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## Mapping Mercury's Debussy Quadrangle and Exploration of Volcanic Vents on a Shrinking World

### Thesis

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### **Appendix 3: Vent Locations and Classification**

Vent ID	Lat	Lon	Compound	Image Quality	Facula Check	In Crater
1	-54.2	4.2	yes	reasonable	yes	yes
3	-55.8	5.4	tentative	reasonable	yes	yes
4	-48.1	15.8	tentative	reasonable	yes	yes
6	-49.0	15.5	no	reasonable	yes	yes
9	-59.1	26.8	yes	good	yes	yes
11	-61.8	-37.3	yes	good	yes	yes
12	-51.4	7.4	tentative	good	yes	yes
14	-48.9	-27.5	yes	good	yes	no
16	1.2	27.5	no	poor	yes	yes
17	-2.8	17.4	yes	reasonable	yes	yes
18	3.7	14.0	yes	good	no	yes
19	-4.1	26.0	yes	reasonable	yes	yes
22	-6.6	-48.3	yes	good	yes	yes
24	5.8	-50.0	yes	good	yes	no
25	2.3	-49.0	yes	reasonable	yes	yes
26	-6.0	-47.1	yes	good	yes	yes
28	87.9	-40.7	yes	good	yes	yes
30	97.6	-33.9	yes	good	no	yes
31	88.2	32.5	yes	reasonable	no	yes
32	178.9	21.5	yes	reasonable	yes	yes
33	179.8	25.1	tentative	reasonable	yes	yes
35	174.8	-40.9	unclassifiable	poor	yes	yes
36	175.7	-40.6	unclassifiable	poor	yes	yes
37	174.8	-39.7	unclassifiable	poor	yes	yes
38	176.6	-39.3	unclassifiable	poor	yes	yes
39	175.8	-39.0	unclassifiable	poor	yes	yes
40	160.9	59.0	yes	reasonable	yes	yes
41	163.1	13.3	yes	reasonable	yes	yes
42	162.1	13.8	yes	reasonable	yes	yes
44	161.2	48.4	no	reasonable	yes	yes
50	179.4	-23.7	yes	reasonable	yes	yes
52	178.1	19.5	tentative	poor	yes	yes
53	178.1	-25.3	unclassifiable	poor	yes	yes
54	177.4	-25.4	yes	reasonable	yes	yes
55	177.7	-25.0	unclassifiable	poor	yes	yes
56	21.6	34.3	tentative	reasonable	yes	no
59	21.3	35.2	yes	reasonable	yes	no
61	23.8	35.5	tentative	reasonable	yes	yes
63	23.2	36.3	unclassifiable	reasonable	yes	yes
64	24.2	36.7	unclassifiable	poor	yes	no
65	10.3	28.4	yes	reasonable	yes	no
66	24.4	-51.7	yes	good	yes	yes
67	71.4	-19.3	yes	good	no	yes
68	72.1	-18.5	no	reasonable	yes	yes
69	72.5	-21.0	yes	good	no	yes
70	65.7	-15.6	tentative	good	yes	no
72	50.0	-3.8	yes	good	no	yes
73	43.9	-0.8	yes	good	yes	no
74	51.0	3.5	yes	good	yes	yes
75	58.8	-7.2	tentative	poor	no	no
76	58.2	-6.2	unclassifiable	poor	yes	no

