

AUDIT OF VIKING PROJECT GROUP DATA
ABSTRACT OF ANNEXES AND APPENDICES
for
MARS CORRECT: CRITIQUE OF ALL NASA MARS WEATHER DATA,
WITH EMPHASIS ON PRESSURE

By Barry S. Roffman and David A. Roffman

After a cursory review of the Viking Project Data it became apparent that an extensive audit was imperative. David A. Roffman wrote a program to extract the Viking Project Data so that it could be further analyzed via Excel. The Viking Project Data did not seem to explain weather phenomena (spiral clouds over Arsia, Mons, dust devils, etc.) clearly seen on Mars. A general discussion of the problems is offered in the Basic Report by David Roffman. The data audit results are presented in seven Annexes. The Viking Project data divides every Martian day into 25 time-bins (hours), each ~59 minutes long.

Annex A (Viking 1 sols 1 to 350) and Annex B (Viking 2 sols 156 to 361) emphasize how pressures change during morning times-bins that correspond to 0630 to 0830. A simple formula, *Pressure predicted = (6.51 mbar*255.77 K)/Temperature K measured*, was often correct for 0730.

Annex C examines how often the pressure sensor did not work (stuck or no pressures) between Viking 2 sols 639 and 799.

Annex D examines the percent differences between hourly predictions and reported pressures for Viking 1 from sols 1 to 350.

Annex E focuses on predictions and reported pressures for the 0.3 (0730) and .34 (0830) time-bins.

Annex F maps out the best and worst prediction times each day, clearly proving the influence of the RTG heaters on hourly pressure reports.

Annex G shows what went wrong in the transducer selection and testing process. These Annexes provide hard evidence that the Tavis pressure transducers used for the Vikings (and Pathfinder) likely jammed with dust during the landing process. The meaning of this is that it is doubtful that they ever measured ambient pressure conditions of Mars. There is evidence that all subsequent attempts to measure pressure were colored by the reported Viking results. Problems with Phoenix pressures based on a Vaisala transducer are discussed in the Basic Report.

Annex H describes windsock calibration efforts for Mars Pathfinder.

Annex I documents the Rover Environmental Monitoring Station (REMS) Team and Ashima Research daily weather reports for the Mars Science Laboratory (MSL) Curiosity Rover.

Annex J documents concessions by Ashima Research and shows how to correctly calculate daylight hours for MSL.

Annex K displays original REMS Team and Ashima Research weather reports from Sol 15 to 299.

Annex L presents variation of daylight due to change of latitude and solar longitude.

Annex M presents the first Martian year of MSL weather reports.

ANNEX A
to
Martian Air Pressures Are Far Higher Than NASA Asserts
VIKING 1 MORNING PRESSURE AND TEMPERATURE CHANGES

The Viking Project data divides every Martian day into 25 time-bins (hours), each ~59 minutes long (see Figure 30). Annex A (Viking 1 sols 1 to 116 and 134 to 350) and emphasize how pressures change during morning times-bins that correspond to 0530 to 0830 (Appendices 1 and 2) or just 0630 to 0830 (Appendices 3 to 6).

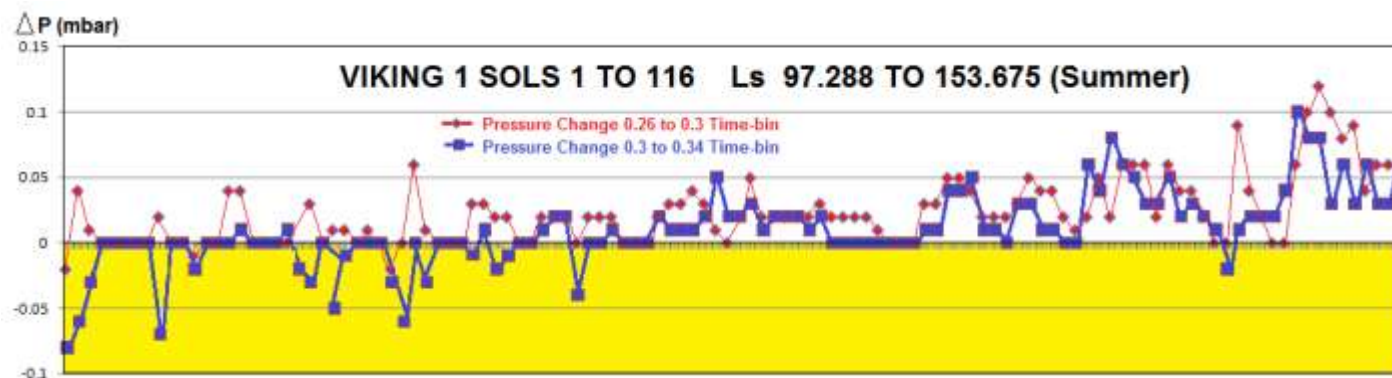
Appendix 1	VL-1 pressures of .26 to .3 time-bins & .3 to .34 time-bins. Sols 1-116.	51
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Figure 1 - MARS TIME-BIN CLOCK

A	B	C
TIME BIN	MARS HOURS AFTER	MARS TIME
	MIDNIGHT (EACH HOUR =	(25 HOUR CLOCK)
	59.088 EARTH MINUTES)	
	25 MARS HOURS/DAY	
	(24.62 EARTH HOURS)	
0.02	0.5	12:30 AM
0.06	1.5	1:30 AM
0.1	2.5	2:30 AM
0.14	3.5	3:30 AM
0.18	4.5	4:30 AM
0.22	5.5	5:30 AM
0.26	6.5	6:30 AM
0.3	7.5	7:30 AM
0.34	8.5	8:30 AM
0.38	9.5	9:30 AM
0.42	10.5	10:30 AM
0.46	11.5	11:30 AM
0.5	12.5	NOON
0.54	13.5	1:30 PM
0.58	14.5	2:30 PM
0.62	15.5	3:30 PM
0.66	16.5	4:30 PM
0.7	17.5	5:30 PM
0.74	18.5	6:30 PM
0.78	19.5	7:30 PM
0.82	20.5	8:30 PM
0.86	21.5	9:30 PM
0.9	22.5	10:30 PM
0.94	23.5	11:30 PM
0.98	24.5	12:30 PM

ANNEX A APPENDIX 1 – VIKING 1 SOLS 1 TO 116

Data reformatted by David A. Roffman and Barry S. Roffman.



Source of Data: Dr. Tillman's web site at

http://www-k12.atmos.washington.edu/k12/resources/mars_data-information/data.html

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT°C .26 to .3 Time-bin	ΔT°C .3 to 0.34 Time-bin
1.22	97.288	7.7			-85.76			
1.26	97.306	7.72			-83.99	1.77		
1.3	97.325	7.7	-0.02		-74.99	9	9	
1.34	97.343	7.62		-0.08	-58.94	16.05		16.05
2.22	97.746	7.62			-85.84			
2.26	97.765	7.64			-81.98	3.86		
2.3	97.783	7.68	0.04		-74.29	7.69	7.69	
2.34	97.801	7.62		-0.06	-65.51	8.78		8.78

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
3.22	98.205	7.62			-85.37			
3.26	98.223	7.64			-83.73	1.64		
3.3	98.242	7.65	0.01		-75.57	8.16	8.16	
3.34	98.26	7.62		-0.03	-59.73	15.84		15.84
4.22	98.664	7.62			-85.47			
4.26	98.683	7.62			-83.31	2.16		
4.3	98.701	7.62	0		-74.81	8.5	8.5	
4.34	98.719	7.62		0	-60.17	14.64		14.64
5.22	99.124	7.62			-84.81			
5.26	99.142	7.62			-81.16	T		
5.3	99.16	7.62	0		-74.16	7	7	
5.34	99.179	7.62		0	-65.26	8.9		8.9
6.22	99.583	7.62			-85.64			
6.26	99.602	7.62			-85.01	0.63		
6.3	99.62	7.62	0		-74.17	10.84	10.84	
6.34	99.639	7.62		0	-55.42	18.75		18.75
7.22	100.043	7.62			-85.58			
7.26	100.062	7.62			-83.17	2.41		
7.3	100.08	7.62	0		-74.74	8.43	8.43	
7.34	100.099	7.62		0	-59.73	15.01		15.01
8.22	100.504	7.62			-84.97			
8.26	100.522	7.62			-82.61	2.36		
8.3	100.541	7.62	0		-74.21	8.4	8.4	
8.34	100.559	7.62		0	-60.44	13.77		13.77

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
9.22	100.965	7.53			-86.07			
9.26	100.983	7.58			-83.49	2.58		
9.3	101.002	7.6	0.02		-74.1	9.39	9.39	
9.34	101.02	7.53		-0.07	-60.05	14.05		14.05
10.22	101.426	7.53			-81.47			
10.26	101.444	7.53			-77.66	3.81		
10.3	101.463	7.53	0		-73.53	4.13	4.13	
10.34	101.481	7.53		0	-58.66	14.87		14.87
11.22	101.888	7.54			-83.78			
11.26	101.906	7.53			-78.99	4.79		
11.3	101.925	7.53	0		-69.64	9.35	9.35	
11.34	101.943	7.53		0	-59.91	9.73		9.73
12.22	102.35	7.53			-85.29			
12.26	102.368	7.54			-82.86	2.43		
12.3	102.387	7.53	-0.01		-73.86	9	9	
12.34	102.405	7.51		-0.02	-59.43	14.43		14.43
13.22	102.812	7.53			-84.95			
13.26	102.831	7.53			-82.61	2.34		
13.3	102.849	7.53	0		-73.19	9.42	9.42	
13.34	102.868	7.53		0	-57.04	16.15		16.15
14.22	103.275	7.53			-85.15			
14.26	103.294	7.53			-82.93	2.22		
14.3	103.312	7.53	0		-74.37	8.56	8.56	
14.34	103.331	7.53		0	-57.8	16.57		16.57
15.22	103.738	7.45			-85.47			

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
15.26	103.757	7.49			-84.58	0.89		
15.3	103.775	7.53	0.04		-74.5	10.08	10.08	
15.34	103.794	7.53		0	-54.46	20.04		20.04
16.22	104.202	7.45			-84.78			
16.26	104.221	7.48			-82.88	1.9		
16.3	104.239	7.52	0.04		-73.56	9.32	9.32	
16.34	104.258	7.53		0.01	-55.78	17.78		17.78
17.22	104.666	7.45			-85.51			
17.26	104.685	7.45			-83.17	2.34		
17.3	104.703	7.45	0		-73.3	9.87	9.87	
17.34	104.722	7.45		0	-56	17.3		17.3
18.22	105.131	7.45			-85.47			
18.26	105.149	7.45			-83	2.47		
18.3	105.168	7.45	0		-73.56	9.44	9.44	
18.34	105.186	7.45		0	-57.37	16.19		16.19
19.22	105.595	7.45			-86.06			
19.26	105.614	7.45			-80.29	5.77		
19.3	105.633	7.45	0		-69.84	10.45	10.45	
19.34	105.651	7.45		0	-56.81	13.03		13.03
20.22	106.061	7.44			-86.57			
20.26	106.079	7.44			-77.07	9.5		
20.3	106.098	7.44	0		-74.71	2.36	2.36	
20.34	106.117	7.45		0.01	-67.2	7.51		7.51
21.22	106.527	7.45			-84.93			

