

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Principal facts for two-hundred-thirty-five gravity stations
near Craters of the Moon, Idaho

by
Carol Finn
D. R. Spydell
and
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This report is preliminary and has not been reviewed for
conformity with U.S. Geological Survey editorial standards.

Principal facts for 235 gravity stations near
Craters of the Moon, Idaho

by

Carol Finn and D. R. Spydell

Explanation of the headings of the accompanying table of principal facts are as follows.

STATION IDENTIFICATION All stations were taken with LaCoste and Romberg¹ gravity meter G-550. For a complete description of the gravity reduction procedures currently in use by the U.S. Geological Survey (USGS) for defining the corrections and anomalies, see Cordell and others (1982).

LATITUDE AND LONGITUDE Values listed are in degrees and minutes to the nearest one hundredth of a minute. These positions were surveyed in with a laser theodolyte for all stations.

ELEVATION Elevations are in feet to the nearest tenth. Most elevations were surveyed in with a laser theodolyte and are accurate to the nearest tenth of a foot; others were on benchmarks, accurate to 0.5 ft.

OBSERVED GRAVITY Values are to the nearest hundredth of a milligal. All stations are relative to IGSN-71 (Morelli, 1974) tied to a base at the Arco,

¹Use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey.

Idaho, Public School having observed gravity equal to 979998.15 mgals (base 93b of LaFehr (1961) with 14 mgals subtracted to update it to the 1967 datum).

THEORETICAL GRAVITY

Values were calculated using the Geodetic Reference System 1967 (International Association of Geodesy, 1971).

TERRAIN CORRECTIONS

Most of the stations were corrected for terrain by computer radially from 0 to 166.7 km (Richard Godson, unpublished program, U.S. Geological Survey), implementing the procedure of Plouff (1977). Some of the inner zone terrain corrections (Hammer zones D-F, Hammer, 1939) were done by template. The density used in these corrections was 2.67 g/cm^3 .

CURV

Curvature correction in milligals.

SPECIAL

Not used.

FREE-AIR ANOMALY

Free-air anomaly values are in milligals. The free-air correction was obtained by the following calculation: observed gravity - theoretical gravity - free-air anomaly = free-air correction.

COMPLETE BOUGUER ANOMALY

Complete Bouguer anomaly values are in milligals using densities of 2.67 and 2.43 g/cm^3 .

REFERENCES CITED

- Cordell, L., Keller, G. R., and Hildenbrand, T. G., 1982, Bouguer gravity map of the Rio Grande Rift: U.S. Geological Survey Geophysical Investigations Map GP-949.
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- International Association of Geodesy, 1971, Geodetic reference system 1967: International Association of Geodesy Special Publication no. 3 (Bureau Central Association International Geodesie, Paris), 116 p.
- LaFehr, T. R., 1961, Gravity survey in the eastern Snake River Plain, Idaho - A Progress Report: U.S. Geological Survey Open-File Report no. 62-74.
- Morelli, C., ed., 1974, The International Gravity Standardization Net 1971: International Association of Geodesy Special Publication no. 4, 194 p.
- Plouff, Donald, 1977, Preliminary documentation for a Fortran program to compute gravity-terrain corrections based on topography digitized on a geographic grid: U.S. Geological Survey Open-File Report 77-535, 45 p.