Vent ID	Lat	Lon	Compound	Image Quality	Facula Check	In Crater
77	58.7	-5.8	yes	good	yes	no
78	58.5	-5.4	tentative	reasonable	yes	no
79	57.3	-5.3	tentative	reasonable	yes	no
82	55.7	-11.4	tentative	poor	yes	no
83	54.9	-11.2	yes	poor	yes	no
84	22.8	32.2	yes	good	yes	no
85	21.8	32.4	yes	reasonable	yes	yes
86	57.4	36.0	no	reasonable	yes	yes
87	23.7	37.3	unclassifiable	poor	yes	yes
88	24.1	37.5	unclassifiable	poor	yes	yes
89	55.3	36.3	yes	good	yes	yes
90	45.7	-37.5	no	reasonable	yes	yes
92	62.4	-11.5	yes	reasonable	yes	yes
94	64.0	35.8	tentative	good	yes	yes
96	50.0	-33.1	yes	reasonable	yes	no
97	38.2	-52.9	yes	good	yes	yes
99	10.8	-49.8	yes	good	yes	no
100	52.4	-9.4	tentative	poor	yes	no
101	51.8	-8.3	yes	reasonable	yes	no
103	51.1	35.9	no	reasonable	yes	yes
104	13.0	-70.6	unclassifiable	poor	yes	yes
105	23.7	-68.9	yes	poor	yes	no
106	17.7	-53.0	no	good	yes	no
107	17.9	-52.7	yes	reasonable	yes	no
109	17.4	-52.3	yes	reasonable	yes	no
110	38.2	-48.5	yes	good	no	yes
111	41.0	-36.2	no	reasonable	no	no
112	41.4	-36.4	unclassifiable	poor	no	no
117	33.4	8.6	tentative	reasonable	yes	no
118	76.8	-66.5	yes	good	yes	yes
119	76.4	-66.7	tentative	good	yes	yes
120	76.2	-66.9	no	good	yes	yes
121	75.7	-67.2	yes	reasonable	yes	yes
122	11.6	-48.4	tentative	reasonable	yes	no
123	20.2	-53.0	yes	reasonable	yes	no
124	159.5	48.7	yes	reasonable	yes	yes
125	141.5	38.3	tentative	poor	yes	no
126	159.4	13.6	tentative	reasonable	yes	no
127	158.8	13.8	unclassifiable	poor	yes	no
128	159.9	14.1	tentative	reasonable	yes	no
129	159.3	14.3	yes	reasonable	yes	no
131	160.8	14.5	yes	poor	yes	no
133	160.2	15.2	unclassifiable	poor	yes	yes
134	139.7	48.5	yes	good	yes	no
135	121.5	42.4	yes	reasonable	no	no
136	143.6	-5.2	yes	good	yes	yes
137	146.2	22.3	yes	good	yes	yes
138	145.4	21.7	yes	good	yes	yes
140	145.8	21.8	yes	good	yes	yes
141	140.6	-11.0	yes	good	yes	yes
143	149.3	18.2	yes	reasonable	yes	yes

