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RECONNAISSANCE GRAVITY AND AEROMAGNETIC SURVEYS OF THE ANTARCTIC PENINSULA

By
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British Antarctic Survey



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ABSTRACT

Measurements made between 1959 and 1984 by the British Antarctic Survey at gravity stations on the Antarctic Peninsula have been recomputed within a stronger base station framework. The results are tabulated as absolute, Bouguer and free-air anomalies and are also presented in contoured form. A 1:1 500 000 Bouguer anomaly map reveals several anomalous trends, the most significant of which is an axial minimum attributed to crustal thickening asymmetrically distributed beneath the geographical axis of the peninsula. Automated direct modelling of selected gravity profiles suggests that crustal thicknesses exceed 30 km. Isolated positive gravity anomalies off the west coast of Graham Land could represent part of a more extensive anomalous zone trending south at least to the Batterbee Mountains in Palmer Land; they may be associated with the west coast magnetic anomaly.

Over 36 000 line kilometres of aeromagnetic profiles have been recovered and processed since 1973. The data are presented as a contoured map together with representative observed profiles. Several distinct magnetic provinces are identified, including a west coast anomaly traceable for over 1300 km and trending nearly parallel to the arcuate peninsula. The tectonic significance of the anomaly is conjectural but it may represent a composite igneous intrusive body related to known Mesozoic-Cenozoic subduction.

The active magnetic signature of the west coast anomaly contrasts with the quieter magnetic regime of the Larsen Ice Shelf, where sedimentary thicknesses in excess of 10 km are estimated. Over Alexander Island, low magnetic gradients reflect underlying sediments whilst superimposed local magnetic anomalies correspond to dispersed igneous bodies. Certain gravity anomalies over the island conform with block faulting and, in the northern half, with crustal thickening. Both gravity and magnetic anomalies over George VI Sound are consistent with those of a major graben structure.

Along the Black Coast of south-east Palmer Land, a pocket of short-wavelength, high-amplitude magnetic anomalies suggests the presence of near-surface bodies rich in magnetite.

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I. INTRODUCTION

West Antarctica is believed to consist of several continental fragments, geographically separate at depth but united by the same ice sheet that covers the geologically distinct, larger and older stable continental shield of East Antarctica. One of these fragments is the Antarctic Peninsula (Fig. 1), defined as the mainland peninsula north of a line joining Cape Adams (lat. 75° 00′ S, long. 62° 34′ W) and a point lat. 73° 24′ S, long. 72° 00′ W on English Coast.

From its base, the Antarctic Peninsula trends northward for 1500 km, its arcuate form at first convex towards and then concave away from the ice-shelf fringed Weddell Sea. The point of inflection occurs around lat. 69°S, where an obvious narrowing provides a natural division between Palmer Land

and the less massive Graham Land.

Palmer Land is 250–280 km in width with a central plateau region averaging 1800 m in elevation. Its plateau ice is broken by nunataks and isolated mountain chains, which reach a maximum height of 2652 m at Mount Jackson. Lying to the

west of the mainland is the more varied terrain of Alexander Island. The two are separated by George VI Sound, an ice-filled channel of rifted appearance, 25–95 km wide, 400 km long and with water depths in excess of 800 m.

The precipitous west coast of Graham Land also has associated offshore islands but, unlike Alexander Island, these take the form of a rugged archipelago. Adelaide Island is the largest of the islands. Many of the smaller ones are revealed only periodically at low tides, making a jagged and treacherous coast. The Graham Land plateau has an average elevation of 1400 m and is typically between 40 and 70 km wide. However, at intervals, encroaching glacier headwalls narrow the plateau, at one locality appropriately named The Catwalk (lat. 64° 31′ S, long. 60° 55′ W), to a mere 4 km. Along the imposing west coast the glaciers calve directly into the sea, in marked contrast with the east coast where the glaciers coalesce to form Larsen Ice Shelf.

II. GEOLOGY

Antarctica is composed of two contrasting geological provinces, the Precambrian craton constituting East (Greater) Antarctica and the younger Phanerozoic mobile belt of West (Lesser) Antarctica. Their present juxtaposition and their relative positions in Gondwana reconstructions continue to be the subject of speculation but a clearer understanding is now emerging of the geological evolution of West Antarctica and its relationship to southern South America.

The rock outcrops visible in West Antarctica scarcely suggest the extensive land mass hidden beneath the ice canopy. Several continental fragments, separated by deep trenches, are believed to exist, each having moved independently from original positions along the Pacific margin of Gondwana. The Antarctic Peninsula is one such fragment. Collation of field samples has identified a complex chronological framework, which has united hitherto unconstrained strato-tectonic units and accommodated them into known geological provinces. A linear development of fore-arc, magmatic-arc and back-arc terranes has been recognized and attributed to subduction of the Pacific Ocean floor beneath the western margin of the former supercontinent. Subduction activity may have been continuous, but related processes episodic, from late Palaeozoic through to late Cenozoic time.

During the Triassic and Jurassic there appears to have been a linear continuity between the magmatic arcs of the Antarctic Peninsula and the southern Andes, but the extensive Carboniferous-Devonian formations of southern South America are not mirrored in West Antarctica. While it is believed that continental crust formed the platform that sustained successive magmatic events, the exact fabric of the basement in the Antarctic Peninsula remains uncertain. Basement rocks have been variously described (Adie, 1954; Pankhurst, 1982) but, if restricted in type to older crustal rocks (Dalziel, 1982), their distribution is limited to the east side of Graham Land where Rb–Sr whole rock ages on migmatitic rocks have yielded ages up to 600 Ma (Pankhurst, 1982). This categorization of basement excludes the late

Palaeozoic-Mesozoic group of unfossiliferous sediments and metasediments comprised of the Trinity Peninsula Group of north-east Graham Land and the LeMay Group of Alexander Island. Their diagenesis may be a consequence of accretion-subduction processes; they may have originated as fore-arc basin sediments (Smellie, 1981; Hyden and Tanner, 1981) or alternatively during trench deposition forming part of an accretionary prism (Storey and Garrett, 1985).

The Mesozoic heralded an intense period of magmatic and tectonic activity that has continued, though in subdued form, to the present. More than 80% of Antarctic Peninsula outcrops are of plutonic origin and represent an Upper Triassic-Tertiary calc-alkaline suite ranging in known age from 209 Ma (Pankhurst, 1982) to 9.5 Ma (Baker and Rex, 1973). They intrude, and are often contemporaneous with, the Antarctic Peninsula Volcanic Group, a Jurassic-Tertiary sequence of calc-alkaline pyroclastic tuffs and breccias interbedded with lavas. Magmatic activity ceased in the southern part of the peninsula about 100 Ma ago; the standstill moved progressively northward as a spreading ridge was subducted beneath the trench (Barker, 1982).

Geographical continuity between the Antarctic Peninsula and South America may have lasted until the mid-Tertiary (Woodburne and Zinsmeister, 1982) but the connection became tenuous after the late Jurassic-early Cretaceous separation of Africa and South America. A major marginal basin developed to the east of the Andes but it had no counterpart in the south. However, sedimentation along the flanks of an emergent arc is generally associated with subduction; notable examples along the Antarctic Peninsula are the fore-arc basin sediments known collectively as the Fossil Bluff Formation. These were deposited off the western margin during the Upper Jurassic-Lower Cretaceous; their lithologies are indicative of marine and terrestrial environments. Thicknesses of 5000 m have been estimated, similar to the back-arc sediments of the James Ross Island Group, a Cretaceous-early Tertiary sequence of marine volcanoclastic sediments. Late Mesozoic back-arc

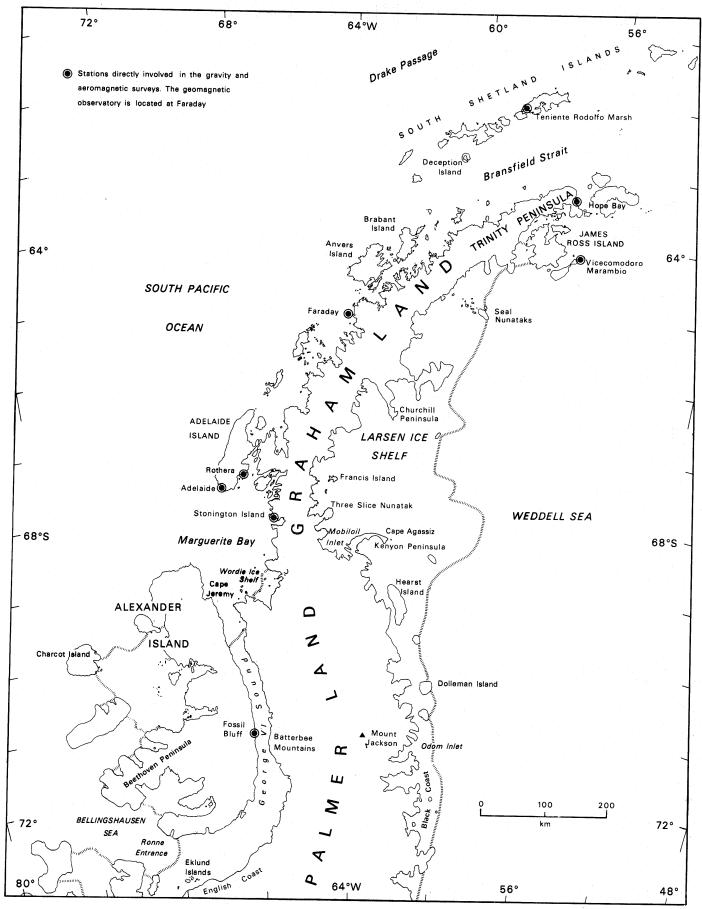


Fig. 1. Location diagram for the Antarctic Peninsula.

sedimentation is also inferred for the Latady Formation (Rowley and Williams, 1982) whose type locality, though at a similar longitude to the James Ross Island Group, lies 1100 km to the south. This suggests a fairly extensive back-arc sedimentary terrane (Farquharson, 1982).

Subduction of the proto-Pacific plate beneath the western edge of the Antarctic Peninsula continued until the Tertiary, at which time the Pacific and Antarctic plates became coupled (Herron and Tucholke, 1976) and magmatism all but ceased. However, spreading continued in the western Drake Passage leading to the separation of the Antarctic Peninsula from South America. This commenced about 29 Ma ago and continued until 6 Ma ago (Barker and Burrell, 1977). The opening of Bransfield Strait as a marginal basin was probably initiated 1.3 Ma ago during the closing stages of subduction activity and there is strong evidence that it continues today (Roach, 1978).

III. THE GRAVITY SURVEY

Reconnaissance gravity surveys of the Antarctic Peninsula and offshore islands commenced in 1959 and involved ship-to-shore measurements along the west coast of Graham Land (Griffiths and others, 1964; Davey and Renner, 1969). These measurements were later supplemented with land-based observations (Kennett, 1966a; Renner, 1980). As the network of stations increased, surveys were extended to Palmer Land and Alexander Island (Burns, 1974; Butler, 1975). Field travel initially consisted of dog sledging, but the introduction of motorized toboggans together with the increasing use of aircraft support gave oversnow parties greater mobility and range.

In some parts of the Antarctic Peninsula, rugged terrain restricts surface travel. Apart from the relatively smooth Larsen Ice Shelf and the Palmer Land plateau, ground traverses are generally confined to valley glaciers where progress may be impeded by crevassed zones, ice falls, or valley headwalls. While it is advantageous to occupy rock sites, these are not always accessible. The plateau region offers relatively straightforward travel but it is an almost featureless, rock-free terrain. On average, one day in three is lost to inclement weather. Wind and low temperatures can affect the performance of instruments and cause further time loss in an already short summer season.

A. SURVEY PROCEDURE AND DATA PROCESSING

1. Gravity meters

Three types of gravity meter (Worden, LaCoste and Romberg, Norgaard) have been variously employed by BAS field geophysicists. Of these, Worden geodetic gravity meters Nos. 556, 743 and 886 have been those most heavily used (Fig. 2a) although, during the 1959-60 season, Griffiths and others (1964) used a Worden gravity meter (No. 14) without geodetic or thermostatic facilities. However, a thermostatic control is not essential. During the earlier long dog-sledging journeys a suitable power supply could not be maintained and temperature calibration factors were interpolated from those supplied by the maker. Thermostatic control has been used to advantage during air and ship-borne links, such as those in which LaCoste and Romberg meters (Fig. 2b) were employed Kennett, 1965a; Renner, 1981a, 1981b; Sturgeon and Renner, 1983). The Norgaard gravity meter was used for local traverses from Hope Bay (Renner, 1980).

To minimize adverse vibration-induced drift during field travel, the gravity meters have been supported and secured on a variety of experimental mounts. Initially, a custom-made padded container was used but this was superseded by suspending the gravity meter in a rigid frame on the back of the





Fig. 2. a. Worden gravimeter being read at the USGS-BAS Doppler satellite controlled station on Dodson Peninsula, Orville Coast (Renner, 1982). b. Lacoste and Romberg gravimeter and Worden gravimeter at Hope Bay primary gravity base station.

sledge or motor toboggan. Similar protective measures were

used during air and ship transport.

Whenever possible, gravity meters were calibrated in the UK before and after their Antarctic service; for this the established calibration line in Cheshire between Hatton Heath and Prees was used (Masson Smith and others, 1974). Despite frequent continuous field use, over thousands of kilometres and periods of up to three years, successive checks failed to show significant changes in calibration constants from those supplied by the manufacturers.

2. International links

The original gravity datum for Graham Land was established by Griffiths and others (1964) using a Worden gravity meter with ship-borne links to the international gravity base stations at Buenos Aires (Argentina) and Montevideo (Uruguay). Kennett (1965a) strengthened the network using a LaCoste and Romberg (No. 2) gravity meter; this reduced by up to 31 gu the original absolute values. The amended values have provided the basis of all subsequent BAS gravity surveys. Table I lists the

primary gravity base stations.

Until definitive gravity air-links are established to South America, the absolute network for the Antarctic Peninsula remains hinged to the early gravity ties. A two-way air-link between Rothera and McMurdo stations used a LaCoste and Romberg (No. 456) gravity meter (Renner, 1981b) to tie the Antarctic Peninsula network indirectly to the international gravity network via New Zealand. By this means an absolute value of 9.824796 m s⁻² was determined for Rothera compared with 9.824817 m s⁻² established via ship links with South America. The discrepancy of -21 gu may be attributed in part to unknown gravity meter drift suffered on the relatively lengthy sea voyages between the Antarctic Peninsula and South America. In 1983, a ten-hour, one-way tie was measured by a non-thermostatted Worden gravimeter between Punta Arenas and Rothera. Details of the South American station are as follows: Station PUQ J7915, lat. 53°00'3"S, long. 70°50'5"W, located in the south-west corner of meteorological workshop Presidente Ibanez Airport, Punta Arenas. The absolute value of gravity relative to IGSN 71 being $9.81297591\,\mathrm{m\,s^{-2}}$ (personal communication, Manuel Arenada, Departamento de Geología y Geofísica, Universidad de Chile). From this, an absolute value was determined at Rothera of $9.824775\,\mathrm{m\,s^{-2}}$ (relative to IGSN 71). Until the Antarctic Peninsula network is more accurately linked to IGSN 71 all quoted absolute values are based on the international links of Griffiths and others (1964) and Kennett (1965a). The tabulated values are estimated to be about 180 gu higher than IGSN equivalents.

Secondary gravity base stations, defined as those with strong ties to the primary network, are given in Table II. In the same category but listed separately (Table III) are stations occupied during the United States Geological Survey (USGS)-BAS Doppler satellite programmes of 1975–1979 (Renner, 1982; Sturgeon and Renner, 1983).

3. Station positioning

Navigation has relied mainly on sledge wheel and compass together with resection to known topographical features. However, during the joint USGS-BAS Doppler satellite programme, positions were fixed by Geoceiver and, since 1982, oversnow geophysical parties have been equipped with a satellite navigation instrument. Oversnow parties since 1982 have also carried a radio-echo ice thickness measuring system and seismic equipment for depth-to-seabed measurements. This facilitates a geological interpretation of gravity measurements on both grounded and floating ice stations.

The major error inherent in most Antarctic gravity surveys is that of elevation control. BAS has experimented with several barometric methods using Baromec, Walker, and Wallace and Tiernan precision aneroids. At first, pressure readings alone were recorded at each gravity station using up to three aneroids. Later, the field readings were corrected by extrapolation of sea level pressures recorded at the nearest scientific observatory (Kennett, 1965b). However, as survey areas became increasingly remote from observatory control, the favoured technique was to set up a field barograph within the immediate survey area to provide continuous pressure reference.

Table I. Primary gravity base stations network (after Griffiths and others, 1964).

		•				
Gravity Station		Latitude S	Longitude W	Height (m)	Absolute Gravity (gu)	Bouguer Anomaly (gu)
Port Stanley	 	51 41.5	57 51.1	4.2	9812433	247
Grytviken ¹		54 17.1	36 29.6	0	9815213	760
Zavodovski I.		56 16.5	27 32.9	4.0	9818443	2309
Signy I.		60 42.6	45 35.7	4.0	9821392	1677
Admiralty Bay		62 05.0	58 23.6	9.0	9821930	1178
Deception I.		62 58.7	60 33.7	0	9822223	788
Hope Bay		63 24.0	56 58.8	3.0	9822525	804
Longing Gap		64 26.6	58 58.3	56.0	9822948	569
Waterboat Point		64 49.3	62 51.4	4.0	9823044	295
Port Lockroy		64 49.5	63 29.2	0	9823036	277
Faraday Station ²		65 14.7	64 15.3	9.0	9823392	359
Detaille I.		66 52.2	66 47.4	5.0	9824499	364
Rothera Point ³		67 34.1	68 07.5	12.1	9824817	243
Adelaide I.		67 45.7	68 54.9	4.3	9825190	478
Stonington I.		68 11.1	66 59.8	15.7	9825094	149
Fossil Bluff		71 19.4	68 17.2	67.0	9826641	-65

¹ Formerly referred to as King Edward Point

² Formerly referred to as Galindez Island

³ Established 1976 (Renner, 1981b)

Table II. Secondary gravity base stations over the Antarctic Peninsula.

Gravity Station	Latitude S	Longitude W	Height (m)	Absolute Gravity (gu)	Bouguer Anomaly (gu)
Crystal Hill	63 39.1	57 48.5	0	9822618	773
Cape Disappointment	65 32.9	61 43.5	265.0	9823350	625
Churchill Depot	66 21.0	62 54.8	336.0	9823877	742
Robinson Cairn	66 50.9	64 03.4	221.0	9823755	75
Horseshoe I.	67 48.6	67 16.8	7.6	9825026	289
Vesconte Point	68 30.4	65 11.8	274.0	9824637	-13
Ptolemy Survey Cairn	68 33.6	65 50.3	551.5	9823618	- 519
Mercator Survey Cairn	68 39.4	65 39.2	443.5	9823900	-508
Victory Nunatak	68 44.3	64 23.1	118.0	9825218	119
Elton Survey Cairn	68 49.6	66 36.8	763.6	9823582	-301
Damien Survey Cairn	69 08.0	65 18.9	1827.2	9821341	-637
Finley Survey Cairn	69 15.7	63 23.6	747.6	9824164	-15
Conchie Survey Cairn	69 26.6	65 01.6	1975.9	9821152	-720
Rymill Survey Cairn	69 31.8	62 29.4	445.9	9825097	164
Spot Survey Cairn	69 35.2	66 38.7	978.4	9823687	-232
Pristine Survey Cairn	69 37.2	65 52.8	1366.7	9822671	- 503
Sullivan Survey Cairn	69 40.0	63 56.9	1954.6	9821527	-519
Quintin Depot	69 59.0	67 33.3	1062.4	9823846	-86
Charity Depot	70 00.9	64 21.3	2155.3	9820890	-967
James Survey Cairn	70 03.7	62 24.9	507.7	9825334	210
Calypso Survey Cairn	70 13.9	63 19.0	1701.6	9822294	-580
Temnikow Nunataks	70 35.2	64 17.6	1671.0	9822318	-820
Clark Hills	70 42.0	63 09.7	1792.5	9822538	-426
St Valentines Survey Cairn	70 51.7	66 23.7	1115.1	9824024	-309
Pimpernel Survey Cairn	70 56.7	64 13.1	2211.0	9821295	-984
South Elands Depot	70 59.8	63 28.3	1752.0	9822358	-852
Jackson Depot	71 15.9	63 10.3	1737.0	9822552	-838
Lamplugh Survey Cairn	71 19.2	61 39.9	1237.8	9824217	-184
Castle Rock Depot	71 26.8	66 56.0	980.5	9824988	71
Spike Survey Cairn	72 01.7	64 52.2	1663.2	9823296	-653

Table III. Gravity base stations occupied during joint USGS-BAS Doppler satellite positioning programme.

Gravity Station	Latitude S	Longitude W ,	Height (m)	Absolute Gravity (gu)	Bouguer Anomaly (gu)
Grytviken, South Georgia	54 17.0	36 29.6	2.7	9815241	794
Signy I., South Orkney Is.	60 42.5	45 35.6	25.0	9821354	1682
Admiralty Bay, South Shetland Is.	62 05.1	58 23.6	18.3	9821907	1172
Petrel Station, Dundee I.	63 28.8	56 13.3	64.8	9822189	515
Cobalescou I.	64 10.7	61 39.0	24.3	9822887	632
Marambio Station, Seymour I.	64 14.1	56 37.2	196.0	9822334	376
Palmer Station, Anvers I.	64 46.4	64 03.1	14.9	9823031	338
Damoy Point, Wiencke I.	64 49.1	63 30.3	10.0	9823005	270
Matienzo Station, Larsen Nunatak	64 58.6	60 04.3	25.0	9823290	475
Faraday Astrofix, Galindez I.	65 14.7	64 15.4	7.3	9823396	360
Rothera Point	67 34.1	68 07.5	12.1	9824817	243
Adelaide I. Astrofix	67 45.6	68 54.9	25.4	9825136	466
Adelaide I.	67 45.7	68 54.9	4.3	9825190	478
Three Slice Nunatak	68 02.2	64 59.2	254.6	9824540	146
Stonington I.	68 11.1	66 59.8	15.7	9825094	149
Havre Mountains	69 07.6	71 36.7	813.6	9823888	80
Fossil Bluff Astrofix	71 19.4	68 16.8	62.8	9826624	-90
Fossil Bluff	71 19.4	68 17.2	67.0	9826641	-65
Gluck Peak	71 42.5	72 41.4	356.8	9826354	8
Lassiter Coast	73 06.7	62 49.9	1591.0	9824298	-355
Gomez Nunatak	73 56.1	68 37.7	1548.0	9824530	-615
Lassiter Coast	74 27.2	64 33.8	1468.0	9825218	-331
Tottan Hills	74 36.6	14 40.2	1143.1	9825831	-430
Orville Coast	75 34.2	66 49.9	1405.6	9825991	- 187
Siple II ¹	75 56.4	84 14.9	1278.0	9826256	920
Sentinel Range, Ellsworth Mountains	77 31.1	86 21.6	1587.0	9826195	-428
Theron Mountains	78 56.3	27 35.2	665.1	9828375	- 577
Heritage Range, Ellsworth Mountains	80 02.0	80 53.8	837.2	9828800	-170
Shackleton Mountains	80 24.0	26 51.1	1112.0	9828320	-221

¹ Snow Station (Renner, 1981a)

Table IVa. Density measurements — East coast Graham Land.

Stratigraphic Unit	Rock Types	No. of Specimens	$(Mg \ m^{-3})$	$(Mg \ m^{-3})$	$ ho_{ m mean}~(Mg~m^{-3}) \ \pm standard~deviation$
Antarctic Peninsula	Crystal Tuff	5	2.72	2.62	2.67 ± 0.04
Volcanic Group	Rhyolite	2	2.64	2.56	2.60 ± 0.06
, cream creap	MEAN	7	2.72	2.56	2.65 ± 0.05
Volcanic rocks (age uncertain)	Tuff	14	2.72	2.58	2.64 ± 0.04
(-80)	Agglomerate	2	2.64	2.56	2.60 ± 0.06
	Others	8	2.80	2.56	2.64 ± 0.08
	MEAN	24	2.80	2.56	2.63 ± 0.06
Jurassic terrestrial sediments	Shale	2		<u>·</u>	2.79
Undifferentiated metasedimentary and metavolcanic rocks	Regionally metamorphosed sandstones and siltstones	9	2.87	2.64	2.73 ± 0.08
Jurassic metamorphic rocks	Metamorphosed sediments	20	2.98	2.59	2.79 ± 0.10
Juliassic metamorphic rocks	Quartzites	5	2.75	2.58	2.63 ± 0.07
	MEAN	25	2.98	2.58	2.76 ± 0.11
Metamorphic rocks	Gneiss	47	2.85	2.60	2.70 ± 0.06
(age uncertain)	Metagabbro	2	2.87	2.74	2.81 ± 0.09
(ugo unionium)	Amphibolite	2 7	3.02	2.87	2.94 ± 0.05
	Others	8	2.98	2.65	2.80 ± 0.13
	MEAN	64	3.02	2.60	2.74 ± 0.11
Trinity Peninsula Group	Greywacke	5		<u></u>	2.74 ± 0.02
Plutonic intrusions	Granite	30	2.73	2.55	2.62 ± 0.04
	Granodiorite	9	2.86	2.62	2.69 ± 0.08
	Diorite	7	2.79	2.66	2.71 ± 0.06
	Gabbro	7	2.86	2.78	2.83 ± 0.03
	Others	18	2.74	2.55	2.65 ± 0.05
	MEAN	71	2.86	2.55	2.67 ± 0.08
	ALL ROCKS	207	3.02	2.55	2.70 ± 0.10

Table IVb. Density measurements — Palmer Land.

Stratigraphic Unit	Rock Types	No. of Specimens	$\rho_{\text{max}} (Mg \ m^{-3})$	$ \begin{array}{c} \rho_{\min} \\ (Mg \ m^{-3}) \end{array} $	$ ho_{ m mean}~(Mg~m^{-3}) \ \pm standard~deviation$
Upper Cretaceous to Lower Cretaceous marine sediments	Sediments	5	2.67	2.61	2.64 ± 0.03
Jurassic-Cretaceous marine sediments	Sediments	2	2.74	2.72	2.73 ± 0.01
Latady Formation	Sediments	7	2.76	2.58	2.69 ± 0.06
Antarctic Peninsula Volcanic Group	Tuff Lava Agglomerate MEAN	19 36 11 66	2.80 3.04 2.80 3.04	2.58 2.63 2.61 2.58	2.69 ± 0.06 2.77 ± 0.10 2.69 ± 0.06 2.73 ± 0.09
Trinity Peninsula Group	Sediments	13	3.00	2.64	2.73 ± 0.09
Metamorphic rocks (age uncertain)	Gneiss Schist Others MEAN	55 23 22 100	3.01 3.06 3.08 3.08	2.58 2.44 2.41 2.41	2.69 ± 0.08 2.73 ± 0.13 2.80 ± 0.17 2.72 ± 0.13
Plutonic intrusions	Granite Granodiorite Quartz diorite Diorite Gabbro MEAN	40 41 14 17 21 133	2.80 2.92 2.82 2.95 2.98 2.98	2.49 2.52 2.61 2.65 2.73 2.49	2.62 ± 0.06 2.67 ± 0.08 2.75 ± 0.07 2.80 ± 0.10 2.85 ± 0.08 2.71 ± 0.11
	ALL ROCKS	326	3.08	2.41	2.72 ± 0.11

This table incorporates data from Butler and McArthur (1983)

Table IVc. Density measurements - Alexander Island.

Stratigraphic Unit	Rock Types	No. of Specimens	$(Mg \ m^{-3})$	$(Mg m^{-3})$	$ ho_{ m mean}~(Mg~m^{-3}) \ \pm standard~deviation$
Late Cenozoic volcanic rocks	Basalt	5	2.95	2.77	2.84 ± 0.08
Tertiary volcanic rocks	Lava	9	3.11	2.55	2.76 ± 0.15
1011019 , 101001110 100110	Tuff	21	2.80	2.53	2.67 ± 0.07
	Agglomerate	4	2.71	2.64	2.67 ± 0.03
	MEAN	34	3.11	2.53	2.69 ± 0.10
Fossil Bluff Formation	Mudstone	11	2.81	2.61	2.68 ± 0.05
2 00011 21211 1 0 11111011011	Siltstone	9	2.84	2.64	2.70 ± 0.07
	Sandstone	12	2.69	2.47	2.60 ± 0.07
	Grit	3	2.69	2.65	2.69 ± 0.02
	Breccia	1			2.69
	MEAN	36	2.84	2.47	2.66 ± 0.07
LeMay Formation	Lava	9	2.96	2.67	2.81 ± 0.11
——————————————————————————————————————	Tuff	13	3.01	2.49	2.74 ± 0.18
	Semi-schist	3	2.76	2.70	2.73 ± 0.03
	Sediments	55	3.01	2.52	2.74 ± 0.10
	MEAN	80	3.01	2.49	2.74 ± 0.11
Plutonic intrusions	Granite	21	2.76	2.47	2.63 ± 0.07
	Granodiorite	18	3.03	2.46	2.70 ± 0.10
	Quartz diorite	8	2.86	2.68	2.72 ± 0.06
	Diorite	22	2.96	2.58	2.75 ± 0.10
	Gabbro	12	3.01	2.70	2.78 ± 0.08
	MEAN	81	3.03	2.46	2.71 ± 0.10
	ALL ROCKS	236	3.11	2.46	2.71 ± 0.11

4. Density determinations

Rock samples collected over a number of years have been used to make representative density measurements. The results are classified within broad geological and geographical provinces and are summarized in Table IV. In all, 769 samples were analysed, giving a mean density for surface rocks of $2.71 \pm 0.11 \, \mathrm{Mg \, m^{-3}}$. However, it was decided to use the accepted mean crustal density of 2.67 Mg m⁻³ in the Bouguer correction and where required, density values of $0.9 \, \mathrm{Mg \, m^{-3}}$ and $1.03 \, \mathrm{Mg \, m^{-3}}$ for ice and sea-water respectively.

5. Sources of error

Antarctic gravity surveys are liable to errors (Table V), the magnitude of which would be considered unacceptable in conventional surveys. A unique combination of climatic, topographic and logistic difficulties have up to now restricted the accuracy of gravity investigations to a reconnaissance level.

Errors arising from gravity meter drift have been minimized by isolating the static from the travelling component. Measurements indicate that the overland travelling drift rate seldom exceeds $+0.5\,\mathrm{gu\,h^{-1}}$ but to compensate, station networks have usually been extended in a series of closed loops with closure errors being linearly distributed. Loops of short duration, though ideal, are not always practical and closures spread over ten days or more were not uncommon. On a few occasions, closures were not practicable. Kennett (1966a) estimates a cumulative drift error of $\pm 50\,\mathrm{gu}$ at Churchill Peninsula (lat. $66^\circ\,21.0'\,\mathrm{S}$, long. $62^\circ\,54.8'\,\mathrm{W}$) after a 30-day traverse from Stonington Island and Burns (1974) records a maximum error of $\pm 20\,\mathrm{gu}$ for an open-ended traverse in northern Alexander Island. The introduction of snowmobiles allowed relatively large loops to be closed within 24 hours.

Position errors have varied considerably depending upon the accuracy of topographic maps. On the west coast of Graham

Land, Griffiths and others (1964) used 1:500 000 scale Admiralty charts but estimated that some stations might still be in error by 1.6 km. Renner (1980) calculated a similar error for stations on the Larsen Ice Shelf positioned by sledge wheel and compass techniques. In areas where detailed topographic survey preceded geophysical traverses, accuracy is considerably improved. Smith (1973b) estimated positions accurate to +100 m in northern Marguerite Bay and ±1 m for a local survey (Smith, 1973a) on Horseshoe Island. This contrasts with remote areas of Alexander Island where Burns (1974) reported that some mountain groups were misplaced by 32 km. At the time there was insufficient ground control to complement the available aerial photographs. Topographic mapping of the Antarctic Peninsula has now progressed with the publication of some sheets of the BAS 250, BAS 250P and BAS 500G map series. These have been compiled from a combination of aerial photography and satellite imagery together with a controlling trigonometric and trilateration network in turn strengthened by Doppler satellite positioning. All the on-rock gravity stations have been plotted onto the new map series and, provided that the original gravity localities are correctly identified, latitude errors should be less than ± 10 gu.