craters of the moon
 Idaho gravity data
 Meter used: g-550

STATION IDENTIFICATION	L O C A T I O N S	G R A V I T Y	TERRAIN	C O R K E C T I O N S	FREE AIR	A N U M A L I E S					
sta-id	LATITUDE deg min deg	LONGITUDE min deg	ELE (in ft)	ST OBSERVED	THEORETICAL	TERRAIN (dl=2.67)	CURV	SPECIAL	COMPLETE-BOUGUER d1=2.67 d2=2.43		
82com001	43 27.59	-113 34.18	1805.00	1d	979945.10	1.15	-61.56	-0.70	22.28	-144.48	-161.91
82com002	43 27.58	-113 33.82	1801.00	1d	979944.76	1.06	-61.43	-0.70	20.74	-145.73	-163.14
82com003	43 27.77	-113 33.66	1803.00	1d	979944.33	1.03	-61.50	-0.70	20.58	-146.08	-163.50
82com004	43 27.51	-113 34.22	1814.00	1d	979943.74	1.02	-61.87	-0.70	23.67	-143.99	-161.51
82com005	43 27.41	-113 34.32	1817.00	1d	979942.46	0.95	-61.97	-0.70	23.05	-144.40	-161.97
82com006	43 27.31	-113 34.42	1822.00	1d	979940.15	0.92	-62.14	-0.70	22.92	-145.57	-163.19
82com007	43 27.22	-113 34.50	1823.00	1d	979938.28	0.92	-62.18	-0.70	21.56	-147.05	-164.67
82com008	43 27.09	-113 34.87	1820.00	1d	979941.86	0.96	-62.07	-0.70	24.40	-143.90	-161.49
82com009	43 27.03	-113 35.02	1813.00	1d	979943.28	0.97	-61.84	-0.70	23.56	-144.02	-161.54
82com010	43 26.95	-113 35.22	1802.00	1d	979945.89	1.02	-61.46	-0.70	23.19	-143.42	-160.84
82com011	43 26.90	-113 35.44	1800.00	1d	979946.97	1.02	-61.39	-0.70	23.69	-142.73	-160.13
82com012a	43 26.51	-113 35.97	1796.00	1d	979951.54	1.00	-61.26	-0.70	27.37	-138.62	-155.97
82com012b	43 26.71	-113 31.29	1752.00	1d	979956.97	0.51	-59.76	-0.68	19.13	-143.26	-160.24
82com013	43 26.64	-113 31.60	1757.00	1d	979955.93	0.54	-59.93	-0.68	19.78	-143.06	-160.08
82com014	43 26.41	-113 33.45	1830.00	1d	979940.97	0.83	-62.42	-0.71	27.71	-141.64	-159.35
82com015	43 26.50	-113 33.42	1839.00	1d	979938.60	0.90	-62.72	-0.71	27.85	-142.24	-160.02
82com016	43 26.60	-113 33.33	1834.00	1d	979939.49	0.85	-62.55	-0.71	27.00	-142.66	-160.39
82com017	43 17.19	-113 22.72	1610.00	1d	979990.82	0.10	-54.91	-0.63	23.61	-126.01	-141.65
82com018	43 17.14	-113 22.85	1607.00	1d	979991.62	0.08	-54.81	-0.63	23.55	-125.81	-141.43
82com019	43 17.09	-113 23.01	1607.00	1d	979991.86	0.08	-54.81	-0.63	23.77	-125.56	-141.17
82com020	43 17.01	-113 23.22	1608.00	1d	979991.76	0.10	-54.84	-0.63	23.98	-125.39	-141.01
82com021	43 16.95	-113 23.49	1613.00	1d	979991.44	0.15	-55.01	-0.63	25.44	-124.40	-140.06
82com022	43 16.90	-113 23.59	1612.00	1d	979991.76	0.16	-54.98	-0.63	25.37	-124.32	-139.97
82com023	43 16.81	-113 23.73	1603.00	1d	979993.64	0.11	-54.67	-0.63	24.64	-124.27	-139.84
82com024	43 16.78	-113 23.81	1599.00	1d	979994.37	0.10	-54.54	-0.63	24.40	-124.21	-139.75
82com025	43 16.75	-113 23.89	1597.00	1d	979994.89	0.08	-54.47	-0.63	24.31	-124.13	-139.64
82com026	43 16.72	-113 23.99	1599.00	1d	979994.39	0.11	-54.54	-0.63	24.32	-124.23	-139.76
82com027	43 16.66	-113 24.12	1596.00	1d	979994.93	0.09	-54.43	-0.63	24.01	-124.27	-139.77
82com028	43 16.58	-113 24.28	1594.00	1d	979995.11	0.09	-54.37	-0.63	23.75	-124.36	-139.85
82com029	43 16.51	-113 24.44	1589.00	1d	979996.21	0.07	-54.20	-0.63	23.36	-124.29	-139.73
82com030	43 17.63	-113 22.42	1617.00	1d	979990.05	0.11	-55.15	-0.64	24.06	-126.12	-141.92
82com031	43 17.72	-113 22.34	1617.00	1d	979990.10	0.12	-55.15	-0.64	24.07	-126.13	-141.83
82com032	43 17.81	-113 22.32	1615.00	1d	979990.64	0.10	-55.08	-0.64	24.01	-126.07	-141.76
82com033	43 17.91	-113 22.25	1620.00	1d	979989.66	0.13	-55.25	-0.64	24.20	-126.19	-141.92
82com034	43 18.05	-113 22.23	1615.00	1d	979990.62	0.10	-55.08	-0.64	23.53	-126.52	-142.21
82com035	43 18.19	-113 22.32	1611.00	1d	979991.14	0.07	-54.95	-0.63	22.62	-127.08	-142.73
82com036	43 18.28	-113 22.29	1609.00	1d	979991.47	0.07	-54.88	-0.63	22.25	-127.29	-142.92
82com037	43 26.70	-113 31.40	1746.00	1d	979958.50	0.51	-59.55	-0.68	18.89	-142.97	-159.89
82com038	43 26.72	-113 31.06	1741.00	1d	979958.79	0.49	-59.38	-0.68	17.65	-143.77	-160.65
82com039	43 26.68	-113 30.93	1746.00	1d	979957.40	0.49	-59.55	-0.68	17.82	-144.05	-160.96