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
21.26	106.545	7.45			-79.28	5.65		
21.3	106.564	7.43	-0.02		-71.6	7.68	7.68	
21.34	106.583	7.41		-0.02	-54.18	17.42		17.42
22.22	106.993	7.36			-85.39			
22.26	107.012	7.45			-80.21	5.18		
22.3	107.03	7.48	0.03		-70.54	9.67	9.67	
22.34	107.049	7.45		-0.03	-59.51	11.03		11.03
23.22	107.46	7.36			-85.37			
23.26	107.478	7.37			-81.83	3.54		
23.3	107.497	7.37	0		-71.54	10.29	10.29	
23.34	107.516	7.37		0	-59.52	12.02		12.02
24.22	107.927	7.36			-85.82			
24.26	107.945	7.45			-80.32	5.5		
24.3	107.964	7.46	0.01		-70.47	9.85	9.85	
24.34	107.983	7.41		-0.05	-61.24	9.23		9.23
25.22	108.394	7.36			-85.91			
25.26	108.413	7.36			-80.16	5.75		
25.3	108.432	7.37	0.01		-71.18	8.98	8.98	
25.34	108.451	7.36		-0.01	-57.42	13.76		13.76
26.22	108.863	7.36			-86.68			
26.26	108.881	7.36			-80.24	6.44		
26.3	108.9	7.36	0		-69.85	10.39	10.39	
26.34	108.919	7.36		0	-55.74	14.11		14.11
27.22	109.331	7.36			-84.36			
27.26	109.35	7.36			-79.25	5.11		

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
27.3	109.369	7.37	0.01		-70.96	8.29	8.29	
27.34	109.387	7.37		0	-56.82	14.14		14.14
28.22	109.8	7.36			-85.18			
28.26	109.819	7.36			-79.86	5.32		
28.3	109.838	7.36	0		-69.1	10.76	10.76	
28.34	109.856	7.36		0	-55.62	13.48		13.48
29.22	110.27	7.39			-86.15			
29.26	110.289	7.38			-84.01	2.14		
29.3	110.307	7.36	-0.02		-73.56	10.45	10.45	
29.34	110.326	7.33		-0.03	-63.24	10.32		10.32
30.22	110.74	7.28			-86.47			
30.26	110.759	7.36			-78.84	7.63		
30.3	110.777	7.36	0		-73.55	5.29	5.29	
30.34	110.796	7.3		-0.06	-58.76	14.79		14.79
31.22	111.21	7.28			-85.31			
31.26	111.229	7.3			-78.9	6.41		
31.3	111.248	7.36	0.06		-67.79	11.11	11.11	
31.34	111.267	7.36		0	-59.89	7.9		7.9
32.22	111.681	7.32			-84.67			
32.26	111.7	7.36			-79.25	5.42		
32.3	111.719	7.37	0.01		-68	11.25	11.25	
32.34	111.738	7.34		-0.03	-53.76	14.24		14.24
33.22	112.153	7.28			-85.78			
33.26	112.172	7.28			-80	5.78		
33.3	112.191	7.28	0		-69	11	11	

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
33.34	112.21	7.28		0	-54.74	14.26		14.26
34.22	112.625	7.28			-83.69			
34.26	112.644	7.28			-77.71	5.98		
34.3	112.663	7.28	0		-66.36	11.35	11.35	
34.34	112.682	7.28		0	-53.08	13.28		13.28
35.22	113.098	7.28			-85.15			
35.26	113.116	7.28			-79.45	5.7		
35.3	113.135	7.28	0		-68	11.45	11.45	
35.34	113.154	7.28		0	-54.32	13.68		13.68
36.22	113.571	7.21			-83.38			
36.26	113.59	7.25			-81.45	1.93		
36.3	113.609	7.28	0.03		-69.75	11.7	11.7	
36.34	113.628	7.27		-0.01	-56.11	13.64		13.64
37.22	114.044	7.22			-80.28			
37.26	114.063	7.25			-72.16	8.12		
37.3	114.082	7.28	0.03		-61.9	10.26	10.26	
37.34	114.101	7.29		0.01	-52.14	9.76		9.76
38.22	114.519	7.22			-80.01			
38.26	114.538	7.26			-71.96	8.05		
38.3	114.557	7.28	0.02		-61.73	10.23	10.23	
38.34	114.576	7.26		-0.02	-52.81	8.92		8.92
9.22	114.993	7.22			-84.07			
39.26	115.012	7.26			-82.42	1.65		
39.3	115.031	7.28	0.02		-61.23	21.19	21.19	
39.34	115.05	7.27		-0.01	-54.76	6.47		6.47

Appendix 1 to Annex A to Critique Of All NASA Mars Weather Data, With Emphasis On Pressure

Barry S. Roffman and David A. Roffman

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
40.22	115.469	7.19			-85.26			
40.26	115.488	7.19			-81.81	3.45		
40.3	115.507	7.19	0		-65.03	16.78	16.78	
40.34	115.526	7.19		0	-55.15	9.88		9.88
41.22	115.945	7.19			-84.73			
41.26	115.964	7.19			-81.93	2.8		
41.3	115.983	7.19	0		-63.92	18.01	18.01	
41.34	116.002	7.19		0	-56.02	7.9		7.9
42.22	116.421	7.15			-85.49			
42.26	116.44	7.17			-81.51	3.98		
42.3	116.459	7.19	0.02		-63.26	18.25	18.25	
42.34	116.478	7.2		0.01	-49.62	13.64		13.64
43.22	116.898	7.12			-84.16			
43.26	116.917	7.14			-81.02	3.14		
43.3	116.936	7.16	0.02		-70.87	10.15	10.15	
43.34	116.955	7.18		0.02	-55.15	15.72		15.72
44.22	117.375	7.13			-85.44			
44.26	117.395	7.17			-75.1	10.34		
44.3	117.414	7.19	0.02		-60.54	14.56	14.56	
44.34	117.433	7.21		0.02	-51.29	9.25		9.25
45.22	117.854	7.15			-85.13			
45.26	117.873	7.19			-81.78	3.35		
45.3	117.892	7.19	0		-60.66	21.12	21.12	
45.34	117.911	7.15		-0.04	-51.16	9.5		9.5

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
46.22	118.332	7.14			-85.27			
46.26	118.351	7.17			-80.79	4.48		
46.3	118.371	7.19	0.02		-61.81	18.98	18.98	
46.34	118.39	7.19		0	-51.34	10.47		10.47
47.22	118.811	7.13			-85.59			
47.26	118.831	7.17			-82.05	3.54		
47.3	118.85	7.19	0.02		-60.53	21.52	21.52	
47.34	118.869	7.19		0	-55.24	5.29		5.29
48.22	119.291	7.13			-85.03			
48.26	119.311	7.17			-82.65	2.38		
48.3	119.33	7.19	0.02		-61.48	21.17	21.17	
48.34	119.349	7.2		0.01	-49.5	11.98		11.98
49.22	119.772	7.11			-84.65			
49.26	119.791	7.1			-81.88	2.77		
49.3	119.81	7.1	0		-71.62	10.26	10.26	
49.34	119.83	7.1		0	-57.59	14.03		14.03
50.22	120.253	7.11			-84.8			
50.26	120.272	7.1			-82.05	2.75		
50.3	120.292	7.1	0		-71.19	10.86	10.86	
50.34	120.311	7.1		0	-56.45	14.74		14.74
51.22	120.735	7.11			-85.05			
51.26	120.754	7.11			-80.66	4.39		
51.3	120.773	7.11	0		-68.38	12.28	12.28	
51.34	120.793	7.11		0	-53.77	14.61		14.61
52.22	121.217	7.04			-84.61			

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
52.26	121.236	7.05			-82.07	2.54		
52.3	121.256	7.07	0.02		-70.75	11.32	11.32	
52.34	121.275	7.09		0.02	-55.43	15.32		15.32
53.22	121.7	7.05			-84.52			
53.26	121.719	7.08			-81.71	2.81		
53.3	121.739	7.11	0.03		-64.74	16.97	16.97	
53.34	121.758	7.12		0.01	-50.73	14.01		14.01
54.22	122.184	7.05			-85.15			
54.26	122.203	7.08			-82.42	2.73		
54.3	122.222	7.11	0.03		-71.08	11.34	11.34	
54.34	122.242	7.12		0.01	-54.49	16.59		16.59
55.22	122.668	7.04			-84.49			
55.26	122.687	7.07			-81.34	3.15		
55.3	122.707	7.11	0.04		-60.03	21.31	21.31	
55.34	122.726	7.12		0.01	-46.55	13.48		13.48
56.22	123.153	7.04			-83.96			
56.26	123.172	7.06			-70.46	13.5		
56.3	123.191	7.09	0.03		-54.91	15.55	15.55	
56.34	123.211	7.11		0.02	-49.46	5.45		5.45
57.22	123.638	7.02			-84.03			
57.26	123.658	7.01			-80.94	3.09		
57.3	123.677	7.02	0.01		-58.26	22.68	22.68	
57.34	123.696	7.07		0.05	-49.28	8.98		8.98
58.22	124.124	7.02			-83.76			
58.26	124.144	7.02			-80.74	3.02		

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
58.3	124.163	7.02	0		-57.99	22.75	22.75	
58.34	124.183	7.04		0.02	-52.79	5.2		5.2
59.22	124.611	6.98			-84.5			
59.26	124.631	7			-81.85	2.65		
59.3	124.65	7.02	0.02		-67.24	14.61	14.61	
59.34	124.67	7.04		0.02	-51.24	16		16
60.22	125.099	6.93			-84.23			
60.26	125.118	6.97			-81.03	3.2		
60.3	125.138	7.02	0.05		-59.78	21.25	21.25	
60.34	125.157	7.05		0.03	-52.74	7.04		7.04
61.22	125.587	6.95			-84.93			
61.26	125.606	6.98			-82.15	2.78		
61.3	125.626	7	0.02		-69.27	12.88	12.88	
61.34	125.645	7.01		0.01	-53.52	15.75		15.75
62.22	126.076	6.95			-85.17			
62.26	126.095	6.97			-74.87	10.3		
62.3	126.115	6.99	0.02		-60.59	14.28	14.28	
62.34	126.134	7.01		0.02	-51.66	8.93		8.93
63.22	126.565	6.95			-84.11			
63.26	126.585	6.97			-80.96	3.15		
63.3	126.604	6.99	0.02		-60.28	20.68	20.68	
63.34	126.624	7.01		0.02	-49.03	11.25		11.25
64.22	127.055	6.95			-84.29			
64.26	127.075	6.97			-81.6	2.69		
64.3	127.094	6.99	0.02		-66.72	14.88	14.88	
64.34	127.114	7.01		0.02	-52.97	13.75		13.75

Appendix 1 to Annex A to Critique Of All NASA Mars Weather Data, With Emphasis On Pressure

Barry S. Roffman and David A. Roffman

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
65.22	127.546	6.96			-86.26			
65.26	127.566	7			-83.05	3.21		
65.3	127.585	7.02	0.02		-65.31	17.74	17.74	
65.34	127.605	7.03		0.01	-51.62	13.69		13.69
66.22	128.038	6.96			-84.62			
66.26	128.057	6.99			-82.45	2.17		
66.3	128.077	7.02	0.03		-70.82	11.63	11.63	
66.34	128.097	7.04		0.02	-56.66	14.16		14.16
67.22	128.53	6.96			-83.67			
67.26	128.55	7			-81.44	2.23		
67.3	128.569	7.02	0.02		-69.11	12.33	12.33	
67.34	128.589	7.02		0	-54.18	14.93		14.93
68.22	129.023	6.96			-84.44			
68.26	129.042	7			-81.91	2.53		
68.3	129.062	7.02	0.02		-61.81	20.1	20.1	
68.34	129.082	7.02		0	-50.11	11.7		11.7
69.22	129.517	6.96			-84.59			
69.26	129.536	7			-81.5	3.09		
69.3	129.556	7.02	0.02		-64.24	17.26	17.26	
69.34	129.576	7.02		0	-51.52	12.72		12.72
70.22	130.011	6.96			-84.19			
70.26	130.031	7			-82.17	2.02		
70.3	130.05	7.02	0.02		-62.76	19.41	19.41	
70.34	130.07	7.02		0	-42.27	20.49		20.49