By far the largest errors arising are due to the imprecise determination of surface elevation. Early surveys generated the greatest errors: Kennett (1966a) estimated that heights might be in error by $\pm 20\,\mathrm{m}$ on the Larsen Ice Shelf and $\pm 30\,\mathrm{m}$ on a traverse across the Graham Land plateau. Most surface elevations from post-1972 gravity surveys are probably accurate to 5 m and all are within 10 m, the improvement being due to the extension of topographic mapping and the deployment of field barographs.

Terrain corrections have been applied where possible. Kennett (1966a) computed terrain corrections using a Hammer chart and obtained values between 6 gu and 56 gu. Griffiths and

Table V. Estimated errors in BAS gravity surveys, giving the errors contributing to the overall standard error for the Bouguer anomaly. The table is based upon previous error estimates and attempts to give a representative value for the areas concerned. The figures quoted for the absolute Bouguer anomaly are thought in several instances to be higher (by up to a factor of 3) than the relative Bouguer anomaly values between adjacent stations.

	South Shetlands and West Coast of	East Coast of Graham Land and	Palmer	George VI	Alexander	· Island
Source of error	Graham Land ^{1,2,3} (gu)	Larsen Ice Shelf ^{4,5} (gu)	Land ^{6,7} (gu)	Sound ⁶ (gu)	Northern ⁶ (gu)	Central ^{6,8} (gu)
Standard error of the absolute gravity values of the base stations	±14	±14	±14	±14	±14	±14
Elevation correction assuming a density of 2.67 Mg m ⁻³ and an elevation error as shown in metres	$\pm 8(\pm 4 \text{ m})$	±40(±20 m)	$\pm 20(\pm 10 \text{ m})$	±16(±8 m)	±16(±8 m)	±24(±12 m)
Instrument drift and calibration factor	±15	±20	±20	±2	±20	±10
Latitude correction	±10	±10	±10	±10	±10	±10
Terrain correction	0 to -40	0 to -56	0 to -60	0 to -30	0 to -60	0 to -50
Overall standard error for the absolute Bouguer anomaly	+25 to -65	+45 to -105	+35 to -95	+25 to -55	+30 to -90	+30 to -80

¹ Griffiths and others, 1964.

⁸ Butler, 1975.

others (1964) estimated terrain corrections as high as 60 gu but the majority were less than 30 gu. Where terrain corrections have been calculated they have not included the contribution from the unknown local sub-ice topography. The authors estimate that this might introduce a further error of up to 30 gu.

Accurate corrections for sub-ice topography are limited by the unknown bedrock relief. Airborne radio-echo sounding of ice thicknesses over the Antarctic Peninsula (Smith, 1972) has shown that the bedrock surface can be extremely irregular with ice thickness values of over 1300 m being recorded. An error of $100 \, \mathrm{m}$ in estimating the depth of an ice-rock interface introduces a gravity difference of $\pm 74 \, \mathrm{gu}$; for this reason, anomalies derived from snow stations can only be considered geologically significant if measured ice depths coincide with gravity points.

A further source of errors arises from the density used in the Bouguer corrections: the generally accepted figure of $2.67\,\mathrm{Mg\,m^{-3}}$ for mean surface crustal density was used throughout, although the average density of surface rocks on the Antarctic Peninsula calculated from the values in Table IV is $2.71\,\mathrm{Mg\,m^{-3}}$. This could lead to maximum errors of $\pm 25\,\mathrm{gu}$.

The standard error in the absolute value of gravity is estimated at $\pm 14\,\mathrm{gu}$ (Griffiths and others, 1964); this is unlikely to be improved until definitive direct gravity air links are established between the Antarctic Peninsula and South America. The maximum overall standard error in the Bouguer anomaly lies between $+45\,\mathrm{gu}$ and $-105\,\mathrm{gu}$ (Table V), although relative errors in a given area are expected to be considerably less.

6. Anomaly computation and station list

While the regional gravity station coverage of the Antarctic Peninsula is still considered incomplete, a representative

number of rock sites have been visited. Various datum levels have been used in the past and, for this reason, it was necessary to update all BAS gravity data (1959-1984) using the latest topographic maps, and to incorporate additional gravity control resulting from improved logistic field support. Hence, the values of absolute gravity calculated from successive reoccupations have been adjusted and weighted according to the method of occupation. For example, air links are given more weight than values obtained during oversnow traverses. In all earlier BAS gravity publications the 1930 international gravity formula was used for latitude corrections. This is now superseded and the 1967 international gravity formula (Jeffreys, 1976) has been incorporated to calculate theoretical gravity at revised station latitudes. (The difference between theoretical gravities calculated by the different methods varies from 70 gu at 60° S to 45 gu at 75° S.)

The revised absolute gravity, Bouguer and free-air anomalies for the 1450 rock stations occupied between 1959 and 1984 are given in Appendix 1. The 50 on-snow stations that have ice and bedrock control are given in Appendix 2 while an additional 605 stations occupied on snow of unknown depth to bedrock, together with their free-air anomaly values, are listed in Appendix 3.

B. THE REGIONAL BOUGUER ANOMALY MAP

The network of on-rock gravity stations is governed mainly by the severe terrain and this is reflected in the irregularity of the station distribution (Bouguer anomaly map—back pocket). Rugged terrain on the east coast of Graham Land between latitudes 64° S and 69° S has resulted in a wider spacing of rock stations. The authors recognize that most of the Bouguer

² Smith, 1973b.

³ Butler, 1983.

⁴ Kennett, 1966a.

⁵ Renner, 1980.

⁶ Burns, 1974.

⁷ A. A. J. Almond and P. F. Butler (British Antarctic Survey, personal communication)

anomalies tabulated for the snow stations are approximate because prior to 1982 no direct control measurements of ice thicknesses or water depths were taken. The exceptions are the two gravity traverses across George VI Sound taken in 1983–84 when ice thickness and seismic depth-to-bedrock were measured at each of the 50 gravity localities. Until data are available to quantify the stations without ice thickness control, only those values with some degree of known physiographic status have been considered in the contouring of the Bouguer anomalies. Such stations include those close to rock, those in the vicinity of BAS airborne radio-echo ice thickness profiles and some on the Larsen Ice Shelf, where a Bouguer correction has been incorporated based upon a continental shelf depth of 500 m (Renner, 1980). In all cases the anomalies complement existing, though scattered, on-rock values and help verify major gravity trends. Also incorporated are marine gravity measurements from Bransfield Strait and Bellingshausen Sea obtained by the Department of Geological Sciences, University of Birmingham as part of their comprehensive marine geophysical investigations of the region (Davey and Renner, 1969).

Although large-scale extrapolation of isogals across data-free areas has been avoided, several major anomalous features are still apparent (Bouguer anomaly map—back pocket).

1. Antarctic Peninsula axial negative anomaly

The dominant anomalies are linear gravity minima associated with the longitudinal axis of the Antarctic Peninsula. Although the negative anomaly is detectable over northern Graham Land, it is most marked over southern Graham Land and Palmer Land. Over the Palmer Land plateau, the anomaly axis trends parallel to the north-south geographic axis, but is offset to the east. It sinks to a minimum of $-1000 \,\mathrm{gu}$ and exhibits a half wavelength up to 200 km. The anomaly profile is asymmetrical. The eastern limb is the steeper and more regular. The western wing is distorted by higher frequency components. To the east, the zero contour almost coincides with the coastline whereas, on the west, it is located up to 20 km inland. In Graham Land both the wavelength and amplitude of the anomaly are smaller, the transition occurring relatively abruptly at the geographic boundary between Palmer Land and Graham Land.

2. West coast positive anomaly

Butler and McArthur (1983) commented on a positive, linear Bouguer anomaly superimposed upon the western limb of the Palmer Land axial negative anomaly. This linear anomaly, which reaches a maximum amplitude of 450 gu, may be traced northwards from the Batterbee Mountains for 100 km before abutting against the eastern edge of George VI Sound. There is insufficient bathymetric control for gravity measurements taken on George VI Ice Shelf to resolve the question of any possible offshore extension.

Gravity measurements taken in the Adelaide Island area indicate a linear north-south positive anomaly of 200 gu reaching a peak of 400 gu between the island and the mainland. A similar gravity anomaly may be identified to the north extending to Anvers Island, but here the pattern is a complex one modified by the regional axial negative anomaly and those possibly associated with the island archipelago. A positive gravity feature also lies over the continental shelf along the

southern margin of Bransfield Strait. Whether these positive anomalies have a common origin is debatable but all appear to be associated with known basic intrusive rocks (e.g. Bell, 1984)., A more comprehensive network of land and marine measurements is required to determine any geological association with the west coast magnetic anomaly.

3. Alexander Island

The most striking of the gravity anomalies is a north–south positive anomaly of 400 gu, located in central Alexander Island, which has been attributed to block faulting (Butler, 1975). By contrast, centred over the north of Alexander Island is a Bouguer anomaly minimum of $-300\,\mathrm{gu}$ that has been interpreted as a result of crustal thickening (Burns, 1974). The isolated but indistinct low gravity field over Beethoven Peninsula may correlate with outcropping Cenozoic volcanic rocks.

4. Bransfield Strait

A north-east—south-west positive linear anomaly is located offshore, parallel to the South Shetland Islands. The maximum amplitude is 1500 gu and it is believed to reflect underlying semi-oceanic crust (Davey, 1972). Marine seismic refraction profiles (Ashcroft, 1972), marine magnetic (Roach, 1978) and aeromagnetic surveys provide corroborating evidence.

C. Interpretation of the Gravity Anomalies

1. Quantitative interpretation of the Antarctic Peninsula axial negative Bouguer anomaly

Four profiles (Figs. 3 and 4) perpendicular to the strike of the anomaly were selected for interpretation. The higher frequency components superimposed upon the main axial anomaly trend have been disregarded in this analysis.

All the profiles were interpreted using a two-dimensional gravity interpretation program (Lee, 1979) based upon the iterative method of Bott (1960) in which a surface is computed that gives best fit to a given gravity anomaly assuming a single density contrast. Initially, a contrast of 0.6 Mg m⁻³ was selected derived from an estimated crustal density of 2.8 Mg m⁻³ and a mantle density of 3.4 Mg m⁻³. A minimum crustal thickness was also introduced based on a value of 25 km proposed as a result of garnet studies by Hamer and Moyes (1982). A series of models were derived by varying the density contrast and crustal thickness. While the depth of the crustmantle interface was varied by a few kilometres, the relative detail within any of the sections remained constant. Therefore, although the absolute value of crustal thickness may be uncertain, we believe that the overall pattern of structure is correct, with the values illustrated being for a minimum regional crustal thickness.

The northernmost profile, A_1A_1' (Fig. 4a), indicates a crustal thickness in excess of 30 km beneath the axis of Graham Land. This represents at least a 5 km increase over the minimum 'background'. The profile asymmetry is interpreted as the crust being thicker beneath the west coast than beneath the east, although some caution is necessary with the east coast interpretation since ice-shelf stations have been included in the profile construction. However, an on-rock value from Larsen Nunatak at the eastern end of profile A_1A_1' reduces the likely error in this profile. A similar observation can be applied to the

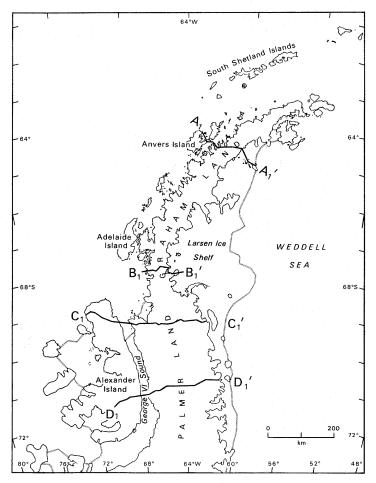


Fig. 3. Location of interpreted profiles A_1A_1' , B_1B_1' , C_1C_1' , D_1D_1' .

eastern end of profile B_1B_1' (Fig. 4b), which terminates in Mobiloil Inlet. Here the profile is partially dependent on ice shelf measurements but its outline would be similar to that of profile A_1A_1' if the nearest on-rock station value (from Three Slice Nunatak) were incorporated. Interpretation of profile B_1B_1' indicates a marked asymmetry, with the axis of maximum crustal thickening offset to the east of the geographic median line. Similarly, crustal thickness increases of $10\,\mathrm{km}$ beneath Palmer Land and Alexander Island are implied by profile C_1C_1' (Fig. 4c). An area of thinner crust beneath George VI Sound is suggested, which may be associated with major normal faults (Edwards, 1979) and rifted origin (McKenzie, 1978). Profile D_1D_1' (Fig. 4d) also shows the crustal thickening observed over the peninsula but under George VI Sound and Alexander Island it suggests a more uniform basement relief than that

indicated by profile C_1C_1' . The residual positive gravity anomaly superimposed upon profile D_1D_1' (Fig. 4d) is also reflected in the complementary aeromagnetic profile D_2D_2' (Fig. 9d, page 17). It is located along western Palmer Land and is considered to be associated with the more extensive west coast gravity and magnetic anomaly.

2. Qualitative interpretation of free-air anomalies

Careful consideration must be given to all station values used in the compilation of the free-air anomaly map before any quantitative analysis is undertaken. For instance, an extreme bedrock morphology beneath the plateau ice could result in the free-air anomaly at a nunatak being 700 gu higher than at a nearby snow station located over a column of ice 1000 m thick. Conversely, free-air anomalies adjacent to deep-water channels fringing the mainland could be artificially lower than the regional mean. Stations giving truly representative free-air anomalies include those at sea level in areas of moderate topography, and those derived on floating ice shelves above a relatively smooth continental shelf.

Given sampling inconsistencies of several hundred gravity units, the free-air anomaly map (Fig. 5) has been contoured at 500 gu intervals. It displays some trends that are largely controlled by regional topography and do not in themselves suggest significant isostatic imbalance. Exemplifying this is the large positive anomaly of up to 1700 gu over the Palmer Land plateau, with similar positive values associated with Alexander Island, Graham Land and the western archipelago. Coastal stations may show negative free-air anomalies due to local overdeepening of the continental shelf (Renner, 1980).

The approach of the continental slope and associated crustal thinning may be responsible for positive anomalies at sea-level stations over the western archipelago, whilst large positive anomalies over and adjacent to Bransfield Strait are coincident with a thin crust and an area of incomplete isostatic equilibrium (Davey, 1972). Studies of satellite derived gravity fields (Gaposhkin, 1974) show an anomaly of 300 gu centred over this marginal basin. The presence of this long-wavelength feature will obviously contribute to the regional field as deduced from land-based measurements; this may partially account for the regional gravity increase observed from Palmer Land northward to Bransfield Strait. Similar features are observed over other active spreading centres and subduction zones (Kuala, 1972) and so the anomalies may reflect mantle processes as well as crustal structure. Bouguer anomalies suggest a crustal thickening beneath the peninsula (Fig. 4) sufficient to cause complete or partial local compensation for the excess topographic mass. However, given the narrow width of the Antarctic Peninsula (100-400 km), a full assessment of the state of regional isostatic balance must await a further data input from the Weddell Sea and Bellingshausen Sea.

IV. THE AEROMAGNETIC SURVEY

Surface traverses involving total-field magnetic measurements have been completed at both reconnaissance (Renner, 1980) and local (Kennett, 1966b; Butler, 1983) levels. However, as with the gravity surveys, coverage has been severely restricted due to environmental conditions. The acquisition in 1973 of an airborne magnetometer system greatly

improved the rate of data accumulation. A British Antarctic Survey Twin Otter aircraft is used, equipped with a wing-tip sensor. Six aeromagnetic seasons have now been completed: 1973–74 (Renner, 1976), 1975–76 (Dikstra, 1983; Renner and others, 1982), 1977–78, 1979–80, 1982–83 and 1983–84. Reconnaissance profiles totalling 36 000 line kilometres have

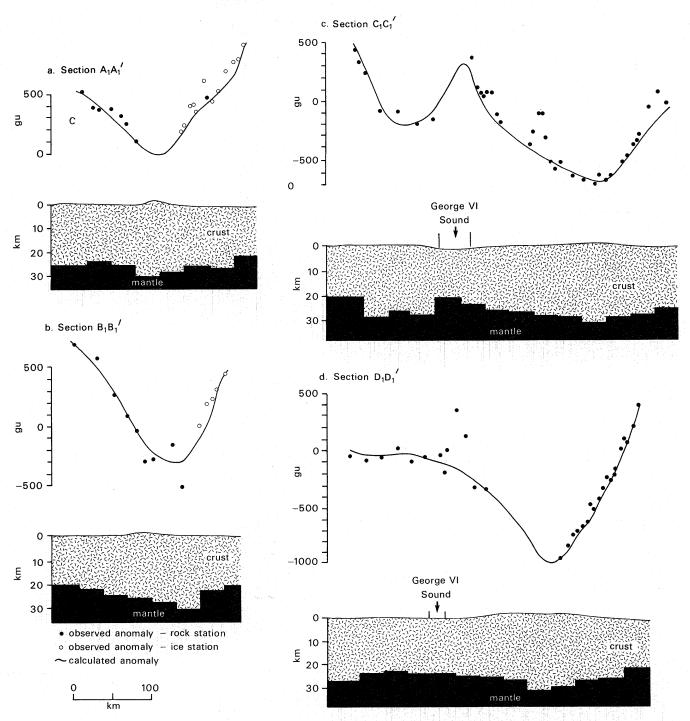


Fig. 4. Interpretation of Bouguer anomaly profiles; a. profile A_1A_1' ; b. profile B_1B_1' ; c. profile C_1C_1' ; d. profile D_1D_1' . (Refer to Fig. 3 for profile locations.)

been recovered from over the Antarctic Peninsula (Fig. 6), supplemented by an additional 4000 line kilometres of more detailed investigations into specific geological problems (Herrod and Renner, 1983; Crawford and others, in press).

A. SURVEY PROCEDURE AND DATA PROCESSING

1. Equipment

The original airborne system included a Geometrics model G-803 total-field magnetometer, a Geometrics model G-704

digital data acquisition unit and a Mars analogue recorder. Subsequent in-house redesign and modifications have included a digital recording system that uses a Motorola 6809 microprocessor (Fig. 7). This data logger unit, which was first used to advantage in the 1982–83 season, also has the flexibility to replay tapes in the field thus enabling data quality to be monitored.

Compensation of the undesirable magnetic influence of the aircraft was initially achieved by the trial-and-error placement of three permanent magnets along mutually perpendicular

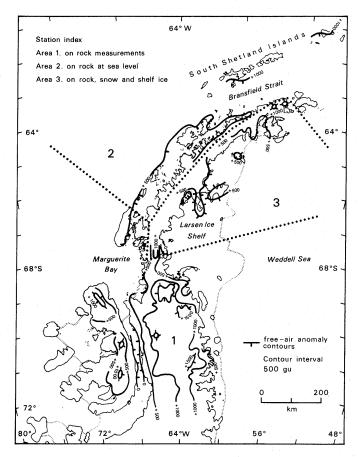


Fig. 5. Free-air anomaly map over the Antarctic Peninsula.

directions in the vicinity of the sensor unit. Patient ground manoeuvering of the aircraft followed by 'clover-leaf' flight trials succeeded in reducing heading errors to acceptable levels. An additional refinement was introduced later. This involved balancing currents along three mutually perpendicular coils wound around the sensor. A series of 'clover-leaves' determined the residual heading errors, which are systematically compensated in-flight. It has been policy to repeat this procedure at the beginning, midpoint and end of aeromagnetic operations in order to monitor any changes in the aircraft's magnetic influence. Heading errors each way along north—south and east—west lines were reduced to less than five nanoteslas but differences approaching ten nanoteslas remained between the cardinal directions.

Flight line positioning has improved with successive seasons, primarily due to the installation of sophisticated navigation hardware and the availability of more accurate topographic maps. During the earlier flights, navigation relied upon visual techniques including vertical fixes and position lines. These were supplemented when necessary with a line-ahead photographic record recovered from a Shackman 35-mm autocamera. Since 1975 self-contained navigation systems have been utilized and from 1982–83 a Decca Series 70 Doppler unit and Tactical Air Navigation System (TANS) computer have been used in combination to provide ground velocities and en-route latitudes and longitudes. A RCA Primus 500 colour radar system completes the navigation package. The navigation parameters are recorded through the data logger onto magnetic

cartridge tape together with the corresponding total-field magnetic measurement. Over the mainland, flight lines are now considered to be accurate to within one kilometre but the greatest improvement has been offshore and over the featureless plateau and ice shelves, where electronic methods have provided positions to within one per cent of distance along track. This compares with an estimated 10% error in the use of visual techniques, which often relied on distant hard fixes.

During the survey of Bransfield Strait in 1982–83, the Very high frequency Omnidirectional Range (VOR) and Distance Measuring Equipment (DME) beacons operated by Chile on King George Island provided additional line control.

2. Field operations

Field operations commenced in 1973 at the BAS station on Adelaide Island (lat. 67° 46′ S, long. 68° 55′ W). After the closure of this station in 1976, flight operations were transferred to the new station Rothera (lat. 67° 34' S, long. 68° 08' W) on the east coast of Adelaide Island. Additional facilities were also available at Fossil Bluff station (lat. 71° 20' S, long. 68° 17' W). From these three localities (Fig. 1) much of the Antarctic Peninsula aeromagnetic flight network (Fig. 6) was completed. However, mainland areas to the north and south, and the seaward edges of the continental shelves were beyond the survey capability of the aircraft. (The Twin Otter aircraft in Antarctic service has a maximum range of 1500 km). Fortunately, additional fuelling facilities and hospitality have been generously provided by Chile at Teniente Rodolfo Marsh (lat. 62° 12′ S, long. 58° 54′ W), by Argentina at Vicecomodoro Marambio (lat. 64° 14' S, long. 56° 37′ W), the USA at the temporary field camp (lat. 75° 17′ S, long. 69° 55′ W) in the Sweeney Mountains, and the USSR at Druzhnaya (lat. 77° 31′ S, long. 40° 11′ W). This has made it possible for most of the mainland areas to be overflown, although much of the continental shelf, particularly on the east coast, is still too distant for systematic flight networks.,

The severe topography of the region precludes contour flying so constant barometric altitudes are maintained instead. On the majority of regional flights, an altitude of 2500 m above sea level was chosen but occasional deviations from this have been dictated for safety reasons. Three of the offshore flights off the northern end of Graham Land were flown at lower altitudes. A flight line separation of 15–20 km was advised, but this also was periodically revised to accommodate aircraft range, fuel availability and distance from emergency landing sites. Predictably, the weather frequently shortened sorties, especially over northern Graham Land, where flying conditions can deteriorate with alarming rapidity.

Throughout the aeromagnetic surveys, diurnal variation was monitored at the BAS geomagnetic observatories at Faraday (lat. 65° 15′ S, long. 64° 16′ W) and Halley (lat. 75° 31′ S, long. 26° 42′ W). Since 1979, a Geometrics G-826A portable base station magnetometer has been used in the immediate survey area to strengthen diurnal control. On only one occasion has magnetic storm activity grounded aeromagnetic operations.

3. Data processing

Data were sampled at one-second intervals, which, at a ground speed of 120 knots, equates to a field reading every 62 m. With over 95% successful recovery in digital format, few analogue profiles required digitization to complete the data set. Subsequent computer processing of the raw profile data to obtain residual magnetic anomalies involved several elements:

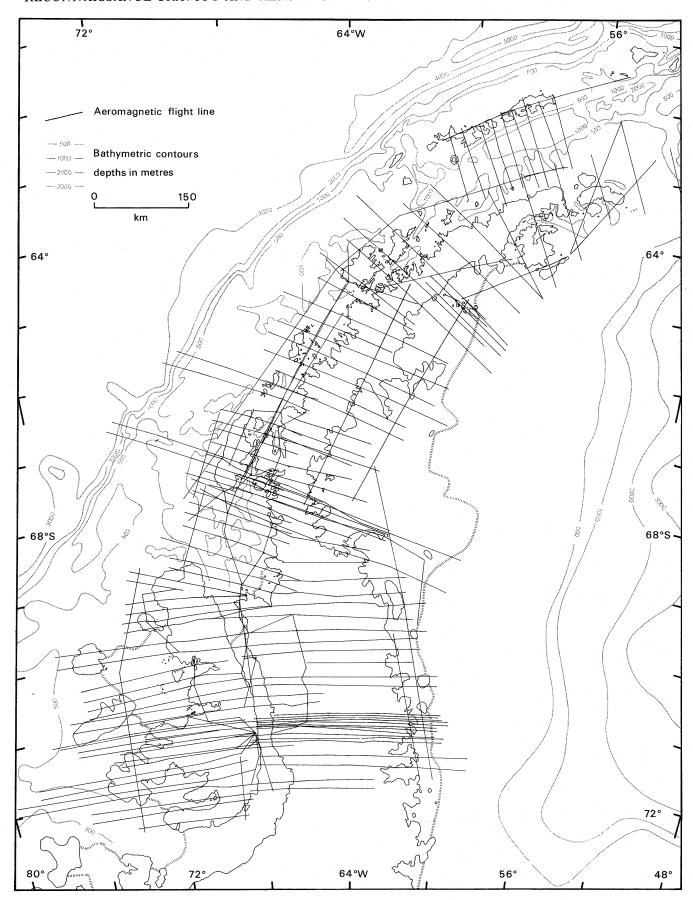


Fig. 6. Reconnaissance aeromagnetic flight line network 1973-84.

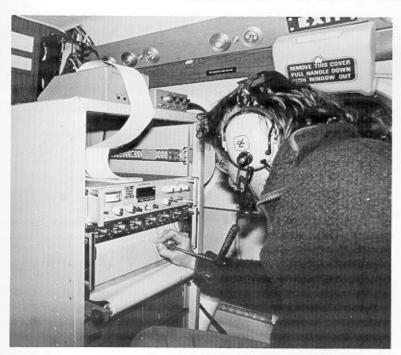


Fig. 7. Aeromagnetic recording equipment installed in BAS Twin Otter aircraft 1983–84.

a. Filtering. High frequency noise and spikes due to interference from the aircraft avionics were removed by the application of a low-pass digital filter. A best fit cubic spline was calculated for successive groups of five data points, and erroneous values adjusted or rejected depending on their relation to the curve. The minimum full period of anomalies remaining after application of the filter was 40s in time, which effectively removed short-wavelength anomalies due to local near-surface sources.

b. Removal of diurnal variations. Diurnal variation corrections were applied where necessary using the values either from the BAS geomagnetic observatories or from the portable base station magnetometer. Typical diurnal profiles had maximum amplitudes approaching 50 nT.

c. Removal of the International Geomagnetic Reference Field (IGRF). The 1980 IGRF (Barraclough, 1981) was used to calculate the global component of the earth's magnetic field by applying the coefficients for the appropriate epoch to the latitude and longitude of each data point (Malin and Barraclough, 1981). The mean magnetic residual for the whole dataset is -45 nT, suggesting that the model is representative of the regional field over the Antarctic Peninsula. At latitude 66° S, longitude 64° W a datum value of 41 887 nT was calculated for epoch 1984.0 with a regional increase of 6.95 nT per km southward and 4.1 nT per km westward.

In order to transcribe the resulting residual aeromagnetic profiles into a computed contour map, residual magnetic values were selected at 10 second time intervals and used to produce a pseudo-magnetic grid. For this, a square grid of points 3 km apart was superimposed on the area and the space around each point divided into octants. Each octant was searched for the closest approach of a flight line to the grid point, up to a

maximum search radius of 300 km. The magnetic field for each point was then assigned a value derived from the weighted average of the values taken from the octants surrounding the point, the weighting being inversely proportional to the distance of the flight line from the point in question. The values on the pseudo-magnetic grid were smoothed by several passes of a normalized convolution matrix, the minimum wavelength of features remaining after this filtering being of the order of 7 km. The gridded set of smoothed values was then contoured at a 25-nT interval on a 1:500 000 scale for direct comparison with the geological maps Series BAS 500G, and at a 50-nT interval on a 1:1500 000 scale (Aeromagnetic anomaly map—back pocket).

Comparison of representative (Fig. 8) observed profiles with equivalent sections constructed from the aeromagnetic contour map indicates an encouraging correlation of long-wavelength features (Fig. 9).

B. THE REGIONAL AEROMAGNETIC ANOMALY MAP

An inspection of the 1:1500000 contour map (Aeromagnetic anomaly map—back pocket) identifies several areas of contrasting magnetic character. Some of these relate to known tectonic and geological provinces whilst others suggest concealed and, as yet, unresolved structures.

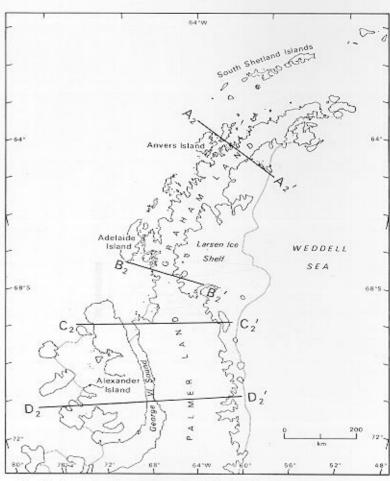


Fig. 8. Location of aeromagnetic profiles A2A2, B2B2, C2C2, D2D2.

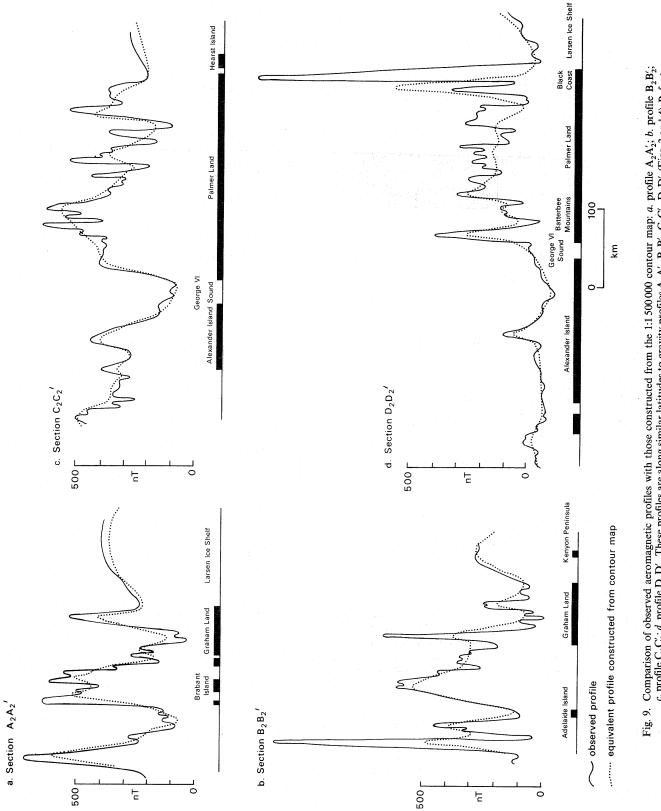


Fig. 9. Comparison of observed aeromagnetic profiles with those constructed from the 1:1500000 contour map: a. profile A₂A'₂; b. profile B₂B'₂; c. profile C₂C'₂; d. profile D₂D'₂. These profiles are along similar latitudes to gravity profiles A₁A'₁, B₁B'₁, C₁C'₁, D₁D'₁ (Figs. 3 and 4), Refer to Fig. 8 for profile locations.)

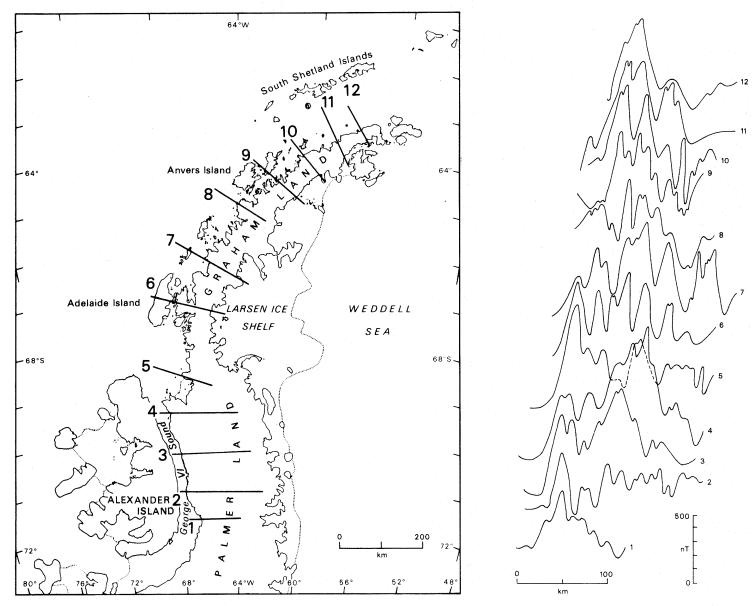


Fig. 10. Individual flight profiles illustrating the west coast anomaly.