craters of the moon
 Idaho gravity data
 Meter used: g-550

STATION IDENTIFICATION	L U C A T I O N S	ELE	ST	G R A V I T Y	TERRAIN BOUGUER CURV	SPECIAL	FREQ	A N O M A L I E S
sta-id	LATITUDE deg min	LONGITUDE deg min	(in ft)	OBSERVED	(d1=2.67)		ALH	COMPLXTE-BOUGUER
	deg	deg		THEORETICAL				d1=2.67
82com040	43 26.66	-113 30.75	1752.00	1d 979956.14	980478.33	0.51	18.18	-144.15
82com041	43 26.62	-113 30.59	1747.00	1d 979957.11	980478.27	0.47	17.71	-144.20
82com042	43 26.70	-113 30.37	1741.00	1d 979958.76	980478.39	0.45	17.36	-144.01
82com043	43 26.71	-113 32.17	1752.00	1d 979955.43	980478.41	0.62	17.49	-144.78
82com044	43 26.58	-113 32.24	1758.00	1d 979954.78	980478.21	0.61	19.01	-143.86
82com045	43 26.41	-113 32.47	1769.00	1d 979953.03	980477.96	0.64	20.71	-143.09
82com046	43 26.51	-113 33.16	1827.00	1d 979940.87	980478.10	0.83	26.26	-142.74
82com047	43 26.39	-113 33.18	1822.00	1d 979942.00	980477.92	0.80	26.16	-142.44
82com048	43 26.34	-113 33.03	1789.00	1d 979949.04	980477.85	0.72	23.12	-142.50
82com049	43 26.40	-113 32.60	1784.00	1d 979949.71	980477.94	0.66	22.01	-143.15
82com050	43 8.00	-113 19.88	1456.00	1d 980016.89	980450.23	-0.07	15.87	-119.60
82com051	43 8.05	-113 19.53	1457.00	1d 980016.41	980450.32	-0.05	15.60	-119.94
82com052	43 8.10	-113 19.17	1463.00	1d 980014.87	980450.39	-0.06	15.77	-120.32
82com053	43 8.23	-113 18.82	1464.00	1d 980014.01	980450.59	-0.03	15.27	-120.95
82com054	43 8.35	-113 18.38	1468.00	1d 980012.32	980450.77	-0.04	14.44	-122.11
82com055	43 7.97	-113 18.33	1467.00	1d 980012.41	980450.20	-0.04	14.82	-121.64
82com056	43 10.03	-113 15.72	1513.00	1d 980002.42	980453.30	-0.06	15.92	-124.82
82com057	43 9.48	-113 15.92	1499.00	1d 980004.32	980452.47	-0.04	14.32	-125.10
82com058	43 9.08	-113 16.13	1493.00	1d 980005.11	980451.66	-0.04	13.84	-125.02
82com059	43 8.55	-113 16.75	1489.00	1d 980006.53	980451.07	-0.07	14.74	-123.75
82com060	43 8.16	-113 16.95	1472.00	1d 980007.58	980450.48	-0.01	11.30	-125.62
82com061	43 7.83	-113 17.15	1468.00	1d 980008.10	980449.96	0.01	11.19	-125.37
82com062	43 7.76	-113 17.38	1456.00	1d 980010.67	980449.86	0.14	10.01	-125.29
82com063	43 7.66	-113 17.83	1454.00	1d 980011.53	980449.73	0.15	10.55	-124.60
82com064	43 7.64	-113 18.20	1456.00	1d 980011.78	980449.70	0.08	11.30	-124.04
82com065	43 7.74	-113 18.56	1457.00	1d 980012.11	980449.85	0.01	11.95	-123.60
83com001	43 24.41	-113 31.45	1753.00	1d 979956.60	980474.94	0.44	22.44	-140.04
83com002	43 24.15	-113 31.78	1752.00	1d 979957.21	980474.55	0.48	23.19	-139.21
83com003	43 23.97	-113 32.13	1758.00	1d 979955.42	980474.28	0.56	23.37	-139.48
83com004	43 24.77	-113 32.43	1733.00	1d 979960.42	980475.48	1.22	19.61	-140.43
83com005	43 23.71	-113 32.64	1740.00	1d 979958.73	980473.89	0.46	21.64	-139.66
83com006	43 23.66	-113 32.81	1743.00	1d 979958.58	980473.61	0.47	22.37	-139.16
83com007	43 23.58	-113 33.00	1742.00	1d 979958.46	980473.70	0.47	22.12	-139.34
83com008	43 23.48	-113 33.21	1741.00	1d 979958.82	980473.54	0.48	22.33	-139.03
83com009	43 23.33	-113 33.46	1735.00	1d 979960.16	980473.31	0.45	22.26	-138.63
83com010	43 23.23	-113 33.73	1731.00	1d 979961.57	980473.17	0.45	22.31	-138.13
83com011	43 23.11	-113 33.99	1729.00	1d 979962.50	980472.98	0.45	23.02	-137.30
83com012	43 23.03	-113 34.19	1728.00	1d 979963.10	980472.86	0.46	23.37	-136.83
83com013	43 22.94	-113 34.47	1728.00	1d 979962.73	980472.73	0.47	23.17	-137.04
83com014	43 22.82	-113 34.86	1719.00	1d 979965.55	980472.55	0.47	23.33	-135.02