Vent ID	Lat	Lon	Compound	Image Quality	Facula Check	In Crater
144	149.6	18.5	tentative	reasonable	yes	yes
145	149.7	19.0	no	reasonable	yes	yes
146	150.2	19.4	unclassifiable	poor	yes	yes
147	146.9	-28.3	yes	good	yes	yes
148	146.7	-28.1	no	good	yes	yes
150	154.5	-9.4	no	reasonable	yes	yes
151	154.5	-9.1	no	reasonable	yes	yes
152	136.6	-28.1	yes	good	yes	yes
153	156.0	18.4	unclassifiable	poor	yes	yes
154	155.2	18.8	tentative	reasonable	yes	yes
155	142.1	-59.7	unclassifiable	poor	yes	no
156	140.4	-59.4	unclassifiable	poor	yes	no
157	138.6	28.0	unclassifiable	poor	yes	no
158	105.8	-43.7	yes	good	no	yes
159	142.6	-43.0	yes	good	no	yes
160	136.8	-33.4	yes	reasonable	no	yes
161	145.3	-59.9	unclassifiable	poor	yes	yes
162	144.8	-59.4	no	reasonable	yes	yes
163	144.4	45.3	unclassifiable	poor	no	yes
164	144.6	28.1	tentative	reasonable	yes	yes
165	148.4	24.2	no	reasonable	yes	yes
166	110.4	58.8	no	poor	no	yes
167	109.7	59.2	tentative	reasonable	no	yes
168	110.2	36.6	tentative	reasonable	yes	yes
169	121.1	60.1	no	reasonable	no	yes
170	101.1	58.2	yes	reasonable	no	yes
171	142.5	-55.4	yes	good	yes	yes
174	129.2	-38.4	yes	reasonable	no	yes
175	134.8	-45.8	no	reasonable	no	yes
176	134.8	-45.4	no	reasonable	yes	yes
177	135.4	-45.5	yes	reasonable	yes	yes
178	135.0	-45.3	no	good	yes	yes
179	134.7	-44.8	no	good	yes	yes
180	135.0	-44.8	yes	good	yes	yes
181	111.3	-40.3	yes	good	yes	yes
182	115.1	-42.0	no	good	yes	yes
183	136.6	-51.5	tentative	reasonable	yes	yes
184	144.8	-64.5	unclassifiable	poor	yes	yes
185	143.0	-64.2	tentative	poor	no	yes
186	143.6	-64.2	yes	good	no	yes
187	143.5	-64.0	tentative	poor	no	yes
188	142.7	-63.9	tentative	poor	yes	yes
189	142.0	-64.1	tentative	poor	no	no
190	143.1	-63.8	yes	poor	no	yes
191	142.6	-63.7	tentative	poor	yes	yes
193	142.1	-63.5	no	poor	no	yes
194	142.7	-63.4	no	poor	yes	yes
197	142.5	-62.9	tentative	poor	yes	yes
198	142.1	-62.2	yes	poor	yes	yes
199	144.3	-62.1	tentative	poor	yes	no
201	147.8	-65.2	yes	good	yes	yes

Vent ID	Lat	Lon	Compound	Image Quality	Facula Check	In Crater
202	143.9	-56.3	yes	good	yes	no
203	137.6	-60.6	no	reasonable	no	yes
204	137.6	-60.3	unclassifiable	reasonable	no	yes
205	138.2	-60.1	tentative	reasonable	yes	yes
206	154.1	-66.1	yes	good	yes	yes
208	154.4	-65.8	no	good	yes	yes
210	137.6	-38.6	no	good	yes	yes
211	133.7	-38.6	yes	good	yes	yes
212	135.0	-39.0	yes	good	yes	yes
214	135.3	-38.3	yes	good	no	yes
215	147.2	-55.0	no	poor	yes	yes
216	124.9	-40.1	no	poor	yes	yes
217	124.4	-39.8	no	reasonable	yes	yes
219	138.5	-52.0	yes	good	yes	yes
222	139.0	-51.7	no	good	yes	yes
224	142.2	-35.2	unclassifiable	poor	yes	yes
227	151.1	-32.6	yes	reasonable	yes	yes
228	152.5	17.7	yes	poor	yes	no
230	150.5	18.6	yes	reasonable	yes	yes
231	151.2	18.7	unclassifiable	reasonable	yes	yes
232	150.5	46.9	yes	poor	yes	yes
233	149.9	17.3	unclassifiable	poor	yes	yes
234	148.6	18.6	yes	reasonable	yes	yes
235	148.3	19.5	yes	reasonable	no	yes
236	148.2	18.2	tentative	reasonable	yes	yes
239	-100.6	41.2	yes	good	yes	yes
242	-111.3	35.8	tentative	good	yes	yes
243	-111.7	52.6	yes	good	yes	yes
244	-89.2	-21.2	yes	good	yes	yes
245	-137.8	9.5	tentative	reasonable	yes	yes
246	-137.8	4.4	no	good	yes	no
247	-136.3	-47.6	no	reasonable	no	yes
250	-156.9	-21.6	yes	good	yes	yes
252	-156.0	-30.3	yes	good	yes	yes
254	-161.9	0.6	tentative	reasonable	yes	yes
256	-105.1	-22.0	unclassifiable	poor	yes	yes
258	-101.7	-57.5	tentative	good	no	yes
261	-98.5	42.0	yes	reasonable	yes	yes
262	-67.4	21.8	yes	good	yes	yes
263	-105.0	-24.1	yes	good	yes	yes
264	-136.8	-3.5	no	good	yes	yes
265	-135.5	-8.4	tentative	good	yes	yes
266	-148.7	3.8	yes	good	yes	yes
267	-178.4	23.4	yes	reasonable	yes	yes
268	-178.4	23.8	yes	good	yes	yes
269	-179.2	23.9	yes	reasonable	yes	yes
270	-178.4	24.0	yes	reasonable	yes	yes
271	-178.9	24.3	yes	reasonable	yes	yes
273	-179.2	24.9	unclassifiable	poor	yes	yes
274	-147.2	-3.0	no	reasonable	yes	yes
275	-147.4	-3.0	yes	good	yes	yes

