

GLO1006

Principal Facts of Gravity Stations for the Escalante Desert  
Region and Vicinity, Iron and Washington Counties, Utah

by

Win Pe and Kenneth L. Cook

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Department of Geology and Geophysics  
University of Utah  
Salt Lake City, Utah 84112

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	UNITS
Station designation . . . . .	-----
Latitude . . . . .	degrees, minutes
Longitude . . . . .	degrees, minutes
Elevation . . . . .	feet
Type of elevation control (T)# . . . . .	----
Observed gravity value . . . . .	milligal
Theoretical gravity value ## . . . . .	milligal
Free-air gravity anomaly value . . . . .	milligal
Simple Bouguer gravity anomaly value * . . . . .	milligal
Terrain-correction (T.C.)*. . . . .	milligal
Terrain-corrected Bouguer gravity anomaly value*. . . . .	milligal

#Type of elevation control: 1 = bench mark; 3 = spot elevation on U.S.G.S. topographic map; and 5 = elevation based on Wallace and Tiernen altimeter measurements.

## Theoretical gravity at mean sea level, using the International Gravity Formula.

\* A density contrast of 2.67 g/cc was assumed for both the Bouguer and terrain corrections. Terrain-correction values were obtained (1) for the inner zones (out to a radial distance of 0.895 km) by hand using Hammer zone chart and (2) for the outer zones (out to a radial distance of 167 km) by using the UNIVAC 1108 digital computer and the U.S. Geological Survey digitized terrain tapes.

STAT.	LATITUDE	LONGITUDE	ELEV.	T	OBSERVED GRAVITY	THEOR. GRAVITY	FREE- AIR	SIMPLE BOUGUER	T.C	T.C. BOUGUER
WP676	37.39.41	113.30.44	5623.	3	979433.55	979974.10	-11.65	-203.17	.69	-202.48
WP677	37.38.73	113.30.40	5474.	3	979441.35	979973.11	-16.88	-203.33	1.17	-202.16
WP678	37.39.19	113.31.73	5443.	3	979444.16	979973.78	-17.67	-203.06	1.48	-201.58
WP679	37.37.97	113.31.80	5833.	3	979421.48	979972.00	-1.87	-200.54	.93	-199.61
WP680	37.35.13	113.32.28	6350.	3	979385.00	979967.86	14.42	-201.86	4.28	-197.58
WP681	37.31.91	113.33.74	6695.	3	979356.16	979963.20	22.69	-205.34	3.07	-202.27
WP682	37.33.48	113.32.78	6245.	3	979389.14	979965.49	11.05	-201.65	1.43	-200.22
WP683	37.32.22	113.32.38	6415.	3	979376.74	979963.65	16.49	-202.01	1.28	-200.73
WP684	37.33.47	113.35.58	6398.	3	979384.09	979965.48	20.41	-197.51	2.63	-194.88
WP685	37.40.65	113.25.38	6262.	1	979407.53	979975.90	20.64	-192.64	1.46	-191.18
WP686	37.41.93	113.26.57	6889.	3	979366.36	979977.76	36.58	-198.06	2.48	-195.58
WP687	37.42.72	113.25.93	6825.	3	979374.07	979978.91	37.12	-195.34	2.19	-193.15
WP688	37.42.71	113.24.24	6670.	3	979380.81	979978.89	29.30	-197.88	2.61	-195.27
WP689	37.42.46	113.22.61	6296.	3	979408.12	979978.52	21.79	-192.65	1.26	-191.39
WP690	37.47.70	113.23.45	5402.	3	979463.89	979986.15	-14.15	-198.15	.41	-197.74
WP691	37.45.91	113.22.98	5615.	3	979452.82	979983.54	-2.58	-193.83	.84	-192.99
WP692	37.52.03	113.27.22	5235.	3	979484.06	979992.47	-16.01	-194.31	.22	-194.09
WP693	38. 5.10	113.38.64	5988.	1	979441.05	980011.51	-7.23	-211.19	2.02	-209.16
WP694	38. 5.95	113.39.76	6168.	3	979425.76	980012.75	-6.84	-216.92	1.26	-215.66
WP695	38. 6.76	113.41.65	6414.	3	979413.10	980013.93	2.47	-215.99	.78	-215.21
WP696	38. 6.86	113.42.72	6458.	3	979414.25	980014.07	7.62	-212.34	1.05	-211.29
WP697	38. 6.50	113.44.90	6750.	3	979401.34	980013.55	22.69	-207.21	1.69	-205.52
WP698	38. 2.13	113.40.18	5976.	3	979453.80	980007.18	8.72	-194.82	.69	-194.13
WP699	38. 3.71	113.42.67	6469.	5	979416.71	980009.48	15.70	-204.65	2.17	-202.48
WP700	38. 3.37	113.41.78	6221.	5	979432.87	980008.99	9.02	-202.85	1.31	-201.54
WP701	38. 1.68	113.42.29	6192.	3	979436.92	980006.52	12.82	-198.04	1.09	-196.95
WP702	38. .58	113.43.61	6117.	3	979439.12	980004.92	9.56	-198.78	1.20	-197.58
WP703	37.56.91	113.44.83	5556.	3	979470.25	979999.56	-6.72	-195.95	.62	-195.33
WP704	37.57.81	113.45.23	5683.	3	979462.31	980000.89	-4.04	-197.61	.84	-196.77
WP705	37.58.91	113.46.29	5997.	5	979442.68	980002.49	4.26	-199.98	1.15	-198.83
WP706	38. .16	113.46.97	6226.	3	979430.79	980004.31	12.10	-199.96	1.13	-198.83
WP707	37.59.04	113.55.93	6564.	3	979383.26	980002.68	-2.02	-225.59	.86	-224.73