craters of the moon
Idaho gravity data
Meter used: g-550

STATION IDENTIFICATION	L O C A T I O N S	ELE	G R A V I T Y	TERRAIN BOUGUER CURV	SPECIAL	A I R	C O M P L E T E - B O U G U E R
sta-Id	LATITUDE LONGITUDE	(in ft)	ST OBSERVED THEORETICAL	(g1=2.67)		FREE AIR	d1=2.67 d2=2.43
	deg min deg min						
83com015	43 22.74 -113 35.15	1716.00	1d 979966.10	980472.43	0.48	-58.53	-135.93
83com016	43 22.47 -113 35.49	1715.00	1d 979966.35	980472.02	0.48	-58.49	-135.53
83com017	43 24.70 -113 31.06	1738.00	1d 979960.78	980475.38	0.45	-59.28	-139.54
83com018	43 24.92 -113 30.59	1731.00	1d 979962.12	980475.71	0.42	-59.04	-140.02
83com019	43 25.19 -113 29.98	1726.00	1d 979963.04	980476.12	0.40	-58.87	-140.59
83com020	43 25.37 -113 29.61	1729.00	1d 979962.89	980476.38	0.40	-58.97	-140.36
83com021	43 25.46 -113 29.61	1729.00	1d 979963.01	980476.52	0.39	-58.97	-140.51
83com022	43 25.46 -113 28.96	1725.00	1d 979963.57	980476.52	0.39	-58.83	-140.82
83com023	43 26.15 -113 28.64	1730.00	1d 979963.04	980477.56	0.44	-59.01	-141.22
83com024	43 26.44 -113 28.10	1731.00	1d 979963.60	980478.00	0.44	-59.04	-140.75
83com025	43 24.17 -113 31.34	1747.00	1d 979958.03	980474.58	0.46	-59.59	-139.56
83com026	43 24.34 -113 31.91	1761.00	1d 979955.21	980474.84	0.53	-60.06	-139.58
83com027	43 23.83 -113 30.85	1706.00	1d 979967.08	980474.07	0.41	-58.19	-138.76
83com028	43 23.82 -113 29.94	1709.00	1d 979966.98	980474.05	0.34	-58.29	-138.30
83com029	43 23.33 -113 29.59	1700.00	1d 979969.96	980473.31	0.31	-57.98	-136.59
83com030	43 24.66 -113 31.79	1769.00	1d 979952.99	980475.32	0.55	-60.34	-140.47
83com031	43 25.63 -113 32.66	1776.00	1d 979952.67	980476.78	0.64	-60.57	-140.65
83com032	43 25.38 -113 33.00	1789.00	1d 979949.54	980476.41	0.66	-61.02	-140.64
83com033	43 25.22 -113 33.25	1774.00	1d 979952.99	980476.16	0.72	-60.51	-140.16
83com034	43 25.07 -113 33.54	1771.00	1d 979953.94	980475.93	0.62	-60.40	-139.56
83com035	43 24.90 -113 33.90	1771.00	1d 979953.85	980475.66	0.60	-60.40	-139.50
83com036	43 24.76 -113 34.27	1768.00	1d 979954.14	980475.47	0.60	-60.30	-139.69
83com037	43 24.71 -113 34.54	1771.00	1d 979954.47	980475.39	0.63	-60.40	-138.68
83com038	43 24.46 -113 34.79	1760.00	1d 979956.35	980475.02	0.64	-60.03	-138.62
83com039	43 25.50 -113 32.80	1776.00	1d 979952.44	980476.59	0.67	-60.57	-140.63
83com040	43 25.74 -113 32.49	1846.00	1d 979934.07	980476.95	1.08	-62.96	-143.42
83com041	43 25.58 -113 32.38	1779.00	1d 979950.83	980476.70	0.61	-60.68	-141.74
83com042	43 26.09 -113 32.51	1787.00	1d 979951.26	980477.47	0.63	-60.95	-140.51
83com043	43 25.88 -113 32.13	1783.00	1d 979950.69	980477.16	0.59	-60.81	-141.55
83com044	43 25.98 -113 31.90	1774.00	1d 979953.12	980477.30	0.56	-60.51	-141.29
83com045	43 26.19 -113 31.58	1764.00	1d 979954.71	980477.63	0.53	-60.16	-142.11
83com046	43 26.34 -113 31.21	1755.00	1d 979956.03	980477.85	0.50	-59.86	-143.11
83com047	43 26.57 -113 30.84	1752.00	1d 979956.28	980478.20	0.50	-59.76	-143.73
83com049	43 21.09 -113 27.97	1791.00	1d 979943.28	980469.95	2.90	-61.09	-138.10
83com048	43 25.02 -113 32.28	1985.00	1d 979893.89	980475.86	9.12	-67.70	-146.40
83com050	43 22.12 -113 28.92	1685.00	1d 979975.39	980471.50	0.27	-57.47	-132.66
83com051	43 22.03 -113 29.09	1692.00	1d 979973.64	980471.36	0.27	-57.71	-132.83
83com052	43 21.86 -113 29.42	1687.00	1d 979974.21	980471.10	0.26	-57.54	-133.00
83com053	43 21.70 -113 29.73	1686.00	1d 979974.08	980470.87	0.27	-57.50	-133.08
83com054	43 21.49 -113 30.07	1686.00	1d 979973.53	980470.55	0.27	-57.50	-133.30