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
71.22	130.506	6.95			-85.07			
71.26	130.526	6.97			-79.64	5.43		
71.3	130.546	6.98	0.01		-63.09	16.55	16.55	
71.34	130.565	6.98		0	-46.76	16.33		16.33
72.22	131.002	6.94			-85.96			
72.26	131.022	6.94			-77.11	8.85		
72.3	131.042	6.94	0		-63.43	13.68	13.68	
72.34	131.061	6.94		0	-51.24	12.19		12.19
73.22	131.498	6.94			-85.39			
73.26	131.518	6.94			-82.3	3.09		
73.3	131.538	6.94	0		-70.25	12.05	12.05	
73.34	131.558	6.94		0	-56.19	14.06		14.06
74.22	131.996	6.94			-85.7			
74.26	132.016	6.94			-82.14	3.56		
74.3	132.035	6.94	0		-60.51	21.63	21.63	
74.34	132.055	6.94		0	-47.92	12.59		12.59
75.22	132.494	6.88			-85.31			
75.26	132.514	6.91			-82.43	2.88		
75.3	132.534	6.94	0.03		-64.66	17.77	17.77	
75.34	132.553	6.95		0.01	-49.99	14.67		14.67
76.22	132.992	6.87			-86.04			
76.26	133.012	6.91			-83.67	2.37		
76.3	133.032	6.94	0.03		-70.03	13.64	13.64	
76.34	133.052	6.95		0.01	-51.36	18.67		18.67

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
77.22	133.492	6.88			-86.2			
77.26	133.512	6.92			-83.49	2.71		
77.3	133.532	6.97	0.05		-71.94	11.55	11.55	
77.34	133.552	7.01		0.04	-55.81	16.13		16.13
78.22	133.992	6.88			-85.46			
78.26	134.012	6.91			-82.78	2.68		
78.3	134.032	6.96	0.05		-67.2	15.58	15.58	
78.34	134.052	7		0.04	-54.64	12.56		12.56
79.22	134.493	6.88			-84.72			
79.26	134.513	6.9			-82.08	2.64		
79.3	134.533	6.94	0.04		-62.47	19.61	19.61	
79.34	134.553	6.99		0.05	-53.46	9.01		9.01
80.22	134.995	6.9			-85.11			
80.26	135.015	6.92			-82	3.11		
80.3	135.035	6.94	0.02		-62.12	19.88	19.88	
80.34	135.055	6.95		0.01	-50.7	11.42		11.42
81.22	135.498	6.9			-85.6			
81.26	135.518	6.92			-82.64	2.96		
81.3	135.538	6.94	0.02		-63.9	18.74	18.74	
81.34	135.558	6.95		0.01	-51.67	12.23		12.23
82.22	136.001	6.9			-85.26			
82.26	136.021	6.92			-82.43	2.83		
82.3	136.041	6.94	0.02		-65.65	16.78	16.78	
82.34	136.061	6.94		0	-57.19	8.46		8.46
83.22	136.505	6.89			-85.9			

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
83.26	136.525	6.91			-82.8	3.1		
83.3	136.546	6.94	0.03		-63.15	19.65	19.65	
83.34	136.566	6.97		0.03	-57.17	5.98		5.98
84.22	137.01	6.85			-85.43			
84.26	137.03	6.89			-83.29	2.14		
84.3	137.05	6.94	0.05		-60.02	23.27	23.27	
84.34	137.071	6.97		0.03	-50.94	9.08		9.08
85.22	137.516	6.85			-83.25			
85.26	137.536	6.9			-76.01	7.24		
85.3	137.556	6.94	0.04		-64.45	11.56	11.56	
85.34	137.577	6.95		0.01	-49.77	14.68		14.68
86.22	138.022	6.85			-80.27			
86.26	138.043	6.9			-70.63	9.64		
86.3	138.063	6.94	0.04		-59.47	11.16	11.16	
86.34	138.083	6.95		0.01	-48.83	10.64		10.64
87.22	138.53	6.85			-81.42			
87.26	138.55	6.92			-72.56	8.86		
87.3	138.57	6.94	0.02		-60.2	12.36	12.36	
87.34	138.591	6.94		0	-46.25	13.95		13.95
88.22	139.038	6.85			-83.92			
88.26	139.058	6.93			-78.39	5.53		
88.3	139.078	6.94	0.01		-66.53	11.86	11.86	
88.34	139.099	6.94		0	-48.7	17.83		17.83
89.22	139.547	6.85			-79.23			
89.26	139.567	6.92			-68.06	11.17		

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
89.3	139.587	6.94	0.02		-55.52	12.54	12.54	
89.34	139.608	7		0.06	-44.83	10.69		10.69
90.22	140.056	6.85			-79.26			
90.26	140.077	6.9			-69.78	9.48		
90.3	140.097	6.95	0.05		-59.06	10.72	10.72	
90.34	140.118	6.99		0.04	-48.88	10.18		10.18
91.22	140.567	6.85			-80.07			
91.26	140.587	6.92			-71	9.07		
91.3	140.608	6.94	0.02		-60.07	10.93	10.93	
91.34	140.628	7.02		0.08	-49.78	10.29		10.29
92.22	141.078	6.85			-78.78			
92.26	141.099	6.88			-68.25	10.53		
92.3	141.119	6.94	0.06		-57.98	10.27	10.27	
92.34	141.14	7		0.06	-50.38	7.6		7.6
93.22	141.591	6.85			-81.08			
93.26	141.611	6.88			-72.55	8.53		
93.3	141.632	6.94	0.06		-62.56	9.99	9.99	
93.34	141.652	6.99		0.05	-52.81	9.75		9.75
94.22	142.104	6.85			-83.02			
94.26	142.124	6.88			-75.41	7.61		
94.3	142.145	6.94	0.06		-63.46	11.95	11.95	
94.34	142.165	6.97		0.03	-49.47	13.99		13.99
95.22	142.618	6.85			-81.94			
95.26	142.638	6.92			-73.53	8.41		
95.3	142.659	6.94	0.02		-63.29	10.24	10.24	

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
95.34	142.679	6.97		0.03	-52.79	10.5		10.5
96.22	143.132	6.85			-82.39			
96.26	143.153	6.88			-74.87	7.52		
96.3	143.174	6.94	0.06		-64.98	9.89	9.89	
96.34	143.194	6.99		0.05	-53.89	11.09		11.09
97.22	143.648	6.85			-82.82			
97.26	143.669	6.9			-74.81	8.01		
97.3	143.689	6.94	0.04		-64.93	9.88	9.88	
97.34	143.71	6.96		0.02	-54.58	10.35		10.35
98.22	144.164	6.85			-86.59			
98.26	144.185	6.9			-81.6	4.99		
98.3	144.206	6.94	0.04		-69.65	11.95	11.95	
98.34	144.226	6.97		0.03	-50.92	18.73		18.73
99.22	144.682	6.85			-85.89			
99.26	144.702	6.92			-80.72	5.17		
99.3	144.723	6.94	0.02		-69.21	11.51	11.51	
99.34	144.744	6.96		0.02	-51.46	17.75		17.75
100.22	145.2	6.91			-83.7			
100.26	145.221	6.94			-77.67	6.03		
100.3	145.241	6.94	0		-68.52	9.15	9.15	
100.34	145.262	6.95		0.01	-56.48	12.04		12.04
101.22	145.719	6.94			-85.59			
101.26	145.74	6.94			-80.53	5.06		
101.3	145.761	6.94	0		-69.64	10.89	10.89	
101.34	145.781	6.92		-0.02	-53.16	16.48		16.48

Appendix 1 to Annex A to Critique Of All NASA Mars Weather Data, With Emphasis On Pressure

Barry S. Roffman and David A. Roffman

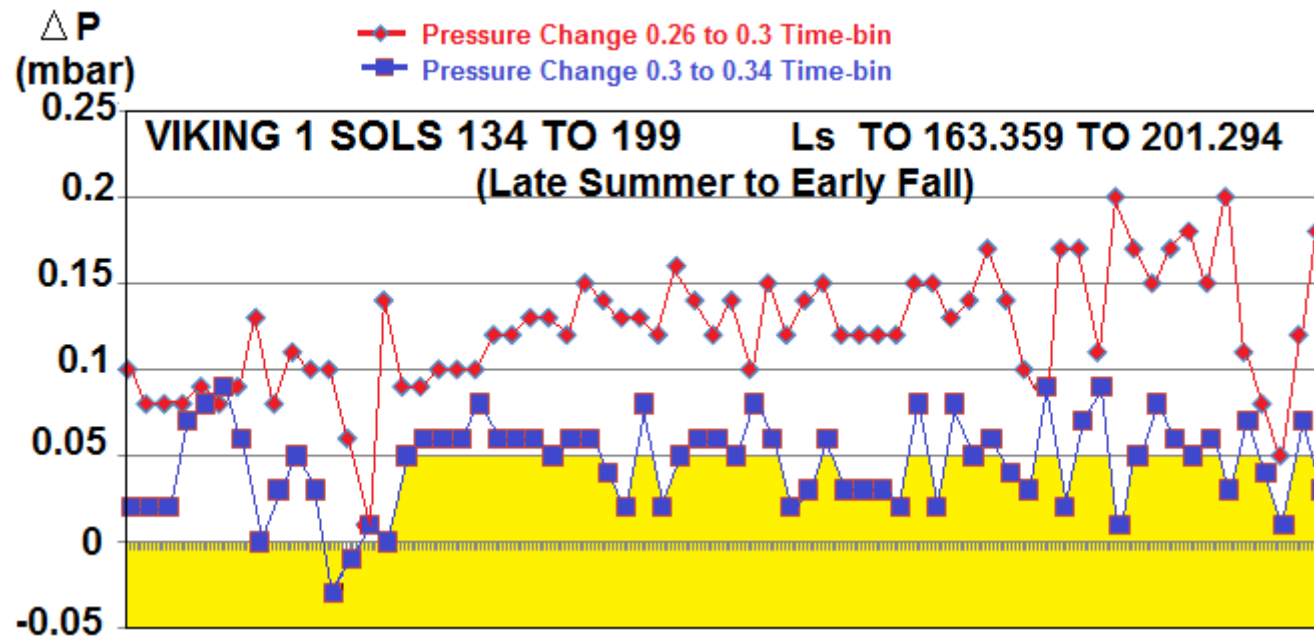
VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
102.22	146.239	6.85			-86.31			
102.26	146.26	6.85			-81.88	4.43		
102.3	146.28	6.94	0.09		-71.51	10.37	10.37	
102.34	146.301	6.95		0.01	-54.65	16.86		16.86
103.22	146.76	6.81			-85.96			
103.26	146.78	6.81			-78.8	7.16		
103.3	146.801	6.85	0.04		-67.34	11.46	11.46	
103.34	146.822	6.87		0.02	-52.67	14.67		14.67
104.22	147.281	6.79			-85.78			
104.26	147.302	6.79			-77.26	8.52		
104.3	147.323	6.81	0.02		-65.26	12	12	
104.34	147.344	6.83		0.02	-51.68	13.58		13.58
105.22	147.804	6.77			-85.6			
105.26	147.825	6.77			-75.73	9.87		
105.3	147.846	6.77	0		-63.17	12.56	12.56	
105.34	147.867	6.79		0.02	-50.69	12.48		12.48
106.22	148.327	6.68			-85.62			
106.26	148.348	6.77			-83.93	1.69		
106.3	148.369	6.77	0		-64.52	19.41	19.41	
106.34	148.39	6.81		0.04	-49.91	14.61		14.61
107.22	148.852	6.66			-82.18			
107.26	148.873	6.71			-82.67	-0.49		
107.3	148.894	6.77	0.06		-65.5	17.17	17.17	
107.34	148.915	6.87		0.1	-53.15	12.35		12.35

