16:44:53	16	42.119170	-90.593670	113	130	56	7883	25864	07.0V-07C HDOP00.7 SATS11	-709	98	-11.81	1.63	-2325	237.84	-38.75	3.96
16:45:09	16	42.121670	-90.588330	135	155	64	7704	25275	07.0V-07C HDOP00.7 SATS11	-673	95	-11.22	1.58	-2209	229.47	-36.81	3.82
16:45:26	17	42.124670	-90.582500	119	137	50	7509	24637	07.0V-07C HDOP00.7 SATS11	-686	87	-11.44	1.44	-2252	221.00	-37.53	3.68
16:45:42	16	42.127330	-90.577500	104	120	48	7328	24042	07.0V-09C HDOP00.7 SATS11	-680	89	-11.34	1.49	-2231	212.66	-37.19	3.54
16:45:58	16	42.130330	-90.572330	126	145	54	7150	23458	07.0V-09C HDOP00.7 SATS11	-668	87	-11.13	1.45	-2190	204.51	-36.50	3.41
16:46:15	17	42.133670	-90.566500	148	170	53	6964	22847	07.0V-09C HDOP00.7 SATS11	-657	79	-10.95	1.32	-2156	196.54	-35.94	3.28
16:47:04	49	42.145670	-90.550000	126	145	43	6458	21189	06.9V-09C HDOP00.7 SATS11	-619	25	-10.31	0.42	-2030	189.04	-33.84	3.15
16:47:20	16	42.150000	-90.544830	150	173	46	6297	20658	06.9V-09C HDOP00.8 SATS10	-607	75	-10.12	1.25	-1991	181.72	-33.19	3.03
16:47:36	16	42.153500	-90.540000	133	153	37	6128	20104	07.0V-09C HDOP00.7 SATS11	-633	73	-10.55	1.21	-2078	174.17	-34.63	2.90
16:47:53	17	42.157670	-90.535330	139	160	42	5966	19575	07.0V-09C HDOP00.7 SATS11	-569	66	-9.48	1.11	-1867	167.36	-31.12	2.79
16:48:09	16	42.160500	-90.530330	100	115	49	5805	19045	06.9V-09C HDOP00.7 SATS11	-606	68	-10.10	1.14	-1987	160.20	-33.12	2.67
16:48:25	16	42.163500	-90.525670	100	115	56	5642	18511	06.9V-09C HDOP00.7 SATS11	-610	66	-10.17	1.10	-2003	153.04	-33.38	2.55
16:48:43	18	42.166500	-90.521000	113	130	50	5464	17925	06.9V-09C HDOP00.7 SATS11	-595	57	-9.92	0.94	-1953	146.09	-32.56	2.43
16:48:58	15	42.169170	-90.517000	96	110	52	5301	17391	06.9V-09C HDOP00.8 SATS10	-651	66	-10.85	1.09	-2136	138.58	-35.60	2.31
16:49:15	17	42.171670	-90.513170	100	115	47	5141	16867	06.9V-09C HDOP00.7 SATS11	-564	56	-9.40	0.93	-1849	132.06	-30.82	2.20
16:49:31	16	42.174170	-90.509330	87	100	53	4972	16313	06.9V-09C HDOP00.8 SATS10	-633	57	-10.55	0.95	-2078	124.84	-34.63	2.08
16:49:47	16	42.176670	-90.505500	81	93	45	4819	15810	06.9V-09C HDOP00.8 SATS10	-575	55	-9.58	0.92	-1886	118.29	-31.44	1.97
16:50:20	33	42.181170	-90.498500	74	85	51	4501	14767	07.0V-09C HDOP00.8 SATS10	-578	25	-9.63	0.41	-1896	111.75	-31.61	1.86
16:50:36	16	42.183170	-90.495500	65	75	41	4342	14244	06.8V-11C HDOP00.7 SATS11	-598	49	-9.96	0.81	-1961	105.04	-32.69	1.75
16:50:53	17	42.185330	-90.492500	87	100	48	4191	13750	06.9V-11C HDOP00.8 SATS11	-531	44	-8.86	0.74	-1744	99.08	-29.06	1.65
16:51:25	32	42.190500	-90.486670	81	93	35	3887	12754	07.0V-09C HDOP00.8 SATS11	-569	22	-9.49	0.36	-1867	92.76	-31.12	1.55
16:51:42	17	42.193500	-90.483670	102	117	34	3738	12265	06.9V-09C HDOP00.8 SATS11	-526	39	-8.77	0.65	-1726	86.93	-28.77	1.45