1. West coast anomaly

The most notable magnetic feature consists of a belt of linear anomalies (Fig. 10) with moderate wavelength (20 km) and amplitudes of 200–600 nT, which is superimposed upon an extensive, positive magnetic 'spine' 80–120 km wide. This has previously been identified (Renner and others, 1982) but data acquired subsequently suggests that a directional change of magnetic strike divides the anomaly into complementary halves.

Over western Palmer Land the anomaly trends north—south and can be traced for at least 500 km. Its western boundary is strongly correlated with the eastern shores of George VI Sound (Fig. 11). One of the smaller anomalies (Fig. 9d) in the Batterbee Mountains is coincident with an observed gravity high (Fig. 4d). North of mainland Palmer Land, the anomaly crosses the coast and embraces Wordie Ice Shelf, continuing north in association with Marguerite Bay and the west coast island archipelago. Approaching latitude 67° S, the anomaly broadens

eastwards but then its strong southern expression wanes to the north of Adelaide Island. However, it is still present and may be followed for a further 800 km parallel to Graham Land before it is lost because of a diminution of amplitudes and paucity of flight profiles. Despite the changing style and position relative to the mainland (Figs. 10, 12) there is an apparent continuity of the west coast anomaly, which suggests a common origin for its source.

Marine magnetic profiles recovered from the Scotia arc indicate that a magnetic signature similar to that observed along the west coast is found on the continental areas of the south Scotia Ridge (Watters, 1971) and South Georgia (Simpson and Griffiths, 1982). To the south of latitude 72° S, the systematic aeromagnetic flight cover ceases. Consequently, the west coast anomaly is unmapped there. However, evidence from a single unpublished flight line across southern Palmer Land suggests that, south of the Batterbee Mountains, the anomaly may deviate inland and veer towards the east coast.

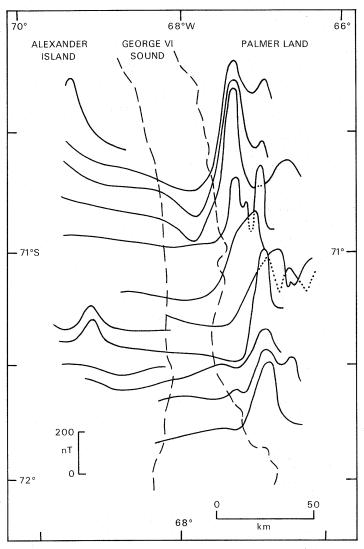


Fig. 11. Observed aeromagnetic profiles across George VI Sound.

2. Graham Land

North of latitude 67°S the Graham Land plateau is associated with a negative anomaly of 200 nT amplitude and wavelength approaching 60 km. Superposed on this and particularly along the eastern limits are local magnetic anomalies with amplitudes of several hundred nanoteslas.

3. James Ross Island and Larsen Ice Shelf

An extensive area of low magnetic gradient is coincident with James Ross Island and much of the Larsen Ice Shelf. Long wavelength, low amplitude (100 nT) anomalies typify the pattern whose subdued character is detectable to the eastern limit of the flight network. The magnetic calm is broken only by occasional high-amplitude, short-wavelength anomalies, believed to be associated with volcanic rocks that crop out on James Ross Island.

The processing of data from the regional flight network has filtered out the short-wavelength, high-amplitude anomalies known from oversnow traverses to be associated with the olivine basalts at Seal Nunataks (Renner, 1980). However, the observed aeromagnetic profiles flown at 2500 m reveal

anomalies of 100-nT amplitude coincident with the outcrops. A more detailed aeromagnetic flight network, which was commenced over Seal Nunataks in 1979–80 at altitudes down to 500 m, recorded anomalies of 550 nT amplitude and 7-km wavelength. These correspond to anomalies of 6000 nT-amplitude and 3-km wavelength measured during the surface traverses.

4. Alexander Island and George VI Sound

Magnetically placid conditions exist over Alexander Island but this situation is modified over central and northern George VI Sound by a major, linear negative magnetic feature. It registers for 350 km north from latitude 71° S, has a width of 50 km and reaches a minimum of $-400\,\mathrm{nT}$. To the east it abuts (Fig. 11) against the magnetically contrasting Palmer Land while to the west it is constrained by a line coincident with the mountainous eastern scarp of the LeMay Range and Douglas Range. Two relatively large positive anomalies are associated with Charcot Island and the Ronne Entrance with amplitudes reaching 450 nT and wavelengths approaching 50 km.

5. Palmer Land-Black Coast

Along the Black Coast of south-east Palmer Land lies a north-south-aligned cluster of intense positive magnetic anomalies with peak-to-peak amplitudes on profiles reaching 2000 nT and wavelengths averaging 20 km. Two large anomalies picked up during the US Naval Oceanographic Office Project Magnet flights and tentatively positioned to Matheson Glacier and Odom Inlet (Renner, 1980) may correlate with members of this group.

6. Bransfield Strait

The southern portion of Bransfield Strait is bordered by the Antarctic Peninsula west coast anomaly. A zone of negative anomalies is sandwiched between this and the South Shetland Islands (Aeromagnetic anomaly map—back pocket); Roach (1978) interpreted this magnetic grain as due to strips of semi-oceanic crust with reversed magnetic polarity. Within and stretching north-east from the volcanically active Deception Island there is a series of positive anomalies corresponding to submarine seamounts that are considered to represent centres of volcanicity. The western limit of the aeromagnetic survey coincides with the onset of a major positive anomaly identified and interpreted from marine geophysical surveys (Griffiths and others, 1964).

C. QUALITATIVE DISCUSSION OF THE MAJOR MAGNETIC PROVINCES

Inspection of the Antarctic Peninsula reconnaissance Aeromagnetic anomaly map (back pocket) discloses magnetic trends that may influence our understanding of the regional tectonics. One important trend concerns the contour inflection between Palmer Land and Graham Land. The geographical division between the two is defined by a line from Cape Jeremy to Cape Agassiz, which coincides with an obvious topographical discontinuity. Geological evidence for a structural change is found on the east coast around latitude 69° S, where major block faults (Fraser and Grimley, 1972) strike parallel to the regional geophysical contours. In contrast, the west coast magnetic anomaly remains uniform as far as lat.

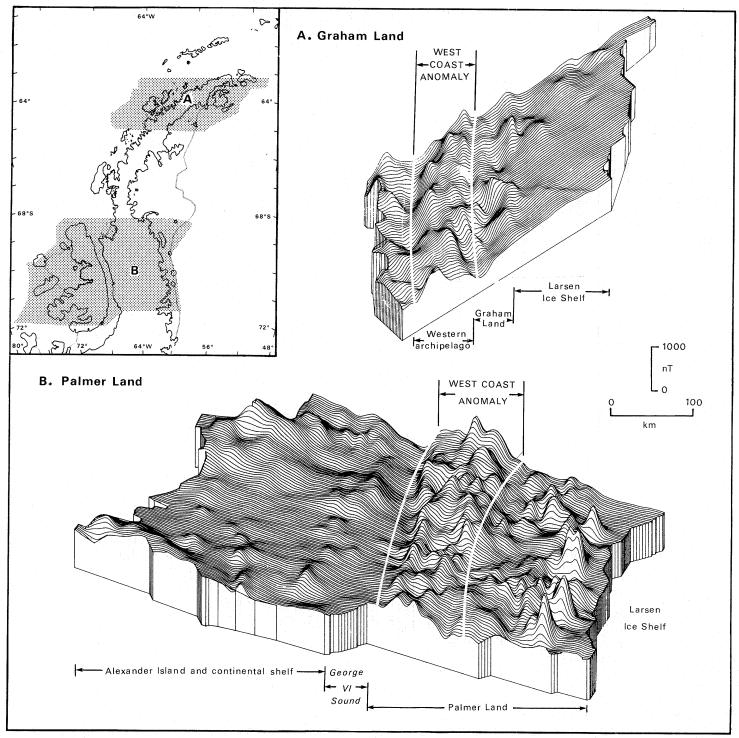


Fig. 12. Isometric plots illustrating the west coast magnetic anomaly: A. Graham Land viewed from the south-west; B. Palmer Land viewed from the

68° S. At this latitude the north-south orientation changes to a north-east-south-west trend, with associated regional faulting mirroring the change. The most significant break in the anomaly pattern occurs at lat. 66° S where the west coast magnetic anomaly apparently becomes narrower. Oblique isometric views of the contoured pseudo-magnetic grid (Fig. 12) illustrate the different style of the west coast anomaly on either side of these disconformities. Adjacent to Graham Land it is less

than 70 km in width; Fig. 10, profiles 8–12) and is flanked to the east by the magnetic low over Graham Land and flat magnetic signature of the Larsen Ice Shelf. In contrast, over Palmer Land the west coast anomaly exceeds 100 km in width (Fig. 10, profiles 2–5), and is flanked to the west by the abrupt margin of George VI Sound and to the east by the chain of anomalies over the Black Coast.

The west coast magnetic anomaly shows no obvious

correlation with the geology of outcrops, which consist of a large number of Mesozoic plutons of diverse composition emplaced in metamorphic rocks and members of the Antarctic Peninsula Volcanic Group. Preliminary estimates of the depth to the top of the source bodies in Palmer Land, by means of curve-measuring techniques (Åm, 1972), give values of 2-5 km below sea-level, whilst the wavelength of the whole suggests a parent body extending to considerable depth. Renner and others (1982) suggested that the west coast anomaly represents a linear composite intrusion of basic or intermediate-to-basic composition. Should this be so, it may be associated with pre-Mesozoic, subduction-related, magmatic activity (Smellie, 1981) or part of the Mesozoic-Cenozoic magmatic arc (Storey and Garrett, 1985). To the west of Graham Land, the suite of intrusions underlying the anomaly show common, mantlederived, primary-banded gabbros representing the earliest members of the sequence of Mesozoic-Cenozoic plutons. These indicate a deep source magma, which could generate a magnetic anomaly comparable with that measured. In Palmer Land and in the area bordering Marguerite Bay geological relationships are more obscure, although outcropping basic plutons may reflect a concentration of basic rocks at depth. Perhaps the strongest correlation with surface geology lies on the eastern coast of George VI Sound (Rowe, 1973; Skinner, 1973) where recent field work (S. M. Harrison, personal communication) has demonstrated several large gabbroic plutons outcropping in areas where magnetic gradients and amplitudes are greatest. At three localities, contact relationships suggest that the plutons are of Mesozoic-Cenozoic age. However, correlation of the west coast magnetic profiles with those of similar signature around the Scotia arc could imply that the origin of the anomaly predates Mesozoic subduction activity.

The quiet magnetic character of the Graham Land plateau corresponds to outcrops of the sedimentary Trinity Peninsula

Group. Only signatures associated with plutonic bodies of limited extent interrupt the otherwise minor magnetic perturbations. Aeromagnetic profiles recovered east of Trinity Peninsula strengthen the proposal of the existence of a major Mesozoic sedimentary basin that extended north of Seal Nunataks (Farquharson, 1982). Observed long-wavelength aeromagnetic anomalies could be explained by sediments of 10-km thickness. Similar sedimentary thicknesses are indicated from the magnetic profiles over the Kenyon Peninsula area, where Jurassic-Cretaceous sediments are known to crop out and have major fault control (Fraser and Grimley, 1972).

George VI Sound is a spectacular structural feature though its origin remains enigmatic. Water depths approaching 900 m have been recorded during the gravity and seismic depth-to-bedrock soundings and an emphatic geophysical break at the Palmer Land coast is apparent from the strong magnetic discontinuity (Fig. 11). The low magnetic gradients observed over George VI Sound extend into eastern Alexander Island, where Jurassic and Lower Cretaceous block-faulted fore-arc basin sediments are exposed. The continuity and grain of the residual magnetic field over George VI Sound and eastern Alexander Island upholds the proposal that a graben structure is responsible for preserving a thick sedimentary sequence.

With the exception of the magnetic anomalies of an unresolved deep origin associated with Charcot Island and the Ronne Entrance, the remainder of Alexander Island shows minimal magnetic excitement with anomalies rarely in excess of 100-nT amplitude or 10-km wavelength. Local areas of slight enhancement correlate with either the known igneous intrusions at Staccato Peaks (Crawford and others, in press), Rouen Mountains, Elgar Uplands and Walton Mountains or suspected volcanic horizons. Otherwise, the featureless magnetic signature extends to the west over the adjacent continental shelf.

V. SUMMARY

The results of 25 years of gravity survey and 10 years of aeromagnetic investigations over the Antarctic Peninsula are presented in tabular and graphical form. These data contribute to the understanding of the geology of the region, even though some areas are not well covered.

Automated interpretation of the major negative Bouguer anomaly underlying the longitudinal axis of the Antarctic Peninsula can be explained by crustal thickening. Thicknesses approaching 35 km can be expected, shelving rapidly towards the east coast. Less pronounced crustal thickening under Alexander Island is also proposed. A thinner crust beneath northern George VI Sound may be part of a wider tectonic scheme through which this graben-like structure originated.

The west coast magnetic anomaly, resembling a linear magnetic massif, dominates the residual field almost throughout western Palmer Land and offshore to the west of Graham Land. Its origin is arguable but may relate to subduction processes. Individual anomalies within the parent body may be explained by a series of basic or basic-to-intermediate plutonic bodies, united at depth. Apparent magnetic disconformities at 68° S and 66° S are also indicated

by the inflection of the coastline, fault lines and Bouguer anomaly contours.

Palmer Land displays a strong north—south tectonic trend exemplified by the west coast anomaly, which, on crossing Marguerite Bay, breaches the western half of Palmer Land before presenting a formidable magnetic front to the graben structure of George VI Sound. A linear regional gravity high, extending north from the Batterbee Mountains, may be genetically related to the anomaly.

The Graham Land plateau exhibits a negative anomaly ruffled only by superimposed local magnetic features. To the east, gentle magnetic gradients indicate a major sedimentary basin, which encompasses James Ross Island. In contrast, to the west, a strong magnetic and gravity regime over the Bransfield Strait is characteristic of a marginal basin floored by semi-oceanic crust.

Along the Black Coast, on the south-east coast of Palmer Land, a cluster of high-amplitude magnetic anomalies are revealed, which must be generated by near-surface bodies rich in ferromagnetic minerals.

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Much of the recent success of the aeromagnetic surveys must be attributed to the redevelopment of the airborne data acquisition system. The responsibility for this has been shouldered by J. T. E. Turton and we have been fortunate to have his technical expertise, in both the field and laboratory. The responsibility for the aeromagnetic data processing was entrusted to Rebbeck Hunter Ltd who have provided a most professional service. We also acknowledge gratefully the assistance given by R. D. Crabtree during the gravity data base compilation.

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Finally to Gill Tew, who typed the manuscript, and to A. C. Sylvester, who prepared the illustrations, we say an unqualified thank you.

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APPENDIX 1

Station listing of all Antarctic Peninsula on-rock gravity measurements by BAS (1959-84).

Station	Latit	uđe ^O S	Longit	ude ^O W	Height	Absolute	Theoretical	Free-air	Terrai	n Bouguer	Station	Latit	uđe ^O S	Longi	tuđe ^O W	Height	Absolute	Theoretical	Pree-air	Terrain	Bouquer	
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.		Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu	
	- 4		27	41 0		0015331	0014000	1110		1110	-,											
1 2	54 54	0.1	37 38	41.8	0.0	9815321 9815536	9814209 9814212	1112 1324		1112 1324	51 52	62 62	5.1	58 57	23.6	18.3	9821907	9820771	1192		1172	
3	54	0.4	37	34.2	0.0	9815250	9814214	1036		1036			6.1		55.0	0.0	9821876	9820784	1092		1092	
4	54	0.8	37	26.9	0.0	9815079	9814220	859		859	53 54	62 62	6.2	58 58	20.9 56.4	0.0	9821921 9822226	9820785 9820878	1136		1136 1348	
5	54	1.5	37	57.8	0.0	9815526	9814230	1296		1296	55	62	20.9	59	7.2	0.0	9822317	9820968	1348 1349		1348	
6	54	3.0	37	8.4	0.0	9815023	9814251	772		772	56	62	22.8	59	42.0	0.0	9822122	9820992	1130		1130	
7	54	8.0	36	41.2	0.0	9815018	9814323	695		695	57	62	26.6	59	43.8	0.0	9822188	9821039	1149		1149	
8	54	9.3	36	42.5	0.0	9815012	9814342	670		670	58	62	26.8	59	23.8	0.0	9822331	9821042	1289		1289	
9	54	10.4	36	42.6	0.0	9815069	9814357	712		712	59	62	27.7	60	48.6	0.0	9822169	9821053	1116		1116	
10	54	17.0	36	29.6	2.7	9815241	9814452	797		794	60	62	32.6	60	1.3	0.0	9822321	9821114	1207		1207	
11	54	17.1	36	29.6	0.0	9815213	9814453	760		760	61	62	36.4	59	49.0	4.0	9822450	9821161	1302		1297	
12	54	17.8	36	17.2	0.0	9815213	9814463	750		750	62	62	38.2	61	8.7	2.0	9822193	9821183	1016	0	1016	
13	54	19.7	36	29.2	0.0	9815231	9814491	740		740	63	62	41.4	60	51.6	0.0	9822493	9821222	1271		1271	
14	54	30.3	36	4.4	0.0	9815660	9814642	1018		1018	64	62	42.2	60	25.6	0.0	9822263	9821232	1031		1031	
15	5.4	30.7	36	36.5	0.0	9815972	9814648	1324		1324	65	62	56.1	60	35.7	0.0	9822199	9821403	796		796	
16	54	36.8	35	56.1	0.0	9815794	9814735	1059		1059	66	62	57.6	60	36.0	0.0	9822275	9821421	854		854	
17	5.4	49.9	36	0.2	0.0	9816571	9814921	1650		1650	67	62	58.5	60	42.1	9.0	9822226	9821432	821		811	
18	55	1.9	34	39.8	0.0	9817107	9815092	2015		2015	68	62	58.6	56	28.4	0.0	9822392	9821434	958		958	
19	56	16.5	27	32.9	4.0	9818443	9816142	2313		2309	69	62	58.7	60	33.7	0.0	9822223	9821435	788		788	
20	56	40.2	28	8.0	0.0	9818366	9816472	1894		1894	70	62	59.8	60	34.9	0.0	9822271	9821448	823		823	
21	56	40.5	27	9.4	4.0	9818475	9816476	2011		2007	71	63	0.4	55	50.5	0.0	9822199	9821456	743		743	
22	57	4.4	26	42.7	0.0	9818853	9816807	2046		2046	72	63	2.0	56	50.3	0.0	9822312	9821475	837		837	
23	57	5.0	26	47.6	4.0	9818951	9816815	2148		2144	73	63	5.6	55	10.2	0.0	9822336	9821519	817		817	
24	57	5.4	26	47.0	4.0	9818959	9816820	2151		2146	74	63	7.6	55	31.2	0.0	9822312	9821544	768		768	
25	60	36.4	46	1.5	0.0	9821481	9819643	1838		1838	75	63	10.3	56	41.5	0.0	9822414	9821577	837		837	
26	60	38.6	45	12.0	0.0	9821403	9819671	1732		1732	76	63	11.8	57	17.6	0.0	9822470	9821595	875		875	
27	60	40.5	44	40.7	0.0	9821461	9819696	1765		1765	77	63	17.7	56	29.0	0.0	9822407	9821667	740		740	
28	60	41.1	44	35.9	0.0	9821460	9819703	1757		1757	78	63	17.9	58	39.5	0.0	9822590	9821669	921		921	
29	60	42.5	45	35.6	25.0	9821354	9819722	1710		1682	79	63	18.2	57	52.8	0.0	9822408	9821673	735		735	
30	60	42.6	45	35.7	4.0	9821392	9819723	1682		1677	80	63	24.0	56	58.8	3.0	9822525	9821743	791	16	804	
31	60	43.1	44	26.5	0.0	9821502	9819729	1773		1773	81	6.3	24.2	56	59.1	46.0	9822451	9821745	848	16	812	
32	60	43.6	4.5	35.0	0.0	9821387	9819736	1651		1651	82	63	24.5	54	40.1	0.0	9822602	9821749	853		853	
33	60	44.2	44	43.9	5.0	9821519	9819743	1791		1785	83	63	28.8	56	13.3	64.8	9822189	9821801	588		515	
34	60	44.3	44	59.3	0.0	9821476	9819745	1731		1731	84	63	28.9	59	45.4	0.0	9822783	9821802	981		981	
35	60	44.7	45	8.3	3.0	9821393	9819750	1652		1649	85	63	30.7	58	44.8	0.0	9822667	9821824	843		843	
36	60	46.2	44	32.3	0.0	9821475	9819769	1706		1706	86	63	32.1	56	43.3	0.0	9822424	9821841	583		583	
37	61	5.9	54	51.7	0.0	9821093	9820022	1071		1071	87	63	32.6	57	22.4	13.5	9822497	9821847	692	7	684	
38	61	7.8	55	27.0	1.0	9821053	9820046	1010	80	1089	88	63	32.8	58	57.0	0.0	9822599	9821849	750		750	
39	61	9.5	54	54.0	0.0	9821138	9820068	1070		1070	89	63	34.5	55	46.3	0.0	9822488	9821870	618		618	
40	61	10.5	55	23.8	1.0	9821248	9820081	1170	50	1220	90	63	37.8	57	35.9	0.0	9822586	9821910	676	3	679	
41	61	14.6	55	20.5	1.0	9821492	9820133	1362	0	1361	91	63	38.0	59	1.8	0.0	9822514	9821912	602		602	
42	61	16.7	55	13.2	1.0	9821705	9820160	1548	- 5	1553	92	63	38.2	57	24.4	0.0	9822459	9821914	545		545	
43		17.1	55	13.8	0.0	9821719	9820165	1554		1554	93	63	39.1	57	17.4	0.0	9822437	9821925	512		512	
44	61	17.2	54	3.1	0.0	9821401	9820166	1235	0	1235	94	63	39.1	57	48.5	0.0	9822618	9821925	693	40	733	
45	61	18.8	54	5.7	1.0	9821412	9820187	1228	16	1244	95	63	39.3	57	6.1	0.0	9822480	9821928	552		552	
46	61	30.0	55	28.2	0.0	9822160	9820329	1831		1831	96	63	39.4	5.7	49.1	0.0	9822585	9821929	656	40	696	
47	61	53.5	57	41.3	0.0	9821680	9820626	1054		1054	97	63	40.5	57	38.3	0.0	9822548	9821942	606	4	610	
48	61	55.9	58	23.6	0.0	9821807	9820656	1151		1151	98	63	40.7	60	46.2	0.0	9822819	9821944	875		875	
49	62	1.6	57	35.7	0.0	9821776	9820728	1048		1048	99	63	40.8	57	49.2	0.0	9822560	9821946	614	44	658	
50	62	5.0	58	23.6	9.0	9821930	9820770	1188		1178	100	63	43.6	61	38.3	0.0	9822681	9821979	702		702	

Stat			ıde ^O S	Longit	uđe ^O W	Height	Absolute	Theoretical	Free-air	Terrair	Bouguer	Station	Latit	uđe ^O S	Long i	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer	
Numb	er	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
							gu	gu	gu	gu	gu							gu	gu	gu	gu	gu	
	01	63	45.2	58	16.6	61.0	9822526	9821999	716	44	691	151	64	3.9	58	25.4	0.0	9822665	9822222	443	56	499	
	02	63	45.5	58	11.1	0.0	9822695	9822002	693	44	737	152	64	4.1	58	24.6	2.0	9822699	9822225	481		478	
	03	63	46.5	59	50.2	0.0	9822626	9822014	612		612	153	64	4.1	60	45.7	0.0	9822636	9822224	412		412	
	04	63	46.8	57	46.2	0.0	9822585	9822018	567	1	568	154	64	4.4	58	26.5	2.0	9822604	9822375	382	12	392	
	05	63	48.0	57	48.9	1.0	9822608	9822033	578	5	582	155	64	4.5	61	57.7	0.0	9822631	9822229	402		402	
	06	63	48.1	57	52.5	1.0	9822616	9822045	574	5.0	573	156	64	4.6	58	20.0	198.0	9822261	9822229	643	4	425	
	07 08	63	48.6 48.6	57	57.7	1.0	9822589	9822040	552	10	561	157	64	4.6	58	23.3	56.0	9822608	9822231	549		487	
	09	63 63	50.1	59 58	23.6	0.0	9822658	9822039	619	•	619	158	64	4.7	58	14.6	71.0	9822626	9822232	613	10	543	
	10	63	50.2	57	56.5	2.0	9822630	9822057	573	3	576	159	64	5.4	58	24.1	64.0	9822699	9822240	656		584	
	11	63	50.7	58	23.1		9822607	9822059	554		551	160	64	5.5	58	26.9	0.0	9822636	9822242	394	10	404	
	12	63	51.2	57	55.4	0.0	9822631	9822064	567	19	586	161	64	6.1	58	25.0	1.0	9822714	9822249	468		467	
	13	63	51.7	57 57			9822615	9822071	544		544	162	64	6.2	62	6.8	0.0	9822719	9822249	470		470	
	14	63	52.5		57.6 29.7	0.0	9822636	9822077	559		558	163	64	6.6	58	1.5	105.0	9822547	9822255	617	10	509	
	15	63	52.8	59 58	11.5	0.0	9822634	9822086	548		548	164	6.4	6.7	58	23.0	70.0	9822677	9822256	637		558	
	16	63	53.2			0.0	9822634	9822090	544	29	573	165	64	6.7	58	24.4	2.0	9822831	9822256	581		579	
	17	63	53.7	60 58	47.1	0.0	9822807	9822094	713		713	166	64	6.8	58	26.5	3.0	9822682	9822257	434		431	
	18	63	54.1	61	9.7	0.0	9822620	9822149	471		471	167	64	7,7	58	7.3	48.0	9822674	9822268	554	10	500	
	19	63	54.5		23.4	0.0	9822855	9822105	750	7	750	168	64	7.8	58	18.1	7.0	9822832	9822269	585	2	579	
	20	63		58	17.8	0.0	9822581	9822110	471	8	479	169	64	7.8	58	24.2	4.0	9822738	9822269	481		477	
	21		54.7	58	8.7	0.0	9822626	9822149	477		477	170	64	8.0	62	37.9	0.0	9822723	9822271	452		452	
	22	63	55.4	58	3.0	150.0	9822305	9822121	64,7	10	489	171	64	8.5	58	26.1	3.0	9822726	9822281	454	3	454	
	23	63	55.6	58	18.5	2.0	9822538	9822124	420	5	423	172	64	8.8	58	19.9	2.0	9822741	9822281	467		464	
		63	55.8	58	7.3	79.0	9822437	9822126	555	15	481	173	64	9.0	60	57.7	0.0	9822651	9822283	368		368	
	24	63	56.8	58	6.2	84.0	9822438	9822138	559	10	475	174	64	9.1	58	9.4	2.0	9822712	9822284	434	15	447	
	25 26	63	57.0	58	3.8	151.0	9822283	9822140	609	15	455	175	64	10.7	61	39.0	24.3	9822887	9822303	659		632	
		63	57.1	58	19.2	2.0	9822543	9822152	397	10	404	176	64	10.7	61	39.1	0.0	9822944	9822303	641		641	
	27	63	57.7	57	58.3	251.0	9822023	9822149	650	10	378	177	64	11.5	58	24.7	4.0	9822736	9822313	435	10	441	
	28 29	63	57.7	58	9.1	160.0	9822311	9822149	656		477	178		13.1	58	10.1	3.0	9822831	9822332	508		505	
	29 30	63	57.8	58	19.2	2.0	9822540	9822156	390	10	397	179	64	14.1	56	37.2	196.0	9822334	9822343	596		376	
		63	57.9	58	14.6	1.0	9822647	9822151	499		498	180		15.9	61	58.6	0.0	9822910	9822364	546		546	
13		63	58.0	58	17.2	1.0	9822612	9822152	463	10	472	181		16.2	58	8.1	3.0	9822863	9822369	503	10	510	
13		63	58.8	61	49.6	6.0	9822617	9822161	474		468	182		16.8	63	9.3	0.0	9822896	9822375	521		521	
		63	58.9	58	6.8	122.0	9822373	9822163	586		450	183		18.2	62	57.0	0.0	9822921	9822392	529		529	
13		63	59.5	58	12.9	3.0	9822636	9822170	475	2	474	184		18.4	61	6.8	0.0	9822784	9822394	390		390	
13		63	59.9	57	57.4	366.0	9821806	9822175	760		351	185		19.0	62	57.1	0.0	9822927	9822401	526		526	
13		63	59.9	58	15.7	2.0	9822675	9822175	506		504	186		19.6	58	18.0	5.0	9822702	9822409	309	5	309	
13		64	0.0	58	19.2	0.0	9822667	9822176	491		491	187		19.7	62	59.2	0.0	9822931	9822409	522		522	
	39	64	0.1	58	19.2	2.0	9822595	9822177	424	_	422	188		20.0	63	9.6	0.0	9822788	9822413	375		375	
14		64	0.5	58	4.3	146.0	9822312	9822182	581	5	422	189		21.2	61	36.4	0.0	9823036	9822427	609		609	
14		64	0.7	61	27.8	0.0	9822938	9822184	754		754	190		23.4	58	13.4	2.0	9822897	9822454	450	10	457	
14		64 64	1.3	58	23.8	2.0	9822581	9822192	396	10	404	191		25.1	62	51.7	0.0	9822870	9822473	397		397	
14		64	2.6	62 58	34.6	0.0	9822844	9822202	642	_	642	192		25.3	62	17.2	0.0	9822947	9822475	472		472	
14		64	2.6	58 61	24.2 16.9	0.0	9822656 9822840	9822207	452	5	456	193	64	26.6	58	58.3	56.0	9822948	9822491	630	2	569	
14		64	2.7	58	9.9	316.0	9822840	9822207	633	_	633	194		29.3	58	1.7	7.0	9822986	9822476	531		524	
14		64	2.7	58	23.2	45.0	9821992	9822208 9822208	759 635	5 5	410 590	195		29.9	61	45.9	0.0	9822784	9822530	254		254	
14		64	3.4	58	8.3	325.0	9821967	9822216	752	3		196		31.0	62	53.3	0.0	9822936	9822542	394		394	
14		64	3.5	58	17.1	47.0	9822714	9822218	641		389	197		32.9	62	0.0	0.0	9822943	9822565	378		378	
14		64	3.5	58	20.7	274.0	9822226	9822217	854	5 10	593	198		33.5	62	43.2	0.0	9822975	9822572	403		403	
15		64	3.7	58		210.0	9822313	9822220	741	10	557 516	199		35.3	62	25.8	0.0	9822956	9822593	363		363	
		٠.	J.,	50	•••	~10.0	JULE 313	3022220	147		210	200	64	36.1	62	54.5	0.0	9823020	9822602	418		418	