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
108.22	149.377	6.73			-83.24			
108.26	149.398	6.8			-81.93	1.31		
108.3	149.419	6.9	0.1		-64.91	17.02	17.02	
108.34	149.44	6.98		0.08	-52.06	12.85		12.85
109.22	149.903	6.8			-84.31			
109.26	149.924	6.9			-81.18	3.13		
109.3	149.945	7.02	0.12		-64.31	16.87	16.87	
109.34	149.966	7.1		0.08	-50.97	13.34		13.34
110.22	150.43	6.91			-84.47			
110.26	150.451	6.98			-83.31	1.16		
110.3	150.472	7.08	0.1		-55.21	28.1	28.1	
110.34	150.493	7.11		0.03	-41.76	13.45		13.45
111.22	150.958	6.85			-85			
111.26	150.979	6.94			-83.39	1.61		
111.3	151	7.02	0.08		-59.55	23.84	23.84	
111.34	151.021	7.08		0.06	-46.28	13.27		13.27
112.22	151.487	6.85			-84.54			
112.26	151.508	6.85			-83.77	0.77		
112.3	151.529	6.94	0.09		-58.53	25.24	25.24	
112.34	151.55	6.97		0.03	-46.81	11.72		11.72
113.22	152.016	6.77			-84.63			
113.26	152.038	6.81			-83.73	0.9		
113.3	152.059	6.85	0.04		-62.03	21.7	21.7	
113.34	152.08	6.91		0.06	-58.75	3.28		3.28
114.22	152.547	6.77			-84.79			

VL- 1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
114.26	152.568	6.85			-83.28	1.51		
114.3	152.59	6.91	0.06		-59.83	23.45	23.45	
114.34	152.611	6.94		0.03	-39.22	20.61		20.61
115.22	153.079	6.8			-83.36			
115.26	153.1	6.88			-83.19	0.17		
115.3	153.121	6.94	0.06		-60.83	22.36	22.36	
115.34	153.142	6.97		0.03	-51.63	9.2		9.2
116.22	153.611	6.83			-84.95			
116.26	153.633	6.88			-83.9	1.05		
116.3	153.654	6.94	0.06		-64.47	19.43	19.43	
116.34	153.675	7.02		0.08	-51.42	13.05		13.05
AVERAGES		7.1407 (ONLY TIME BINS 0.26 TO .34)	0.023275862	0.010431034	-70.3115 (ONLY TIME BINS 0.26 TO .34)		13.72155172	12.7890517

ANNEX A APPENDIX 2 – VIKING 1 SOLS 134 TO 199

Data reformatted by David A. Roffman and Barry S. Roffman.



Source of Data: Dr. Tillman's web site at

http://www-k12.atmos.washington.edu/k12/resources/mars_data-information/data.html

VL-1 SOL	Ls	Pressure (mbar)	Pressure Change (mbar)	ΔP Time-Bin 0.26 to .3 (mbar)	ΔP Time-bin .3 to .34 (mbar)	Temperature °C	ΔT °C	ΔT Time-Bin .26 to .3	ΔT Time-bin .3 to .34
134.22	163.359	6.85				-85.82			
134.26	163.381	6.9	0.05			-84.54	1.28		
134.3	163.403	7	0.1	0.1		-68.64	15.9	15.9	

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time-bin
134.34	163.425	7.02	0.02		0.02	-51.76	16.88		16.88
135.22	163.909	6.85				-85.07			
135.26	163.931	6.92	0.07			-84.16	0.91		
135.3	163.953	7	0.08	0.08		-67.85	16.31	16.31	
135.34	163.976	7.02	0.02		0.02	-53.19	14.66		14.66
136.22	164.461	6.85				-85.25			
136.26	164.483	6.94	0.09			-84.26	0.99		
136.3	164.505	7.02	0.08	0.08		-75.08	9.18	9.18	
136.34	164.527	7.04	0.02		0.02	-60.28	14.8		14.8
137.22	165.014	6.88				-84.94			
137.26	165.036	6.96	0.08			-83.93	1.01		
137.3	165.058	7.04	0.08	0.08		-76.94	6.99	6.99	
137.34	165.08	7.11	0.07		0.07	-64.33	12.61		12.61
138.22	165.567	6.91				-84.57			
138.26	165.59	6.94	0.03			-83.56	1.01		
138.3	165.612	7.03	0.09	0.09		-75.71	7.85	7.85	
138.34	165.634	7.11	0.08		0.08	-62.54	13.17		13.17
139.22	166.122	6.94				-85.16			
139.26	166.144	6.94	0			-83.78	1.38		
139.3	166.167	7.02	0.08	0.08		-57.51	26.27	26.27	
139.34	166.189	7.11	0.09		0.09	-46.4	11.11		11.11
140.22	166.678	6.91				-85.02			
140.26	166.7	6.96	0.05			-83.88	1.14		
140.3	166.722	7.05	0.09	0.09		-66.22	17.66	17.66	
140.34	166.745	7.11	0.06		0.06	-52.1	14.12		14.12

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
141.22	167.234	6.94				-85.53			
141.26	167.257	6.98	0.04			-84.49	1.04		
141.3	167.279	7.11	0.13	0.13		-75.3	9.19	9.19	
141.34	167.301	7.11	0		0	-60.51	14.79		14.79
142.22	167.792	6.94				-85.38			
142.26	167.814	7	0.06			-84.26	1.12		
142.3	167.837	7.08	0.08	0.08		-64.04	20.22	20.22	
142.34	167.859	7.11	0.03		0.03	-54.15	9.89		9.89
143.22	168.351	6.94				-85.46			
143.26	168.373	7	0.06			-84.6	0.86		
143.3	168.395	7.11	0.11	0.11		-76.58	8.02	8.02	
143.34	168.418	7.16	0.05		0.05	-62.98	13.6		13.6
144.22	168.91	6.94				-85.77			
144.26	168.933	6.98	0.04			-84.55	1.22		
144.3	168.955	7.08	0.1	0.1		-60.07	24.48	24.48	
144.34	168.978	7.11	0.03		0.03	-49.77	10.3		10.3
145.22	169.471	6.94				-85.77			
145.26	169.493	7.01	0.07			-84.58	1.19		
145.3	169.516	7.11	0.1	0.1		-70.66	13.92	13.92	
145.34	169.538	7.08	-0.03		-0.03	-57.32	13.34		13.34
146.22	170.033	6.96				-82.67			
146.26	170.055	7	0.04			-79.22	3.45		
146.3	170.078	7.06	0.06	0.06		-68.59	10.63	10.63	
146.34	170.1	7.05	-0.01		-0.01	-57.62	10.97		10.97
147.22	170.595	6.98				-79.58			
147.26	170.618	6.99	0.01			-73.86	5.72		

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time-bin
147.3	170.64	7	0.01	0.01		-66.51	7.35	7.35	
147.34	170.663	7.01	0.01		0.01	-57.92	8.59		8.59
148.22	171.159	7.02				-86.02			
148.26	171.181	7.05	0.03			-84.84	1.18		
148.3	171.204	7.19	0.14	0.14		-76.54	8.3	8.3	
148.34	171.226	7.19	0		0	-62.65	13.89		13.89
149.22	171.723	6.94				-85.85			
149.26	171.746	7.05	0.11			-84.6	1.25		
149.3	171.769	7.14	0.09	0.09		-68.71	15.89	15.89	
149.34	171.791	7.19	0.05		0.05	-55.54	13.17		13.17
150.22	172.289	6.96				-85.81			
150.26	172.312	7.06	0.1			-83.85	1.96		
150.3	172.334	7.15	0.09	0.09		-68.92	14.93	14.93	
150.34	172.357	7.21	0.06		0.06	-56.25	12.67		12.67
151.22	172.856	7				-85.72			
151.26	172.878	7.08	0.08			-82.37	3.35		
151.3	172.901	7.18	0.1	0.1		-69.36	13.01	13.01	
151.34	172.924	7.24	0.06		0.06	-57.68	11.68		11.68
152.22	173.423	7.02				-85.67			
152.26	173.446	7.09	0.07			-81.63	4.04		
152.3	173.469	7.19	0.1	0.1		-69.58	12.05	12.05	
152.34	173.492	7.25	0.06		0.06	-58.39	11.19		11.19
153.22	173.992	7.02				-85.99			
153.26	174.015	7.07	0.05			-82.14	3.85		
153.3	174.038	7.17	0.1	0.1		-69.32	12.82	12.82	
153.34	174.06	7.25	0.08		0.08	-61.07	8.25		8.25

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
154.22	174.562	7.02				-85.86			
154.26	174.584	7.07	0.05			-80.68	5.18		
154.3	174.607	7.19	0.12	0.12		-71.09	9.59	9.59	
154.34	174.63	7.25	0.06		0.06	-59.2	11.89		11.89
155.22	175.132	7.02				-86.37			
155.26	175.155	7.07	0.05			-81.96	4.41		
155.3	175.178	7.19	0.12	0.12		-69.66	12.3	12.3	
155.34	175.201	7.25	0.06		0.06	-60.78	8.88		8.88
156.22	175.704	7.02				-85.98			
156.26	175.727	7.07	0.05			-81.7	4.28		
156.3	175.75	7.2	0.13	0.13		-69.95	11.75	11.75	
156.34	175.773	7.26	0.06		0.06	-60.44	9.51		9.51
157.22	176.277	7.02				-85.2			
157.26	176.3	7.09	0.07			-81.17	4.03		
157.3	176.323	7.22	0.13	0.13		-70.53	10.64	10.64	
157.34	176.346	7.27	0.05		0.05	-59.76	10.77		10.77
158.22	176.85	7.02				-84.81			
158.26	176.873	7.1	0.08			-80.91	3.9		
158.3	176.896	7.22	0.12	0.12		-70.82	10.09	10.09	
158.34	176.919	7.28	0.06		0.06	-59.42	11.4		11.4
159.22	177.425	7.02				-86.73			
159.26	177.448	7.07	0.05			-82.59	4.14		
159.3	177.471	7.22	0.15	0.15		-70.86	11.73	11.73	
159.34	177.494	7.28	0.06		0.06	-60.5	10.36		10.36
160.22	178.001	7.02				-88.15			

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time-bin
160.26	178.024	7.1	0.08			-82.51	5.64		
160.3	178.047	7.24	0.14	0.14		-69.58	12.93	12.93	
160.34	178.07	7.28	0.04		0.04	-60.68	8.9		8.9
161.22	178.578	7.02				-89.57			
161.26	178.601	7.13	0.11			-82.43	7.14		
161.3	178.624	7.26	0.13	0.13		-68.3	14.13	14.13	
161.34	178.647	7.28	0.02		0.02	-60.87	7.43		7.43
162.22	179.155	7.11				-86.44			
162.26	179.178	7.15	0.04			-82	4.44		
162.3	179.201	7.28	0.13	0.13		-71.27	10.73	10.73	
162.34	179.225	7.36	0.08		0.08	-58.64	12.63		12.63
163.22	179.734	7.14				-82.3			
163.26	179.757	7.22	0.08			-81.35	0.95		
163.3	179.78	7.34	0.12	0.12		-71.44	9.91	9.91	
163.34	179.803	7.36	0.02		0.02	-60.69	10.75		10.75
164.22	180.314	7.11				-85.77			
164.26	180.337	7.15	0.04			-82.13	3.64		
164.3	180.36	7.31	0.16	0.16		-67.44	14.69	14.69	
164.34	180.383	7.36	0.05		0.05	-55.65	11.79		11.79
165.22	180.894	7.14				-81.17			
165.26	180.918	7.22	0.08			-80.56	0.61		
165.3	180.941	7.36	0.14	0.14		-70.8	9.76	9.76	
165.34	180.964	7.42	0.06		0.06	-59.7	11.1		11.1
166.22	181.476	7.19				-84.64			
166.26	181.5	7.24	0.05			-79.77	4.87		
166.3	181.523	7.36	0.12	0.12		-72.85	6.92	6.92	