16:51:58	16	42.197000	-90.481000	91	105	29	3585	11761	06.9V-09C HDOP00.8 SATS10	-576	39	-9.60	0.65	-1890	80.61	-31.50	1.34
16:52:14	16	42.200670	-90.479330	100	115	13	3443	11296	06.8V-09C HDOP00.8 SATS11	-531	37	-8.86	0.62	-1744	74.80	-29.06	1.25
16:52:31	17	42.204330	-90.478830	80	92	0	3302	10832	06.8V-09C HDOP00.8 SATS11	-499	33	-8.32	0.56	-1638	69.37	-27.29	1.16
16:52:47	16	42.208330	-90.478500	106	122	4	3165	10385	06.8V-09C HDOP00.8 SATS11	-511	34	-8.52	0.56	-1676	63.84	-27.94	1.06
16:53:03	16	42.212170	-90.478670	78	90	353	3017	9899	06.9V-09C HDOP00.8 SATS11	-555	32	-9.26	0.53	-1822	57.89	-30.37	0.96
16:53:20	17	42.215830	-90.478670	100	115	5	2883	9459	07.0V-09C HDOP00.8 SATS11	-473	28	-7.89	0.47	-1553	52.83	-25.88	0.88
16:53:36	16	42.219670	-90.478670	85	98	359	2751	9027	06.8V-09C HDOP00.8 SATS10	-494	29	-8.23	0.48	-1620	47.58	-27.00	0.79
16:53:52	16	42.223500	-90.478830	96	110	359	2625	8612	07.0V-09C HDOP00.8 SATS11	-474	27	-7.91	0.45	-1556	42.57	-25.94	0.71
16:54:09	17	42.226670	-90.478830	72	83	3	2497	8192	06.9V-09C HDOP00.8 SATS10	-452	24	-7.53	0.40	-1482	37.82	-24.71	0.63
16:54:25	16	42.229830	-90.478500	63	72	359	2367	7766	06.9V-09C HDOP00.8 SATS10	-487	24	-8.12	0.40	-1597	32.74	-26.62	0.55
16:54:41	16	42.232330	-90.477830	74	85	16	2241	7351	07.0V-09C HDOP00.8 SATS11	-474	22	-7.91	0.37	-1556	27.82	-25.94	0.46
16:54:58	17	42.234670	-90.477330	50	58	5	2120	6955	07.0V-09C HDOP00.8 SATS10	-426	20	-7.10	0.33	-1398	23.42	-23.29	0.39
16:55:14	16	42.236830	-90.476000	63	72	34	1986	6516	07.0V-09C HDOP00.8 SATS11	-502	19	-8.36	0.32	-1646	18.28	-27.44	0.30
16:55:30	16	42.238830	-90.474830	44	51	19	1858	6096	07.0V-09C HDOP00.8 SATS10	-480	18	-8.00	0.30	-1575	13.40	-26.25	0.22
16:55:47	17	42.240670	-90.473000	54	62	31	1723	5653	07.0V-07C HDOP00.8 SATS10	-477	15	-7.94	0.25	-1564	8.57	-26.06	0.14
16:56:04	17	42.242830	-90.470670	80	92	38	1593	5225	07.0V-07C HDOP00.8 SATS10	-460	14	-7.67	0.23	-1511	3.94	-25.18	0.07
16:56:36	32	42.248500	-90.468330	80	92	5	1322	4337	07.0V-07C HDOP00.8 SATS10	-507	6	-8.46	0.10	-1665	-1.13	-27.75	-0.02
16:56:52	16	42.251500	-90.468330	72	83	359	1200	3937	07.0V-07C HDOP00.8 SATS10	-457	10	-7.62	0.17	-1500	-5.67	-25.00	-0.09
16:57:09	17	42.245500	-90.469330	59	68	12	1451	4761	07.0V-07C HDOP00.8 SATS10	886	12	14.77	0.20	2908	3.13	48.47	0.05
16:57:25	16	42.257000	-90.469330	70	81	352	970	3182	07.0V-07C HDOP00.8 SATS10	-1805	7	-30.08	0.12	-5921	-14.71	-98.69	-0.25
16:57:41	16	42.259500	-90.470500	50	58	337	861	2824	07.0V-07C HDOP00.8 SATS10	-409	6	-6.82	0.10	-1342	-18.70	-22.37	-0.31
16:58:00	19	42.261670	-90.471330	69	79	348	752	2467	07.0V-07C HDOP00.8 SATS10	-344	4	-5.73	0.07	-1127	-22.02	-18.79	-0.37
16:58:16	16	42.263830	-90.472830	46	53	329	636	2085	07.0V-05C HDOP00.8 SATS10	-437	4	-7.28	0.06	-1432	-26.23	-23.87	-0.44