craters of the moon
Idaho gravity data
Meter used: g-550

STATION IDENTIFICATION	L O C A T I O N S	ELE (in ft)	ST OBSERVED	G R A V I T Y	TERRAIN	C U R K E C T I O N S	SPECIAL	AIR	A M U N I A L I E S
sta-id	LATITUDE deg min deg	LONGITUDE min deg	id	THEORETICAL	(d1=2.07)	CURV		COMP	
83com055	43 21.21	-113 30.50	1689.00	id 979972.41	980470.13	0.30	-57.61	-0.60	0.00
83com056	43 20.97	-113 31.03	1684.00	id 979973.44	980469.77	0.29	-57.44	-0.66	0.00
83com057	43 20.75	-113 31.67	1681.00	id 979974.40	980469.43	0.31	-57.33	-0.66	0.00
83com058	43 20.48	-113 26.89	1662.00	id 979980.82	980469.02	0.23	-56.69	-0.65	0.00
83com059	43 20.38	-113 27.07	1657.00	id 979982.29	980468.88	0.20	-56.52	-0.65	0.00
83com060	43 20.30	-113 27.23	1655.00	id 979982.39	980468.75	0.20	-56.45	-0.65	0.00
83com061	43 20.23	-113 27.45	1653.00	id 979982.78	980468.65	0.20	-56.38	-0.65	0.00
83com062	43 20.13	-113 27.71	1651.00	id 979982.85	980468.50	0.20	-56.31	-0.65	0.00
83com063	43 19.96	-113 28.13	1639.00	id 979984.82	980468.24	0.20	-55.90	-0.64	0.00
83com064	43 19.75	-113 28.61	1645.00	id 979983.75	980467.93	0.20	-56.11	-0.65	0.00
83com065	43 19.84	-113 29.20	1662.00	id 979979.23	980468.06	0.24	-56.69	-0.65	0.00
83com066	43 19.29	-113 30.26	1654.00	id 979980.93	980467.23	0.24	-56.41	-0.65	0.00
83com067	43 19.17	-113 30.83	1634.00	id 979984.78	980467.05	0.23	-55.73	-0.64	0.00
83com068	43 19.79	-113 27.15	1639.00	id 979984.66	980467.98	0.17	-55.90	-0.64	0.00
83com069	43 19.89	-113 26.58	1642.00	id 979984.57	980468.14	0.17	-56.00	-0.64	0.00
83com070	43 22.15	-113 28.90	1685.00	id 979973.78	980471.54	0.27	-57.47	-0.66	0.00
83com071	43 22.29	-113 28.71	1683.00	id 979973.97	980471.75	0.27	-57.40	-0.66	0.00
83com072	43 22.45	-113 28.58	1679.00	id 979975.05	980471.99	0.26	-57.27	-0.66	0.00
83com073	43 22.57	-113 28.37	1675.00	id 979976.32	980472.17	0.25	-57.13	-0.66	0.00
83com074	43 22.73	-113 28.12	1685.00	id 979972.54	980472.41	0.25	-57.47	-0.66	0.00
83com075	43 22.92	-113 27.77	1669.00	id 979977.79	980472.70	0.23	-56.92	-0.65	0.00
83com076	43 23.12	-113 27.37	1669.00	id 979978.19	980473.60	0.23	-56.92	-0.65	0.00
83com077	43 23.38	-113 26.77	1674.00	id 979977.14	980473.40	0.25	-57.10	-0.65	0.00
83com078	43 23.61	-113 26.26	1670.00	id 979974.86	980473.73	0.21	-56.96	-0.65	0.00
83com079	43 23.82	-113 25.63	1680.00	id 979976.25	980474.05	0.25	-57.30	-0.66	0.00
83com080	43 22.31	-113 24.06	1646.00	id 979983.10	980471.76	0.14	-56.14	-0.65	0.00
83com081	43 22.21	-113 23.98	1650.00	id 979982.46	980471.63	0.15	-56.28	-0.65	0.00
83com082	43 21.86	-113 24.84	1653.00	id 979982.39	980471.10	0.15	-56.38	-0.65	0.00
83com083	43 21.68	-113 25.15	1648.00	id 979983.87	980470.83	0.15	-56.21	-0.65	0.00
83com084	43 21.46	-113 25.58	1647.00	id 979984.29	980470.50	0.15	-56.17	-0.65	0.00
83com085	43 21.24	-113 26.00	1644.00	id 979985.03	980470.17	0.16	-56.07	-0.64	0.00
83com086	43 20.92	-113 26.57	1648.00	id 979984.10	980469.69	0.17	-56.21	-0.65	0.00
83com087	43 20.75	-113 26.80	1649.00	id 979983.37	980469.43	0.18	-56.24	-0.65	0.00
83com088	43 20.64	-113 26.94	1659.00	id 979981.03	980469.27	0.20	-56.58	-0.65	0.00
83com089	43 20.52	-113 27.10	1664.00	id 979980.40	980469.09	0.23	-56.75	-0.65	0.00
83com090	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00
83com091	43 19.41	-113 26.27	1636.00	id 979986.94	980467.41	0.18	-55.80	-0.64	0.00
83com092	43 19.50	-113 26.15	1636.00	id 979986.80	980467.55	0.16	-55.80	-0.64	0.00
83com093	43 19.60	-113 25.99	1635.00	id 979986.93	980467.70	0.15	-55.77	-0.64	0.00
83com094	43 19.79	-113 25.70	1635.00	id 979986.78	980467.98	0.15	-55.77	-0.64	0.00
83com095	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00
83com096	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00
83com097	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00
83com098	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00
83com099	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00
83com100	43 20.38	-113 27.27	1661.00	id 979981.23	980468.88	0.22	-56.65	-0.65	0.00