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time-bin
166.34	181.546	7.42	0.06		0.06	-61.53	11.32		11.32
167.22	182.059	7.11				-75.64			
167.26	182.082	7.17	0.06			-68.29	7.35		
167.3	182.106	7.31	0.14	0.14		-61.72	6.57	6.57	
167.34	182.129	7.36	0.05		0.05	-56.46	5.26		5.26
168.22	182.643	7.19				-85.29			
168.26	182.666	7.24	0.05			-83.14	2.15		
168.3	182.689	7.34	0.1	0.1		-69.54	13.6	13.6	
168.34	182.713	7.42	0.08		0.08	-59.4	10.14		10.14
169.22	183.227	7.19				-85.15			
169.26	183.251	7.24	0.05			-78.95	6.2		
169.3	183.274	7.39	0.15	0.15		-70.79	8.16	8.16	
169.34	183.298	7.45	0.06		0.06	-61.39	9.4		9.4
170.22	183.813	7.14				-85.18			
170.26	183.837	7.22	0.08			-83	2.18		
170.3	183.86	7.34	0.12	0.12		-67.04	15.96	15.96	
170.34	183.883	7.36	0.02		0.02	-54.84	12.2		12.2
171.22	184.4	7.19				-81.92			
171.26	184.423	7.28	0.09			-79.73	2.19		
171.3	184.447	7.42	0.14	0.14		-72.45	7.28	7.28	
171.34	184.47	7.45	0.03		0.03	-60.77	11.68		11.68
172.22	184.988	7.19				-86.98			
172.26	185.011	7.24	0.05			-83.34	3.64		
172.3	185.035	7.39	0.15	0.15		-68.52	14.82	14.82	
172.34	185.058	7.45	0.06		0.06	-53.92	14.6		14.6

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time-bin
173.22	185.576	7.22				-83.58			
173.26	185.6	7.3	0.08			-82.19	1.39		
173.3	185.623	7.42	0.12	0.12		-72.04	10.15	10.15	
173.34	185.647	7.45	0.03		0.03	-60.47	11.57		11.57
174.22	186.166	7.21				-85.34			
174.26	186.189	7.3	0.09			-82.84	2.5		
174.3	186.213	7.42	0.12	0.12		-72.45	10.39	10.39	
174.34	186.237	7.45	0.03		0.03	-61.21	11.24		11.24
175.22	186.757	7.19				-87.1			
175.26	186.78	7.3	0.11			-83.49	3.61		
175.3	186.804	7.42	0.12	0.12		-72.86	10.63	10.63	
175.34	186.828	7.45	0.03		0.03	-61.96	10.9		10.9
176.22	187.348	7.34				-86.48			
176.26	187.372	7.39	0.05			-83.26	3.22		
176.3	187.396	7.51	0.12	0.12		-72.73	10.53	10.53	
176.34	187.419	7.53	0.02		0.02	-61.3	11.43		11.43
177.22	187.941	7.28				-87.1			
177.26	187.965	7.3	0.02			-84.61	2.49		
177.3	187.988	7.45	0.15	0.15		-67.78	16.83	16.83	
177.34	188.012	7.53	0.08		0.08	-61.3	6.48		6.48
178.22	188.534	7.28				-86.93			
178.26	188.558	7.36	0.08			-83.85	3.08		
178.3	188.582	7.51	0.15	0.15		-73.48	10.37	10.37	
178.34	188.606	7.53	0.02		0.02	-61.77	11.71		11.71
179.22	189.129	7.28				-86.55			
179.26	189.153	7.32	0.04			-83.14	3.41		

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
179.3	189.177	7.45	0.13	0.13		-68.62	14.52	14.52	
179.34	189.2	7.53	0.08		0.08	-52.16	16.46		16.46
180.22	189.725	7.28				-85.43			
180.26	189.748	7.34	0.06			-80.45	4.98		
180.3	189.772	7.48	0.14	0.14		-72.42	8.03	8.03	
180.34	189.796	7.53	0.05		0.05	-61.08	11.34		11.34
181.22	190.321	7.36				-86.63			
181.26	190.345	7.39	0.03			-83.33	3.3		
181.3	190.369	7.56	0.17	0.17		-72.94	10.39	10.39	
181.34	190.393	7.62	0.06		0.06	-62.09	10.85		10.85
182.22	190.919	7.37				-87.74			
182.26	190.943	7.44	0.07			-84.06	3.68		
182.3	190.967	7.58	0.14	0.14		-74.89	9.17	9.17	
182.34	190.99	7.62	0.04		0.04	-63.91	10.98		10.98
183.22	191.517	7.38				-88.85			
183.26	191.541	7.49	0.11			-84.8	4.05		
183.3	191.565	7.59	0.1	0.1		-76.84	7.96	7.96	
183.34	191.589	7.62	0.03		0.03	-65.73	11.11		11.11
184.22	192.117	7.39				-91.08			
184.26	192.14	7.44	0.05			-85.37	5.71		
184.3	192.165	7.53	0.09	0.09		-71.88	13.49	13.49	
184.34	192.189	7.62	0.09		0.09	-64.55	7.33		7.33
185.22	192.717	7.36				-86.78			
185.26	192.741	7.43	0.07			-84.07	2.71		
185.3	192.765	7.6	0.17	0.17		-72.13	11.94	11.94	
185.34	192.789	7.62	0.02		0.02	-55.09	17.04		17.04

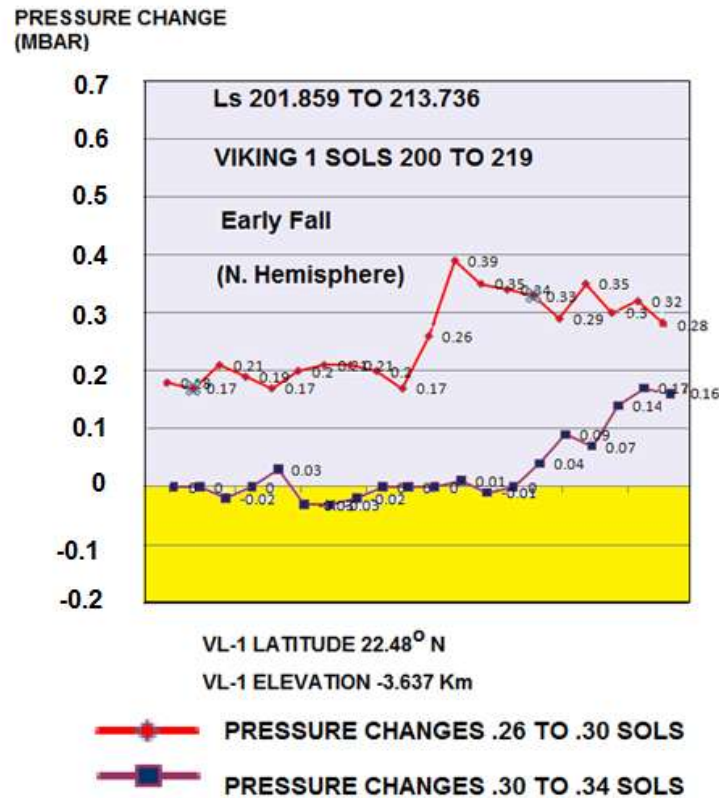
VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
186.22	193.318	7.47				-85.99			
186.26	193.342	7.52	0.05			-83.25	2.74		
186.3	193.366	7.69	0.17	0.17		-74.21	9.04	9.04	
186.34	193.39	7.76	0.07		0.07	-63.96	10.25		10.25
187.22	193.92	7.45				-86.29			
187.26	193.945	7.48	0.03			-83.05	3.24		
187.3	193.969	7.59	0.11	0.11		-74.13	8.92	8.92	
187.34	193.993	7.68	0.09		0.09	-60.83	13.3		13.3
188.22	194.524	7.45				-84.14			
188.26	194.548	7.49	0.04			-82.65	1.49		
188.3	194.572	7.69	0.2	0.2		-74.39	8.26	8.26	
188.34	194.596	7.7	0.01		0.01	-63.26	11.13		11.13
189.22	195.128	7.45				-84.4			
189.26	195.152	7.48	0.03			-78.91	5.49		
189.3	195.176	7.65	0.17	0.17		-71.17	7.74	7.74	
189.34	195.2	7.7	0.05		0.05	-63.56	7.61		7.61
190.22	195.733	7.45				-83.25			
190.26	195.757	7.47	0.02			-82.66	0.59		
190.3	195.781	7.62	0.15	0.15		-74.66	8	8	
190.34	195.806	7.7	0.08		0.08	-62.7	11.96		11.96
191.22	196.339	7.53				-87.36			
191.26	196.363	7.56	0.03			-85.18	2.18		
191.3	196.387	7.73	0.17	0.17		-75.64	9.54	9.54	
191.34	196.412	7.79	0.06		0.06	-64.47	11.17		11.17
192.22	196.946	7.45				-85.83			

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time-bin
192.26	196.97	7.47	0.02			-84.87	0.96		
192.3	196.995	7.65	0.18	0.18		-74.23	10.64	10.64	
192.34	197.019	7.7	0.05		0.05	-59.17	15.06		15.06
193.22	197.554	7.56				-88.33			
193.26	197.578	7.64	0.08			-86.36	1.97		
193.3	197.602	7.79	0.15	0.15		-77.63	8.73	8.73	
193.34	197.627	7.85	0.06		0.06	-66.62	11.01		11.01
194.22	198.163	7.48				-88.26			
194.26	198.187	7.53	0.05			-85.88	2.38		
194.3	198.211	7.73	0.2	0.2		-75.59	10.29	10.29	
194.34	198.236	7.76	0.03		0.03	-62.32	13.27		13.27
195.22	198.772	7.53				-86.61			
195.26	198.797	7.64	0.11			-85.2	1.41		
195.3	198.821	7.75	0.11	0.11		-76.92	8.28	8.28	
195.34	198.845	7.82	0.07		0.07	-66.88	10.04		10.04
196.22	199.383	7.56				-87.19			
196.26	199.407	7.64	0.08			-85.17	2.02		
196.3	199.432	7.72	0.08	0.08		-77.13	8.04	8.04	
196.34	199.456	7.76	0.04		0.04	-66.19	10.94		10.94
197.22	199.994	7.59				-87.77			
197.26	200.019	7.64	0.05			-85.14	2.63		
197.3	200.043	7.69	0.05	0.05		-77.34	7.8	7.8	
197.34	200.068	7.7	0.01		0.01	-65.5	11.84		11.84
198.22	200.607	7.62				-88.93			
198.26	200.631	7.68	0.06			-88.06	0.87		
198.3	200.656	7.8	0.12	0.12		-75.42	12.64	12.64	

VL-1 SOL	Ls	Pressure (mbar)	pressure change (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	ΔT °C	ΔT °C .26 to .3 Time-bin	ΔT °C .3 to 0.34 Time- bin
198.34	200.68	7.87	0.07		0.07	-66.71	8.71		8.71
199.22	201.22	7.53				-88.33			
199.26	201.245	7.58	0.05			-87.12	1.21		
199.3	201.269	7.76	0.18	0.18		-73.69	13.43	13.43	
199.34	201.294	7.79	0.03		0.03	-56.14	17.55		17.55
AVERAGES		7.1407 (ONLY TIME BINS 0.26 TO 0.34)		0.122424242	0.045909091	-71.3448 (ONLY TIME BINS 0.26 TO 0.34)		11.48909091	11.545

ANNEX A APPENDIX 3 – VIKING 1 SOLS 200 TO 219

Data reformatted by David A. Roffman and Barry S. Roffman.