Station	Latit	uđe ^O S	Longit	tuđe ^O W	Height	Absolute	Theoretical	Free-air	Terrair	Bouguer	Station	Latit	ude ^O S	Longit	uđe ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
	-					gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
											051		22.0		21.2	12.0	0022552	9823134	455	. 3	453
201		36.7	62	18.4	0.0	9822881	9822609	272		272	251		22.0	65	21.2	12.0 9.0	9823552 9823706	9823134	596	2	453 594
202	64	37.7	62	33.8	0.0	9822958	9822621	337		337	252	65 65	22.3	65 65	32.1 36.2	5.0	9823728	9823138	606	0	603
203	64	40.7	62	12.2	0.0	9822789	9822656	133		133	253		22.4	65	20.7	4.0	9823560	9823139	433	3	435
204	64	41.3	63	9.5	0.0	9823009	9822663	346		346	254			64	18.1	26.0	9823460	9823141	399	•	370
205	64	42.8	62	52.3	0.0	9823013	9822681	332		332	255 256	65 65	22.6	65	17.1	12.0	9823526	9823144	419	5	419
206	64	43.6	62	36.2	0.0	9823006	9822690	316		316							9823532	9823149	407	4	408
207	64	43.9	63	17.2	0.0	9823026	9822694	332		332	257	65	23.3	65 65	16.5 16.5	8.0 35.0	9823469	9823152	425	5	416
208	64	44.5	62	39.5	0.0	9822906	9822701	205		205	258	65	23.5	65	34.2	2.0	9823712	9823156	562	0	561
209	64	45.5	63	30.6	0.0	9823007	9822712	295		295	259	65	23.9	65	18.1	4.0	9823579	9823160	432	3	433
210	64	46.0	64	5.1	0.0	9823088	9822718	370		370	260	65	24.2				9823703	9823161	548	1	549
211	64	46.1	62	42.2	0.0	9822921	9822719	202		202	261	65	24.3	65	37.3	9.0	9823657	9823165	519	2	518
212	64	46.4	64	3.1	14.9	9823031	9822723	354		338	262	65	24.7	65 65	31.1	5.0	9823643	9823167	492	0	490
213	64	47.8	63	21.5	0.0	9823024	9822739	285	,	285	263	65	24.8	65	22.6	0.0	9823648	9823168	480	0	480
214	64	47.8	64	7.6	4.0	9823058	9822739	331	1	331 327	264	65	24.9	65	29.8		9823542	9823172	394	2	393
215	64	48.1	. 63	13.6	0.0	9823070	9822743	327		360	265	65	25.3	65	18.8	8.0 4.0	9823626	9823172	464	0	462
216	64	48.9	63	5.4	0.0	9823112	9822752	360		270	266	65	25.5	65	29.5		9823702	9823177	531	. 0	530
217	64	49.1	63	30.3	10.0	9823005	9822754	282		295	267	65	25.7	65	44.4	2.0	9823702	9823178	413	2	415
218	64	49.3	62	51.4	4.0	9823044	9822757	300		277	268		25.8	65	20.3	0.0 5.0	9823676	9823181	510	0	508
219	64	49.5	63	29.2	0.0	9823036	9822759	277			269	65	26.1	65	34.2			9823184	427	0	423
220	64	50.3	62	31.4	0.0	9822908	9822768	140		140	270	65	26.3	65	22.2	9.0	9823583	9823189	403	0	401
221	64	51.4	63	43.5	0.0	9823149	9822781	368		368	271	65	26.8	65	20.8	5.0	9823577	9823189	443	0	442
222	64	52.8	63	35.1	4.0	9823155	9822797	370		366	272	65	26.8	65	24.8	3.0	9823623 9823668	9823189	482	1	482
223	64	53.4	63	6.7	0.0	9823124	9822804	320		320	273	65	26.8	65	30.5	1.0			470	0	469
224	64	53.9	63	19.8	0.0	9823149	9822810	339		339	274	65	27.1	65	35.1	2.0	9823657	9823193 9823193	514	0	511
225	64	54.5	63	35.4	0.0	9823189	9822817	372		372	275	65	27.1	65	43.4	5.0	9823691	9823290	461	0	459
226	64	54.6	62	56.2	0.0	9823013	9822818	195		195	276	65		65	42.3	5.0	9823645			0	460
227	64	57.2	63	15.5	0.0	9823131	9822848	283		283	277	65	28.0	65	42.4	6.0	9823647	9823203	462 490	0	489
228	64	57.2	63	25.2	0.0	9823211	9822848	363		363	278	65	28.2	65	30.6	3.0	9823686	9823205 9823210	477	2	478
229	64	58.6	60	4.3	25.0	9823290	9822865	502		475	279	65		65	29.5	4.0	9823675	9823210		0	566
230	64	58.6	63	52.5	0.0	9823272	9822865	407		407	280	65		65	49.3	4.0	9823765	9823211	567	0	450
231	64	58.9	63	36.1	0.0	9823296	9822868	428		428	281	65		65	42.8	4.0	9823650	9823211	451 464	1	460
232	65	3.1	63	52.5	0.0	9823228	9822917	311		311	282	65		65	29.2	10.0	9823645	9823212	438	0	437
233	65	5.2	63	8.0	0.0	9822942	9822941	1		1	283	65		65	41.5	2.0	9823644	9823212	453	0	453
234	65	9.0	64	6.3	0.0	9823187	9822985	202	_	202	284	65		65	24.6	1.0	9823669	9823220	433	0	431
235	65	9.5	64	59.2	33.0	9823423	9822991	534	. 7	527	285		29.5	65	29.4	4.0 5.0	9823641 9823644	9823221	438	0	436
236	65		64.	8.5	0.0	9823330	9823001	329		329	286	65		65	31.1	5.0	9823646	9823228	433	. 0	431
237	65		64	19.0	0.0	9823490	9823022	468		468	287	65		65 61	27.9 43.5		9823350	9823259	909	13	625
238	65		64	4.7	3.0	9823431	9823023	417		414	288		32.9	62	40.1	687.0	9822018	9823264	874	31	137
239	65		64	20.5	0.0	9823492	9823024	468		468	289	65 65		62	30.2		9822328	9823269	978	71	353
240	65		64	12.3	0.0	9823366	9823036	330		330	290 291		34.6	62		703.0	9822016	9823278	907	49	169
241	65		64	13.5	0.0	9823390	9823043	347	_	347				62	24.8		9822494	9823292	766	154	353
242	65		65	8.7	13.0	9823455	9823045	450	, 3	448	292	65 65		62	21.0	507.0	9822707	9823293	978	49	460
243	65		64	16.1	0.0	9823404	9823048	356		356	293			62	16.5		9822817	9823296	960	46	484
244	65		64	17.7	0.0	9823390	9823048	342		342	294	65	36.1 36.1	62	20.1		9822751	9823296	940	43	445
245	65		64	15.3	9.0	9823392	9823051	369		359	295 296	65		62	38.2		9822028	9823296	782	73	112
246	65		64	15.4	7.3	9823396	9823051	368		360		65		66	50.2	3.0	9823767	9823296	465	4	468
247	65		64	15.6	0.0	9823402	9823054	348	2	348 437	297	65		64	59.7	0.0	9823666		353	-	353
248	65		65	3.2	25.0	9823426	9823058	446	2	413	298	65		66	5.1	3.0	9823745	9823314	441	0	439
249	65		64	7.6	0.0	9823481	9823068	413		468	299 300		37.7 37.8	62	11.3		9822977	9823315	801	44	432
250	65	21.7	65	21.7	1.0	9823593	9823131	465	3	408	300	05	31.8	02	11.3	309.0	30443/1	3023313	301		474

Statio		ude S Min	Longi Deg	tude W Min	Height m	Absolute Gravity	Theoretical Gravity	Free-air Anomaly		Bouguer Anomaly	Station Number	Latit Deg	ude S Min	Long i Deg	tude "W Min	Height m	Absolute Gravity	Theoretical Gravity	Free-air Anomaly	Terrair Corr.	n Bouguer Anomaly
Number	Deg	MIII	Deg	MIII		gu	gu	gu	gu	gu	Ndmber	beg	1111	beg			gu	gu	gu	gu	gu
301	65	37.9	62	25.9	525.0	9822642	9823316	946	20	379	351	66	42.9	67	47.9	425.0	9823494	9824043	763	28	315
302	65	38.0	62	7.0	181.0	9823426	9823317	667	40	505	352	66	45.0	67	45.3	260.0	9823817	9824066	553	22	285
303	65	38.0	62	18.9	443.0	9822792	9823317	842	84	430	353	66	49.3	66	37.3	0.0	9824478	9824113	365		365
304	65	38.1	62	37.0	808.0	9821850	9823318	1025	151	272	354	66	50.2	64	2.6	245.0	9823718	9824123	351	16	93
305	65	38.4	62	30.5	605.0	9822431	9823322	976	43	342	355	66	50.9	64	3.4	221.0	9823755	9824131	306	16	75
306	65	39.1	62	31.6	743.0	9822064	9823330	1027	80	276	356	66	52.2	66	47.4	5.0	9824499	9824145	370		364
307	65	39.8	62	33.8	780.0	9821993	9823338	1062	86	276	357	66	53.9	64	10.0	53.0	9824295	9824163	295	11	247
308	65	40.3	62	24.9	636.0	9822358	9823343	977	74	340	358	66	55.0	66	30.0	0.0	9824283	9824175	108		108
309	65	40.3	62	30.0	709.0	9822164	9823343	1009	27	242	359	67	7.4	68	14.3	681.5	9823128	9824310	921	39	197
310	65	40.7	62	23.3	581.0	9822485	9823348	930	59	339	360	67	7.5	68	9.4	846.5	9822765	9824311	1066	33	152
311	65	40.9	62	17.9	522.0	9822593	9823350	854	7	277	361	67	9.6	68	13.6	727.5	9823100	9824334	1011	22	219
312	65	40.9	62	28.0	661.0	9822313	9823350 9823351	1003	31	29 4 268	362	67	10.8	67	41.3	2.4	9824574	9824347 9824370	234 273		231 271
313 314	65 65	41.0 45.5	62 66	31.3	777.0 2.0	9822046 9823767	9823402	1093 371	45 0	370	363 364	67 67	12.9	67 67	34.0 48.1	1.5 4.9	9824638 9824685	9824373	327		322
315	65	45.8	66	10.8	5.0	9823718	9823402	328	0	326	365	67	13.3	68	14.5	703.5	9823228	9824374	1025	29	267
316	65	46.0	66	11.5	6.0	9823721	9823408	332	0	329	366		14.6	67	50.1	4.6	9824772	9824388	398		393
317	65	47.3	66	15.0	3.0	9823789	9823423	376	0	374	367		15.4	68	14.5	679.0	9823295	9824397	994	27	261
318	65	51.8	66	12.8	4.0	9823798	9823474	337	0	335	368	67	15.9	67	46.9	1.6	9824733	9824402	336		334
319	65	52.2	66	12.7	3.0	9823823	9823478	354	0	353	369	67	16.1	67	48.3	1.5	9824721	9824404	321		320
320	65	52.5	66	6.8	4.0	9823879	9823481	410	0	408	370	67	17.8	68	14.0	579.5	9823482	9824423	848	32	231
321	65	52.8	66	13.7	4.0	9823799	9823485	327	0	325	371	67	18.2	67	56.2	2.6	9824765	9824427	346		343
322	65	53.2	66	17.0	4.0	9823831	9823489	354	0	352	372	67	18.9	67	35.9	2.6	9824722	9824435	296		293
323	65	53.5	66	14.8	5.0	9823812	9823493	335	0	333	373	67	19.9	67	42.0	1.6	9824781	9824445	341		339
324	65	53.7	66	11.4	. 5.0	9823812	9823495	332	0	330	374	67	21.4	68	12.9	415.5	9823866	9824461	687	25	247
325	65	53.8	66	2.2	5.0	9823819	9823496	338	0	336	375	67	21.8	67	32.3	0.7	9824707	9824466	243		243
326	65	54.4	66	2.7	2.0	9823855	9823503	358	2	359	376	67	23.6	67	34.4	3.0	9824767	9824485	291		288
327	65	54.4	66	2.8	17.0	9823823	9823503	373	3	368	377	67	23.6	68	5.4	143.0	9824486	9824485	442		282
328	65	54.7	66	3.5	4.0	9823868	9823506	374	. 0	372	378	67	23.9	67	59.0	3.0	9824816	9824488	337		334
329	65	55.0	66	3.2	53.0	9823812	9823510	466	6	450	379	67	23.9	68	24.8	544.0	9823558	9824488	7.49		140
330	65	56.6	66	2.7	8.0	9823855	9823528	352	2,	351	380	67	24.0	68	16.9	304.0	9824086	9824489	535		195
331	65	57.0	66	0.8	3.0	9823866	9823532	343 317	2 2	344 313	381	67	24.5	67	57.7	175.0	9824427	9824495	472 506		277 303
332 333	66 66	0.1 3.8	66 66	10.2 34.7	15.0 0.0	9823838 9824037	9823567 9823609	428		428	382 383	67 67	24.6	68 68	3.8 32.4	181.0 696.0	9824443 9823209	9824496 9824497	860		81
334	66	8.0	65	47.0	0.0	9823982	9823656	326		326	384	67	25.1	67	35.7	3.2	9824773	9824501	282		278
335	66	9.1	62	40.5	351.0	9823344	9823668	759	8	374	385	67	25.4	67	55.5	3.0	9824799	9824504	304		301
336	66	15.5	66	59.3	1.0	9824170	9823740	434	0	433	386	67	26.7	67	37.1	9.8	9824764	9824518	276		265
337	66	15.7	67	8.1	4.0	9824270	9823742	541	5	544	387	67	26.8	67	54.8	1.6	9824829	9824519	315		313
338	66	17.4	67	12.0	2.0	9824262	9823761	507	0	507	388	67	26.8	68	43.0	623.0	9823365	9824519	768		71
339	66	18.6	67	8.2	2.0	9824166	9823774	398	0	397	389	67	27.0	67	58.2	160.0	9824430	9824522	402		223
340	66	19.7	67	7.7	0.0	9824189	9823786	403	2	405	390	67	27.6	67	56.3	1.5	9824810	9824528	287		285
341	66	21.0	62	54.8	336.0	9823877	9823801	1113	5	742	391	67	27.6	68	3.6	395.0	9823890	9824528	581		139
342	66	21.1	67	9.9	1.0	9824228	9823802	429	2	431	392	67	27.7	68	33.2	931.0	9822756	9824529	1100		58
343	66	23.8	67	9.4	15.0	9824141	9823832	355	. 3	352	393	67	28.0	68	3.9	399.0	9823802	9824532	501		55
344	66	25.2	67	9.6	2.0	9824224	9823847	383	0	382	394	67	28.2	67	38.7	3.3	9824811	9824534	287		283
345	66	25.8	67	17.2	1.0	9824296	9823854	445	0	445	395	67	28.6	67	57.6	2.0	9824848	9824539	315		313
346	66	25.9	67	12.9	20.0	9824268	9823855	475	4	470	396	67	28.8	68	24.3	443.0	9823720	9824541	546		51
347	66	26.6	67	15.3	7.0	9824292	9823863	451	2	450	397	67	29.0	68	16.6	419.0	9823851	9824543	601		132
348	66	26.6	67	19.4	1.0	9824354	9823863	494	1	495	398	67	29.5	67	2.6	9.1	9824552	9824548	32		22
349	66	36.6	67	36.3	0.0	9824396	9823974	422		422	399	67	29.5	67	37.3	4.0	9824867	9824548	331		327
350	66	40.6	62	28.0	281.0	9823993	9824018	843	6	534	400	67	29.5	68	42.0	780.0	9823131	9824548	990		117

Station	Lati	tuđe ^O	S Longi	tuđe ^O W	Height	Absolute	Theoretical	Free-air	Terrair	Bouguer	Station	Latit	ude ^o s	Longi	tuđe ^O W	Height	Absolute	Theoretical	Free-air	Terrair	Bouguer
Number	Deg			Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
401	67	29.9	67	31.4	4.9	9824751	9824553	214		208	451	67	36.7	68	40.2	936.0	9822909	9824625	1172		125
401	67			2.6	2.4	9824596	9824557	47		44	452	67	37.1	68	13.2	2.6	9824905	9824629	284		281
403	67			11.1	299.0	9824143	9824559	507		172	453		37.2	67	37.9	1.2	9824979	9824631	352		351
404	67			7.2	1.5	9824670	9824560	115		113	454	67	37.2	67	42.3	3.1	9825028	9824631	407		404
405	67			34.8	9.8	9824810	9824568	273		262	455	67		68	21.4	3.9	9824986	9824636	362		358
406	67			9.3	303.0	9824127	9824568	494		155	456	67	37.8	67	6.2	0.0	9824695	9824637	58		58
407		31.5		2.1	1.3	9824790	9824570	224		223	457	67	37.8	68	7.3	2.6	9825007	9824637	378		375
408	67			6.4	1.5	9824781	9824571	215		213	458	67	37.9	68	17.0	2.0	9824991	9824638	359		357
409	67	31.8	67	17.6	2.4	9824750	9824573	184		182	459	67	38.0	67	35.8	259.1	9824434	9824639	595		305
410	67	32.2	68	1.4	4.9	9824786	9824577	224		218	460	67	38.2	68	46.3	524.0	9823716	9824641	692		106
411	67	32.2	68	11.3	299.0	9824119	9824577	465		130	461	67	39.1	68	10.9	3.3	9825031	9824651	390		387
412	67	32.3	68	3.4	1.6	9824806	9824578	233		231	462	67	39.2	67	1.8	2.5	9824765	9824652	121	0	118
413	67	32.3	68	43.6	763.0	9823227	9824578	1003		150	463	67	39.2	68	34.8	772.0	9823319	9824652	1050		186
414	67	32.6	67	39.8	1.0	9824922	9824581	344		343	464	67	39.9	67	31.6	707.1	9823668	9824659	1191		400
415	67	32.7	67	11.6	2.8	9824793	9824583	219		216	465	67	40.0	68	44.8	437.0	9823982	9824660	670		181
416	67	32.8	6.7	47.5	3.7	9824869	9824584	297		293	466	67	40.2	67	38.9	54.9	9824925	9824662	432		371
417	67	33.0	68	8.9	230.0	9824304	9824586	428		171	467	67	40.2	68	29.3	186.0	9824485	9824662	397		188
418	67	33.1	67	14.1	0.0	9824737	9824587	150		150	468	67	40.6	67	12.1	0.0	9824712	9824667	45		45
419	67	33.4	67	37.3	2.4	9824910	9824590	327		325	469	6.7	40.6	68	40.4	771.0	9823324	9824667	1037		174
420	67	33.9	67	5.5	0.0	9824729	9824595	134		134	470	67	40.9	67	38.0	0.0	9825102	9824670	432		432
421	67	33.9	67	12.3	0.0	9824774	9824595	179		179	471	67	41.0	67	4.8	0.0	9824716	9824671	45		45
422	67	33.9	68	7.5	1.5	9824829	9824595	238		237	472	67	41.2	66	58.0	1.0	9824708	9824673	38	0	37
423	67	33.9	68	44.8	697.0	9823397	9824595	953		173	473	67	41.4	67	6.6	1.5	9824761	9824675	90		89
424	67	34.0	68	7.7	9.1	9824806	9824596	238		227	474	67	42.0	68	30.7	186.0	9824612	9824682	504		296
425	67	34.1	. 68	7.5	12.1	9824817	9824597	257		243	475	67	43.5	66	58.6	1.0	9824837	9824698	143	0	141
426	67	34.2	68	7.2	38.0	9824680	9824599	199		156	476	67	44.0	67	9.5	0.0	9824808	9824703	105	0	105
427	67	34.3	67	14.3	0.0	9824739	9824600	139		139	477	67	44.3	67	0.7	1.0	9824762	9824706	59	0	58
428	67	34.3	68	2.9	3.9	9824839	9824600	251		247	478	67	45.2	68	34.3	0.0	9825137	9824716	421		421
429	67	34.5	67	27.3	1.2	9824813	9824602	215		214	479	67	45.6	68	54.9	25.4	9825136	9824720	495		466
430	67	34.5	68	43.6	655.0	9823470	9824602	890		157	480	67	45.7	68	54.9	4.3	9825190	9824721	482		478
431	67	34.6	67	49.2	0.6	9824846	9824603	245		244	481	67	46.2	67	22.3	1.0	9824881	9824726	158	0	157
432	67	34.7	67	9.6	0.0	9824749	9824604	145		145	482	67	46.3	68	52.9	2.0	9825198	9824727	477		475
433	67	34.7	67	32.0	4.6	9824863	9824604	273		268	483	67	46.4	67	5.3	0.0	9824827	9824728	99	0	99
434	67	34.8	68	3.6	3.3	9824846	9824605	251		248	484	67	46.8	68	53.4	2.0	9825193	9824733	467		464
435	67	35.3	67	23.4	0.6	9824795	9824610	187		186	485	67	47.2	67	24.6	1.0	9824998	9824737	264	0	263
436	67	35.4	67	9.8	0.0	9824758	9824611	147		147	486	67	47.6	67	13.0	1.0	9824901	9824741	163	0	162
437	67	35.6	68	13.6	3.0	9824906	9824613	302		298	487	67	47.6	67	13.5	141.8	9824668	9824741	365		206
438	67	35.7	68	11.4	3.3	9824871	9824615	267		263	488	67	47.6	67	14.1	125.9	9824712	9824741	359		219
439	67	35.	68	12.5	2.0	9824867	9824615	259		256	489	67	47.6	67	14.5	56.3	9824843	9824741	276		213
440	67	35.7	68	19.3	4.6	9824925	9824615	325		319	490	67	47.8	67	12.9	197.5	9824529	9824743	395		174
441	67	35.8	68	10.4	1.3	9824824	9824616	212		211	491	67	47.9	67	13.4	258.1	9824417	9824744	469		180
442	67	35.9	67	30.7	1.2	9824921	9824617	308		307	492	67	48.0	67	13.5	251.1	9824450	9824745	480		199
443	67	35.9	68	11.6	4.9	9824857	9824617	255		250	493	67	48.0	67	14.3	0.6	9824976	9824745	233		232
444	67	36.1	. 68	14.5	1.6	9824915	9824619	301		299	494	67	48.3	67	14.8	0.6	9825002	9824748	255		255
445	67	36.4	68	10.4	1.6	9824891	9824622	274		272	495	67	48.4	67	13.6	182.7	9824615	9824750	429		225
446	67	36.4	68	44.6	553.0	9823699	9824622	784		165	496	67	48.5	67	14.7	74.0	9824855	9824751	333		250
447	67	36.5	67	20.5	0.0	9824765	9824623	142		142	497	67	48.5	67	15.5	2.6	9825034	9824751	291		289
448	67	36.6	67	35.0	1.2	9824928	9824624	308		306	498	67	48.6	67	16.8	7.6	9825026	9824752	298	0	289
449	67			22.9	2.3	9824920	9824624	303		300	499	67	48.6	67	17.3	52.3	9824920	9824752	330		271
450	67	36.	68	15.0	2.0	9824912	9824625	293		291	500	67	48.6	67	17.8	19.1	9824985	9824752	292		271

ber	Deg	Min	Deg	.uue w Min	mergiic m	Gravity	Theoretical Gravity	Anomaly	Corr.		Station Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomal
	,					gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
							0004553	205		202	551	£0	6.9	67	22.9	1.8	9825169	9824944	230		228
01		48.7	67	15.8	1.1	9825034	9824753	285		283	551 552	68 68	7.3	67	6.6	0.6	9825100	9824948	154	0	153
02	67	48.8	67	14.4	198.1	9824588	9824754	446		224	553	68	7.7	67	12.8	1.8	9825102	9824953	155	•	153
503	67	48.8	67	17.0	19.6	9824994	9824754	301		279	554	68	7.7	67	16.2	1.5	9825140	9824953	192		190
04	67	48.8	67	17.8	41.9	9824953	9824754	329		282	555	68	7.8	67	8.6	2.1	9825115	9824954	168		16
505	67	48.8	67	18.1	33.8	9824965	9824754	316		278				67	10.1	0.9	9825073	9824954	122		12
506	67	48.9	67	14.9	166.1	9824657	9824755	415		229	556	68	7.8				9825105	9824954	156		15
507	67	48.9	67	15.4	125.1	9824747	9824755	378		238	557	68	7.8	67	13.9	1.5	9825090	9824955	141	0	13
808	67	48.9	67	16.9	43.6	9824936	9824755	316		267	558	68	7.9	67	6.4	2.0			167	Ü	16
509	67	48.9	67	17.5	22.6	9824987	9824755	302		277	559	68	7.9	67	7.4	2.4	9825114	9824955	127		12
510	67	49.0	67	16.0	127.1	9824752	9824756	388		246	560	68	7.9	67	11.9	0.9	9825079	9824955			15
511	67	49.0	67	16.5	123.1	9824757	9824756	381		243	561	68	8.4	67	8.2	1.5	9825109	9824960	154 233		23
512	67	49.0	67	16.9	102.1	9824798	9824756	357		243	562	68	8.6	67	28.9	1.8	9825189	9824962			14
513	67	49.0	67	18.5	51.5	9824915	9824756	318		260	563	68	9.1	67	9.0	1.8	9825104	9824967	142		
514	67	49.1	.67	14.0	317.1	9824300	9824757	522		167	564	68	9.1	67	16.3	1.8	9825137	9824967	175		17
515	67	49.1	67	14.3	289.1	9824374	9824757	509		186	565	68	9.7	67	9.5	0.6	9825102	9824974	130		13
16	67	49.1	67	18.3	95.7	9824831	9824757	369		262	566	68	10.0	65	41.2	95.0	9824893	9824977	209		10
517	67	49.2	67	15.0	117.1	9824759	9824758	362		231	567	68	10.3	65	19.6	149.0	9824949	9824980	429		- 20
18	67	49.2	67	17.6	67.0	9824868	9824758	317		242	568	.68	10.4	67	10.8	3.1	9825107	9824981	136		13
19	67	49.2	67	18.9	93.4	9824832	9824758	362		258	569	68	10.6	67	11.9	1.8	9825134	9824983	157		1
20	67	49.2	67	19.4	65.7	9824869	9824758	314		240	570	68	10.7	67	15.5	1.5	9825173	9824984	194		1
21	67	49.3	67	15.8	120.1	9824750	9824759	362		227	571	68	10.9	67	15.0	1.5	9825168	9824986	187		1
22	67	49.3	67	19.1	60.6	9824872	9824759	300		232	572	68	11.1	66	59.8	15.7	9825094	9824988	154	12	1.
523	67	49.4	67	16.6	81.1	9824826	9824760	316		225	573	68	11.1	67	13.5	2.1	9825176	9824988	194		1
24	67	49.5	67	20.0	1.0	9825012	9824761	254	0	253	574	68	11.2	65	15.0	653.8	9823745	9824989	773		
25	67	51.1	66	52.1	0.0	9824897	9824778	119		119	575	68	11.3	67	2.9	0.0	9825136	9824990	146	0	1
26	67	51.6	68	40.5	0.0	9825259	9824783	476		476	576	68	11.6	67	5.9	5.0	9825171	9824993	193	0	1
527	67	52.4	66	52.4	0.0	9824884	9824792	92		92	577	68	12.2	67	5.7	2.0	9825195	9825000	202	0	1
28	67	52.8	66	49.7	0.0	9824904	9824796	108		108	578	68	12.8	64	56.7	145.0	9824807	9825006	249		
29	67	53.2	66	57.5	0.0	9824899	9824800	99		99	579	68	13.0	65	10.4	116.0	9824881	9825008	231		1
30.	67	53.6	67	22.9	0.9	9825020	9824804	218		217	580	68	13.0	66	57.4	2.0	9825103	9825008	101	0	
31	67	54.5	67	15.9	1.0	9824980	9824814	169	0	168	581	68	16.1	66	43.5	0.0	9825110	9825040	70	30	1
32	67	55.1	66	52.4	0.0	9824962	9824820	142	•	142	582	68	16.6	65	18.7	109.0	9824884	9825046	175		
33		55.3	66	59.3	0.0	9824952	9824822	130		130	583	68	21.8	65	10.8	86.0	9824977	9825100	143		
534	67	56.3	67	6.3	0.0	9824982	9824833	149		149	584	68	22.6	65	20.1	77.0	9824895	9825108	25		_
35	67		67	12.1	0.0	9825044	9824834	210		210	585	68	24.7	65	29.8	622.0	9823781	9825130	571		-1
		56.4			2.0	9825031	9824848	189	0	187	586	68	24.8	65	17.4	633.8	9823798	9825131	623		_
36	67	57.7	67	17.0		9825031	9824895	431	U	146	587	68	30.4	65	11.8	274.0	9824637	9825189	294		-
37	68	2.2	64	59.2	254.6			179		69	588	68		65	36.4	445.0	9823958	9825205	126		-3
38	68	3.1	65	32.9	98.0	9824781	9824904			148	589	68		65	23.3	181.0	9824636	9825209	-15		-2
39	68	3.2	67	12.1	1.5	9825051	9824905	150			590		33.6	65		551.5	9823618	9825222	98		-5
40	68	3.5	67	13.9	1.5	9825060	9824909	156		154	591	68	33.6	66	7.9	620.7	9823751	9825222	445		-2
41	68	4.7	67	11.9	1.5	9825048	9824921	131		130	592		35.6	66		813.9	9823574	9825242	844		
42	68	5.7	65	4.9	110.0	9824912	9824932	320		197							9823471	9825268			-1
43	68	5.7	65	41.2		9824787	9824932	189		68	593	68		66		833.2 240.0	9824821	9825279	774 283		
44	68	5.8	64	55.8	46.0	9825235	9824933	444		393	594		39.2					9825281	-12		
45	68	5.9	67	10.4	1.8	9825107	9824934	179		177	595		39.4	65	~.	443.5	9823900				
546	68	6.0	67	19.9	1.5	9825097	9824935	167		165	596		39.4	65		599.0	9823950	9825281	517		-1
547	68	6.4	67	22.0	1.2	9825126	9824939	191		189	597		41.1	67	32.3	3.0	9825578	9825299	289		2
48	68	6.6	67	8.4	1.2	9825111	9824941	174		172	598		41.8	64		110.0	9825292	9825306	326		2
549	68	6.6	67	18.0	1.5	9825096	9824941	160		158	599	68	43.9	66		809.1	9823739	9825327	909		
50	68	6.8	67	7.7	1.5	9825084	9824943	145		144	600	68	44.0	66	30.8	920.2	9823379	9825328	890		-