Craters of the moon
 Idaho gravity data
 Meter used: g-550

STATION IDENTIFICATION sta-Id	L O C A T I O N S		E L E (In ft)	G R A V I T Y ST OBSERVED	T E R R A I N THEORETICAL	C U R K E C T J O H S BOUGUER CURV SPECIAL (d1=2.67)		A N U M A L I E S FREE COMPLETE-BOUGUER AIR d1=2.67 d2=2.43
	L A T I T U D E deg	L O N G I T U D E deg				T E R R A I N	S P E C I A L	
83com095	43 19.98	-113 25.33	1632.00	Id 979987.23	980468.27	0.14	-55.66 -0.64	22.40 -129.17 -145.01
83com096	43 20.19	-113 25.14	1630.00	Id 979987.93	980468.59	0.13	-55.59 -0.64	22.23 -129.18 -145.01
83com097	43 23.09	-113 29.25	1785.00	Id 979944.87	980472.95	2.28	-60.88 -0.69	22.62 -141.35 -158.49
83com098	43 23.73	-113 29.05	1698.00	Id 979969.96	980473.92	0.29	-57.91 -0.66	19.83 -137.71 -154.19
83com099	43 23.69	-113 29.15	1701.00	Id 979968.96	980473.45	0.29	-58.02 -0.66	19.80 -138.02 -154.52
83com100	43 23.63	-113 29.28	1697.00	Id 979969.94	980473.77	0.30	-57.88 -0.66	19.83 -137.66 -154.13
83com101	43 23.58	-113 29.38	1698.00	Id 979969.85	980473.70	0.31	-57.91 -0.66	14.94 -137.58 -154.05
83com102	43 23.53	-113 29.49	1700.00	Id 979969.57	980473.62	0.30	-57.98 -0.66	20.51 -137.25 -153.74
83com103	43 23.47	-113 29.59	1703.00	Id 979968.42	980473.53	0.31	-58.08 -0.66	20.38 -137.65 -154.18
83com104	43 23.42	-113 29.70	1702.00	Id 979968.73	980473.45	0.31	-58.05 -0.66	20.28 -137.61 -154.12
83com105	43 23.37	-113 29.78	1704.00	Id 979968.47	980473.38	0.32	-58.12 -0.67	20.75 -137.33 -153.85
83com106	43 23.32	-113 29.86	1704.00	Id 979968.58	980473.30	0.32	-58.12 -0.67	20.84 -137.21 -153.73
83com107	43 23.28	-113 29.95	1711.00	Id 979966.62	980473.24	0.33	-58.36 -0.67	21.10 -137.59 -154.18
83com108	43 23.22	-113 30.06	1713.00	Id 979966.28	980473.15	0.34	-58.43 -0.67	21.67 -137.26 -153.87
83com109	43 23.14	-113 30.20	1701.00	Id 979969.18	980473.03	0.32	-58.02 -0.66	20.97 -136.86 -153.36
83com110	43 23.08	-113 30.34	1700.00	Id 979969.18	980472.95	0.32	-57.98 -0.66	20.64 -137.06 -153.55
83com111	43 22.99	-113 30.55	1699.00	Id 979969.11	980472.80	0.32	-57.95 -0.66	20.38 -137.22 -153.70
83com112	43 22.94	-113 30.76	1707.00	Id 979967.21	980472.73	0.34	-58.22 -0.67	21.03 -137.30 -153.85
