## SUPPLEMENTAL MATERIAL for manuscript titled: A Morphometric Investigation of Large-scale Crustal Shortening on Mars R. M. Atkins, P. K. Byrne, D. R. Bohnensteihl, and K.W. Wegmann

Table S1. Summarized fault metrics

Fault name	Length (km)	t <sub>max</sub> (m)	D <sub>max</sub> (m)	D <sub>max</sub> /L ratio	# of segments (FFT)	# of segments (S-Transform)	Location
1	295	923.8	1847.6	0.00626	5	5	S
2	61	197.3	394.6	0.00647	3	3	S
3	48	85.4	170.9	0.00356	2	2	S
5	141	302.9	605.7	0.00430	3	3	S
6	128	119.4	238.8	0.00187	2	4	N
7	417	176.3	352.6	0.00085	3	3	N
8	109	384.1	768.2	0.00705	3	3	N
9	105	195.0	390.0	0.00371	5	2	N
10	346	87.0	174.0	0.00050	3	4	N
11	126	211.1	422.3	0.00335	3	2	N
12	195	353.3	706.6	0.00362	5	5	N
13	134	381.0	762.0	0.00569	3	6	S
14	34	282.3	564.6	0.01660	2	2	S
15	180	131.8	263.6	0.00146	4	4	N
16	291	203.9	407.8	0.00140	3	3	N
17	117	130.0	260.0	0.00222	8	9	N
18	370	235.9	471.8	0.00128	8	5	N
19	520	215.9	431.8	0.00083	8	8	N
20	82	107.0	213.9	0.00261	3	3	N
21	258	210.5	421.0	0.00163	8	7	N
22	324	152.7	305.4	0.00094	4	5	N
23	73	441.7	883.4	0.01210	2	2	S
24	230	907.2	1814.3	0.00789	2	2	S
25	97	712.2	1424.4	0.01468	3	3	S
26	136	877.1	1754.2	0.01290	5	2	S
Ogygis Rupes	207	2032.8	4065.5	0.01964	2	3	S
28	205	1569.6	3139.2	0.01531	2	3	S
29	116	805.4	1610.7	0.01389	2	2	S
30	140	308.0	616.0	0.00440	2	3	S
31	544	1488.6	2977.1	0.00547	4	5	S
Icaria Rupes	161	1281.8	2563.7	0.01592	4	4	S
Hiddekel Rupes	144	489.1	978.3	0.00679	8	9	N
34	410	1696.2	3392.4	0.00827	3	3	S
Phrixi Rupes	206	1313.0	2626.0	0.01275	2	2	S
37	138	539.4	1078.9	0.00782	1	1	S
38	287	193.0	386.0	0.00134	6	9	N
39	270	227.3	454.6	0.00168	6	5	N
40	178	181.0	362.0	0.00203	2	2	N
41	388	463.0	926.1	0.00239	2	2	S
42	280	415.7	831.4	0.00297	2	2	S

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43	533	2149.7	4299.5	0.00807	4	4	N
44	228	643.7	1287.4	0.00565	2	2	N
45	409	961.0	1922.0	0.00470	2	2	N
47	111	196.0	392.0	0.00353	4	4	N
48	50	131.0	262.0	0.00524	4	11	S
49	159	202.1	404.2	0.00254	3	3	N
50	124	331.6	663.2	0.00535	4	4	S
Bosporus Rupes (a)	303	1460.4	2920.8	0.00964	2	2	S
Bosporus Rupes (b)	269	1399.8	2799.6	0.01041	3	2	S