Statio	n Lati	tuđe	OS Long	gitud	e ^O W	Height	Absolute	Theoretical	Free-air	Terrais	Bouguer	Station	Latit	ude ^O S	Longi	tude ^O W He	eight	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number					Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
							gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
							0005010	0005333	251		110	651	60	7 0	6 E	54.0 205		9821061	9825570	1845		-459
601		44.				118.0	9825218	9825331	251		119 234	651 652	69 69	7.8 8.0	65 65	18.9 182		9821341	9825572	1408		-637
602	68					128.0	9825316	9825333	378		110	653	69	8.0	71	59.4 57		9824787	9825572	974		336
603	68					596.0	9824285	9825348 9825350	777 184		88	654	69	8.2	65	3.8 202		9821051	9825574	1711		-550
604	68				9.5	85.0	9825271 9824001	9825350	699		-43	655	69	8.2	71	51.9 63		9824557	9825574	949		236
605 606	68					663.6 934.0	9823312	9825350	845		-201	656	69	8.6	64	16.1 93		9823267	9825578	569		-475
607	68 68					304.0	9824805	9825352	391		51	657	69	9.2	71	20.0 97		9823594	9825584	1020		-71
608	68					691.6	9823910	9825354	690		-83	658	69	10.3	64	29.0 121		9822750	9825595	895		-461
609	68					974.5	9823169	9825377	799		-291	659	69	10.7	71	58.5 63		9824628	9825599	995		282
610	68					987.6	9823220	9825378	889		-216	660	69	11.2	64	49.6 165		9821683	9825604	1194		-661
611	68					763.6	9823582	9825385	553		-301	661	69	11.9	64	38.1 145		9822232	9825611	1099		-525
612	68					866.2	9823529	9825389	814		-156	662	69	12.6	64	50.6 172		9821674	9825618	1375		-554
613	68					776.0	9824001	9825393	1003		135	663	69	13.7	66	17.1 99		9823403	9825629	829		-279
614	68					1532.5	9822228	9825395	1563		-152	664	69	13.9	64	3.5 124		9822866	9825631	1089		-308
615	68					302.0	9824902	9825406	428		90	665	69	13.9	64	30.6 128		9822559	9825631	908		-535
616	68					688.0	9824033	9825408	748		-22	666	69	13.9	64	44.6 177		9821587	9825631	1434		-552
617	68					1604.9	9822142	9825408	1687		-109	667	69	14.3	64	48.5 178		9821539	9825635	1419		-581
618	68					222.5	9825023	9825408	302		53	668		14.3	66	13.3 104		9823262	9825635	846		-321
619	68					718.5	9823946	9825410	753		-51	669	69	14.5	64	53.7 200		9821001	9825637	1554		-690
620	68					1026.1	9823255	9825415	1007		-142	670	69	15.1	64	21.2 114		9822923	9825643	807		-472
621	68					195.1	9825115	9825416	301		83	671		15.5	65	38.8 169		9822006	9825647	1598		-302
622	68				2.9	7.6	9825672	9825420	275		267	672	69	15.6	64	48.8 196		9821186	9825648	1592		-603
623	68					556.3	9824364	9825424	657		34	673	69		63	23.6 74		9824164	9825649	822		-15
624	68					1622.7	9822055	9825426	1637		-179	674	69	16.1	64	27.3 126		9822608	9825653	870		-550
625	68					604.3	9824071	9825426	510		-167	675	69	16.3	71	12.3 100		9823601	9825655	1050		-76
626	. 68	3 53	.7 6	4 4		1659.8	9821974	9825427	1669		-188	676	69		65	28.1 181		9821849	9825658	1797		-236
627	68					399.9	9824621	9825429	426		-22	677	69	16.7	70	57.1 96		9823564	9825659	886		-195
628	68					306.2	9824892	9825429	408		65	678	69	17.2	66	3.8 109		9823238	9825664	957		-270
629	68					1780.9	9821547	9825434	1609		-384	679	69		64	38.5 203		9821055	9825667	1598		-654
630	68					1285.4	9822727	9825436	1258		-180	680	69	18.1	63	41.3 80	0.00	9823990	9825673	785		-110
631	68	3 55	. 2 6	6 3	31.3	643.1	9824028	9825442	570		-149	681	69	19.1	64	40.4 209	51.1	9821020	9825683	1666		-629
632	68					1467.4	9822486	9825445	1569		-73	682	69	19.1	65	40.4 170	07.7	9822016	9825683	1603		-308
633	68	3 55	.7 6	7	9.9	264.1	9824886	9825448	253		-42	683	69	19.1	66	37.5 50	07.0	9824626	9825683	507		-60
634	68	3. 57	.4 6	4 4	11.6	1706.6	9821779	9825465	1581		-329	684	69	19.1	70	59.4 92	23.5	9823721	9825683	888		-146
635	68	3 57	.4 6	6 2	20.3	902.7	9823530	9825465	851		-159	685	69	19.3	64	37.5 214	46.4	9820812	9825685	1750		-651
636	68	58	.1 6	55]	10.9	1651.2	9821811	9825472	1435		-413	686	69	19.4	68	14.8 31	14.0	9825290	9825686	573		221
637	69	9 0	. 5 6	8 1	16.5	3.0	9826040	9825496	553		550	687	69	19.5	64	46.0 196	67.0	9821154	9825687	1537		-664
638	69	9 1	. 2 6	4 4	4.4	1933.6	9821273	9825503	1737		-427	688	69	19.6	66	32.7 62	22.5	9824386	9825688	619		-78
639	69	9 4	.1 6	55	3.6	1910.7	9821279	9825533	1643		-495	689	69	19.7	64	49.6 193	39.3	9821110	9825689	1405		-765
640	69	9 4	.8 6	4 5	55.1	1919.3	9821330	9825540	1713		-434	690	69	19.7	66	7.7 98	81.2	9823414	9825689	753		-345
641	69	9 4	.8 6	5 5	50.4	1925.5	9821329	9825540	1731		-423	691	69	19.8	65	51.2 156	69.7	9822371	9825690	1525		-232
642	69	9 5	.1 7	1 4	47.3	609.6	9824574	9825543	913		230	692	69	20.0	65	35.2 175	58.1	9822002	9825692	1735		-232
6.4.3	69	9 . 5	. 2 6	8 4	42.9	4.6	9826206	9825544	676		671	693	69	20.3	65	37.9 179	91.0	9821890	9825695	1722		-282
644	69	9 5	.3 6	4 4	46.1	1915.6	9821278	9825545	1645		-499	694	69	20.3	65	46.2 168	81.7	9822133	9825695	1627		-254
645	69	9 5	.5 6	34 1	15.8	784.0	9823511	9825547	384		-494	695	69	20.5	66	25.8 94	46.5	9823594	9825697	818		-242
646	69	9 5	.9 6	4 3	33.0	1564.4	9822094	9825551	1371		-380	696	69	20.5	68	14.6 42	25.0	9825041	9825697	655		180
647	69	9 7	.0 6	66.	1.9	1709.1	9821941	9825562	1653		-259	697	69	20.7	65	58.3 100		9823240	9825699	834		-360
648	69	9 7	.0 7	12	2.1	359.7	9825272	9825562	820		418	698	69	20.9	65	27.9 191		9821677	9825701	1881		-260
649	69	9 7	. 3 6	55. 4	42.8	1764.0	9821818	9825565	1697		-277	699	69	21.9	66	27.7 78		9824034	9825711	759		-124
650	69	9 7	. 6 7	71 3	36.7	813.6	9823888	9825568	831		-80	700	69	22.0	65	22.1 197	73.3	9821463	9825712	1840		-368

Station	Latit	ude ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrai	n Bouguer	Station	Latit	uđe ^O S	Longi	tude ^O W Height	Absolute	Theoretical	Free-air	Terrain	Bouquer	
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.		Number	Deg	Min	Deg	Min m	Gravity	Gravity	Anomaly	Corr.		
						gu	gu	gu	gu	gu						gu	gu	gu	gu	gu	
701	60	22.2	60	16.7	266.5	0005303	0005714	401			253										
701 702			68		266.5	9825383	9825714	491		193	751	69	29.8	68	27.7 818.0	9824225	9825790	959		4.4	
702	69	22.3	66	36.7		9824007	9825715	797		-111	752	69.	30.0	68	20.9 603.0	9824683	9825792	752		77	
703			66		1061.5	9823336	9825716	896		-291	753	69	30.0	71	5.0 847.3	9823869	9825792	692		-256	
		22.8	66		860.5	9823693	9825720	628		-335	754	69	30.1	68	5.0 596.5	9824649	9825793	697		29	
705 706	69	22.9	65		1183.0	9823127	9825721	1056		-267	755	69	30.1	68	14.0 585.5	9824682	9825793	696		41	
706		23.0	66		840.0	9823950	9825722	820		-120	756	69	30.2	68	29.2 432.5	9824932	9825794	473		-11	
707	69	23.1	65		1605.0	9822211	9825723	1441		-355	757	69	30.3	63	45.2 1427.1	9822599	9825795	1208		-389	
709		23.1	68		330.5	9825216	9825723	513		143	758	69	30.4	65	16.9 1611.8	9822079	9825796	1257		-547	
710		23.8	66		1176.0	9823148	9825728	1049		-267	759 760	69	30.5	64	37.1 1702.7	9821825	9825797	1283		-623	
711	69		66		950.5	9823697	9825730	900		-164		69	30.6	70	54.6 993.6	9823697	9825798	965		-147	
711		23.9	66		1075.0	9823435	9825731	1021		-182	761 762	69	30.8	68	36.0 212.5	9825499	9825800	355		117	
712 713		23.9	68	50.0	99.5	9825724	9825731	300		188		69	30.9	64	22.5 1725.9	9821847	9825801	1372		-559	
714	69	23.9	70 68		457.2	9824667	9825731	347		-165	763	69	31.1	68	31.3 272.0	9825354	9825803	390		86	
715					301.0	9825300	9825733	496		159	764 765	69	31.3	63	41.2 1421.9	9822665	9825805	1248		-343	
716		24.4	65		1777.4	9821592	9825736	1341		-648		69	31.3	64	36.9 1722.6	9821799	9825805	1310		-617	
717	69	24.5	66		931.5	9823698	9825737	835		-207	766 767	69	31.4	63	27.9 1392.2	9822759	9825806	1249		-308	
718	7.71		68		106.5	9825614	9825738	204		85	768	69	31.4	64	46.7 1799.7	9821563	9825806	1311		-703	
719		24.7	68		245.5	9825478	9825739	496		222		69	31.4	68	11.3 555.5	9824736	9825806	644		23	
	69	24.9	64		2035.8	9820952	9825741	1493		-785	769	69	31.4	68	45.4 1.2	9826175	9825806	373		371	
720 721		25.0	68		232.5	9825321	9825742	296		36	770 771	69	31.6	68	4.2 726.0	9824409	9825808	842		29	
		25.2	65		1864.4	9821552	9825744	1561		-525		69	31.6	68	22.3 463.5	9824890	9825808	512		-6	
722		25.2	65		1652.7	9822109	9825744	1465		-384	772	69	31.8	62	29.4 445.9	9825097	9825810	663		164	
723 72 4	69	25.4	68		427.5	9825012	9825746	585		107	773	69	31.8	66	4.2 1048.0	9823304	9825810	728		-444	
	69	25.6	65		1245.0	9822824	9825748	918		-475	774	69	31.8	67	55.8 636.0	9824517	9825810	670		-42	
725	69	25.8	68		483.0	9825014	9825750	754		214	775	69	32.1	63	21.0 1382.2	9822978	9825813	1431		-116	
726 727	69	25.9	66		930.0	9823655	9825751	774		-267	776 777	69	32.2	68.	31.1 301.5	9825310	9825814	427		89	
	69	26.2	67		488.0	9824802	9825754	554		8		69	32.4	66	44.4 937.0	9823788	9825816	864		-185	
728 729	69 69	26.6	65		1975.9	9821152	9825758	1491		-720	778	69	32.6	70	57.7 905.3	9823871	9825818	847		-166	
730	69	26.8	63		1140.2	9823122	9825760	880		-395	779	69	32.7	63	57.1 1642.8	9822197	9825819	1448		-390	
731		26.9	67		549.0	9824685	9825761	618		4	780 781	69	32.8	68	3.1 597.0	9824711	9825820	734		66	
		26.9	68		514.0	9824776	9825761	601		26		69	32.9	63	14.2 1258.6	9823299	9825821	1362		-46	
732 733	69	26.9	68		448.5	9824982	9825761	605		103	782	69	32.9	64	27.9 1766.6	9821692	9825821	1323		-654	
	69	27.0	63		1064.0	9823649	9825762	1170		-20	783	69	32.9	65	58.7 1077.0	9823134	9825821	637		-568	
734 735		27.0	68		842.0	9824224	9825762	1060		118	784	69	33.0	67	55.2 696.5	9824337	9825822	665		-115	
	69	27.3	67		559.0	9824669	9825765	629		3	785	69	33.0	71	11.7 850.4	9824034	9825822	837		-115	
736 737		27.6	65		1302.1	9822735	9825768	985		-472	786	69	33.2	63	35.4 1539.7	9822348	9825824	1276		-447	
738	69 69	28.0 28.2	67		619.0	9824529	9825772	667		-26	787	69	33.2	65	18.7 1622.5	9822001	9825824	1184		-631	
739	69	28.3	68 64		518.5	9824835	9825774	661		81	788	69	33.3	65	33.1 1562.5	9822129	9825825	1126		-622	
740	69	28.3			1522.0	9822090	9825775	1012		-691	789	69	33.4	64	19.8 1766.6	9821727	9825826	1353		-624	
741	69	28.3	67 70		687.0	9824477	9825775	822		53	790	69	33.4	70	13.8 704.1	9824143	9825826	490		-298	
742					1088.1	9823450	9825775	1033		-185	791	69	33.5	68	14.8 541.5	9824829	9825827	673		67	
743	69	28.4 28.6	67	55.4	582.0	9824672	9825776	692		41	792	69	33.6	68	17.9 427.0	9825050	9825828	540		62	
	69		68	18.8		9824182	9825778	888		-13	793	69	33.7	63	36.3 1472.4	9822542	9825829	1257		-390	
744	69	28.7	68	9.8	755.5	9824324	9825779	876		31	794	69	34.0	68	23.7 335.5	9825220	9825832	424		48	
745	69	28.7	68	31.2	630.0	9824632	9825779	797		92	795	69	34.2	63	39.2 1565.3	9822330	9825834	1327		-425	
746	69	28.7	68		520.5	9824907	9825779	734		152	796	69	34.5	66	47.7 974.5	9823580	9825837	751		-340	
747	69	29.2	67	51.7		9824429	9825784	817		30	797	69	34.5	67	41.9 744.0	9824199	9825837	658		-174	
748	69	29.3	68	38.8	279.0	9825422	9825785	498		186	798	69	34.6	65	58.1 1173.0	9823011	9825838	793		-519	
749	69	29.5	63		1163.7	9823494	9825787	1298		-4	799	69	35.0	62	58.1 1338.1	9823123	9825842	1411		-86	
750	69	29.7	70	36.4	938.2	9823516	9825789	622		-428	800	69	35.0	71	6.0 877.8	9823965	9825842	832		-150	

		۰. و . و .		a. 0	uniaht	Abgolute	Theoretical	Free-air	Terrair	Bongner	Station	Latit	ude ^O S	Longi	ude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Station Number	Deq	uae : Min	Deg	cuae v Min	neight	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
Number	beg	MIII	Deg	11411		gu	gu	gu	gu	gu							gu	ģu	gu	gu	gu
								•	•	.											
801	69	35.1	63	9.8	1380.0	9823169	9825843	1585		41	851	69	52.8	71		502.9	9824981	9826017	516		-46
802	69	35.1	66	38.8	927.0	9823809	9825843	827		-210	852	69	53.1	68		347.5	9825314	9826020	367	40	18
803	69	35.2	66	38.7	978.4	9823687	9825844	863		-232	853	69	53.5	67		1023.5	9823931	9826024	1066	55	-24 -193
804	69	35.2	68	1.3	696.5	9824536	9825844	842		62	854	69	53.9	67		1105.8	9823614	9826027	999	45 58	59
805	69	35.5	65		1725.0	9821806	9825847	1283		-647	855	69	53.9	67		717.2	9824618	9826027	804 1032	55	-37
806	69	35.5	71		749.8	9824194	9825847	661		-178	856	69	54.2	67		411.8	9823961 9825149	9826030 9826031	388	55	-17
807	69		63		1804.3	9822045	9825848	1766		-253	857	69	54.3	68 68		460.9	9825110	9826038	494	45	23
808	69		64		1791.6	9821717	9825851	1394		-610 -292	858 859	69 69	55.0 55.7	67		1147.0	9823508	9826045	1003	55	-226
809	69		66	15.0		9823621	9825853	812		-525		69	55.8	64		2368.3	9820394	9826046	1657		-993
810	69		65		1258.5	9822857	9825857	883		-636	860 861	69	56.9	67		1065.3	9823754	9826057	985	55	-152
811	69		65		1467.7	9822335	9825858 9825860	1006 97 4		-111	862	69	57.4	67		1164.0	9823376	9826062	907	55	-341
812	69		66	26.3		9823842 9825564	9825860	367		127	863	69	57.8	67		1075.3	9823915	9826065	1168	55	20
813	69		68		215.0 259.0	9825455	9825861	393		103	864	69	58.0	64		2028.2	9821139	9826067	1331		-939
814	69						9825863	1309		-466		69	58.7	67		1115.0	9823803	9826074	1170	55	-23
815	69				1585.5	9822279 9822671	9825863	1026		-503	865 866	69	59.0	67		1062.4	9823846	9826077	1048	55	-86
816	69				1366.7	9823143	9825863	784		-487	867	69	59.0	71		442.0	9825279	9826077	566		71
817	69				1135.5	9823143	9825863	701		-124	868	69	59.5	67		550.8	9824912	9826082	530	45	-42
818	69				737.6	9823960	9825865	909		-111	869	70	0.0	71		396.2	9825346	9826087	482		38
819	69			31.9		9824163	9825865	866		-66	870	70	0.9	64		2155.3	9820890	9826096	1445		-967
820	69				832.1	9821682	9825872	1459		-589	871	70	1.3	67		959.5	9823982	9826100	843	55	-175
821	69					9821428	9825873	1383		-730	872	70	2.5	67		1228.3	9823573	9826111	1252		-122
822	69				1888.6	9821716	9825873	1397		-617	873	70	2.5	67		1025.7	9823891	9826111	945	55	-148
823	69				716.3	9824370	9825873	707		-94	874	70	2.6	67		1228.0	9823587	9826112	1264	65	-45
824	69				2154.4	9820857	9825874	1631		-779	875	70	3.4	71		256.0	9825598	9826120	268		-18
825 826	69 69				880.9	9823969	9825877	810		-175	876	70	3.7	62		507.7	9825334	9826123	778		210
826 827	69				1066.8	9823620	9825883	1029		-165	877	70	4.5	67		1275.3	9823513	9826131	1318	78	-31
828	69				1783.5	9822016	9825891	1629		-367	878	70	6.0	66		1243.0	9823616	9826145	1307	80	-4
829	69				1954.6	9821527	9825891	1668		-519	879	70	6.0	67		1100.3	9823783	9826145	1033	55	-143
830	69				719.3	9824405	9825891	734		-71	880	70	7.4	67		1122.6	9823772	9826159	1078	45	-134
831	69				722.4	9824403	9825898	734		-74	881	70	7.5			647.9	9824581	9826160	421	90	-214
832	69				2 2192.6	9820853	9825900	1720		-734	882	70				1092.1	9823794	9826164	1001	60	-161
833	69				7 740.7	9824370	9825903	753		-76	883	70				1138.5	9823755	9826175	1093	45	-181
834	69				2054.0	9821091	9825904	1526		-772	884	70				1299.4	9823615	9826179	1446	58	50
835	69				5 640.1	9824524	9825907	593		-124	885	70			10.7	1278.3	9823677	9826191	1431	40	41
836	69				5 2258.4	9820592		1652		-875	886	70	11.0	67	35.9	1043.6	9823942	9826194	969	40	-159
837	69				716.3	9824413	9825911	713		-89	887	70	11.4	71	50.1	4.6	9826426	9826197	243		238
838	69				9 2043.4	9821094		1469		-818	888	70	12.0	67	8.9	1246.9	9823716	9826203	1361	55	21
839	69			17.0		9824628		667		-49	889	70	12.0	67	26.4	1206.7	9823587	9826203	1108	45	-198
840	69					9823821	9825937	865		-216	890	70	12.7	67	17.8	1062.5	9823979	9826210	1048	55	-86
841	69					9824048		649		-275	891	70	12.9	67	33.6	906.2	9824271	9826212	856	40	-118
842	69					9824998		401		-90	892	70	13.7	68	5.5	198.3	9825706	9826220	98	53	-71
843	69				4 1958.4	9821449		1534		-658	893	70	13.9	63	19.0	1701.6	9822294	9826221	1324		-580
844	69				9 2242.4	9820638		1595		-914	894	70	14.1	67	10.7	1009.8	9823999	9826223	892	45	-193
845	69					9824952		516		-39	895	70	14.4	67	2.6	1041.2	9823902	9826226	889	45	-231
846	6				1 1954.4	9821464		1503		-684	896	70	16.4	70	42.2	121.9	9826066	9826246	197		60
847	6							530		35	897	70	17.0	67	23.3	986.0	9824082	9826251	873	55	-175
848	6					9824210		872	55	-41	898	70	17.0	67	29.4	828.5	9824360	9826251	665	78	-184
849	6							518	60	-94	899	70	18.1	. 69	5.5	560.2	9825020	9826262	487	78	-62
850	6			10.	6 451.8	9825022	9826009	407	78	-20	900	.70	18.4	68	57.6	433.3	9825232	9826265	304	55	-125

Station	Latitu	ide ^O S	Longit	ude ^O W Height	Absolute	Theoretical	Free-air	Terrain	n Bonguer	Station	Latit	uđe ^O S	Longit	tude ^O W	/ Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min m	Gravity	Gravity	Anomaly		Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	
					gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
				0.5 1 1005 0			1005	***	20.0	951	70	40.3	67	7.9	808.9	0074647	0026474	665	50	-190
901			66	36.1 1376.8	9823224	9826268	1205	40	-295 128	951	70 70	40.3	67 67	16.0		9824642 9825266	9826474 9826477	409	50	-128
902	70	19.4	71	27.4 234.7	9825941	9826274	391		-223	953		40.7	63		1684.5	9822711	9826479	1430	50	-125 -455
903	70	19.7	66	46.4 1206.7	9823616	9826277 9826278	1063 793	65 55	-346	954		41.0	67		598.3	9825449	9826480	815	75	221
904	70 70	19.8	67	15.8 1066.8	9823779	9826284	793 1709	22	-838	955	70	41.1	69		673.6	9825332	9826481	930	,,	176
905		20.4	64	19.0 2276.8	9820967	9826285			-668	956		41.9	66		1124.4	9824030	9826489	1011	60	-187
906	70	20.5	64	19.8 2158.3	9821371 9823391	9826291	1747 1353	60	-129	957		42.0	63		1792.5	9822538	9826490	1580	••	-426
907 908	70 70	21.1	66	26.1 1378.0	9823460	9826299	1375	60	-93	958	70	42.0	67		145.5	9826471	9826490	430	40	307
909	70		66	34.3 1365.5	9824840	9826300	467	45	-187	959		42.2	69		694.9	9825304	9826491	957		179
910	70	22.1	67	36.3 624.5	9823993	9826303	719	55	-325	960		42.3	67		481.6	9825821	9826492	815		276
	70		67	23.9 981.5	9823871	9826304	945	55	-225	961	70	42.4	63		1731.5	9822494	9826493	1344		-593
911 912	70	22.5	67 67	1.6 1094.8 55.9 25.3	9826025	9826319	-216	55	-190	962	70	42.5	63		1689.0	9822422	9826494	1140		-750
913	70	24.1				9826322	531	80	-168	963	70	42.6	69		865.6	9824920	9826495	1096		127
914	70	24.4	67	44.6 696.2	9823409	9826324	1482	45	-67	964	70	42.9	63		1509.5	9822587	9826498	747		-942
915	70	24.7	66	19.1 1424.9 58.4 1804.4	9822342	9826325	1585	60	-374	965	70	43.0	63		1599.5	9822549	9826499	986		-804
916	70	24.7	65	26.9 961.0	9824084	9826326	724	50	-302	966	70	43.0	64		1549.0	9822515	9826499	796		-937
			67					55	-459	967	70	43.0	69		755.9	9825064	9826499	898		52
917 918	70 70	25.0 25.1	67	13.6 965.6	9823915 9824195		567 781	50	-226	968	70	43.4	69		691.9	9825304	9826503	936		162
919	70	25.1	67 70	35.1 944.6 20.9 347.5			335	50	-53	969	70	43.6	69		752.9	9825138	9826505	957		114
920		25.3				9826331	860	50	-259	970	70	43.8	69		719.3	9825234	9826507	947		142
921	70 70		66	43.2 1044.6		9826334	803	40	-230	971	70	44.0	63		1569.0	9822610	9826508	943		-812
921	70 70	25.6 26.7	67	3.4 959.2			840	60	-245	972	70	44.2	63		1655.5	9822516	9826510	1115		-738
922	70	26.9	66 69	50.1 1023.2 54.3 350.5			105	60	-287	973	70	44.3	69		737.6	9825271	9826511	1036		211
924	70	27.3	67				667	50	-158	974	70	44.5	63		1641.5	9822777	9826513	1330		-507
924	70			38.1 781.5			802	55	-184	975	70	44.9	63		1677.0	9822454	9826517	1112		-764
925	70	27.9 28.5	67 66	18.6 930.6 36.5 1099.1			899	40	-290	976	70	44.9	64		1659.0	9822471	9826517	1074		-783
926	70	29.1					1130	40	-258	977	70	45.0	69		755.9	9825118	9826518	933		87
927	70	29.1	66 67	27.8 1240.5 25.3 899.2			818	75	-113	978	70	45.1	63		1602.0	9822560	9826519	985		-808
929	- 70	29.4	66	19.5 1284.4			1072	50	-316	979	70	45.4	62		1554.0	9823025	9826522	1299		-440
930	70	29.9	67	52.7 17.5			-68	60	-28	980	70	45.5	66		1132.6	9823841	9826523	814	55	-399
931	70	31.6	68	39.3 180.7			59	54	-90	981	70	45.6	68		246.0	9825823	9826524	59		-217
932	70	32.8	66	49.9 1043.9			852	40	-276	982	70	45.7	63		1599.0	9822545	9826524	955		-834
933	70	33.4	67	0.0 802.5			557	50	-291	983	70		65		1597.2	9823078	9826524	1482	75	-230
933	70						1007	50	-768	984	70	46.4	63		1761.0	9822521	9826531	1424		-546
934	70	34.3	64 64	13.8 1586.5 18.0 1682.6			1064		-819	985	70	46.8	68		375.0	9825673	9826535	295		-124
936	70	35.2	64	17.6 1671.0			1050		-820	986	70	47.0	62		1498.0	9823147	9826537	1233		-443
936	70	35.5		14.4 1596.0			1010		-776	987	70	47.0	63		1804.0	9822135	9826537	1165		-853
938	70	36.9	64 66	12.2 1362.5			1141	55	-328	988	70	47.0	69		798.6	9824894	9826537	822		-72
939	70	36.9	67				752	55	-150	989	70	47.1	63		1717.0	9822266	9826538	1027		-894
939	70	36.9		2.0 855.0 40.1 580.9			693	33	43	990	70	47.6	69		728.5	9825033	9826542	739		-76
941	70	37.0	69	6.7 1501.5			810		-870	991	70	47.7	63		1801.0	9822255	9826543	1270		-746
			64						-92	992	70	48.2	69		640.1	9825252	9826548	679		-37
942 943	70 70	37.1 38.3	69 67	50.5 554.0 22.3 520.3			527 427	50	-92 -105	993	70	48.4	62		1454.5	9823273	9826550	1212		-416
	70 70			28.0 1208.8			979	50	-324	994	70	49.1	62		1600.0	9822818	9826556	1199		-591
944 945			66				1170	50	-130	995	70	49.1	63		1731.0	9822477	9826556	1262		-675
945	70° 70	39.1 39.1	66 68	33.2 1161.3 32.0 149.6	4.0		1170	58	-130 -97	996	70	49.1	63		1938.0	9821853	9826556	1277		-891
946	70		69	25.3 768.1			702	20	-97 -157	997	70		65		1545.0	9823113	9826556	1324	60	-344
947							1206		-563	998	70	49.1	69	28.8		9825395	9826556	861	-	128
948	70 70	40.0	63 69	21.1 1580.5 21.1 784.9			790		-88	999	70	49.8	68	23.9		9826455	9826563	-13		-47
949	70		69	51.1 478.5			285		-250	1000		49.9	69		582.2	9825416	9826564	649		-3
950	. /0	40.1	69	21.1 4/8.2	3023280	70204/2	200		-250	1000	/ 0	77.7	09			2023410	2020304	3.5		

Station	Latit	ude ^O S	Longit	tude ^O V	W Height	Absolute	Theoretical	Free-air	Terrair	Bouguer	Station	Latit	ude ^O S	Longi	tude ^O l	W Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly		Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
1001	70		66		977.2	9824245	9826568	693	55	-346	1051		59.4	61		638.0	9825198	9826653	514		-200
1002	70	50.3	69	30.0		9825602	9826568	840		185	1052	70	59.4	62	14.4	806.5	9824456	9826653	292		-610
1003	70	50.7	63		1563.5	9822846	9826571	1099		-650	1053	70	59.6	62		1491.0	9823085	9826655	1031		-637
1004	70	50.9	69		249.9	9826254	9826573	452		172	1054	70	59.8	63		1752.0	9822358	9826657	1108		-852
1005	70	51.0	62		1606.0	9822887	9826574	1269		-528	1055	70	59.9	62		844.0	9824253	9826658	200		-744
1006	70	51.5	63		2041.0	9821750	9826579	1470		-814	1056	71	0.3	61		759.0	9824957	9826661	638		-211
1007	70	51.6	61		252.0	9826145	9826580	343		61	1057	71	0.3	63		1646.0	9822629	9826661	1047		-795
1008	70	51.7	66		1115.1	9824024	9826581	884	55	-309	1058	71	0.5	62		730.0	9824683	9826663	273		-544
1009	70	52.0	68		390.7	9825632	9826584	254	100	-83	1059	71	0.9	62		836.0	9824372	9826667	285		-650
1010	70	52.2	62		1293.0	9823537	9826586	942		-505	1060	71	1.1	63		2309.0	9821334	9826669	1791		-793
1011	70	52.5	63	22.1	2002.0	9821936	9826588	1526		-714	1061	71	1.2	61		588.0	9825264	9826670	409		-249
1012	70	52.6	62	58.3	1396.5	9823325	9826589	1045		-517	1062	71	1.4	62	47.1	1390.0	9823288	9826671	906		-649
1013	70	52.8	69	32.3	487.7	9825898	9826591	812		266	1063	71	1.4	62		1338.0	9822902	9826671	360		-1138
1014	70	52.9	69	12.9	682.8	9824970	9826592	485		-279	1064	71	1.6	62	23.1	849.0	9824275	9826673	222		-728
1015	70	53.2	61	39.0	491.0	9825716	9826595	636		87	1065	71	1.7	67	15.6	552.0	9825663	9826674	692	75	150
1016	70	53.2	69	27.7	606.6	9825594	9826595	871		192	1066	71	1.8	62	2.1	728.5	9824902	9826675	475		-340
1017	70	53.5	63	19.6	1880.0	9822191	9826598	1395		-709	1067	71	1.9	63	37.5	2286.0	9821296	9826676	1674		-884
1018	70	53.6	63	9.4	1518.0	9822941	9826599	1027		-672	1068	71	2.0	62	15.0	796.0	9824534	9826677	313		-577
1019	70	53.6	63	15.4	1796.0	9822330	9826599	1274		-736	1069	71	2.5	62	18.3	825.5	9824424	9826682	290		-634
1020	70	53.8	65	36.5	1546.0	9822975	9826601	1145	55	-530	1070	71	3.2	63	31.3	1879.0	9822153	9826688	1263		-839
1021	70	54.3	63	52.1	2233.0	9821152	9826605	1438		-1061	1071	71	3.3	62	9.0	802.0	9824720	9826689	506		-392
1022	70	55.0	69	32.5	402.3	9825913	9826612	543		93	1072	71	3.5	63	39.4	2307.4	9821269	9826691	1699		-883
1023	70	55.1	61	31.0	656.0	9825539	9826613	951		217	1073	71	3.6	66	55.8	649.8	9825298	9826692	611	35	-81
1024	70	55.3	63	1.9	1491.5	9823038	9826615	1026		-643	1074	71	3.7	62	32.9	1406.5	9823499	9826693	1147		-427
1025	70	55.6	63	15.8	1674.0	9822573	9826617	1122		-752	1075	71	4.3	61	53.1	676.5	9825096	9826698	485		-272
1026	70	55.6	63	30.6	2155.0	9821592	9826617	1625		-786	1076	71	4.4	61	59.4	728.5	9825000	9826699	549		-266
1027	70	55.6	63	42.5	2327.0	9821062	9826617	1626		-978	1077	71	4.5	62	37.7	1415.5	9823376	9826700	1044		-540
1028	70	56.0	61	39.4	858.0	9825221	9826621	1248		288	1078-	71	4.6	63	14.4	1700.0	9822403	9826701	948		-954
1029	70	56.0	66	47.5	899.8	9824564	9826621	720	55	-232	1079	71	4.7	62	11.5	831.5	9824640	9826702	504		-427
1030	. 70	56.2	62	43.5	1290.0	9823515	9826623	873		-571	1080	71	4.9	62	52.3	1490.5	9823008	9826704	904		-7,64
1031	70	56.2	63	21.7	1767.0	9822379	9826623	1209		-768	1081	71	5.4	61	26.5	414.0	9825877	9826709	446		-17
1032	70	56.6	65	56.3	1441.4	9823329	9826627	1150	55	-407	1082	71	5.5	62	52.1	1484.5	9823052	9826710	924		-738
1033	70	56.7	64	13.1	2211.0	9821295	9826628	1490		-984	1083	71	5.8	61	29.9	426.0	9825823	9826712	425		-51
1034	70	56.8	63	2.1	1531.0	9822994	9826629	1090		-623	1084	71	5.9	62	31.0	1412.0	9823451	9826713	1095		-485
1035	70	57.0	61	40.2	798.0	9825119	9826630	951		58	1085	71	6.1	62	50.4	1536.0	9822970	9826715	995		-724
1036	70	57.2	62	51.5	1466.5	9823085	9826632	978		-663	1086	71	6.1	63	2.5	1697.0	9822547	9826715	1069		-830
1037	70	57.4	63	8.5	1881.0	9822204	9826634	1375		-730	1087	71	6.2	62	59.0	1696.2	9822519	9826716	1037		-861
1038	70	57.6	61	55.0	358.0	9826088	9826636	557		156	1088	71	6.4	61	28.1	411.0	9825835	9826718	385		-75
1039	70	57.6	66	40.6	836.7	9824783	9826636	729	55	-152	1089	71	6.4	62	16.5	1018.0	9824286	9826718	710		-430
1040	70	57.9	61	47.1	600.0	9825609	9826639	822		150	1090	71	6.4	62	38.5	1561.5	9823044	9826718	1145		-602
1041	70	58.2	63	31.7	1944.0	9822005	9826642	1363		-813	1091	71	6.4	62	48.1	1663.5	9822795	9826718	1211		-651
1042	70	58.2	66	54.2	869.6	9824793	9826642	835	40	-98	1092	71	6.5	61	30.0	447.5	9825837	9826719	499		-2
1043	70	58.5	63	23.8	1760.0	9822425	9826644	1212		-757	1093	71	6.6	62	2.7	1058.0	9824399	9826720	944		-240
1044	70	58.6	62	21.3	802.0	9824377	9826645	207		-691	1094	71	6.7	61	25.2	376.5	9825995	9826721	436		15
1045	70	58.6	62	44.4	1301.5	9823237	9826645	608		-848	1095	71	6.8	61	16.0	269.5	9826332	9826722	442		140
1046	70	58.8	62	49.2	1478.5	9823052	9826647	967		-687	1096	71	6.8	61	51.3	1034.0	9824456	9826722	925		-232
1047	70	59.1	61	58.1	696.0	9825105	9826650	603		-176	1097	71	6.8	66	7.9	1079.0	9824223	9826722	831		-376
1048	70	59.2	63	42.7	2407.0	9821026	9826651	1803		-890	1098	71	6.9	61	10.4	254.0	9826417	9826723	478		194
1049	70	59.3	63	24.4	1675.0	9822497	9826652	1014		-860	1099	71	7.0	62	10.8	988.0	9824446	9826724	771		-334
1050	70	59.4	61	47.1	581.5	9825444	9826653	586		-65	1100	71	7.2	62	59.4	1675.0	9822698	9826725	1142		-733