Vent ID	Lat	Lon	Compound	Image Quality	Facula Check	In Crater
276	-140.7	4.6	unclassifiable	poor	yes	yes
277	-142.2	6.7	no	reasonable	yes	yes
278	-161.6	-16.7	tentative	reasonable	yes	yes
279	-161.1	-19.9	no	reasonable	yes	yes
280	-163.1	-21.1	yes	good	yes	yes
281	-162.7	-21.0	yes	good	yes	yes
283	-113.8	-6.9	no	good	yes	yes
284	-130.0	-13.5	unclassifiable	reasonable	yes	yes
285	-132.8	-11.6	yes	good	yes	yes
286	-133.0	-11.6	tentative	reasonable	no	yes
287	-112.4	15.0	yes	good	yes	yes
288	-81.9	-26.8	yes	good	yes	yes
289	-67.9	8.6	unclassifiable	reasonable	yes	yes
290	-90.2	-22.7	tentative	reasonable	yes	yes
293	-139.6	5.1	tentative	poor	yes	yes
294	-69.2	56.0	tentative	reasonable	yes	yes
296	-163.3	-20.2	tentative	reasonable	yes	yes
297	-34.0	48.3	yes	good	yes	yes
298	-34.6	-59.4	unclassifiable	poor	yes	yes
299	-34.0	-59.2	unclassifiable	poor	no	yes
300	-33.1	-59.0	unclassifiable	poor	no	yes
301	-32.6	-58.9	yes	reasonable	yes	yes
303	-32.1	-58.0	yes	good	yes	yes
304	-29.4	-57.8	yes	good	yes	no
306	-30.7	-57.6	yes	good	yes	yes
309	-13.2	-6.1	no	good	yes	yes
310	-10.8	61.8	tentative	reasonable	yes	yes
311	-32.9	58.8	tentative	reasonable	yes	yes
312	-12.3	-44.9	yes	reasonable	yes	yes
313	-12.5	-44.8	yes	good	yes	yes
314	-12.4	-44.6	no	good	yes	yes
315	-37.6	-57.7	yes	good	yes	yes
317	-19.1	-29.4	tentative	reasonable	yes	no
318	-29.6	27.1	tentative	reasonable	yes	yes
320	-28.6	-52.3	tentative	reasonable	yes	no
321	-28.2	-51.7	unclassifiable	poor	yes	yes
322	-27.9	-51.4	tentative	reasonable	yes	yes
324	-44.2	12.2	no	poor	yes	yes
325	-30.0	-55.1	yes	good	yes	no
327	-30.8	-53.0	yes	good	yes	yes
330	163.9	15.1	tentative	reasonable	yes	no
331	165.3	15.4	unclassifiable	poor	yes	yes
347	-97.6	33.1	yes	good	yes	yes
351	156.6	-20.4	no	good	yes	yes
354	179.8	26.1	no	poor	yes	yes
355	179.7	26.0	no	poor	yes	yes
356	179.8	25.7	no	poor	yes	yes
357	179.9	25.4	tentative	poor	yes	yes
358	162.8	14.0	yes	reasonable	yes	yes
360	162.6	13.7	yes	reasonable	yes	yes
368	23.7	35.8	unclassifiable	reasonable	yes	yes