83com113	43 23.00	-113 29.81	1725.00	Id 979963.35	980472.82	0.41	-58.83 -0.67	22.74 -137.23 -153.95
83com114	43 22.85	-113 29.70	1760.00	Id 979953.57	980472.59	1.24	-60.03 -0.68	24.05 -138.49 -155.48
83com115	43 22.55	-113 29.22	1692.00	Id 979972.29	980472.14	0.30	-57.71 -0.66	22.24 -134.79 -151.20
83com116	43 22.64	-113 28.91	1684.00	Id 979973.73	980472.27	0.29	-57.44 -0.66	21.09 -135.21 -151.55
83com117	43 22.75	-113 28.57	1678.00	Id 979975.46	980472.45	0.27	-57.23 -0.66	20.82 -134.94 -151.23
83com118	43 23.19	-113 28.72	1689.00	Id 979971.82	980473.11	0.28	-57.61 -0.66	19.72 -137.00 -153.38
83com119	43 23.29	-113 28.30	1686.00	Id 979973.40	980473.26	0.27	-57.50 -0.66	20.19 -136.25 -152.60
83com120	43 23.53	-113 28.00	1679.00	Id 979974.82	980473.62	0.26	-57.27 -0.66	19.36 -136.52 -152.81
83com121	43 24.22	-113 29.51	1705.00	Id 979967.82	980474.66	0.33	-58.15 -0.67	19.10 -134.05 -155.59
83com122	43 24.72	-113 30.09	1825.00	Id 979934.97	980475.41	2.91	-62.25 -0.71	22.52 -144.60 -162.07
83com123	43 24.17	-113 30.61	1750.00	Id 979953.60	980474.58	0.56	-59.69 -0.68	18.94 -143.21 -160.17
83com124	43 24.12	-113 31.28	1767.00	Id 979952.10	980474.51	0.63	-60.27 -0.69	22.71 -140.89 -158.00
83com125	43 23.66	-113 30.66	1779.00	Id 979956.42	980473.81	1.51	-60.68 -0.69	31.41 -132.62 -149.77
83com126	43 23.51	-113 30.12	1704.00	Id 979968.14	980473.59	0.32	-58.12 -0.67	20.24 -137.84 -154.37
83com127	43 23.50	-113 29.78	1701.00	Id 979968.61	980473.58	0.32	-58.02 -0.66	19.83 -137.99 -154.48
83com128	43 26.62	-113 33.57	1880.00	Id 979925.15	980478.27	1.60	-64.12 -0.72	26.79 -146.49 -164.60
83com129	43 27.83	-113 31.08	1743.00	Id 979961.21	980480.09	0.52	-59.45 -0.68	18.84 -142.69 -159.57
83com130	43 27.76	-113 31.29	1747.00	Id 979960.57	980479.99	0.56	-59.59 -0.68	19.63 -142.26 -159.19
83com131	43 27.64	-113 31.55	1748.00	Id 979959.51	980479.81	0.57	-59.62 -0.68	18.88 -143.04 -159.97
83com132	43 27.51	-113 31.78	1752.00	Id 979958.11	980479.61	0.60	-59.76 -0.68	14.09 -143.23 -160.20
83com133	43 27.20	-113 32.12	1748.00	Id 979958.60	980479.14	0.63	-59.62 -0.68	18.75 -143.16 -160.08
83com134	43 27.08	-113 32.27	1747.00	Id 979958.46	980478.96	0.68	-59.59 -0.68	18.58 -143.23 -160.14