Source of Data: Dr. Tillman's web site at

http://www-k12.atmos.washington.edu/k12/resources/mars_data-information/data.html

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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200.26	201.859	7.64			-86.14		
200.3	201.883	7.82	0.18		-72.99	13.15	
200.34	201.908	7.82		0	-65.26		7.73
201.26	202.474	7.73			-88.98		
201.3	202.498	7.9	0.17		-76.29	12.69	
201.34	202.523	7.9		0	-67.74		8.55
202.26	203.09	7.66			-85.29		
202.3	203.114	7.87	0.21		-76.65	8.64	
202.34	203.139	7.85		-0.02	-62.55		14.1
203.26	203.706	7.66			-86.02		
203.3	203.731	7.85	0.19		-75.86	10.16	
203.34	203.756	7.85		0	-65.66		10.2
204.26	204.324	7.79			-89.13		
204.3	204.349	7.96	0.17		-81.95	7.18	
204.34	204.373	7.99		0.03	-71.16		10.79
205.26	204.943	7.73			-88.71		
205.3	204.967	7.93	0.2		-76.2	12.51	
205.34	204.992	7.9		-0.03	-66.8		9.4
206.26	205.562	7.75			-86.85		
206.3	205.587	7.96	0.21		-78.74	8.11	
206.34	205.611	7.93		-0.03	-67.77		10.97
207.26	206.182	7.74			-86.45		
207.3	206.207	7.95	0.21		-78.44	8.01	
207.34	206.232	7.93		-0.02	-67.22		11.22

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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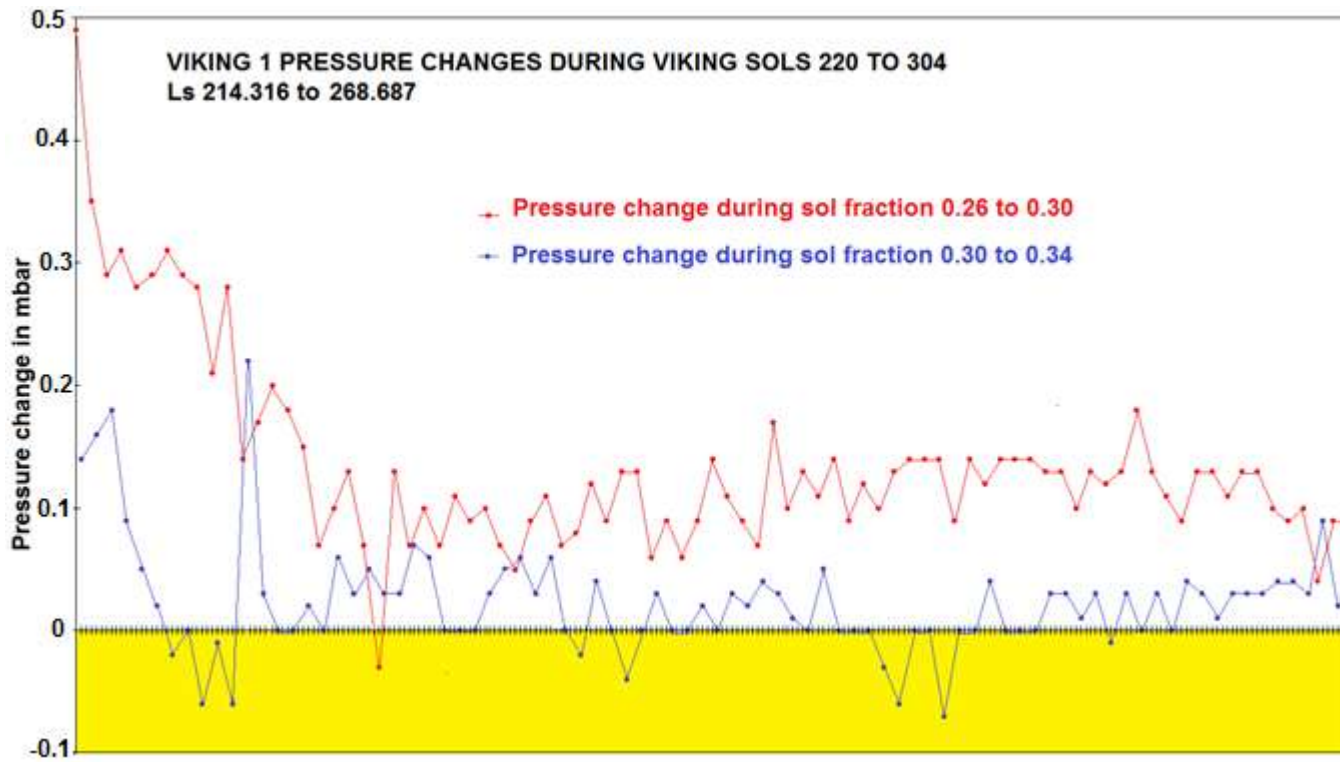
208.26	206.803	7.73			-86.05		
208.3	206.828	7.93	0.2		-78.15	7.9	
208.34	206.853	7.93		0	-66.68		11.47
209.26	207.425	7.7			-84.2		
209.3	207.45	7.87	0.17		-74	10.2	
209.34	207.475	7.87		0	-63.66		10.34
210.26	208.047	8.05			-82.06		
210.3	208.072	8.31	0.26		-78.61	3.45	
210.34	208.097	8.31		0	-74.13		4.48
211.26	208.671	8.09			-82.25		
211.3	208.696	8.48	0.39		-79.36	2.89	
211.34	208.721	8.49		0.01	-71.32		8.04
212.26	209.295	8.02			-80.87		
212.3	209.32	8.37	0.35		-75	5.87	
212.34	209.345	8.36		-0.01	-68.75		6.25
213.26	209.92	8			-80.06		
213.3	209.945	8.34	0.34		-75.21	4.85	
213.34	209.97	8.34		0	-68.99		6.22
214.26	210.546	7.92			-79.94		
214.3	210.571	8.25	0.33		-74.24	5.7	
214.34	210.596	8.29		0.04	-66.66		7.58
215.26	211.172	8.11			-80.45		
215.3	211.198	8.4	0.29		-77.67	2.78	
215.34	211.223	8.49		0.09	-73.16		4.51

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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216.26	211.8	7.87			-74.95		
216.3	211.825	8.22	0.35		-71.51	3.44	
216.34	211.85	8.29		0.07	-66.4		5.11
217.26	212.428	7.92			-76.67		
217.3	212.453	8.22	0.3		-73.33	3.34	
217.34	212.478	8.36		0.14	-68.61		4.72
218.26	213.057	7.87			-76.32		
218.3	213.082	8.19	0.32		-72.91	3.41	
218.34	213.107	8.36		0.17	-67.66		5.25
219.26	213.686	7.94			-77.77		
219.3	213.711	8.22	0.28		-74.11	3.66	
219.34	213.736	8.38		0.16	-67.84		6.27
AVERAGE		8.0267	.256	0.03	-75.64	6.897	8.16

ANNEX A APPENDIX 4 – VIKING 1 SOLS 220 TO 304

Data reformatted by David A. Roffman and Barry S. Roffman.



Source of Data: Dr. Tillman's web site at
http://www-k12.atmos.washington.edu/k12/resources/mars_data-information/data.html

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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220.26	214.316	7.79			-77.51		
220.3	214.342	8.28	0.49		-74.67	2.84	
220.34	214.367	8.42		0.14	-69.93		4.74
221.26	214.947	7.96			-79.21		
221.3	214.973	8.31	0.35		-75.24	3.97	
221.34	214.998	8.47		0.16	-69.36		5.88
222.26	215.579	8.02			-79.63		
222.3	215.604	8.31	0.29		-76.34	3.29	
222.34	215.63	8.49		0.18	-70.65		5.69
223.26	216.211	8.09			-81.35		
223.3	216.237	8.4	0.31		-77.43	3.92	
223.34	216.262	8.49		0.09	-71.51		5.92
224.26	216.845	8.09			-81.64		
224.3	216.87	8.37	0.28		-77.57	4.07	
224.34	216.895	8.42		0.05	-71.52		6.05
225.26	217.478	8.09			-80.95		
225.3	217.504	8.38	0.29		-76.41	4.54	
225.34	217.529	8.4		0.02	-71.19		5.22
226.26	218.113	8.18			-81.53		
226.3	218.138	8.49	0.31		-78.08	3.45	
226.34	218.163	8.47		-0.02	-73.27		4.81
227.26	218.748	8.11			-81.49		
227.3	218.773	8.4	0.29		-77.58	3.91	
227.34	218.799	8.4		0	-73.98		3.6

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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228.26	219.383	8.18			-81.3		
228.3	219.409	8.46	0.28		-78.8	2.5	
228.34	219.434	8.4		-0.06	-81.83		-3.03
229.26	220.02	8.16			-82.68		
229.3	220.045	8.37	0.21		-76.95	5.73	
229.34	220.071	8.36		-0.01	-73.89		3.06
230.26	220.657	8.36			-83.07		
230.3	220.682	8.64	0.28		-80.89	2.18	
230.34	220.708	8.58		-0.06	-76.39		4.5
231.26	221.294	8.22			-84.64		
231.3	221.32	8.36	0.14		-81.05	3.59	
231.34	221.345	8.58		0.22	-76.58		4.47
232.26	221.932	8.29			-83.27		
232.3	221.958	8.46	0.17		-79.85	3.42	
232.34	221.984	8.49		0.03	-74.17		5.68
233.26	222.571	8.29			-83.78		
233.3	222.597	8.49	0.2		-80.45	3.33	
233.34	222.623	8.49		0	-74		6.45
234.26	223.211	8.31			-83.5		
234.3	223.236	8.49	0.18		-80.5	3	
234.34	223.262	8.49		0	-73.96		6.54
235.26	223.851	8.25			-81.15		
235.3	223.876	8.4	0.15		-78.09	3.06	
235.34	223.902	8.42		0.02	-72.29		5.8

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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236.26	224.491	8.51			-83.84		
236.3	224.517	8.58	0.07		-81.7	2.14	
236.34	224.542	8.58		0	-76.64		5.06
237.26	225.132	8.42			-83.37		
237.3	225.158	8.52	0.1		-80.63	2.74	
237.34	225.183	8.58		0.06	-74.61		6.02
238.26	225.774	8.51			-80.06		
238.3	225.799	8.64	0.13		-80.92	-0.86	
238.34	225.825	8.67		0.03	-81.64		-0.72
239.26	226.416	8.51			-84.5		
239.3	226.441	8.58	0.07		-81.59	2.91	
239.34	226.467	8.63		0.05	-75.05		6.54
240.26	227.058	8.67			-86.42		
240.3	227.084	8.64	-0.03		-83.45	2.97	
240.34	227.11	8.67		0.03	-77.01		6.44
241.26	227.702	8.51			-86.97		
241.3	227.727	8.64	0.13		-84.1	2.87	
241.34	227.753	8.67		0.03	-76.66		7.44
242.26	228.345	8.51			-85.39		
242.3	228.371	8.58	0.07		-82.4	2.99	
242.34	228.397	8.65		0.07	-76.62		5.78
243.26	228.989	8.6			-85.12		
243.3	229.015	8.7	0.1		-82.71	2.41	
243.34	229.041	8.76		0.06	-76.58		6.13