Vent ID	Lat	Lon	Compound	Image Quality	Facula Check	In Crater
369	23.7	35.4	yes	reasonable	yes	yes
370	23.4	36.9	unclassifiable	poor	yes	no
371	59.0	-7.4	yes	good	no	no
372	50.1	-34.1	unclassifiable	poor	yes	no
373	50.1	-34.4	unclassifiable	reasonable	yes	no
376	19.8	-43.5	yes	reasonable	yes	yes
377	159.5	14.5	unclassifiable	poor	yes	no
378	159.2	15.1	unclassifiable	poor	yes	yes
381	145.1	21.5	no	good	yes	yes
385	144.0	45.3	no	good	yes	yes
392	154.8	-66.1	unclassifiable	reasonable	yes	yes
393	153.2	-65.8	yes	reasonable	yes	yes
396	149.8	17.9	unclassifiable	reasonable	yes	yes
397	149.7	17.8	tentative	reasonable	yes	yes
398	-178.6	23.3	yes	reasonable	yes	yes
399	-163.5	-20.3	unclassifiable	poor	yes	yes
400	-163.6	-20.4	unclassifiable	poor	yes	yes
402	92.3	-37.7	no	good	yes	yes
403	156.7	-20.4	yes	reasonable	yes	yes
404	157.7	-19.3	unclassifiable	poor	yes	yes
406	162.6	13.4	tentative	reasonable	yes	yes
408	23.5	35.1	tentative	reasonable	yes	yes
409	23.4	34.9	no	reasonable	yes	yes
421	19.0	37.5	unclassifiable	poor	yes	yes
422	150.4	47.3	unclassifiable	poor	yes	yes
423	156.9	48.8	unclassifiable	poor	yes	yes
424	-160.8	0.4	unclassifiable	poor	yes	yes
425	-54.5	4.1	yes	good	yes	yes
426	160.3	58.6	yes	good	yes	yes
427	160.6	58.6	yes	good	yes	yes
428	161.0	58.5	yes	good	yes	yes
429	-37.4	-57.5	no	good	yes	yes
430	92.5	-37.0	tentative	good	yes	yes
431	-132.7	-40.7	no	good	yes	no
432	-19.3	-48.8	unclassifiable	poor	yes	yes
433	-19.0	49.3	unclassifiable	poor	yes	yes
434	-55.2	49.1	unclassifiable	poor	yes	yes
435	109.3	-40.0	no	poor	yes	yes
436	143.4	-7.3	yes	good	yes	no
437	141.8	-7.5	unclassifiable	poor	no	no
438	141.8	-8.3	unclassifiable	poor	yes	no
439	141.7	-765.0	tentative	poor	no	no
440	141.3	-60.9	yes	good	yes	no
441	142.0	-61.2	no	good	yes	no
443	156.5	-26.4	no	poor	yes	yes
444	166.6	-45.1	no	good	yes	yes
445	169.0	-46.4	yes	good	yes	yes
447	4.0	-74.6	no	good	yes	no
448	-3.2	-75.3	tentative	good	yes	yes
450	-60.6	-53.2	yes	good	yes	no
458	147.7	-65.6	yes	good	no	yes



<b>Vent ID</b>	<b>Lat</b>	<b>Lon</b>	<b>Compound</b>	<b>Image Quality</b>	<b>Facula Check</b>	<b>In Crater</b>
460	143.2	-7.4	unclassifiable	poor	yes	no
463	6.2	24.0	tentative	reasonable	yes	yes
469	-95.7	-41.0	unclassifiable	poor	yes	yes