craters of the moon
 Idaho gravity data
 Meter used: g-550

STATION IDENTIFICATION	L O C A T I O N S	G R A V I T Y	TERRAIN HOUGUER CURV	A N O M A L I E S
sta-id	LATITUDE LONGITUDE min deg min deg	ST OBSERVED THEORETICAL (in ft)	(d1=2.67)	FREP. COMPLETE-HOUGUER AIR (d1=2.67 d2=2.43)
83com135	43 26.96 -113 32.50	1754.00	0.74	17.74
83com136	43 26.87 -113 32.98	1804.00	0.40	20.00
83com137	43 26.93 -113 33.28	1817.00	0.82	21.99
83com138	43 26.92 -113 33.43	1833.00	0.86	23.00
83com139	43 26.94 -113 33.65	1832.00	0.84	24.89
83com140	43 26.68 -113 34.02	1918.00	3.13	29.10
83com141	43 26.60 -113 34.33	1838.00	0.90	27.55
83com142	43 26.46 -113 34.47	1825.00	0.83	26.58
83com143	43 26.38 -113 34.56	1817.00	0.80	26.19
83com144	43 26.24 -113 34.71	1807.00	0.79	26.42
83com145	43 26.18 -113 34.96	1802.00	0.81	26.03
83com146	43 26.14 -113 35.19	1894.00	3.28	56.35
83com147	43 26.04 -113 35.40	1792.00	0.84	24.98
83com148	43 25.89 -113 35.76	1781.00	0.89	23.96
83com149	43 25.74 -113 36.15	1766.00	0.92	23.42
83com150	43 25.50 -113 36.74	1764.00	1.66	24.44
83com151	43 25.85 -113 34.61	1785.00	0.75	26.04
83com152	43 26.05 -113 34.53	1794.00	0.76	26.16
83com153	43 26.03 -113 34.20	1797.00	0.76	26.31
83com154	43 26.12 -113 33.82	1799.00	0.75	25.71
83com155	43 26.09 -113 33.52	1797.00	0.71	25.58
83com156	43 26.24 -113 33.36	1790.00	0.79	24.13
83com157	43 27.29 -113 33.74	1779.00	1.36	19.92
83com158	43 27.36 -113 33.63	1779.00	1.21	20.23
83com159	43 27.52 -113 33.50	1775.00	1.06	19.98
83com160	43 27.69 -113 33.38	1767.00	1.18	19.41
83com161	43 28.24 -113 33.03	1752.00	0.98	20.85
83com162	43 28.20 -113 34.59	1938.00	3.50	26.06
83com163	43 28.02 -113 35.17	1811.00	2.33	22.37
83com164	43 27.62 -113 34.87	1807.00	1.37	21.53
83com165	43 27.32 -113 35.36	1925.00	3.18	28.84
83com166	43 26.69 -113 34.69	1937.00	4.45	28.51
83com167	43 27.02 -113 34.96	1809.00	0.97	23.18
83com168	43 26.79 -113 34.51	1864.00	1.35	26.28
83com169	43 27.66 -113 33.79	1805.00	1.04	21.73