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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244.26	229.634	8.6			-84.43		
244.3	229.66	8.67	0.07		-81.68	2.75	
244.34	229.685	8.67		0	-75.49		6.19
245.26	230.279	8.56			-84.07		
245.3	230.305	8.67	0.11		-81.54	2.53	
245.34	230.33	8.67		0	-75.43		6.11
246.26	230.924	8.76			-86.9		
246.3	230.95	8.85	0.09		-83.76	3.14	
246.34	230.976	8.85		0	-77.79		5.97
247.26	231.57	8.72			-86.26		
247.3	231.596	8.82	0.1		-84.5	1.76	
247.34	231.622	8.85		0.03	-76.67		7.83
248.26	232.216	8.69			-86.87		
248.3	232.242	8.76	0.07		-84.45	2.42	
248.34	232.268	8.81		0.05	-78.15		6.3
249.26	232.863	8.65			-86.52		
249.3	232.889	8.7	0.05		-83.97	2.55	
249.34	232.915	8.76		0.06	-77.83		6.14
250.26	233.51	8.82			-88.22		
250.3	233.536	8.91	0.09		-86.24	1.98	
250.34	233.562	8.94		0.03	-80.95		5.29
251.26	234.157	8.65			-87.59		
251.3	234.183	8.76	0.11		-85.12	2.47	
251.34	234.209	8.82		0.06	-79.19		5.93

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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252.26	234.805	8.69			-86.6		
252.3	234.831	8.76	0.07		-83.97	2.63	
252.34	234.857	8.76		0	-77.35		6.62
253.26	235.453	8.83			-87.97		
253.3	235.479	8.91	0.08		-85.36	2.61	
253.34	235.505	8.89		-0.02	-79.75		5.61
254.26	236.102	8.67			-86.78		
254.3	236.128	8.79	0.12		-83.58	3.2	
254.34	236.153	8.83		0.04	-76.89		6.69
255.26	236.75	8.76			-86.93		
255.3	236.776	8.85	0.09		-84.11	2.82	
255.34	236.802	8.85		0	-80.73		3.38
256.26	237.399	8.78			-87.68		
256.3	237.425	8.91	0.13		-84.99	2.69	
256.34	237.451	8.87		-0.04	-79.11		5.88
257.26	238.049	8.81			-88.48		
257.3	238.075	8.94	0.13		-86.01	2.47	
257.34	238.101	8.94		0	-79.34		6.67
258.26	238.698	8.85			-88.67		
258.3	238.724	8.91	0.06		-86.35	2.32	
258.34	238.75	8.94		0.03	-79.76		6.59
259.26	239.348	8.85			-88.82		
259.3	239.374	8.94	0.09		-86.75	2.07	
259.34	239.4	8.94		0	-79.97		6.78

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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260.26	239.998	8.88			-89.95		
260.3	240.024	8.94	0.06		-88.34	1.61	
260.34	240.05	8.94		0	-81.06		7.28
261.26	240.649	8.85			-93.74		
261.3	240.675	8.94	0.09		-89.03	4.71	
261.34	240.701	8.96		0.02	-78.39		10.64
262.26	241.299	8.89			-89.59		
262.3	241.325	9.03	0.14		-87.56	2.03	
262.34	241.351	9.03		0	-80.71		6.85
263.26	241.95	8.89			-89.95		
263.3	241.976	9	0.11		-87.62	2.33	
263.34	242.002	9.03		0.03	-80.7		6.92
264.26	242.601	8.94			-90.31		
264.3	242.627	9.03	0.09		-88.65	1.66	
264.34	242.653	9.05		0.02	-82.63		6.02
265.26	243.252	8.78			-89.49		
265.3	243.278	8.85	0.07		-87.09	2.4	
265.34	243.304	8.89		0.04	-80.61		6.48
266.26	243.904	8.83			-89.92		
266.3	243.93	9	0.17		-87.55	2.37	
266.34	243.956	9.03		0.03	-81.85		5.7
267.26	244.555	8.87			-90.63		
267.3	244.581	8.97	0.1		-88.03	2.6	
267.34	244.607	8.98		0.01	-81.4		6.63

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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268.26	245.207	8.81			-89.78		
268.3	245.233	8.94	0.13		-87.85	1.93	
268.34	245.259	8.94		0	-81.39		6.46
269.26	245.859	8.89			-90.68		
269.3	245.885	9	0.11		-89.29	1.39	
269.34	245.911	9.05		0.05	-79.41		9.88
270.26	246.51	8.89			-90.79		
270.3	246.536	9.03	0.14		-89.02	1.77	
270.34	246.562	9.03		0	-82.77		6.25
271.26	247.162	8.94			-91.17		
271.3	247.188	9.03	0.09		-89.49	1.68	
271.34	247.215	9.03		0	-82.91		6.58
272.26	247.814	8.91			-91.65		
272.3	247.84	9.03	0.12		-90.27	1.38	
272.34	247.866	9.03		0	-83.82		6.45
273.26	248.466	9.05			-92.28		
273.3	248.493	9.15	0.1		-90.61	1.67	
273.34	248.519	9.12		-0.03	-84.58		6.03
274.26	249.119	9.05			-93.44		
274.3	249.145	9.18	0.13		-91.85	1.59	
274.34	249.171	9.12		-0.06	-85.84		6.01
275.26	249.771	8.89			-92.64		
275.3	249.797	9.03	0.14		-88.66	3.98	
275.34	249.823	9.03		0	-81.62		7.04

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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276.26	250.423	8.89			-93.01		
276.3	250.449	9.03	0.14		-91.55	1.46	
276.34	250.475	9.03		0	-85.53		6.02
277.26	251.075	8.98			-93.14		
277.3	251.101	9.12	0.14		-91.19	1.95	
277.34	251.127	9.05		-0.07	-84.58		6.61
278.26	251.727	9.03			-93.47		
278.3	251.753	9.12	0.09		-91.31	2.16	
278.34	251.779	9.12		0	-84.59		6.72
279.26	252.38	8.89			-91.96		
279.3	252.406	9.03	0.14		-90.39	1.57	
279.34	252.432	9.03		0	-84.4		5.99
280.26	253.032	8.94			-92.8		
280.3	253.058	9.06	0.12		-90.94	1.86	
280.34	253.084	9.1		0.04	-84.92		6.02
281.26	253.684	8.98			-93.31		
281.3	253.71	9.12	0.14		-91.58	1.73	
281.34	253.736	9.12		0	-85.52		6.06
282.26	254.336	8.89			-92.87		
282.3	254.362	9.03	0.14		-91.71	1.16	
282.34	254.388	9.03		0	-85.73		5.98
283.26	254.988	8.89			-92.74		
283.3	255.014	9.03	0.14		-91.33	1.41	
283.34	255.04	9.03		0	-85.25		6.08

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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284.26	255.64	8.96			-93.53		
284.3	255.666	9.09	0.13		-92.52	1.01	
284.34	255.692	9.12		0.03	-86.35		6.17
285.26	256.291	8.96			-94.4		
285.3	256.317	9.09	0.13		-92.91	1.49	
285.34	256.343	9.12		0.03	-86.69		6.22
286.26	256.943	8.87			-92.7		
286.3	256.969	8.97	0.1		-90.8	1.9	
286.34	256.995	8.98		0.01	-83.56		7.24
287.26	257.594	9.05			-94.22		
287.3	257.62	9.18	0.13		-93.19	1.03	
287.34	257.646	9.21		0.03	-88.32		4.87
288.26	258.246	9.03			-95.16		
288.3	258.272	9.15	0.12		-94	1.16	
288.34	258.298	9.14		-0.01	-87.53		6.47
289.26	258.897	8.87			-93.54		
289.3	258.923	9	0.13		-92.56	0.98	
289.34	258.949	9.03		0.03	-86.12		6.44
290.26	259.548	8.94			-94.61		
290.3	259.574	9.12	0.18		-92.61	2	
290.34	259.6	9.12		0	-87.61		5
291.26	260.199	9.05			-95.59		
291.3	260.225	9.18	0.13		-93.97	1.62	
291.34	260.251	9.21		0.03	-87.86		6.11

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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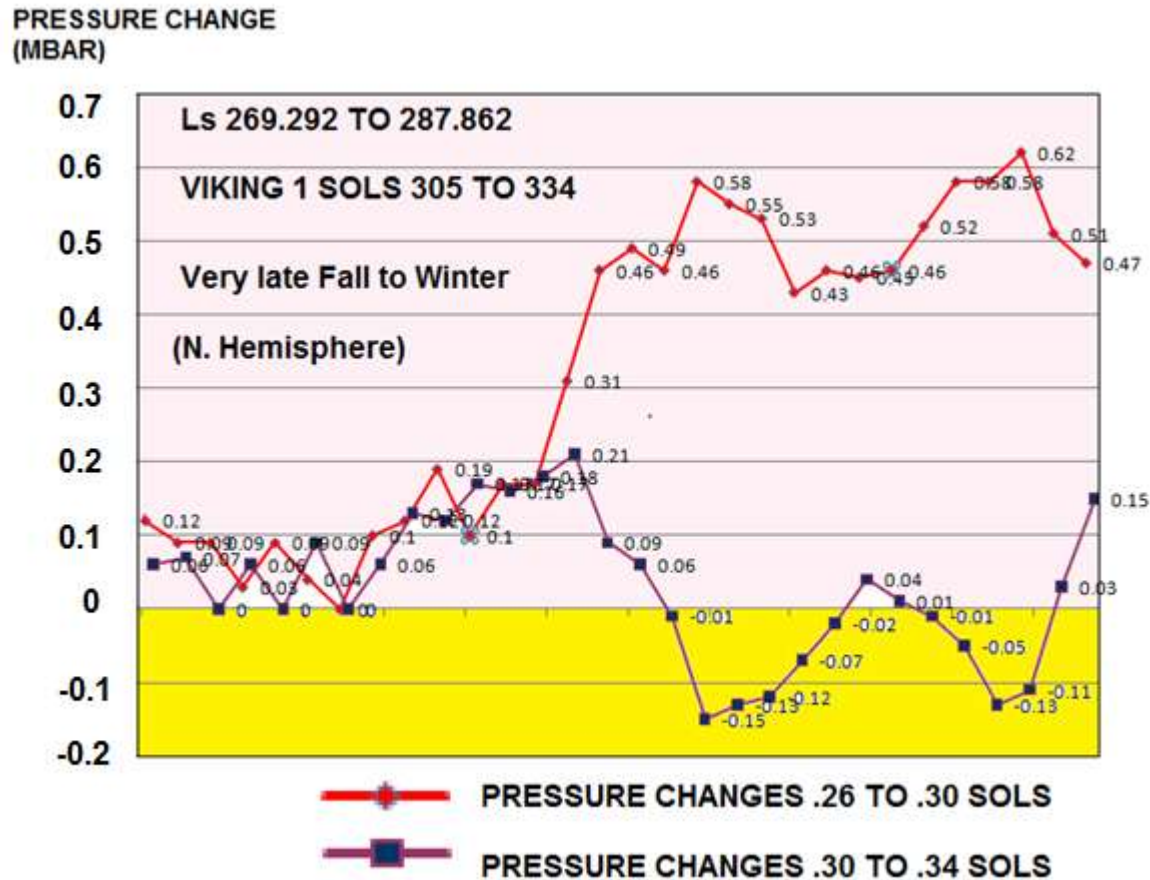
292.26	260.849	9.01			-95.96		
292.3	260.875	9.12	0.11		-94.83	1.13	
292.34	260.901	9.12		0	-88.44		6.39
293.26	261.5	8.94			-95.28		
293.3	261.526	9.03	0.09		-94.42	0.86	
293.34	261.552	9.07		0.04	-88.55		5.87
294.26	262.15	9.05			-95.35		
294.3	262.176	9.18	0.13		-94.78	0.57	
294.34	262.202	9.21		0.03	-89.02		5.76
295.26	262.8	9.14			-94.97		
295.3	262.826	9.27	0.13		-93.99	0.98	
295.34	262.852	9.28		0.01	-89		4.99
296.26	263.449	8.89			-94.02		
296.3	263.475	9	0.11		-93.22	0.8	
296.34	263.501	9.03		0.03	-87.22		6
297.26	264.099	8.87			-94.19		
297.3	264.125	9	0.13		-93.47	0.72	
297.34	264.151	9.03		0.03	-88.11		5.36
298.26	264.748	8.96			-95.11		
298.3	264.774	9.09	0.13		-94.72	0.39	
298.34	264.8	9.12		0.03	-89.57		5.15
299.26	265.396	8.96			-95.04		
299.3	265.422	9.06	0.1		-94.36	0.68	
299.34	265.448	9.1		0.04	-89.54		4.82