Station	Latit	uđe ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer	Station	Latit	ude ^O S	Longit	ude ^O W Hei	ht Absolut	e Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly'	Number	Deg	Min	Deg	Min m	Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu	gu	gu	gu						gu	gu	gu	gu	gu
1101	71	7.3	61	59.0 1		9824230	9826726	1025		-252	1151		14.9	61	34.8 1009		9826797	1017		-112
1102	71	7.4	61	54.6 1		9824336	9826727	932		-273	1152		15.0	63	19.6 1818		9826797	1170		-864
1103	71	7.5	62	9.4]	214.0	9823992	9826728	1010		-348	1153		15.1	63	17.8 1805		9826798	1159		-861
1104	71	7.6	61	19.8	300.0	9826280	9826729	477		141	1154	71	15.1	67	13.7 588	0 9825884	9826798	900	0	242
1105	71	7.7	62	18.5 1	1072.0	9824147	9826730	725		-474	1155	71	15.3	62	21.4 1612		9826800	1363		-441
1106	71	7.9	62	35.8 1	1580.0	9823006	9826732	1150		-618	1156	71	15.3	62	52.1 1512	0 9823202	9826800	1068		-624
1107	71	8.1	62	9.4	1326.5	9823768	9826734	1128		-356	1157	71	15.3	66	47.1 891	0 9825138	9826800	1087	٥	90
1108	71	8.1	62	31.3	1418.0	9823466	9826734	1108		-478	1158	71	15.7	66	10.5 1351	7 9823777	9826804	1144	10	-359
1109	.71	8.4	62	1.5	1223.0	9824072	9826737	1110		-259	1159	71	15.9	63	10.3 1737	0 9822552	9826806	1106		-838
1110	71	8.5	62	24.8	1303.0	9823649	9826737	933		-525	1160	71	15.9	66	26.1 1182	0 9824224	9826806	1066	0	-257
1111	71	8.6	62	14.2	1112.5	9824121	9826738	816		-429	1161	71	16.4	66	37.3 1178	0 9824315	9826810	1140	40	-138
1112	71	8.6	66	18.5	1121.8	9824345	9826738	1069	30	-156	1162	71	16.8	62	58.1 1495	0 9823113	9826814	913		-760
1113	71	8.9	62	50.4	1666.2	9822776	9826741	1177		-688	1163	71	16.8	63	17.4 1813	0 9822349	9826814	1130		-899
1114	71	9.1	68	14.6	401.1	9825751	9826743	246	90	-113	1164	71	16.8	67	11.6 550	0 9825919	9826814	802	20	207
1115	71	9.5	63	0.8	1722.5	9822632	9826747	1201		-726	1165	71	16.9	61	37.5 1134	5 9824414	9826815	1100		-169
1116	71	9.7	61	26.0	807.5	9825437	9826749	1180		277	1166	71	17.0	63	5.4 1655	0 9822773	9826816	1064		-787
1117	71	9.7	62	48.3	1747.0	9822760	9826749	1403		-552	1167	71	17.3	61	39.4 1126	0 9824414	9826819	1070		-190
1118	71	9.8	61	30.0	944.0	9824974	9826749	1138		81	1168	71	17.4	62	19.3 1638	0 9823218	9826820	1453		-380
1119	71	9.9	62	39.6	1669.0	9822859	9826750	1259		-608	1169		17.4	63	10.7 1779		9826820	1303		-687
1120	71	10.0	62	10.0	1344.0	9823743	9826751	1139		-365	1170		17.5	61	53.1 1201		9826820	1049		-295
1121	1	10.1	61		831.5	9825197	9826752	1011		80	1171		17.6	66	27.9 1161		9826821	1015	0	-284
1122		10.5	61		240.5	9826593	9826756	579		310	1172		17.7	62	24.9 1467		9826822	1191		-451
1123		10.7	66		1125.0	9824239	9826758	953	10	-296	1173		17.7	63	0.0 1532		9826822	986		-728
1124		10.9	61		1240.0	9823968	9826760	1035		-353	1174		17.7	63	7.7 1666		9826822	1111		-753
1125		11.1	62		1539.0	9823211	9826761	1199		-523	1175		17.7	63	35.6 2359		9826822	1687		-953
1126		11.2	63		1731.5	9822613	9826762	1194		-743	1176		17.8	67	33.4 17		9826823	-92	65	-47
1127		11.3	61		758.5	9825531	9826763	1108		260	1177		17.9	63	3.2 1590		9826824	979	. 03	-800
1128		11.3	62		1583.9	9823089	9826763	1214		-558	1178		18.0	61	51.4 1157		9826825	1043		-251
1129		11.4	61		1203.0	9824135	9826764	1083		-263	1179		18.0	62	45.2 1483		9826825	1037		-622
										-429	1180		18.3	61	34.7 972		9826828	983		-105
1130		11.4	62		1492.0	9823400	9826764	1240		371	1181	71	18.4	61	41.4 1128		9826829	1121		-142
1131 1132		11.6	60		242.5	9826660	9826766	642 661		309	1182		18.5	62	31.1 1561		9826830	1297		-450
		11.8	61		315.0	9826457	9826768			-725								346	20	-70
1133		11.9	63		1762.0	9822578	9826769	1247			1183		18.5	67	25.5 389			1757	20	-70 -947
1134		12.0	61		1166.0	9824235	9826770	1063		-241	1184		18.7	63	25.1 2417			950	10	-347 -350
1135		12.0	62		1520.5	9823277	9826770	1199		-502	1185		18.7	66	28.7 1171				10	
1136		12.4	63		1874.0	9822405	9826773	1415		-682	1186	71		63	5.6 1592			1116		-666
1137		12.5	62		1438.6	9823533	9826774	1199		-411	1187		19.2	61	39.9 1237			1201		-184
1138		12.6	62		1503.0	9823335	9826775	1198		-484	1188		19.2	62	29.8 1526		9826836	1296		-411
1139		12.6	62		1624.0	9823046	9826775	1283		-534	1189		19.3	62	41.1 1808			1650		-373
1140		12.6	63		1887.0	9822222	9826775	1270		-842	1190	71		67	18.9 374			422	30	34
1141		13.4	62		1806.0	9822735	9826783	1526		-495	1191		19.4	68	16.8 62			-20		-90
1142		13.7	66		1324.0	9823873	9826785	1173	0	-308	1192		19.4	68	17.2 67			10		-65
1143		13.9	69		673.6	9825565	9826787	856		103	1193	71		63	7.3 1580			1120		-648
1144		14.1	63		2013.0	9821896	9826789	1319		-934	1194		19.9	63	24.6 2400			1823		-863
1145	71	14.2	61	58.8	1388.0	9824003	9826790	1496		-57	1195	71	20.5	62	58.3 1524			1107		-599
1146	71	14.3	61		991.0	9824713	9826791	980		-129	1196	71		62	34.9 1305			986		-474
1147	71	14.3	62	1.5	1432.0	9823846	9826791	1474		-128	1197	71	20.7	67	13.9 458			547	20	55
1148	71	14.3	63	20.4	1860.5	9822203	9826791	1153		-928	1198	71	20.8	66	44.6 1063	.0 9824837		1267	20	97
1149	71	14.7	62	0.8	1426.0	9823844	9826795	1450		-146	1199	71	21.3	65	43.5 1385	and the second second		1033		-517
1150	71	14.7	63	17.3	1800.0	9822390	9826795	1150		-864	1200	71	21.3	67	1.9 783	.0 9825588	9826855	1149	30	303

Station	Latit	udė ^O S	Longit	ude ^O W	Height	Absolute	Theoretical	Pree-air	Terrain	Bouguer	Station	Latit	ude ^O S	Longit	ude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	w	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu .	gu	gu	gu							gu	gu	gu	gu	gu
							2006056	1022		627	1251	71	27.2	67	21 6	556.0	9825627	9826909	433	50	-139
1201		21.4	63		1492.0	9823284	9826856	1032 1858		-637 -883	1251	71	27.5	62		1309.0	9823814	9826912	941	50	-523
1202 1203	71		63	32.4 2		9821154 9823252	9826856 9826857	1209		-537	1252		27.6	64		1464.1	9823350	9826913	955		-683
1203	71 71	21.5	63 63	30.2 2	1560.0	9820619	9826857	1947		-1021	1254	71	27.8	67	36.0	20.9	9826787	9826915	-64	53	-34
1204	71		63	29.4 2		9820677	9826858	1981		-978	1255	71		65		1442.3	9823427	9826916	962		-652
1206	71	21.7	62		1439.0	9823631	9826859	1213		-397	1256		27.9	73	,	399.3	9826214	9826916	530		84
1207	71.		63	34.5		9821966	9826859	1259		-972	1257	71	28.0	63	6.0	1389.0	9823614	9826917	984		-570
1208	71		63		1519.0	9823162	9826861	989		-711	1258	71	28.0	65	4.3	1489.7	9823319	9826917	1000		-667
1209	71	22.0	65		1649.5	9823219	9826862	. 1448		-398	1259	71	28.2	68	43.1	670.6	9825514	9826919	665		-85
1210	71		70		661.4	9825451	9826864	628		-112	1260	71	28.3	67	20.1	486.0	9825746	9826919	326	50	-167
1211	71	22.4	69	17.7	847.3	9825422	9826865	1171		223	1261	71	28.8	67	1.7	831.0	9825312	9826924	952	10	33
1212	71	22.6	65	8.1	1545.4	9823411	9826867	1313		-416	1262	71	28.9	73	23.8	280.4	9826498	9826925	438		125
1213	71	22.6	65	29.6	1602.9	9823351	9826867	1430		-363	1263	71	29.3	67	4.3	787.0	9825398	9826929	898	20	38
1214	71	22.7	66	47.4	1037.0	9824686	9826868	1018	0	-142	1264	71	29.6	72	59.8	445.0	9826093	9826931	535		37
1215	71	22.7	67	21.4	489.0	9825778	9826868	419	30	-98	1265	71		69		774.2	9825413	9826932	870		4
1216	71	22.9	63	11.1	1534.0	9823147	9826870	1011		-706	1.266	71	29.9	62	21.6	851.0	9825054	9826934	746		-206
1217	71		65	10.9	1489.9	9823505	9826874	1229		-438	1267	71		67	3.9	757.0	9825493	9826936	893	20	66
1218	71		65		1535.5	9823543	9826875	1407		-311	1268	71	-, ,	72		591.3	9825900	9826937	788		126
1219	71		65		1526.3	9823401	9826875	1236		-472	1269	71		69	20.1	819.9	9825355	9826940	945		27 -34
1220	. 71		67	37.7	26.5	9826734	9826875	-59	65	-24	1270	71		69		868.7	9825204	9826947	938 1076		-54 -531
1221	71		62		1354.0	9823839	9826876	1141		-374	1271 1272	71 71		63 65		1436.0	9823594 9823656	9826949 9826949	782		-696
1222	71		65		1534.5	9823493	9826876	1352		-365 467						1424.4	9823561	9826953	1004		-590
1223	71		65		1335.7	9823794	9826878	1038 1346		-457 -830	1273 1274	71 71		64 69		783.3	9825432	9826953	896		20
1224 1225	71 71		63 65		1944.5 1357.8	9822224 9823894	9826879 9826880	1204		-315	1274	71		67		430.0	9826001	9826954	374	20	-87
1225	71		65		1482.9	9823477	9826881	1172		-487	1276	71		63		1541.0	9823314	9826957	1113		-612
1227	71		65		1213.0	9823966	9826882	827		-530	1277	71		65		1580.6	9823198	9826957	1119		-650
1228	71		67		1039.0	9824954	9826882	1278	20	136	1278	71		62		797.0	9825304	9826958	806		-86
1229	71		63		2020.5	9821995	9826883	1347		-913	1279	71		68		313.9	9826285	9826958	296		-55
1230	71		67		475.0	9825754	9826884	336	20	-175	1280	71		72		557.8	9825982	9826959	744		120
1231	71		62		1416.0	9823689	9826885	1174		-410	1281	71	32.8	64	59.4	1494.9	9823460	9826960	1113		-560
1232	71		65		1466.7	9823592	9826886	1233		-409	1282	71	32.9	63	5.1	1422.0	9823614	9826961	1041		-550
1233	71	24.7	62		1436.0	9823614	9826887	1159		-448	1283	71	32.9	65	5.1	1275.4	9823898	9826961	873		-555
1/234	71	24.8	62	37.5	1246.0	9824114	9826887	1072		-323	1284	71	33.5	63	0.2	1381.0	9823644	9826967	939		-606
1235	71	25.1	67	17.4	555.0	9825693	9826890	516	110	5	1285	71	33.7	62	43.1	1039.0	9824654	9826969	892		-271
1236	71	25.3	63	7.9	1451.0	9823494	9826892	1080		-544	1286	71	33.7	72	28.3	551.7	9826010	9826969	744		127
1237	71	25.3	69	15.6	871.7	9825225	9826892	1023		48	1287	71	33.8	69	2.4		9825551	9826969	1159		224
1238	.71	25.4	62	45.4	1437.0	9823724	9826893	1266		-342	1288	71				325.2	9826356	9826971	428	40	104
1239	71	25.5	67	24.2	518.0	9825642	9826894	347	10	-223	1289	71				728.0	9825547	9826973	821		6
1240	71		62		1331.0	9823734	9826898	944		-545	1290	71				158.5	9826576	9826974	91		-86
1241	71		65		1267.2	9823886	9826898	899		-519	1291	71			11.1		9825254	9826979	853		-82
1242	71		63		1910.0	9822389	9826901	1382		-755	1292	71				1336.0	9823904	9826979	1047		-448
1243	71		6.2	25.5	981.0	9824684	9826904	807		-290	1293	71				661.4	9825590	9826984	647		-93 -608
1244	71		67	1.3		9825239	9826904	1131	70	187	1294	71				1318.0	9823784	9826985	866 999		-608 -470
1245	71		66	56.0	980.5	9824988	9826906	1108	60	71	1295	71				1313.0 712.0	9823934 9825705	9826987 9826988	915	40	158
1246	71		68	15.4	20.7	9826739	9826907	-104	58	-69 202	1296 1297	71 71				906.0	9825705	9826991	839	10	-165
1247	71		62		1190.0	9824274	9826908	1039		-293	1297	71				1355.0	9823924	9826993	1112	10	-404
1248	71		65		1306.5	9823720	9826908	844		-618 -576	1298	71				542.5	9826107	9826995	786		179
1249	71		65		1279.5	9823815	9826908	856 1068		-576 -235	1300	71				1795.5	9822568	9826997	1112		-897
1250	/1	27.1	62	30.6	1164.0	9824384	9826908	1009		-233	1300	/1	50.0		20.1		2022300	,020,37	****		•••

Station Number	Latit Deg	ude ^O S Min	Longit Deg	ude ^O W Height Min m	Absolute Gravity	Theoretical Gravity	Free-air Anomaly	Terrain Corr.	Bouguer Anomaly	Station Number	Latite Deg	ude ^O S Min	Longi Deg	tude ^S V Min	/ Height m	Absolute Gravity	Theoretical Gravity	Free-air Anomaly	Terrain Corr.	Anomaly
					gu	gu	gu	gu	gu							gu	gu ,	gu	gu	gu
1301	71	36.8	65	7.1 1239.8	9823950	9826997	779		-608	1351		44.4	70		691.9	9825776	9827065	846		72
1302		36.8	69	0.0 749.8	9825539	9826997	856		17	1352	71	44.5	64		1439.7	9823565	9827066	942		-669
1303	71	36.9	62	48.0 1093.0	9824494	9826998	869		-354	1353		44.7	69		722.2	9825693	9827068	854		46
1304	71	36.9	69	33.4 835.2	9825484	9826998	1064		129	1354		44.9	64		1866.3	9822659	9827070	1349		-740
1305	71	37.4	65	1.5 1387.2	9823791	9827002	1070		-482	1355	71	45.3	68		536.5 1688.2	9826076	9827073	658		58 -661
1306 1307	71 71	37.6 38.0	69	23.6 682.8 35.4 1726.8	9825637 9822895	9827004 9827008	740 1216		-2 4 -716	1356 1357	71	45.6	64 64		1502.9	9823094 9823617	9827076 9827082	1228 1172		-509
1308	71	38.0	64 64	59.6 1430.4	9823728	9827008	1135		-466	1358		46.6	64		1790.0	9822858	9827085	1297		-706
1309		38.2	64	46.7 1602.8	9823258	9827009	1195		-599	1359	71	46.9	64		1627.0	9823385	9827088	1318		-503
1310	71	38.3	64	49.3 1614.9	9823267	9827010	1240		-567	1360		47.3	64		1355.3	9823959	9827092	1049		-468
1311		38.6	64	28.5 1683.0	9822905	9827013	1086		-797	1361		47.4	65		1219.7	9824108	9827092	780		-585
1312	71	38.6	64	51.6 1559.1	9823473	9827013	1271		-473	1362	71	47.7	69		610.0	9826021	9827095	809		126
1313	71	38.6	68	12.9 24.4	9827003	9827013	65		38	1363	71	47.8	62	52.1	1256.0	9824424	9827096	1204		-201
1314	71	38.9	69	24.6 789.4	9825586	9827016	1006		123	1364	71	47.8	62	55.7	1409.0	9824054	9827096	1306		-270
1315	71	39.0	64	59.1 1535.6	9823552	9827017	1274		-444	1365	71	48.0	64	34.2	1541.0	9823514	9827098	1172		-553
1316	71	39.0	73	10.7 649.2	9825750	9827017	737		10	1366	71	48.1	69	0.0	563.9	9825892	9827099	534		-97
1317	7,1	39.1	64	43.9 1476.4	9823470	9827018	1008		-644	1367	71	48.6	64	2.9	1751.8	9822908	9827103	1211		-749
1318	7.1	39.3	63	0.4 1350.0	9823894	9827019	1041		-470	1368	71	48.7	64		1739.4	9823076	9827104	1340		-607
1319	71	39.3	65	2.4 1401.3	9823853	9827019	1158		-410	1369	71	49.2	70		582.2	9825996	9827109	684		33
1320	71	39.7	64	51.2 1419.1	9823728	9827023	1084		-504	1370		49.5	64		1606.7	9823301	9827111	1148		-650
1321	71	39.7	69	32.6 826.0	9825518	9827023	1044		120	1371	71	49.5	64		1447.6	9823634	9827111	990		-630
1322		39.8	65	5.6 1335.2	9824002	9827024	1099		-395	1372		49.6	64		1573.9	9823398	9827112	1143		-618
1323 1324	71	39.9	65	5.8 1414.7	9823755 9823804	9827025 9827026	1096		-487 -440	1373 1374	71	49.9 50.0	64 70		1651.1	9823103	9827115	1083 337		-764 54
1325	71 71	40.0	63 64	6.6 1414.0 47.8 1450.2	9823599	9827026	1142 1049		-574	1375	71	50.2	65		253.0 1167.8	9826672 9824232	9827116 9827118	718		-588
1326	71	40.0	64	54.4 1441.0	9823673	9827026	1094		-518	1376	71	50.4	64		1353.3	9823831	9827119	888		-626
1327	71	40.0	68	52.9 676.7	9825593	9827026	656		-102	1377	71	50.5	65		1298.1	9824007	9827120	893		-560
1328	71	40.2	69	31.3 743.7	9825632	9827027	900		67	1378	71	50.5	70		253.0	9826457	9827120	118		-166
1329	71	40.3	66	39.0 687.0	9825490	9827028	582	10	-177	1379		50.7	68		310.0	9826616	9827122	451	90	194
1330	71	40.4	64	58.7 1281.4	9823945	9827029	870		-564	1380	71	51.5	69	48.1	649.2	9826017	9827129	891		165
1331	71	40.5	62	59.1 1317.0	9823974	9827030	1008		-466	1381	71	51.8	63	28.9	1427.0	9823757	9827132	1029		-568
1332	71	40.5	68	13.7 210.3	9826623	9827030	242	50	56	1382	71	51.8	64	32.4	1463.6	9823541	9827132	926		-712
1333	71	40.6	67	7.5 300.2	9826555	9827031	450	55	169	1383	71	51.8	65	0.0	1282.1	9823894	9827132	719		-716
1334	71	41.3	62	47.4 1226.0	9824174	9827037	920		-452	1384	71	53.4	68	42.8	298.7	9826645	9827146	421		87
1335	71	42.0	66	34.3 639.0	9825645	9827044	573	0	-142	1385		55.0	69	9.0		9826164	9827160	621		35
1336	71	42.2	64	16.5 1760.2	9822813	9827046	1199		-770	1386		55.3	69	40.8		9826488	9827163	849		296
1337	71	42.4	64	18.9 1693.4	9822902	9827047	1080		-814	1387		55.5	69	0.4		9826322	9827165	549		. 44
1338	71	42.5	70	45.0 649.2	9825772	9827048	727		1 8	1388		55.5	69		475.5	9826556	9827165	858		326
1339	71	42.5	72	41.4 356.8	9826354	9827048	407		_	1389		56.0	69	34.9		9826477 9826352	9827169	803		261 64
1340 1341	71 71	42.7	72 69	42.4 262.1 38.6 816.9	9826560 9825587	9827049 9827050	320 1058		26 144	1390 1391	71	56.7 56.9	69 63		451.1 1320.0	9824076	9827176 9827177	568 972		-505
1342		42.8	64	3.6 1895.1	9822546	9827051	1343		-777	1392		57.3	69		463.3	9826342	9827181	591		72
1343		42.8	70	37.9 670.6	9825717	9827051	736		-15	1393		58.0	64		1455.9	9823633	9827187	939		-690
1344		43.0	62	51.4 1303.0	9824234	9827053	1202		-256	1394		58.0	64		1325.0	9823751	9827187	653		-830
1345		43.5	68	59.1 661.4	9825692	9827057	676		-64	1395		58.1	63		1276.0	9824136	9827188	886		-542
1346		43.8	68	33.0 268.2	9826623	9827060	391		91	1396		58.2	70		310.9	9826780	9827189	550		203
1347	71	43.9	63	59.9 1902.8	9822571	9827061	1382		-747	1397		58.5	69	4.9	560.8	9826186	9827192	725		97
1348	71	44.0	66	48.0 564.0	9826020	9827062	699	30	98	1398	71	58.6	64	53.2	1319.0	9823921	9827193	799		-677
1349	71	44.4	68	14.4 91.4	9826969	9827065	186		83	1399	71	58.9	68	30.9	288.6	9826773	9827195	468	45	190
1343												59.2			1668.4		9827198	1149		-718

Station	Latit	ude ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer	Station	Latit	ude ^O S	Longi	tude ^O W He	ight i	Absolute	Theoretical	Pree-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m (Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu
								201		500	3.426	70			1 0 22		000000	0000000			
1401		59.5	65		1160.8	9824319	9827201	701		-598	1426	72	6.4	69	1.8 37		9826627	9827262	513		97
1402	71		64		1669.4	9823246	9827204	1194		-674	1427	72	6.9	63	10.0 130		9824212	9827266	967		-491
1403	72	0.5	65		1269.9	9824196	9827210	905		-516	1428	72	7.2	63	12.1 135		9824070	9827269	983		-534
1404	72	0.7	64		1641.6	9823316	9827211	1171		-666	1429	72	7.7	69	9.0 45		9826396	9827273	532	55	76
1405	72	0.8	65		1247.9	9824211	9827212	850		-547	1430	72	8.0	64	56.0 139		9824092	9827276	1110	1	-447
1406	72	1.0	69	0.4	490.7	9826376	9827214	676		127	1431	72	8.1	69	4.9 25	6.0	9826838	9827277	351		65
1407	72	1.1	63	23.6	1391.0	9823946	9827215	1024		-533	1432	72	8.1	69	45.6 28	39.6	9827013	9827277	630		306
1408	72	1.4	64	45.0	1580.7	9823506	9827218	1166		-603	1433	72	8.3	64	42.1 155	3.2	9823837	9827279	1351		-386
1409	72	1.6	70	24.3	414.5	9826655	9827219	715		251	1434	72	9.0	63	20.5 149	3.0	9823691	9827285	1014		-657
1410	72	1.7	64	52.2	1663.2	9823296	9827220	1208		-653	1435	72	9.0	64	48.5 141	16.3	9824026	9827285	1112		-473
1411	72	1.9	64	52.3	1542.5	9823647	9827222	1185		-541	1436	72	9.4	63	21.6 153	30.0	9823654	9827288	1087		-625
1412	72	1.9	68	52.9	557.8	9826275	9827222	774		150	1437	72	13.2	63	22.7 149	5.0	9823746	9827322	1038		-635
1413	72	2.0	62	58.0	1204.0	9824596	9827223	1089		-259	1438	72	16.6	66	50.1 18	39.0	9827262	9827352	493		282
1414	72	3.1	69	27.8	438.9	9826523	9827233	645		154	1439	72	29.1	63	7.0 161	19.0	9823632	9827461	1167		-644
1415	72	3.3	70	27.6	478.5	9826526	9827234	768		233	1440	72	33.9	63	11.4 151	10.0	9823772	9827503	929		-760
1416	72	4.0	70	24.7	454.2	9826669	9827241	830		322	1441	73	6.7	62	49.9 159	91.0	9824298	9827783	1425		-355
1417	72	4.4	69	39.7		9826836	9827244	645		263	1442	73	12.6	71	47.3	1.5	9828256	9827832	428		427
1418	72	5.0	68		490.7	9826481	9827249	746		197	1443	73	56.1	68	37.7 154	48.0	9824530	9828190	1118		-615
1419	72	5.2	68	43.0		9826620	9827251	597	55	207	1444	74	27.2	64	33.8 146		9825218	9828436	1312		-331
1420	72	5.5	68		119.8	9827166	9827254	282	53	201	1445		36.6	14	40.2 114		9825831	9828510	849		-430
1421	72	5.5	69		502.9	9826299	9827254	597	33	34	1446		34.2	66	49.9 140		9825991	9828943	1385		-187
1421	72	5.8			1629.0	9823499	9827257	1270		-553	1447		31.1	86	21.6 158		9826195	9829744	1348		-428
			63									78									
1423	72	6.1	63		1568.0	9823693	9827259	1273		-482	1448			27	35.2 66		9828375	9830260	168		-577
1424	72	6.1	64		1378.3	9824097	9827259	1091		-451	1449	80		80	53.8 83		9828800	9830617	767		-170
1425	72	6.2	63	39.4	1682.0	9823304	9827260	1235		-648	1450	80	24.0	2	51.1 1112	2.0 9	9828320	9830729	1023		-221

APPENDIX 2

Station listing of all Antarctic Peninsula on-snow gravity measurements made by BAS (1959–84), and which have ice thickness and depth-to-bedrock control.

																									٠,			
Bouguer	Anomaly	nß		334	325	323	326	329	324	309	318	316	319	318	317	329	316	315	293	283	281	293	296	330	338	332	352	403
Terrain	Corr.	nb																										
Free-air	Anomaly	nb		63	43	42	22	-	o	F	-5	-11	-39	-70	-117	-152	-180	-193	-219	-232	-230	-217	-241	-235	-219	-226	-203	-146
Absolute Theoretical Free-air Terrain Bouguer	Gravity	n6		9827382	9827388	9827394	9827400	9827406	9827415	9827422	9827426	9827432	9827439	9827445	9827450	9827456	9827463	9827469	9827476	9827488	9827488	9827493	9827500	9827506	9827512	9827518	9827524	9827531
Absolute 1	Gravity	n6		9827290	9827293	9827286	9827266	9827247	9827256	9827261	9827265	9827261	9827240	9827214	9827170	9827140	9827123	9827108	9827089	9827082	9827090	9827109	9827087	9827096	9827114	9827128	9827157	9827214
Height	E			50.3	44.8	49.0	50.8	52.0	53.3	51.4	52.0	52.0	52.0	52.0	53.3	53.3	52.0	54.4	54.4	54.4	54.4	54.4	55.7	56.9	58.1	53.3	53.3	55.7
wo apn	Min			47.0	44.4	41.3	38.5	35.8	32.5	30.4	27.2	24.1	21.4	18.4	15.5	12.6	9.4	6.8	3.8	0.9	58.2	54.6	51.5	48.9	46.0	43.0	40.3	37.5
Longit	Ded			99	89	89	89	89	89	89	68	89	89	89	89	89	89	89	89	89	67	67	67	67	67	67	67	29
ude os	Min			20.1	20.7	21.5	22.1	22.8	23.7	24.6	25.1	25.8	26.6	27.2	27.9	28.5	29.4	30.0	30.8	31.4	32.2	32.8	33.5	34.3	35.0	35.7	36.4	37.2
Latit	Ded			72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
Station Latitude OS Longitude OW Height	Mimber			56	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	4.7	8	6	20
Ronaner	VI emond	nb		14	22	118	20	26	20	57	32	34	32	18	35	32	01	13	ñ	-28	21	-80	·Ψ	-92	-55	-	279	300
Torrain	,	. nb	•																									
Torreit Terrain Bouguer		ATOMOT A	,	-332	-117	-429	-434	-403	-405	-379	-383	-442	-463	-525	464-	-480	-547	-533	-525	-524	-547	-533	-372	-504	-197	-247		10
10000	neore crear	di du		9826839	9826839	9826840	9826841	9826842	9826843	9826843	9826843	9826845	9826846	9826848	9826848	9826848	9826851	9826851	9826852	9826853	9826853	9826854	9826855	9826855	9589266	9589686	0600706	9827376
		Gravity	, n	9826443	9826637	9826348	9826347	0826375	9826369	0826399	9826395	9826334	9826315	9826247	9826278	9826294	9826229	9826242	9826250	9826246	9826231	9829286	967976	982626	0039200	9626360	9626312	9827268
	Reigni	E		20.7	27.4	200	9 6 6		22.5	1 6		22.5	22.0	24.5	24.5	23.5	24.5	24.0	24.9	26.9	26.4	27.4	2 2 2	2 2 2 2	20.00	0 0	0 0	57.5
0	age .	E T		13.7	α 4.	13 3	11.5	7		, ,	e o				, A	5,6		A7 . 2	4.74	43.5	49.0		37 5		0.60	* .	20.0	49.9
	Longita	Deg		8	2	9 4	8 9	0 0	0 0	0	0 4	2 0	2 4	3 5				5 5	, ,	, ,	; ;	; ;	6 5	5 5	6 5	6 5	9	89
Ö	ge v	Min		10		10.61	19.0	7.61	20.00	6.61	19.9	20 2	, ,	1 6	20.4	20.5	0.00	0.00	6.02	21.5	21.0		1.12	7:17	7.17	21.3	21.3	19.3
	Latit	Deg		17	: ;	: F	7 7	† ;	7 ;	† ;	7 ;	1 7	1 7	1 7	: =	1 5	† F	7 7	† F	7 7	1 7	1 7	7 ;	: ;	7 ;	7 ;	7 ;	75
	Station Latitude S Longitude W Reight	Number		-	٠, ٢	4 (n •	er i	Ω (,	~ •	• •	, ,	? :	- C	13	Ç .	* U	CT .	1.1	, a	9 5	61	2 6	17	77	23	25

APPENDIX 3

Station listing of all Antarctic Peninsula on-snow gravity measurements made by BAS (1959–84) without accurate ice thickness or bathymetric control. Nearest available information on thickness and depth has been considered in the Bouguer corrections, so the Bouguer anomalies must be considered as only approximate.

