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# Cryovolcanic rates on Ceres revealed by topography

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ID number	Latitude ( $^{\circ}$ N)	Longitude ( $^{\circ}$ E)	D	D error	H	H error	Aspect ratio	Volume	Age	Name
1	13.5	4.9	26.8	2.9	2.1	0.4	0.08	400.4	290	
2	5.5	1.9	21.8	6.8	1.4	0.3	0.063	171.8	390	
3	-21.8	6.2	39.3	7.2	1.8	0.5	0.045	715.9	800	Wangala Tholus
4	-20.5	25	37.3	7.9	2.4	0.4	0.064	876.4	470	
5	-54.1	38.3	57.3	16	2.6	0.8	0.046	2241.7	2200	
6	-13.3	220.6	32.3	7.9	1.8	0.7	0.057	500.3	510	
7	-10.5	316	17	2.9	3.5	1.1	0.2	261	0	Ahuna Mons
8	-4	323.5	62.3	7.4	3.6	0.8	0.057	3614.1	410	
9	20.4	326.3	31.7	4	1.8	0.8	0.056	468.4	560	
10	21.9	299.9	28.5	7	2	0.9	0.071	430.6	370	
11	43.3	320.3	37.3	3.4	3.8	0.7	0.103	1394	320	Hosil Tholus
12	-68.5	123.8	37	3.5	3.7	0.8	0.1	1317.1	2050	
13	3.5	5	19.2	3.9	1.6	0.5	0.084	156.4	280	Dalien Tholus
14	56.8	183	52	10	4.4	1	0.084	3088.2	1120	
15	41.9	9.2	52	9.4	3.8	1.2	0.074	2716.6	640	Cosecha Tholus
16	86	1.8	17.5	1.9	3.3	0.6	0.19	267.6	1000	Yamor Mons
17	-43.7	281.5	32.5	8.5	1.5	0.031	0.046	411.3	1400	
18	20.1	113	26.5	3.9	1.5	0.4	0.058	280.4	520	
19	-13.1	106.2	16	2.2	1.1	0.19	0.069	74.6	350	
20	5.9	310.8	86.3	12.7	4.1	0.76	0.047	7911.9	630	Liberalia Mons
21	17.2	317.3	58.5	5.8	3	0.96	0.051	2654.2	640	
22	4.4	293.1	51.5	7.3	2.5	0.42	0.049	1744.6	590	
23	-13.1	5.1								
24	-12.2	316.1								
25	4.6	261.8								
26	-18.7	353.1								
27	4.4	279.8								
28	28.4	336.1								Aymuray Tholus
29	18.1	309.5								
30	-18.9	164.6								
31	32.4	327.7								Kwanzaa Tholus
32	32.7	326.2								Mikeli Tholus

**Supplementary Table 1.** Location and physical characteristics of domes on Ceres. D is the average diameter in km, H is the height in km, errors are the uncertainties in km for D and H, aspect ratio is H/D, volume is in  $\text{km}^3$ , and age is estimated in Myr from viscous flow models as described in the main text.

ID number	D1	D2	D3	D4	D5	D6	D7	D8	Notes
1	28	32	30	34	32	14	24	20	
2	38	20	12	24	16	16	16	32	
3	32	50	60	36	38	46	24	28	
4	38	44	44	52	28	14	36	42	
5	36	76	60	32	38	32	90	94	
6	12	26	38	26	32	50	40	34	
7	12	22	22	16	16	18	16	14	Ahuna Mons described in Ruesch <i>et al.</i> [2016]
8	44	46	58	76	78	68	58	70	
9	18	24	30	46	34	40	38	24	Example shown in Fig. 1b of the manuscript
10	34	26	26	22	40	32	30	18	
11	40	36	48	38	32	32	34	34	
12	24	40	48	44	48	44	20	28	
13	28	20	18	18	22	16	16	16	
14	50	82	60	62	28	42	40	52	
15	36	50	48	48	94	36	56	48	
16	16	18	20	18	16	18	20	14	Example shown in Fig. 1b of the manuscript
17	36	46	40	6	36	32	30	34	
18	18	18	18	32	32	28	34	32	
19	12	14	20	14	20	12	6	20	
20	78	116	134	98	62	70	64	68	
21	46	70	34	52	78	44	68	76	
22	54	46	88	68	46	44	36	30	
23									At a location between 3 craters that suggests it could be formed by impact ejecta
24									Sub-poses, and largely obscured by, Ahuna Mons
25									Abuts a crater wall and could be a collapse feature
26									
27									
28									
29									
30									
31									
32									

**Supplementary Table 2.** Diameters from each of eight individual profiles measured for each dome, in km.