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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300.26	266.045	8.76			-94.23		
300.3	266.071	8.85	0.09		-93.33	0.9	
300.34	266.097	8.89		0.04	-86.69		6.64
301.26	266.693	8.81			-95.19		
301.3	266.719	8.91	0.1		-94.74	0.45	
301.34	266.745	8.94		0.03	-89.31		5.43
302.26	267.341	8.81			-95.03		
302.3	267.367	8.85	0.04		-94.52	0.51	
302.34	267.392	8.94		0.09	-89.27		5.25
303.26	267.988	8.76			-93.38		
303.3	268.014	8.85	0.09		-93.34	0.04	
303.34	268.04	8.87		0.02	-88.38		4.96
304.26	268.635	8.85			-95.49		
304.3	268.661	8.94	0.09		-94.48	1.01	
304.34	268.687	8.98		0.04	-89.57		4.91
AVERAGES		8.800980392	0.136235294	0.023058824	-85.5669	2.164824	5.844706

ANNEX A APPENDIX 5 – VIKING 1 SOLS 305 TO 334

Data reformatted by David A. Roffman and Barry S. Roffman.



Source of Data: Dr. Tillman's web site at http://www-k12.atmos.washington.edu/k12/resources/mars_data-information/data.html

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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305.26	269.282	8.85			-95.01		
305.3	269.308	8.97	0.12		-94.22	0.79	
305.34	269.333	9.03		0.06	-88.91		5.31
306.26	269.928	8.85			-95.54		
306.3	269.954	8.94	0.09		-94.91	0.63	
306.34	269.98	9.01		0.07	-89.43		5.48
307.26	270.574	8.76			-95.14		
307.3	270.6	8.85	0.09		-94.82	0.32	
307.34	270.625	8.85		0	-89.68		5.14
308.26	271.219	8.85			-95.23		
308.3	271.245	8.88	0.03		-95.08	0.15	
308.34	271.271	8.94		0.06	-89.95		5.13
309.26	271.864	8.85			-94.92		
309.3	271.89	8.94	0.09		-94.31	0.61	
309.34	271.916	8.94		0	-89.99		4.32
310.26	272.509	8.63			-94.51		
310.3	272.535	8.67	0.04		-94.12	0.39	
310.34	272.56	8.76		0.09	-89.84		4.28
311.26	273.153	8.76			-94.29		
311.3	273.179	8.76	0		-94.37	-0.08	
311.34	273.204	8.76		0	-89.66		4.71
312.26	273.796	8.6			-93.05		
312.3	273.822	8.7	0.1		-94	-0.95	
312.34	273.848	8.76		0.06	-85.54		8.46

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time-bin
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313.26	274.439	8.67			-92.46		
313.3	274.465	8.79	0.12		-92.26	0.2	
313.34	274.491	8.92		0.13	-88.51		3.75
314.26	275.082	8.63			-86.16		
314.3	275.108	8.82	0.19		-86.35	-0.19	
314.34	275.133	8.94		0.12	-84.18		2.17
315.26	275.724	8.69			-86.55		
315.3	275.75	8.79	0.1		-86.67	-0.12	
315.34	275.775	8.96		0.17	-84.71		1.96
316.26	276.366	8.83			-85.6		
316.3	276.391	9	0.17		-85	0.6	
316.34	276.417	9.16		0.16	-83.54		1.46
317.26	277.007	9.01			-85.59		
317.3	277.032	9.18	0.17		-85.14	0.45	
317.34	277.058	9.36		0.18	-83.94		1.2
318.26	277.647	8.87			-83.9		
318.3	277.673	9.18	0.31		-83.46	0.44	
318.34	277.698	9.39		0.21	-82.52		0.94
319.26	278.287	8.81			-81.53		
319.3	278.313	9.27	0.46		-80.63	0.9	
319.34	278.338	9.36		0.09	-80.01		0.62
320.26	278.927	8.81			-81.21		
320.3	278.952	9.3	0.49		-80.8	0.41	
320.34	278.978	9.36		0.06	-80.45		0.35

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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321.26	279.565	8.96			-83.12		
321.3	279.591	9.42	0.46		-82.75	0.37	
321.34	279.616	9.41		-0.01	-82.91		-0.16
322.26	280.203	8.87			-83.04		
322.3	280.229	9.45	0.58		-82.53	0.51	
322.34	280.255	9.3		-0.15	-82.98		-0.45
323.26	280.841	8.81			-82.81		
323.3	280.867	9.36	0.55		-82.16	0.65	
323.34	280.892	9.23		-0.13	-82.76		-0.6
324.26	281.478	8.83			-83.66		
324.3	281.503	9.36	0.53		-82.57	1.09	
324.34	281.529	9.24		-0.12	-83.18		-0.61
325.26	282.114	8.87			-84.06		
325.3	282.14	9.3	0.43		-83.65	0.41	
325.34	282.165	9.23		-0.07	-83.64		0.01
326.26	282.75	8.81			-83.75		
326.3	282.775	9.27	0.46		-83.25	0.5	
326.34	282.801	9.25		-0.02	-83.49		-0.24
327.26	283.385	8.85			-84.51		
327.3	283.41	9.3	0.45		-83.83	0.68	
327.34	283.436	9.34		0.04	-83.49		0.34
328.26	284.019	8.87			-85.08		
328.3	284.045	9.33	0.46		-84.28	0.8	
328.34	284.07	9.34		0.01	-84.28		0

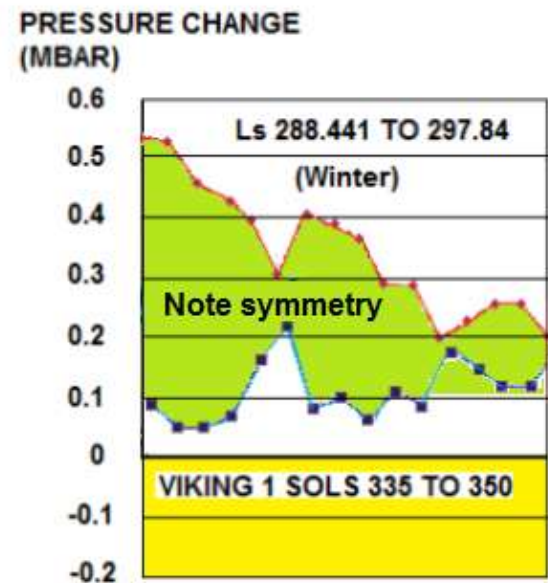
VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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329.26	284.653	8.81			-85.69		
329.3	284.678	9.33	0.52		-84.4	1.29	
329.34	284.704	9.32		-0.01	-84.45		-0.05
330.26	285.286	8.81			-85.37		
330.3	285.312	9.39	0.58		-84.21	1.16	
330.34	285.337	9.34		-0.05	-84.62		-0.41
331.26	285.919	8.78			-84.73		
331.3	285.944	9.36	0.58		-83.59	1.14	
331.34	285.969	9.23		-0.13	-84.19		-0.6
332.26	286.55	8.74			-85.38		
332.3	286.576	9.36	0.62		-84.21	1.17	
332.34	286.601	9.25		-0.11	-84.78		-0.57
333.26	287.181	8.76			-85.92		
333.3	287.206	9.27	0.51		-84.91	1.01	
333.34	287.232	9.3		0.03	-85.2		-0.29
334.26	287.811	8.74			-86.98		
334.3	287.837	9.21	0.47		-86.15	0.83	
334.34	287.862	9.36		0.15	-85.87		0.28
AVERAGE		9.0263	0.325666667	0.029666667	-86.56	0.5386	1.731

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time-bin
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ANNEX A APPENDIX 6 – VIKING 1 SOLS 335 TO 350

Data reformatted by David A. Roffman and Barry S. Roffman.



Source of Data: Dr. Tillman's web site at
http://www-k12.atmos.washington.edu/k12/resources/mars_data-information/data.html

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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335.26	288.441	8.76			-87.61		
335.3	288.466	9.3	0.54		-86.47	1.14	
335.34	288.491	9.39		0.09	-86.16		0.31
336.26	289.07	8.74			-88.85		
336.3	289.095	9.27	0.53		-87.76	1.09	
336.34	289.12	9.32		0.05	-87.66		0.1
337.26	289.698	8.81			-87.94		
337.3	289.723	9.27	0.46		-87.22	0.72	
337.34	289.748	9.32		0.05	-86.92		0.3
338.26	290.325	8.74			-86.93		
338.3	290.35	9.18	0.44		-86.1	0.83	
338.34	290.375	9.25		0.07	-85.99		0.11
339.26	290.952	8.72			-86.87		
339.3	290.977	9.12	0.4		-86.28	0.59	
339.34	291.002	9.28		0.16	-85.89		0.39
340.26	291.577	8.72			-88.16		
340.3	291.602	9.03	0.31		-87.54	0.62	
340.34	291.627	9.25		0.22	-86.78		0.76
341.26	292.202	8.74			-87.97		
341.3	292.227	9.15	0.41		-87.25	0.72	
341.34	292.252	9.23		0.08	-86.92		0.33
342.26	292.827	8.76			-88		
342.3	292.852	9.15	0.39		-87.66	0.34	
342.34	292.877	9.25		0.1	-87.24		0.42

VL-1 SOL	Ls	Pressure (mbar)	ΔP 0.26 to .3 Time-bin (mbar)	ΔP .3 to .34 Time-bin (Mbar)	Temperature °C	$\Delta T^{\circ}C$.26 to .3 Time-bin	$\Delta T^{\circ}C$.3 to 0.34 Time- bin
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343.26	293.45	8.78			-88.69		
343.3	293.475	9.15	0.37		-88.34	0.35	
343.34	293.5	9.21		0.06	-88.37		-0.03
344.26	294.073	8.83			-89.07		
344.3	294.097	9.12	0.29		-89.01	0.06	
344.34	294.122	9.23		0.11	-88.51		0.5
345.26	294.694	8.83			-89.8		
345.3	294.719	9.12	0.29		-89.79	0.01	
345.34	294.744	9.21		0.09	-89.24		0.55
346.26	295.315	8.83			-89.6		
346.3	295.34	9.03	0.2		-89.55	0.05	
346.34	295.365	9.21		0.18	-88.89		0.66
347.26	295.936	8.83			-89.93		
347.3	295.96	9.06	0.23		-89.91	0.02	
347.34	295.985	9.21		0.15	-89.15		0.76
348.26	296.555	8.83			-89.73		
348.3	296.58	9.09	0.26		-89.81	-0.08	
348.34	296.604	9.21		0.12	-89.15		0.66
349.26	297.173	8.74			-89.61		
349.3	297.198	9	0.26		-89.57	0.04	
349.34	297.223	9.12		0.12	-88.81		0.76
350.26	297.791	8.74			-89.67		
350.3	297.816	8.94	0.2		-89.58	0.09	
350.34	297.84	9.12		0.18	-88.85		0.73

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