. >																																						_		_			_				_
Corr. Anomaly	nb		464	375	399		404	44	149	390	217	301	514	157	431	419	307	378	040	710	4 C. C.	512	312	459	747	610	469	246	360	412	441	445	536	404	371	727	909	587	644	\$75	713	899	600	580	610	455	267
Corr.	nß												12						:	1	01	12	18	-	1	0	m (۰ 0	9	0	0	- 0	-	38	m	6	20	7	e r (o 01	7	ĸ	7	7	7	>
Anomaly	nb		943	375	673	708	607	697	149	753	217	301	190	157	629	419	307	378	040	208	4. a	766	416	114	402	266	122	861	16	62	102	106	196	264	1086	384	689	1324	302	935	371	775	255	597	756	113	227
Gravity	nß		9821867	9821867	9821869	9821869	9021077	9821879	9821879	9821883	9821883	9821888	9821888	9821890	9821892	9821893	9821894	9821900	9821906	9821912	9821914	9822014	9822044	9822259	9822283	9822300	9822306	9822336	9822360	9822383	9822383	9822413	9822413	9822436	9822436	9822442	9822442	9822448	9822454	9822460	9822466	9822472	9822472	9822478	9822478	9822484	9822495
Gravity	n6		9821363	9822242	9821662	9821536	9021402	9821746	9822028	9821510	9822100	9822189	9821802	9822047	9821762	9822312	9822201	9822278	9822446	9821878	9822458	9821990	9821991	9822373	9822685	9822566	9822428	9822534	9822403	9822445	9822476	9822510	9822590	9822510	9821214	9822684	9822650	9821427	9822710	9822046	9822701	9822830	9822579	9822920	9822721	9822467	9822676
ne 1911.			469.0	0.0	285.0	384.0	383.0	269.0		365.0	0.0	0.0	284.0	0.0	262.0	0.0	0.0	0.0	0.0	0.1/2	0.0	256.0	152.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	• •	748.0	46.0	156.0	760.0	15.0	437.0	44.0	135.0	48.0	50.0	166.0	42.0	15.0
Longicude w meigne. Deg Min m			2.3	26.9	55.7	59.0	n •		12.6	3.6	20.0	27.8	51.0	16.0	1.2	22.1	18.0	29.7	25.6	50.0	33.7	23.0	25.0	32.0	28.0	30.0	18.0	26.0	33.0	19.0	34.0	24.0	41.0	28.0	13.0	32.0	39.0	10.0	52.0	4.0	31.0	57.0	46.0	58.0	0.0	26.0	40.0
Deg			57	23	26	9 1	/ 5	ć <u>r</u>	, ,	57	57	57	5.7	21	21	57	57	27	57	57	57	0 10	28.	58	28	58	28	28	y	8 8	28	28	88 6	80 0	5.0	59	59	59	28	29	5 5 5 6	28	59	58	59	59	28
Latitude s Deg Min			34.3	34.3	34.4	34.4	54. Y	35.3	25.5	35.6	35.6	36.0	36.0	36.2	36.3	36.4	36.5	37.0	37.5	38.0	38.2	45.5	49.0	7.0	9.0	10.5	11.0	13.5	15.0	17.5	17.5	20.0	20.0	22.0	22.0	22.5	22.5	23.0	23.5	24.0	24.5	25.0	25.0	25.5	25.5	26.0	27.0
Deg			63	63	63	63	2 (5 6	3 6	6 6	63	63	63	63	63	63	63	63	63	63	93	2 4	9	64	64	64	64	9	4 4	9	64	64	64	9 7	. 4	64	64	64	64	64	4 4	6. 49	64	64	64	64	64
Station Number			51	52	53	5.4	ر د ر	0 7	n ar	96	09	61	62	63	64	65	99	67	89	69	70	1, 2,	7.3	7.4	75	9/	11	78	90	8 8	82	83	8	82	87	88	68	90	91	92	. 4 . 4	95	96	6	86	66	100
Bouguer Anomaly	nß	,	292	704	745	722	506	67 6	666	909	419	711	332	428	494	363	644	715	697	-11	630	281	/95	323	484	208	538	129	594	446	613	458	461	416	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	494	240	428	88	428	617	150	507	425	9/	340	458
Terrain Corr.	nß		2	Ŋ								9		45	9	6						•	4			80																	7				
Free-alr Anomaly	nb		1128	945	1062	1007	503	479	666	664	419	708	332	919	884	069	906	715	697	7	630	581	856	323	484	931	800	129	594	8 2 U	613	822	834	764	2//	1004	240	762	88	170	274	150	1011	901	16	340	694
heoretical Gravity	nb	h	9821779	9821797	9821797	9821807	9821808	9821810	9821810	9821813	9821818	9821822	9821822	9821822	9821828	9821828	9821830	9821830	9821830	9821831	9821834	9821834	9821834	9821840	9821840	9821840	9821841	9821848	9821849	9821851	9821853	9821855	9821855	9821855	9821855	9821859	9821859	9821860	9821860	9821861	9821861	9821864	9821864	9821865	9821865	9821865	9821867
Absolute Theoretic Gravity Gravity	, DB	j n	9821873	9821897	9821860	9821805	9822317	9822239	9822209	9822477	9822237	9822505	9822154	9821485	9821582	9821181	9821829	9822545	9822527	9821820	9822464	9822415	9821863	9822163	9822324	9822113	9821715	9821977	9822443	9821569	9822466	9821548	9821535	9821533	9821557	9821332	9822099	9821576	9821948	9821564	9822135	9822014	9821446	9821670	9821941	9822205	9821652
Station Latitude 'S Longitude 'W Height Number Deq Min Deg Min m			335.0	274.0	324.0	327.0	0.0	0.0		0.0		0.8	0.0	328.0	366.0	433.0	294.0	0.0	0.0	0.0	0.0	0.0	268.0		0.0	213.0	300.0	0.0	0.0	0.758		366.0	374.0	352.0	347.0	496.0	0.0	339.0	0.0	346.0	0.0	0.728	463.0	292.0	0.0	0.0	319.0
de w			2.0	4.0			13.7	17.8	20.5	9.5	12.3	9.0	17.8	43.0	37.0	49.0	2.0	8.3	20.8	12.3	10.0	26.8	31.0	12.0	20.5	27.0	0.8	15.3	8.5	57.4	22.5	53.1	55.0	57.8	58.5	. F	12.0	9.99	16.7	54.8	21.8	18.0	51.0	51.1	15.2	32.0	47.3
ongitu Deg	,		57	23	23	21	57	57	/5	57	5 5	57	57	57	21	57	57	22	2.2	57	21	27	57	7 2	57	21	57	21	27	56	57	26	26	26	26	57	57	99	22	26	57	57.	57	99	57	57	26
Nin I			27.0	28.5	28.5	29.3	29.4	29.5	29.5	29.8	30.1	30.5	30.5	30.5	31.0	31.0	31.2	31.2	31.2	31,3	31.5	31.5	31.5	31.7	32.0	32.0	32.1	32.7	32.8	32.9	33.1	33.3	33.3	33,3	33.3	33.6	33.6	33.7	33.7	33.8	33.8	34.0	34.0	34.1	34.1	34.1	34.3
atitud Deq			63 2	63 2						63						63	63	63	63					5 6				63		69 63					69			63	63			2 6				63	63
ı L									,		٠.5	3 [12	13	14	15	16	17	18	19	20	21	22	57.7	25	26	27	28	29	30	32	33	34	35	36	38	39	4 0	41	42	ές ·	at 40 at ⊓	. 9	47	48	649	20

Station Latitude OS Longitude OW Height	atitud	le os i	Longitu	ude ow	Height	Absolute Theoreti	Theoretical	Free-air	Terrain Bouguer	Bouguer	Station Latitude S Longitude W Height	Latitu	de os i	ongitu	Mo op	Height	Absolute T	Absolute Theoretical F	Free-air	Terrain Bouguer	Bouguer
Number	Deg	Min	Deg	Min	E	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	E	Gravity	> 1	Anomaly	Corr.	Anomaly
						n6	nß	nb	nb	nß							nß	nb	n6	nb	nß
101	64 2	27.5	28	53.0	251.0	9822439	9822501	712	. 6	460	151	65	10.0	09	12.0	36.0	9823379	9822996	494		834
102	64 2	27.5	59	22.0	39.0	9822668	9822501	287	-	628	152	65	10.5	09	27.0	42.0	9823268	9823002	395	0	735
103		28.0	59	51.0	48.0	9822416	9822507	57	7	399	153	9	13.0	09	14.0	36.0	9823377	9823031	457	0	797
104		28.5	28	45.0	91.0	9822851	9822513	619	m. 1	557	154	9	14.0	09	32.0	42.0	9823291	9823043	378	0 (718
105		28.5	8 6	52.0	353.0	9822274	9822513	850	ın c	563	155	9	16.5	9 9	17.0	36.0	9823349	9823071	389	-	67/
101	7 7	28.5	y .	• •	35.0	987786	9822513	600	7 4	301	156	£ ;	17.0	3 3	36.0	0.24	9823314	9823077	367		/0/
101		29.0	χ α	17.0	37.0	982289	9822519	191	-	200	157	9	19.5	9 9	0.61	36.0	9823340	9823106	343	-	683
109		30.0	5 6	14.0	35.0	9822962	9822531	539		880	159	φ. γ.	20.02	2 9	21.0	35.0	9823335	9823140	323		663
110		30.5	58	50.0	347.0	9822367	9822537	901	10	620	160	9 29	23.5	3 9	45.0	43.0	9823360	9823152	341		681
111	64 3	31.0	29	11.0	35.0	9822968	9822542	534	1	875	161	65	26.0	09	24.0	35.0	9823359	9823180	287	0	627
112	64.3	31.0	59	56.0	48.0	9822609	9822542	215	-	256	162	65	27.0	09	49.0	44.0	9823366	9823192	310	0	650
113		33.5	29	16.0	35.0	9822685	9822572	221	0	561	163	65	29.0	09	26.0	34.0	9823348	9823215	238	0	578
114	64 3	34.0	09	3.0	48.0	9822865	9822578	435	7	777	164	65	29.5	09	55.0	44.0	9823340	9823220	255	0	595
115		35.5	59	22.0	35.0	9822819	9822595	332	0	672	165	9	32.0	09	28.0	34.0	9823335	9823249	191	0	531
116		37.0	09	0.6	48.0	9822962	9822613	497	-	838	166	9	33.0	09	57.0	44.0	9823326	9823260	202	0	542
111		38.0	29	26.0	35.0	9822914	9822625	397	0	737	167	9	34.0	19	47.0	207.0	9823422	9823272	189	7	609
118		40.0	9	15.0	48.0	9822853	9822648	353	→ (694	168	. 65	35.0	9	31.0	34.0	9823345	9823283	167	0	207
119		40.5	20	32.0	35.0	9822911	9822654	365	5 (705	169	9	35.0	19	20.0	58.0	9823711	9823283	607	0	947
120		41.0	9 (23.0	9.6	9822/45	9822660	157	,	6/6	170	65	35.5	19	0.0	45.0	9823359	9823289	506	0	549
121		42.5	9 5	27.0	9.0	50/2786	1/97786	111	ŋ •	075	171	9	36.5	19	26.0	62.0	9823584	9823300	475	7 6	818
777	40	5.5	2 5	35.0	32.0	6627786	1197786	977	• •	100	172	65	37.0	3	48.0	58.0	9823630	9823306	503	o (6 t
124		43.0	0 4	30.0	35.0	9022102	4822683	350	2	069	173	92	38.0	3	33.0	33.0	9823380	9823317	165	-	500
125		43.0	S	47.0	303.0	9822381	9822683	633	10	467	174	ŝ	38.0	79			9623572	9623317	200	·	549
126		43.0	9	52.0	400.0	9821932	9822683	483	10	256	2/1	ξ ξ	38.5	7 5	0.05	79.0	9823393	9823323	411	, 0	751
127	64	43.0	09	54.0	467.0	9821728	9822683	486	10	218	177	3 4	38.5	1 5	58.0	62.0	9823551	9823323	419	. 0	160
128		46.0	59	45.0	36.0	9822984	9822718	377	0	717	178	99	40.5	19	43.0	57.0	9823511	9823346	341	0	681
129	64	46.0	9	25.0	48.0	9822704	9822718	134	0	474	179	65	41.0	09	36.0	33.0	9823469	9823351	220	0	260
130	64	48.0	69	51.0	38.0	9823055	9822741	431	0	771	180	65	41.5	61	51.0	59.0	9823474	9823357	299	0	639
131	64	48.5	09	21.0	46.0	9822790	9822747	185	0	525	181	9	42.0	61	7.0	45.0	9823379	9823363	155	0	495
132	9	50.5	59	56.0	39.0	9823087	9822771	437	0 (777	182	65	44.0	09	38.0	33.0	9823577	9823385	294	0 (634
133	* 4	20.5	2	0.81	0.04	9823011	9822111	5 Y S	> c	705	183	60	944.0	Į (0.0	0.75	9823428	9823385	151		600
135	, 4	53.0	9	12.0	43.0	9823132	9822800	465	0	805	1 2 4		4 5.0	7 5	50.0	28.0	9823466	9823397	248		588
136	49	53.0	9	15.0	44.0	9823129	9822800	465	0	805	186	9	46.0	19	50.0	58.0	9823468	9823408	239	0	579
137	79	56.5	9	7.0	40.0	9823210	9822840	493	0	833	187	9	46.5	19	44.0	57.0	9823381	9823414	143	0	483
138	7 9	57.0	09	0.6	41.0	9823199	9822846	479	0	821	188	9	47.5	9	41.0	33.0	9823597	9823425	274	0	614
139		58.5	09	6.0	40.0	9823350	9822863	610	0	950	189	65	48.5	61	15.0	46.0	9823450	9823436	156	0	964
140	65	0.5	09	12.0	40.0	9823292		529	0	698	190	9	49.5	61	44.0	57.0	9823421	9823448	149	0	489
141	£ ;	2.5	9 (0.7	110.0	9823174		\$0.4 \$0.5	- c	0.50	191	65	49.5	.	53.0	0.09	9823379	9823448	977	.	457
747	Ç Y	٠ • •	9 9	17.0	36.0	9823334	9822916	670	۰ د	600	192	65	50.5	3 3	0.44	34.0	9823675	9823459	321	-	199
144	2 4	0 4	0 0	7.7.0	34.0	1466304		260	٠ .	006	193	6 3	0.00	10	2.61	36.0	9023400	9823470	366		704
145	65	4.5	9	8.0	74.0	9823358	9822933	653	0	578	195	3 49	51.5	3 6	48.0	58.0	9823538	9823470	247	. 0	587
146	. 29	5.0	59	49.0	32.0	9823355	9822939	515	0	855	196	9	52.5	9	59.0	40.0	9823791	9823481	433	0	773
147	65	0.9	53	43.0	28.0	9823340	9822950	476	0	816	197	9	52.5	19	57.0	63.0	9823435	9823481	148	0	489
148	65	0.9	9	21.0	42.0	9823298	9822950	477	0	817	198	9	53.0	. 19	1.0	42.0	9823779	9823487	422	0	762
149	65	7.0	09	0.6	36.0	9823339	9822962	488	0	828	199	92	53.0	61	24.0	50.0	9823526	9823487	193	0	533
150	. 59	8.5	09	25.0	42.0	9823264	9822979	414	0	754	200	65	53.5	61	8.0	45.0	9823694	9823493	340	H	681

APPENDIX 1

Station listing of all Antarctic Peninsula on-rock gravity measurements by BAS (1959-84).

Statio	n Lat	itu	de ^O S	Longi	ude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouquer	Station	Latit	uđe ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouquer	
Number			Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
							gu	gu	gu	gu	gu		_		-			gu	gu	gu	gu	gu	
201	65		54.0	61	15.0	46.0	9823762	9823498	406	1	747	251	66	7.0	62	12.0	200.0	9823553	9823645	526	0	451	
202	69		54.0	61	21.0	48.0	9823796	9823498	446	0	786	252	66	7.0	62	25.0	329.0	9823152	9823645	523	7	236	
203 204	65 65		54.0 55.0	61 60	52.0 58.0	59.0 159.0	9823554 9823689	9823498 9823510	238	0 2	578 533	253 254	66 66	7.0 7.5	62 62	50.0 14.0	795.0 166.0	9822374	9823645	1183	24	514	
204	6:		55.0	62	4.0	63.0		9823510	670	0	433	255			62			9823631	9823650	493	0	431	
206	6:		55.5	61	29.0	52.0	9823407 9823601	9823515	92 246	0	587	256	66 66	7.5 8.0	61	19.0 10.0	230.0 160.0	9823182 9823690	9823650	242	-	155	
207	6:		56.0	61	17.0	135.0	9823752	9823521	648	2	532	257	66	8.0	62	33.0	306.0	9823088	9823656 9823656	528 377	1 1	389 106	
208	6		56.0	61	56.0	60.0	9823534	9823521	198	0	539	258	66	8.0	62	40.0	447.0	9822970	9823656	694	9.	314	
209	6		57.5	60	56.0	269.0	9823359	9823538	651	2	418	259	66	8.5	62	30.0	224.0	9823331	9823661	361	10	158	
210	6		57.5	62	9.0	64.0	9823558	9823538	218	0	558	260	66	9.0	62	17.0	198.0	9823448	9823667	392	0	317	
211	6		58.0	61	34.0	54.0	9823627	9823543	250	0	590	261	66	9.5	61	53.0	104.0	9823861	9823672	509	1	471	
212	6		58.0	61	59.0	62.0	9823582	9823543	230	0	571	262	66	9.5	62	23.0	231.0	9823407	9823672	447	1	361	
213	6		58.5	60	40.0	452.0	9823069	9823549	915	19	539	263	66	10.0	61	38.0	314.0	9823498	9823678	789	3	518	
214	6		58.5	61	13.0	288.0	9823401	9823549	741	5	495	264	66	10.5	61	12.0	99.0	9823869	9823684	491	0	453	
215	6		59.5	60	45.0	519.0	9822812	9823560	853	11	411	265	66	10.5	62	33.0	194.0	9823401	9823684	316	1	169	
216	6		59.5	60	53.0	375.0	9823168	9823560	765	3	441	266	66	11.0	61	44.0	455.0	9823197	9823689	912	14	530	
217	6	6	0.0	61	26.0	50.0	9823683	9823566	271	1	612	267	66	11.5	61		129.0	9823791	9823695	494	2	447	
218	6	6	0.0	62	13.0	66.0	9823662	9823566	300	0	640	268	66	11.5	62	38.0	277.0	9823414	9823695	574	4	342	
219	6	6	0.5	60	53.0	404.0	9823220	9823572	895	3	545	269	66	12.0	61	49.0	357.0	9823334	9823700	735	12	435	
220	6	6	0.5	61	12.0	425.0	9823235	9823572	975	11	615	270	66	12.0	62	21.0	131.0	9823745	9823700	449	1	401	
221	6	6	0.5	61	33.0	53.0	9823811	9823572	403	0	743	271	66	13.5	61	14.0	81.0	9823981	9823717	514	0	483	
222	6	6	0.5	61	37.0	55.0	9823787	9823572	385	0	724	272	66	14.0	61	52.0	275.0	9823611	9823723	737	- 5	499	
223	6	6	0.5	62	3.0	63.0	9823622	9823572	245	0	586	273	66	14.0	62	0.0	99.0	9823873	9823723	456	0	797	
224	- 6	6	1.0	61	40.0	55.0	9823642	9823577	235	0	574	274	66	14.0	62	18.0	80.0	9823819	9823723	343	1	684	
225	6	6	2.0	61	43.0	56.0	9823675	9823588	259	0	599	275	66	14.0	62	39.0	85.0	9823803	9823723	343	2	755	
226	6	6	2.5	60	58.0	471.0	9823042	9823594	901	24	514	276	66	14.0	62	44.0	116.0	9823787	9823723	422	4	367	
227	6	6	2.5	61	9.0	428.0	9823227	9823594	954	8	588	277	66	15.0	62	49.0	232.0	9823553	9823734	535	1	404	
. 228	6	6	3.0	62	6.0	64.0	9823688	9823600	286	0	626	278	66	15.5	62	14.0	77.0	9823818	9823740	316	0	656	
229	6	6	3.5	62	20.0	275.0	9823320	9823605	563	1	349	279	66	16.0	62	42.0	84.0	9823820	9823745	334	1	745	
230	6	6	4.0	62	32.0	468.0	9822862	9823611	695	7	294	280	66	16.5	61	50.0	165.0	9823788	9823751	547	0	403	
231	6	6	4.5	61	6.0	299.0	9823468	9823616	774	1	514	281	66	16.5	62	4.0	68.0	9823831	9823751	290	0	630	
232	6	6	4.5	61	7.0	263.0	9823545	9823616	740	1	511	282	66	17.0	61	15.0	65.0	9823966	9823756	410	0	750	
233	6	6	4.5	62	29.0	420.0	9822952	9823616	632	12	248	283	66	17.0	62	8.0	72.0	9823849	9823756	315	1	657	
234	6	6	4.5	62	38.0	467.0	9822812	9823616	637	8	238	284	66	17.0	62	42.0	84.0	9823807	9823756	310	2	722	
235	6	6	5.0	61	1.0	279.0	9823376	9823622	615	4	376	285	66	17.0	62	47.0	186.0	9823816	9823756	634	3	537	
236		6	5.0	61	10.0	188.0	9823589	9823622	547	1	384	286	66	18.0	62	3.0	67.0	9823863	9823767	302	0	642	
237	6		5.0	61	13.0	176.0	9823626	9823622	547	2	395	287	66	18.0	62	6.0	70.0	9823845	9823767	294	0	635	
238	6		5.0	61	18.0	258.0	9823656	9823622	830	2	607	288	66	18.0	62	35.0	82.0	9823849	9823767	335	0	710	
239	6		5.0	61	25.0	234.0	9823686	9823622	786	7	589	289	66	18.0	62	45.0	80.0	9824020	9823767	499	2	876	
240	_	6	5.0	61	31.0	183.0	9823582	9823622	525	0	365	290	66	18.5	61	47.0	241.0	9823751	9823773	722	7	518	
241		6	5.0	61	48.0	57.0	9823711	9823622	265	0	605	291	66	19.0	62	39.0	80.0	9823854	9823779	322	1	698	
242		6	5.0	62	9.0	70.0	9823852	9823622	446	0	420	292	66	19.0	63	17.0	84.0	9823385	9823779	-134	7	248	
243	_	6	5.5	61	55.0	60.0	9823678	9823628	235	. 0,	576	293	66	19.5	61	57.0	65.0	9823957	9823784	374	0	714	
244		6	5.5	62	10.0	80.0	9823892	9823628	511	0	481	294	.66	19.5	62	15.0	75.0	9823819	9823784	266	0	607	
245		6	6.0	62	2.0	60.0	9823817	9823633	369	0	710	295	66	19.5	62	29.0	80.0	9823800	9823784	263	0	638	
246	_	6	6.0	62	45.0	631.0	9822573	9823633	887	12	350	296	66	20.0	61	16.0	47.0	9823962	9823790	317	0	657	
247		6	6.5	62 62	38.0 41.0	542.0	9822820	9823639	854	7	388	297 298	66 66	20.0	62	47.0	161.0 75.0	9824024 9823787	9823790 9823795	731 223	2 0	587 564	
248 249	_	6	6.5	62 61	35.0	539.0	9822672	9823639	696	7 2	233 433	298 299	66	20.5	62 62	22.0 51.0	313.0	9823787	9823795 9823795	937	2	710	
250	-	6	7.0 7.0	61	50.0	217.0 56.0	9823596 9823903	9823645 9823645	621 431	2	773	300	66	21.0	61	52.0	62.0	9823766	9823801	451	1	710	
250			7.0	0.1	50.0	20.0	3023303	3043043	431	4		300	00	21.0	0.1	32.0	02.0	3024000	3023001	431	1	173	

Station	Latitu	ıde ^O S	Longit	uđe ^O W	Height	Absolute	Theoretical	Free-air	Terrair	Bouguer	Station	Latit	uđe ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer	
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly		Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu	
301	66	21.0	62	54.0	304.0	9823769	9823801	906	1	642	351	66	38.0	63	11.0	67.0	9823956	9823989	174	0	514	
302	66	21.0	62	55.0	290.0	9823734	9823801	828	1	576	352	66	38.0	63	26.0	65.0	9823834	9823989	46	0	386	
303	66	21.5	62	22.0	75.0	9823791	9823806	216	0	557	353	66	38.0	63	36.0	59.0	9823858	9823989	51	0	391	
304	66	21.5	62	37.0	74.0	9823783	9823806	205	0	546	354	66	38.0	63	42.0	59.0	9823798	9823989	-9	2	333	
305	66	21.5	62	53.0	292.0	9823718	9823806	813	1	559	355	66	38.0	63	49.0	65.0	9823758	9823989	-30	5	315	
306			63	15.0	82.0	9823466	9823806	-87	3	291	356	66	38.0	63	56.0	68.0	9823631	9823989	-148	14	206	
307	66	21.5	63	21.0	83.0	9823381	9823806	-169	2	208	357	66	38.5	62	39.0	444.0	9823556	9823994	932	11	556	
308	66	22.0	61	46.0	142.0	9823864	9823812	490	1	367	358	66	40.5	62	37.0	433.0	9823608	9824016	928	7	558	
309	66	22.0	62	29.0	74.0	9823830	9823812	246	0	587	359	66	41.0	62	32.0	506.0	9823419	9824022	959	19	537	
310	66	22.0	62	53.0	307.0	9823724	9823812	860	1	594	360	66	41.0	63	32.0	60.0	9823934	9824022	97	0	438	
311	66	22.0	62	55.0	271.0	9823734	9823812	758	1	523	361	66	41.0	63	56.0	60.0	9823704	9824022	-133	6	214	
312		22.5	62	55.0	261.0	9823849	9823817	837	1	611	362	66	41.5	63	12.0	64.0	9823998	9824027	168	0	508	
313	66	23.0	62	52.0	339.0	9823754	9823823	977	1	683	363	66	43.0	63	56.0	57.0	9823892	9824044	24	8	372	
314	66	23.5	62	15.0	70.0	9823849	9823829	236	0	577	364	66	44.0	63	40.0	55.0	9823975	9824055	90	0	429	
315		23.5	62	49.0	265.0	9823786	9823829	775	1	545	365	66	45.0	63	13.0	58.0	9824053	9824066	166	1	506 445	
316	66	23.5	62	55.0	219.0	9824072	9823829	919	1	729	366	66	45.0	63	51.0	51.0	9824012	9824066	103	1	385	
317	66	23.5	63	24.0	80.0	9823496	9823829	-86	1	290	367 368	66 66	45.0 47.5	63 63	52.0 47.0	53.0 50.0	9823946 9824049	9824066 9824093	44 110	0	450	
318	66	24.0	61	18.0	45.0	9823999	9823834	304	0	644	369	66		63	11.0	57.0	9824100	9824099	177	0	517	
319	66	24.0	63	13.0	80.0	9823543	9823834	-44	0	331	370	66	48.0 50.0	63	57.0	327.0	9823431	9824121	319	2	66	
320	66	24.5	62	50.0	302.0	9823735	9823840	827	1	565			51.0	63		50.0	9824185	9824132	208	0	548	
321	66	25.0	62	7.0	67.0	9823952	9823845	314	0	654	371 372	66 66	53.0	64	7.0 5.0	208.0	9823724	9824154	212	0	53	
322	66	25.0	62	59.0	133.0	9823975	9823845	540	2	418	372	66	55.0	63	3.0	48.0	9824225	9824175	198	0	538	
323	66	25.5	62	46.0	257.0	9823726	9823851	668	0	444	374	66	57.0	63	7.0	48.0	9824326	9824197	277	. 0	617	
324	66	25.5	62	48.0	254.0	9823794	9823851	727	0	506	375	66	57.5	64	13.0	53.0	9824172	9824203	133	3	476	
325	66	25.5	63	3.0	75.0	9824040	9823851	421	0	762	376	67	1.0	63	12.0	48.0	9824367	9824241	274	0	614	
326	66	26.0	63	28.0	77.0	9823560	9823856	-59	0	281 722	377	67	1.5	64	16.0	58.0	9824185	9824246	118	0	458	
327 328	66 66	27.0 27.0	61	22.0	46.0	9824107 9823993	9823867 9823867	382 317	0	658	378	67	2.0	64	14.0	57.0	9824166	9824252	90	0	430	
	66	27.0	62 62	0.0 47.0	62.0 237.0	9823770	9823867	634	0	428	379	67	4.0	63	16.0	48.0	9824407	9824273	282	0	622	
329 330	66	27.0	63	2.0	72.0	9823918	9823867	273	1	615	380	67	4.0	64	7.0	55.0	9824280	9824273	176	0	515	
331	66	27.5	63	5.0	75.0	9823840	9823873	199	1	541	381	67	5.0	64	2.0	55.0	9824335	9824284	221	0	560	
332	66	28.0	62	44.0	291.0	9823600	9823878	620	0	366	382	67	6.0	63	56.0	54.0	9824426	9824295	298	0	640	
333	66	28.0	63	32.0	74.0	9823494	9823878	-156	0	185	383	67	6.0	64	19.0	50.0	9824247	9824295	106	0	446	
334	66	29.0	61	53.0	56.0	9824036	9823890	319	0	659	384	67	7.0	63	20.0	48.0	9824410	9824306	252	0	592	
335	66	30.0	61	26.0	46.0	9824129	9823901	370	0	710	385	67	8.0	63	49.0	53.0	9824436	9824317	283	0	623	
336	66	30.0	62	43.0	210.0	9823933	9823901	680	0	497	386	67	9.0	63	42.0	51.0	9824445	9824328	275	. 0	616	
337	66	30.0	63	8.0	72.0	9823811	9823901	133	0	474	387	67	10.0	63	24.0	48.0	9824419	9824338	229	0	569	
338	66	30.5	61	46.0	53.0	9824086	9823906	343	0	683	388	67	10.0	64	23.0	46.0	9824323	9824338	127	0	467	
339	66	30.5	63	6.0	72.0	9823918	9823906	234	0	575	389	67	11.0	63	33.0	50.0	9824404	9824349	209	0	549	
340	66	31.0	63	32.0	70.0	9823577	9823912	-119	0	222	390	67	12.0	63	28.0	50.0	9824409	9824360	203	0	543	
341	66	32.0	62	46.0	175.0	9824034	9823923	651	Ö	498	391	67	13.0	63	26.0	49.0	9824460	9824371	240	0	580	
342	66	32.5	61	31.0	47.0	9824116	9823928	333	0	673	392	67	13.0	64	26.0	46.0	9824569	9824371	340	0	680	
343	66	32.5	61	38.0	50.0	9824129	9823928	355	0	695	393	67	13.5	63	32.0	48.0	9824465	9824376	237	0	577	
344	66	33.0	63	15.0	73.0	9823740	9823934	32	0	373	394	67	15.0	63	15.0	47.0	9824491	9824392	244	0	584	
345	66	33.0	63	34.0	65.0	9823694	9823934	-39	0	301	395	67	15.0	63	33.0	50.0	9824457	9824392	219	0	559	
346	66	34.0	62	47.0	226.0	9823956	9823945	709	0	512	396	67	16.5	63	8.0	46.0	9824544	9824409	277	0	617	
347	66	34.0	63	8.0	70.0	9823940	9823945	211	0	554	397	67	17.0	63	37.0	49.0	9824500	9824414	237	0 -	577	
348	66	35.5	63	35.0	62.0	9823803	9823961	33	0	374	398	67	17.0	64	30.0	47.0	9824704	9824414	435	0	775	
349	66	36.0	63	22.0	70.0	9823806	9823967	55	. 0	396	399	67	18.5	63	0.0	45.0	9824587	9824430	296	0	636	
350		36.5	62	42.0	260.0	9823965	9823972	795	0	569	400	67	19.5	63	43.0	48.0	9824524	9824441	231	0	571	
•																						