STAT.	LATITUDE	LONGITUDE	ELEV.	T	OBSERVED GRAVITY	THEOR. GRAVITY	FREE- AIR	SIMPLE BOUGUER	T.C	T.C. BOUGUER
WP708	37.59.04	113.54.82	6550.	3	979385.44	980002.68	-1.16	-224.26	.93	-223.33
WP709	37.59.04	113.53.76	6610.	3	979390.70	980002.68	9.75	-215.38	1.11	-214.27
WP710	37.58.30	113.53.50	6829.	5	979384.02	980001.60	24.75	-207.84	2.14	-205.70
WP711	37.59.04	113.52.95	6732.	5	979394.37	980002.68	24.90	-204.40	1.45	-202.95
WP712	37.58.45	113.52.96	7075.	3	979370.40	980001.82	34.05	-206.92	2.09	-204.83
WP713	37.59.91	113.51.75	6788.	5	979393.19	980003.95	27.72	-203.49	2.12	-201.37
WP714	37.59.91	113.52.97	6581.	5	979399.82	980003.95	14.89	-209.25	1.04	-208.21
WP715	37.59.91	113.54.30	6500.	5	979388.81	980003.95	-3.75	-225.15	.88	-224.27
WP716	37.59.05	113.51.68	6870.	5	979387.96	980002.70	31.46	-202.52	2.70	-199.82
WP717	37.58.32	113.51.46	7370.	3	979354.22	980001.62	45.82	-205.20	4.31	-200.89
WP718	38. .38	113.51.92	6654.	3	979401.56	980004.63	22.81	-203.82	1.50	-202.32
WP719	38. 1.03	113.51.11	6670.	3	979404.85	980005.58	26.65	-200.53	1.15	-199.38
WP720	38. .87	113.50.45	6716.	5	979402.44	980005.34	28.80	-199.96	1.40	-198.56
WP721	38. .73	113.49.86	6767.	5	979400.45	980005.14	31.81	-198.66	1.64	-197.02
WP722	37.37.45	113.49.30	6217.	3	979401.34	979971.24	14.86	-196.89	1.41	-195.48
WP723	37.38.11	113.51.04	6217.	3	979404.66	979972.20	17.23	-194.52	.97	-193.55
WP724	37.36.63	113.54.43	5668.	3	979433.34	979970.05	-3.59	-196.64	.87	-195.77
WP725	37.41.45	113.45.73	5641.	3	979443.52	979977.05	-2.95	-195.09	.49	-194.60