Station	Latit	ude ^O S	Longi	tuđe ^O V	Height	Absolute	Theoretical	Free-air	Terrain	n Bouguer	Station	Latit	ude ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer	ε
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu	
401	67	19.5	64	36.0	50.0	9824730	9824441	443	0	783	451	67	34.5	65	12.0	68.0	9824675	9824602	283	1	624	
402	67	20.0	62	53.0	45.0	9824673	9824446	366	0	706	452	67	36.0	62	53.0	45.0	9824808	9824618	329	0	669	
403		21.0	64	51.0	53.0	9824666	9824457	372	0	712	453		36.0	63	42.0	45.0	9824792	9824618	313	. 0	653	
404	67	21.5	62	46.0	45.0	9824708	9824462	384	0	724	454	67	36.0	64	15.0	45.0	9824793	9824618	314	0	654	
405	67	22.0	63	47.0	47.0	9824656	9824468	333	0	673	455	67	36.0	65	20.0	75.0	9824847	9824618	461	11	813	
406	67	22.0	64	55.0	55.0	9824573	9824468	275	0	614	456	67	36.5	65	28.0	80.0	9824891	9824623	515	63	953	
407	67	23.0	62	40.0	45.0	9824751	9824479	411	0	751	457	67	37.0	65	8.0	65.0	9824619	9824628	191	1	532	
408	67	23.0	64	58.0	60.0	9824535	9824479	242	4	587	458	67	38.5	62	53.0	46.0	9824822	9824644	320	0	660	
409		24.5	63	52.0	47.0	9824734	9824495	384	0	724	459	67	38.5	63	49.0	45.0	9824853	9824644	347	0	687	
410	67	25.0	65	27.0	90.0	9824117	9824500	-105	20	324	460	67	38.5	68	24.7	180.0	9824537	9824644	448		247	
411	67	25.5	65	5.0	65.0	9824348	9824505	43	6	389	461	67	39.0	64	21.0	44.0	9824844	9824650	330	0.	670	
412		26.0	62	40.0	45.0	9824782	9824511	410	0	750	462	67	39.5	65	8.0	67.0	9824506	9824655	58	1	399	
413 414	67	26.3	68	12.5	493.0	9823724	9824514	731	•	180	463	67	40.5	63	56.0	45.0	9824868	9824666	341	0	681	
414	67	27.0 27.0	63 65	57.0 27.0	48.0 88.0	9824715 9824310	9824522 9824522	342	0	682	464	67		62	53.0	47.0	9824802	9824671	276	0	616	
416	67	28.0	65	12.0	77.0	9824234	9824522	60 -61	19 0	488 279	465	67	41.0	6.5	3.0	60.0	9824546	9824671	60	1	402	
417	67	28.5	65	27.0	85.0	9824536	9824538	261	13	650	466 467	67	42.0	64 64	27.0 57.0	42.0 57.0	9824910	9824682	358 165	0	698 505	
418	67	29.0	62	38.0	45.0	9824807	9824543	403	0	743	468	67	42.0	65	17.0	80.0	9824671 9824670	9824682	235	4	579	
419	67	29.0	64	2.0	45.0	9824689	9824543	285	0	625	469	67	42.0	65	23.0	83.0	9824701	9824682 9824682	276	15	666	
420	67	29.4	68	27.9	382.0	9823900	9824547	532	-	105	470	67		64	7.0	44.0	9824942	9824687	391	0	731	
421	67	30.0	64	37.0	52.0	9824557	9824554	164	0	505	471	67	42.5	64	13.0	44.0	9824913	9824687	362	0	702	
422	67	30.5	64	28.0	50.0	9824594	9824559	189	0	529	472	67	42.5	64	20.0	45.0	9824882	9824687	334	0	674	
423	67	30.9	68	37.8	913.0	9822860	9824563	1114		93	473	67		68	44.2	368.0	9824232	9824688	680		268	
424	67	31.0	64	20.0	48.0	9824662	9824564	246	0	596	474	67	43.0	62	53.0	46.0	9824799	9824692	249	0	589	
425	67	31.0	64	45.0	53.0	9824492	9824564	91	0	431	475	67	43.0	62	58.0	47.0	9824788	9824692	241	0	581	
426	67	31.0	65	19.0	76.0	9824407	9824564	77	2	419	476	6.7	4.3.0	63	4.0	47.0	9824793	9824692	246	0	586	
427	67	31.5	65	27.0	82.0	9824524	9824570	207	15	597	477	67	43,0	63	9.0	47.0	9824781	9824692	234	0	574	
428		31.5	68	24.5	220.0	9824289	9824570	398		152	478	67	43.0	63	14.0	47.0	9824786	9824692	239	0	579	
429		32.0	62	35.0	44.0	9824799	9824575	360	0	700	479	67		63	19.0	47.0	9824785	9824692	238	0	578	
430		32.0	64	8.0	45.0	9824666	9824575	230	0	570	480	67	43.0	63	26.0	47.0	9824798	9824692	251	0	591	
431		32.0	64	11.0	45.0	9824666	9824575	230	0	570	481	67	43.0	63	31.0	46.0	9824823	9824692	273	0	613	
432 433		32.0	64	53.0	55.0	9824518	9824575	113	0	453	482			63	37.0	47.0	9824854	9824692	307	0	647	
434		32.5	64	1.0 53.0	43.0	9824698	9824580	250	0	590 630	483	67	43.0	63	42.0	46.0	9824886	9824692	336	0	676	
435		33.0	63 65	3.0	46.0 60.0	9824734 9824684	9824586 9824586	290 283	0	630 624	484 485	67 67	43.0	63 63	48.0	45.0	9824899	9824692	346 368	0	686 708	
436		33.5	63	44.0	45.0	9824750	9824591	298	Ö	638	486	67	43.0	64	53.0	45.0 45.0	9824921 9824960	9824692 9824692	407	0	7.47	
437		33.5	65	25.0	78.0	9824641	9824591	291	15	646	487	67	43.0	64	3.0	44.0	9824953	9824692	397	0	737	
438		34.0	62	21.0	43.0	9824785	9824596	321	0	661	488	67		64	27.0	45.0	9824899	9824692	346	0	686	
439		34.0	62	25.0	43.0	9824798	9824596	334	0	674	489	67	43.5	64	32.0	46.0	9824844	9824698	288	0	628	
440	67	34.0	62	29.0	44.0	9824804	9824596	343	0	683	490	67	43.5	64	39.0	50.0	9824794	9824698	251	. 0	591	
441	67	34.0	62	34.0	44.0	9824801	9824596	340	0	680	491	67		64	47.0	53.0	9824754	9824703	215	0	555	
442	67	34.0	62	41.0	45.0	9824800	9824596	342	0	682	492	67	44.0	64	52.0	55.0	9824727	9824703	194	0, ,	533	
443	67	34.0	62	47.0	45.0	9824814	9824596	356	0	696	493	67	44.0	65	28.0	82.0	9824537	9824703	87	16	478	
444	67	34.0	62	53.0	45.0	9824799	9824596	341	0	681	494	67		68	33.4	143.0	9824723	9824705	459		300	
445	67	34.0	62	59.0	46.0	9824777	9824596	323	0	663	495	67	45.0	64	10.0	41.0	9824975	9824713	388	0	730	
446	67	34.0	63	5.0	47.0	9824751	9824596	300	0	640	496	67	45.0	64	27.0	47.0	9824898	9824713	330	0	670	
447		34.0	63	17.0	47.0	9824683	9824596	232	0	572	497	67	45.0	65	14.0	75.0	9824603	9824713	121	0	462	
448	67	34.0	63	26.0	46.0	9824699	9824596	245	0	585	498	67	45.0	65	31.0	82.0	9824396	9824713	-64	23	334	
449		34.0	63	35.0	45.0	9824723	9824596	265	0	605	499	67		65	21.0	80.0	9824464	9824719	-8	4	371	
450	67	34.5	64	13.0	45.0	9824697	9824602	234	0	574	500	67	47.0	64	17.0	47.0	9824965	9824735	375	0	715	

Station	Latit	uđe ^O S	Longit	ude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	n Bouguer	Station	Latit	ude ^O S	Longi	tuđe ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly		Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu	gu	gu	gu							gu	gu	gu	gu .	gu
501	67	47.5	64	37.0	50.0	9824932	9824740	346	0	686	554	68	6.0	65	44.0		9824589	9824935	-37	48	489
502	67	47.5	65	21.0	80.0	9824567	9824740	74	2	451	555	68	6.0	66	29.0 1		9821565	9824935	1151	47	-145
503	67	48.0	65	32.0	82.0	9824678	9824745	186	22	583	556	68	6.0	66	36.0		9822771	9824935	657	63	149
504	67	49.5	64	44.0	53.0	9824870	9824761	272	. 0	612	557	68	6.5	65	39.0	96.0	9824528	9824940	-116	51	379
505	67	49.5	65	11.0	73.0	9824768	9824761	232	0	573	558	68	6.5	66	32.0 1		9821946	9824940	904	70	-245
506	67	50.0	64	27.0	50.0	9824986	9824766	374	0	714	559	68	6.5	66		915.0	9822763	9824940	647	63	138
507	67	50.0	65	21.0	80.0	9824633	9824766	113	2	490	560	68	7.0	64	49.0	182.0	9825355	9824945	971	9	867
508	67	51.5	64	51.0	57.0	9824832	9824782	226	0	566	561	68	7.0	65	18.0	84.0	9824822	9824945	136	18	564
509	67	51.5	65	34.0	84.0	9824517	9824782	-6	24	393	562	68	7.5	65	24.0	82.0	9824838	9824951	141	23	574
510	67	52.0	64	34.0	53.0	9824892	9824788	268	0	607	563	68	7.5	66		336.0	9823998	9824951	84	33	-93
511	67	52.0	65	8.0	70.0	9824744	9824788	172	0	513	564	68	8.0	66	53.0	294.0	9824105	9824956	57	16	-110
512	67	53.0	65	16.0	80.0	9824666	9824798	115	2	492	565	68	9.0	65	14.0	83.0	9824877	9824966	167	30	572
513	67	53.0	65	27.0	83.0	9824514	9824798	-28	18	365	566	68	9.5	64	22.0	53.0	9824971	9824971	163	0	503
514	67	53.5	64	41.0	56.0	9824879	9824803	248	0	588	567	68	9.5	65	13.0	83.0	9824953	9824971	238	23	636
515	67	55.0	64	55.0	63.0	9824794	9824819	169	0	510	568	68	10.0	64	41.0	53.0	9825124	9824977	311	2	653
516	67	55.5	65	12.0	80.0	9824621	9824825	43	1	419	569	68	10.0	64	49.0	182.0	9825093	9824977	678	. 33	598
517	67.	55.5	65	22.0	82.0	9824633	9824825	62	8	445	570	68	10.0	65	19.0	75.0	9825004	9824977	259	37	637
518	67	56.0	64	47.0	57.0	9824826	9824830	172	0	512	571	68	10.0	66	55.0	224.0	9824372	9824977	87	13	-40
519	67	57.0	65	4.0	74.0	9824738	9824840	126	0	467	572	68	11.0	66	58.0	124.0	9824693	9824987	89	9	20
520	67	57.5	65	14.0	82.0	9824662	9824846	69	4	448	573	68	11.5	64	51.0	54.0	9825118	9824992	292	28	660
521	67	58.0	64	53.0	59.0	9824823	9824851	154	. 0	494	574	68	11.5	65	12.0	285.0	9824605	9824992	492	72	408
522	67	58.5	64	59.0	71.0	9824761	9824856	124	1	466	575	68	12.5	64	23.0	58.0	9824936	9825003	112	0	452
523	67	58.5	65	7.0	81.0	9824717	9824856	111	2	488	576	68	14.0	64	47.0	62.0	9824945	9825018	118	3	462
524	67	59.5	65	7.0	82.0	9824666	9824867	52	3	430	577	68	14.0	64	56.0	60.0	9824951	9825018	118	15	474
525	68	0.0	64	47.0	45.0	9824931	9824872	198	1	-539	578	68	14.0	65	11.0	65.0	9824891	9825018	73	38	451
526	68	0.5	65	0.0	75.0	9824737	9824877	91	9	441	579	68	15.5	65	4.0	65.0	9824829	9825034	-4	18	354
527	68	1.0	65	15.0	87.0	9824536	9824882	-78	5	337	580	68	16.0	64	25.0	63.0	9824830	9825039	-15	0	326
528	68	1.5	64	43.0	40.0	9825055	9824888	291	0	631	581	68	16.0	65	8.0	66.0	9824788	9825039	-48	12	304
529	68	2.0	64	42.0	40.0	9825056	9824893	287	1	628	582	68	17.0	65	12.0	67.0	9824768	9825050	-75	17	282
530	68	2.0	65	8.0	83.0	9824594	9824893	-43	2	334	583	68	17.0	66	42.0	130.0	9824804	9825050	156	28	91
531	68	2.0	65	21.0	90.0	9824556	9824893	-59	12	362	584	68	18.0	66	23.0	776.0	9823379	9825060	714	31	263
532	68	2.0	65	59.0	845.0	9822938	9824893	653	21	25	585	68	18.0	66	34.0	310.0	9824404	9825060	301	44	116
533	68	2.5	65	0.0	106.0	9824893	9824898	322	100	382	586	68	19.0	64	27.0	67.0	9824819	9825070	-45	0	295
534	68	2.5	66	6.0	996.0	9822476	9824898	652	13	-153	587	68	19.0	64	49.0	70.0	9824937	9825070	83	1	425
535	68	3.0	64	37.0	43.0	9825042	9824903	271	0	611	588	68	20.0	64	48.0	70.0	9824956	9825081	91	1	433
536	68	3.0	65	5.0	82.0	9824681	9824903	31	4	445	589	68	22.0	64	28.0	70.0	9824958	9825102	72	0	413
537	68	3.0	65	28.0	93.0	9824545	9824903	-71	25	398	590	68	22.0	66	16.0	929.0	9822859	9825102	624	19	63
538	68	3.0	66	13.0	1170.0	9821974	9824903	681	16	-316	591	68	25.0	64	30.0	73.0	9825017	9825133	110	0	451
539	68	4.0	65	13.0	85.0	9824515	9824914	-137	6	279	592	68	26.0	64	51.0	80.0	9824814	9825143	-82	2	329
540	68	4.0	65	54.0	490.0	9823734	9824914	332	90	94	593	68	26.0	66	4.0	746.0	9822839	9825143	-2	33	-435
541	68	4.0	66	25.0	1476.0	9821445	9824914	1086	5	-264	594	68	28.0	64	31.0	75.0	9825034	9825164	102	0	443
542	68	5.0	64	36.0	45.0	9825177	9824924	392	1	733	595	68	29.5	65	3.0	85.0	9824903	9825179	-14	6	402
543	68	5.0	64	53.0	60.0	9825244	9824924	505	10	493	596	68	30.0	65	49.0	456.0	9823402	9825184	-375	56	-604
544	68	5.0	65	2.0	104.0	9824935	9824924	332	9	284	597	68	31.0	64	32.0	75.0	9825063	9825195	100	0	441
545	68	5.0	65	21.0	87.0	9824489	9824924	-167	11	254	598	68	32.0	6.5	16.0	90.0	9824659	9825205	-268	14	190
546	68	5.0	65	50.0	188.0	9824355	9824924	11	111	-41	599	68	32.5	64	41.0	79.0	9824897	9825210	-69	0	306
547	68	5.5	64	29.0	48.0	9825059	9824930	278	0	618	600	68	32.5	64	51.0	85.0	9824798	9825210	-150	0	260
548	68	5.5	65	27.0	90.0	9824512	9824930	-140	16	320	601	68	32.5	65	33.0	305.0	9823885	9825210	-384	38	-536
549	68	5.5	65	30.0	93.0	9824450	9824930	-193	20	271	602	68	33.0	65	1.0	89.0	9824724	9825215	-217	2	229
550	68	5.5	66	42.0	516.0	9823570	9824930	233	74	-18	603	68	33.0	65	24.0	155.0	9824324	9825215	-413	25	-485
551	68	5.5	66	44.0	453.0	9823551	9824930	19	64	-188	604	68	35.0	65	12.0	93.0	9824523	9825236	-426	4	22
552	68	5.5	66	48.0	419.0	9823750	9824930	113	34	-115	605	75	56.4	84	14.9	1278.0	9826256	9829104	1095		920
553	68	6.0	65	9.0	81.0	9824661	9824935	-24	17	368											

Statio	n Latit	tuđe ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	n Bouquer	Station	Latit	uđe ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouquer	
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
						gu	gu	gu	gu	gu		_		-			gu	gu	gu	gu	gu	
201			61	15.0	46.0	9823762	9823498	406	1	747	251	66	7.0	62	12.0	200.0	9823553	9823645	526	0	451	
202	65	54.0	61	21.0	48.0	9823796	9823498	446	0	786	252	66	7.0	62	25.0	329.0	9823152	9823645	523	7	236	
203 204	65 65	54.0 55.0	61 60	52.0 58.0	59.0 159.0	9823554 9823689	9823498 9823510	238	0 2	578 533	253 254	66 66	7.0 7.5	62 62	50.0 14.0	795.0 166.0	9822374	9823645	1183	24	514	
204	65	55.0	62	4.0	63.0		9823510	670	0	433	255			62			9823631	9823650	493	0	431	
205	65	55.5	61	29.0	52.0	9823407 9823601	9823515	92 246	0	587	256	66 66	7.5 8.0	61	19.0 10.0	230.0 160.0	9823182 9823690	9823650	242	-	155	
207	65	56.0	61	17.0	135.0	9823752	9823521	648	2	532	257	66	8.0	62	33.0	306.0	9823088	9823656 9823656	528 377	1 1	389 106	
208	65	56.0	61	56.0	60.0	9823534	9823521	198	0	539	258	66	8.0	62	40.0	447.0	9822970	9823656	694	9.	314	
209	65	57.5	60	56.0	269.0	9823359	9823538	651	2	418	259	66	8.5	62	30.0	224.0	9823331	9823661	361	10	158	
210	65	57.5	62	9.0	64.0	9823558	9823538	218	0	558	260	66	9.0	62	17.0	198.0	9823448	9823667	392	0	317	
211	65	58.0	61	34.0	54.0	9823627	9823543	250	0	590	261	66	9.5	61	53.0	104.0	9823861	9823672	509	1	471	
212	65	58.0	61	59.0	62.0	9823582	9823543	230	0	571	262	66	9.5	62	23.0	231.0	9823407	9823672	447	1	361	
213	65	58.5	60	40.0	452.0	9823069	9823549	915	19	539	263	66	10.0	61	38.0	314.0	9823498	9823678	789	3	518	
214	65	58.5	61	13.0	288.0	9823401	9823549	741	5	495	264	66	10.5	61	12.0	99.0	9823869	9823684	491	0	453	
215	65	59.5	60	45.0	519.0	9822812	9823560	853	11	411	265	66	10.5	62	33.0	194.0	9823401	9823684	316	1	169	
216	65	59.5	60	53.0	375.0	9823168	9823560	765	3	441	266	66	11.0	61	44.0	455.0	9823197	9823689	912	14	530	
217	66	0.0	61	26.0	50.0	9823683	9823566	271	1	612	267	66	11.5	61		129.0	9823791	9823695	494	2	447	
218	66	0.0	62	13.0	66.0	9823662	9823566	300	0	640	268	66	11.5	62	38.0	277.0	9823414	9823695	574	4	342	
219	66	0.5	60	53.0	404.0	9823220	9823572	895	3	545	269	66	12.0	61	49.0	357.0	9823334	9823700	735	12	435	
220	66	0.5	61	12.0	425.0	9823235	9823572	975	11	615	270	66	12.0	62	21.0	131.0	9823745	9823700	449	1	401	
221	66	0.5	61	33.0	53.0	9823811	9823572	403	0	743	271	66	13.5	61	14.0	81.0	9823981	9823717	514	0	483	
222	66	0.5	61	37.0	55.0	9823787	9823572	385	0	724	272	66	14.0	61	52.0	275.0	9823611	9823723	737	- 5	499	
223	66	0.5	62	3.0	63.0	9823622	9823572	245	0	586	273	66	14.0	62	0.0	99.0	9823873	9823723	456	0	797	
224	66	1.0	61	40.0	55.0	9823642	9823577	235	0	574	274	66	14.0	62	18.0	80.0	9823819	9823723	343	1	684	
225	66	2.0	61	43.0	56.0	9823675	9823588	259	0	599	275	66	14.0	62	39.0	85.0	9823803	9823723	343	2	755	
226	66	2.5	60	58.0	471.0	9823042	9823594	901	24	514	276	66	14.0	62	44.0	116.0	9823787	9823723	422	4	367	
227	66	2.5	61	9.0	428.0	9823227	9823594	954	8	588	277	66	15.0	62	49.0	232.0	9823553	9823734	535	1	404	
. 228	66	3.0	62	6.0	64.0	9823688	9823600	286	0	626	278	66	15.5	62	14.0	77.0	9823818	9823740	316	0	656	
229	66	3.5	62	20.0	275.0	9823320	9823605	563	1	349	279	66	16.0	62	42.0	84.0	9823820	9823745	334	1	745	
230	66	4.0	62	32.0	468.0	9822862	9823611	695	7	294	280	66	16.5	61	50.0	165.0	9823788	9823751	547	0	403	
231	66	4.5	61	6.0	299.0	9823468	9823616	774	1	514	281	66	16.5	62	4.0	68.0	9823831	9823751	290	0	630	
232	66	4.5	61	7.0	263.0	9823545	9823616	740	1	511	282	66	17.0	61	15.0	65.0	9823966	9823756	410	0	750	
233	66	4.5	62	29.0	420.0	9822952	9823616	632	12	248	283	66	17.0	62	8.0	72.0	9823849	9823756	315	1	657	
234	66	4.5	62	38.0	467.0	9822812	9823616	637	8	238	284	66	17.0	62	42.0	84.0	9823807	9823756	310	2	722	
235	66	5.0	61	1.0	279.0	9823376	9823622	615	4	376	285	66	17.0	62	47.0	186.0	9823816	9823756	634	3	537	
236	66	5.0	61	10.0	188.0	9823589	9823622	547	1	384	286	66	18.0	62	3.0	67.0	9823863	9823767	302	0	642	
237	66	5.0	61	13.0	176.0	9823626	9823622	547	2	395	287	66	18.0	62	6.0	70.0	9823845	9823767	294	0	635	
238	66	5.0	61	18.0	258.0	9823656	9823622	830	2	607	288	66	18.0	62	35.0	82.0	9823849	9823767	335	0	710	
239	66	5.0	61	25.0	234.0	9823686	9823622	786	7	589	289	66	18.0	62	45.0	80.0	9824020	9823767	499	2	876	
240	66	5.0	61	31.0	183.0	9823582	9823622	525	0	365	290	66	18.5	61	47.0	241.0	9823751	9823773	722	7	518	
241	66	5.0	61	48.0	57.0	9823711	9823622	265	0	605	291	66	19.0	62	39.0	80.0	9823854	9823779	322	1	698	
242	66	5.0	62	9.0	70.0	9823852	9823622	446	0	420	292	66	19.0	63	17.0	84.0	9823385	9823779	-134	7	248	
243	66	5.5	61	55.0	60.0	9823678	9823628	235	. 0,	576	293	66	19.5	61	57.0	65.0	9823957	9823784	374	0	714	
244	66	5.5	62	10.0	80.0	9823892	9823628	511	0	481	294	.66	19.5	62	15.0	75.0	9823819	9823784	266	0	607	
245	66	6.0	62	2.0	60.0	9823817	9823633	369	0	710	295	66	19.5	62	29.0	80.0	9823800	9823784	263	0	638	
246	66	6.0	62	45.0	631.0	9822573	9823633	887	12	350	296	66	20.0	61	16.0	47.0	9823962	9823790	317	0	657	
247	66	6.5	62	38.0	542.0	9822820	9823639	854	7	388	297	66	20.0	62	47.0	161.0	9824024	9823790	731	2	587	
248	66	6.5	62	41.0	539.0	9822672	9823639	696	7	233	298	66	20.5	62	22.0	75.0	9823787 9823766	9823795	223	0	564 710	
249	66	7.0	61	35.0	217.0	9823596	9823645	621	2	433	299	66	20.5	62	51.0	313.0		9823795	937	2		
250	66	7.0	61	50.0	56.0	9823903	9823645	431	2	773	300	66	21.0	61	52.0	62.0	9824060	9823801	451	1	793	

Station Latitude OS Longitude OW Heigh			Height	Absolute	Station	Latit	uđe ^O S	Longi	tude ^O W	Height	Absolute Theoretical Free-air Terrain Bouguer											
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly		Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu	
301	66	21.0	62	54.0	304.0	9823769	9823801	906	1	642	351	66	38.0	63	11.0	67.0	9823956	9823989	174	0	514	
302	66	21.0	62	55.0	290.0	9823734	9823801	828	1	576	352	66	38.0	63	26.0	65.0	9823834	9823989	46	0	386	
303	66	21.5	62	22.0	75.0	9823791	9823806	216	0	557	353	66	38.0	63	36.0	59.0	9823858	9823989	51	0	391	
304	66	21.5	62	37.0	74.0	9823783	9823806	205	0	546	354	66	38.0	63	42.0	59.0	9823798	9823989	9	2	333	
305	66	21.5	62	53.0	292.0	9823718	9823806	813	1	559	355	66	38.0	63	49.0	65.0	9823758	9823989	-30	5	315	
306	66	21.5	63	15.0	82.0	9823466	9823806	-87	3	291	356	66	38.0	63	56.0	68.0	9823631	9823989	-148	14	206	
307	66	21.5	63	21.0	83.0	9823381	9823806	-169	2	208	357	66	38.5	62	39.0	444.0	9823556	9823994	932	11	556	
308	66	22.0	61	46.0	142.0	9823864	9823812	490	1	367	358	66	40.5	62	37.0	433.0	9823608	9824016	928	7	558	
309	66	22.0	62	29.0	74.0	9823830	9823812	246	0	587	359	66	41.0	62	32.0	506.0	9823419	9824022	959	19	537	
310	66	22.0	62	53.0	307.0	9823724	9823812	860	1	594	360	66	41.0	63	32.0	60.0	9823934	9824022	97	0	438	
311	66	22.0	62	55.0	271.0	9823734	9823812	758	1	523	361	66	41.0	63	56.0	60.0	9823704	9824022	-133	6	214	
312	66	22.5	62	55.0	261.0	9823849	9823817	837	1	611	362	66	41.5	63	12.0	64.0	9823998	9824027	168	0	508	
313	66	23.0	62	52.0	339.0	9823754	9823823	977	1	683	363	66	43.0	63	56.0	57.0	9823892	9824044	24	8	372	
314	66	23.5	62	15.0	70.0	9823849	9823829	236	0	577	364	66	44.0	63	40.0	55.0	9823975	9824055	90	0	429	
315	66	23.5	62	49.0	265.0	9823786	9823829	775	1	545	365	66	45.0	63	13.0	58.0	9824053	9824066	166	0	506	
316	66	23.5	62	55.0	219.0	9824072	9823829	919	1	729	366	66	45.0	63	51.0	51.0	9824012	9824066	103	1	445	
317	66	23.5	63	24.0	80.0	9823496	9823829	-86	1	290	367	66	45.0	63	52.0	53.0	9823946	9824066	44	1	385	
318	66	24.0	61	18.0	45.0	9823999	9823834	304	0	644	368	66	47.5	63	47.0	50.0	9824049	9824093	110	0	450	
319	66	24.0	63	13.0	80.0	9823543	9823834	-44	0	331	369	66	48.0	63	11.0	57.0	9824100	9824099	177	0	517	
320	66	24.5	62	50.0	302.0	9823735	9823840	827	1	565	370	66	50.0	63	57.0	327.0	9823431	9824121	319	2	66	
321	66	25.0	62	7.0	67.0	9823952	9823845	314	0	654	371	66	51.0	63	7.0	50.0	9824185	9824132	208	0	548	
322	66	25.0	62	59.0	133.0	9823975	9823845	540	2	418	372	66	53.0	64	5.0	208.0	9823724	9824154	212	0	53	
323	66	25.5	62	46.0	257.0	9823726	9823851	668	0	444	373	66	55.0	63	3.0	48.0	9824225	9824175	198	0	538	
324	66	25.5	62	48.0	254.0	9823794	9823851	727	0	506	374	66	57.0	63	7.0	48.0	9824326	9824197	277	. 0	617	
325	66	25.5	63	3.0	75.0	9824040	9823851	421	0	762	375	66	57.5	64	13.0	53.0	9824172	9824203	133	3	476	
326	66	26.0	63	28.0	77.0	9823560	9823856	-59	0	281	376	67	1.0	63	12.0	48.0	9824367	9824241	274	0	614	
327	66	27.0	61	22.0	46.0	9824107	9823867	382	0	722	377	67	1.5	64	16.0	58.0	9824185	9824246	118	0	458	
328	66	27.0	62	0.0	62.0	9823993	9823867	317	0	658	378	67	2.0	64	14.0	57.0	9824166	9824252	90	0	430	
329	66	27.0	62	47.0	237.0	9823770	9823867	634	0	428	379	67	4.0	63	16.0	48.0	9824407	9824273	282	0	622	
330	66	27.0	63	2.0	72.0	9823918	9823867	273	1	615	380	67	4.0	64	7.0	55.0	9824280	9824273	176	0	515	
331	66	27.5	63	5.0	75.0	9823840	9823873	199	. 1	541	381	67	5.0	64	2.0	55.0	9824335	9824284	221	0 .	560	
332	66	28.0	62	44.0	291.0	9823600	9823878	620	0	366	382	67	6.0	63	56.0	54.0	9824426	9824295	298	0	640	
333	66	28.0	63	32.0	74.0	9823494	9823878	-156	0	185	383	67	6.0	64	19.0	50.0	9824247	9824295	106	0	446	
334	66	29.0	61	53.0	56.0	9824036	9823890	319	0	659	384	67	7.0	63	20.0	48.0	9824410	9824306	252	0	592	
335	66	30.0	61	26.0	46.0	9824129	9823901	370	0	710	385	67	8.0	63	49.0	53.0	9824436	9824317	283	0	623	
336	66	30.0	62	43.0	210.0	9823933	9823901	680	0	497	386	67	9.0	63	42.0	51.0	9824445	9824328	275	. 0	616	
337	66	30.0	63	8.0	72.0	9823811	9823901	133	0	474	387	67	10.0	63	24.0	48.0	9824419	9824338	229	0	569	
338	66	30.5	61	46.0	53.0	9824086	9823906	343	0	683	388	67	10.0	64	23.0	46.0	9824323	9824338	127	0	467	
339	66	30.5	63	6.0	72.0	9823918	9823906	23.4	0	575	389	67	11.0	63	33.0	50.0	9824404	9824349	209	0	549	
340	66	31.0	63	32.0	70.0	9823577	9823912	-119	0	222	390	67	12.0	63	28.0	50.0	9824409	9824360	203	0	543	
341	66	32.0	62	46.0	175.0	9824034	9823923	651	0	498	391	67	13.0	63	26.0	49.0	9824460	9824371	240	0	580	
342	66	32.5	61	31.0	47.0	9824116	9823928	333	0	673	392	67	13.0	64	26.0	46.0	9824569	9824371	340	0	680	
343	66	32.5	61	38.0	50.0	9824129	9823928	355	0	695	393	67	13.5	63	32.0	48.0	9824465	9824376	237	0	577	
344	66	33.0	63	15.0	73.0	9823740	9823934	32	0	373	394	67	15.0	63	15.0	47.0	9824491	9824392	244	0	584	
345	66	33.0	63	34.0	65.0	9823694	9823934	-39	0	301	395	67	15.0	63	33.0	50.0	9824457	9824392	219	0	559	
346	66	34.0	62	47.0	226.0	9823956	9823945	709	0	512	396	67	16.5	63	8.0	46.0	9824544	9824409	277	0	617	
347	66	34.0	63	8.0	70.0	9823940	9823945	211	0	554	397	67	17.0	63	37.0	49.0	9824500	9824414	237	0	577 775	
348	66	35.5	63	35.0	62.0	9823803	9823961	33	0	374	398	67	17.0	64	30.0	47.0	9824704	9824414	435	0		
349	66	36.0	63	22.0	70.0	9823806	9823967	55	0	396	399	67	18.5	63	0.0	45.0	9824587	9824430 9824441	296 231	0	636 571	
350	66	36.5	62	42.0	260.0	9823965	9823972	795	0	569	400	6/	19.5	63	43.0	48.0	9824524	7024441	231		3/1	

Station	Latit	ude ^O S	Longi	tuđe ^O V	Height	Absolute	Theoretical	Free-air	Terrain	n Bouguer	Station	Latit	ude ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer	ε
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly	
						gu	gu	gu	gu	gu							gu	gu	gu	gu	gu	
401	67	19.5	64	36.0	50.0	9824730	9824441	443	0	783	451	67	34.5	65	12.0	68.0	9824675	9824602	283	1	624	
402	67	20.0	62	53.0	45.0	9824673	9824446	366	0	706	452	67	36.0	62	53.0	45.0	9824808	9824618	329	0	669	
403		21.0	64	51.0	53.0	9824666	9824457	372	0	712	453		36.0	63	42.0	45.0	9824792	9824618	313	. 0	653	
404	67	21.5	62	46.0	45.0	9824708	9824462	384	0	724	454	67	36.0	64	15.0	45.0	9824793	9824618	314	0	654	
405	67	22.0	63	47.0	47.0	9824656	9824468	333	0	673	455	67	36.0	65	20.0	75.0	9824847	9824618	461	11	813	
406	67	22.0	64	55.0	55.0	9824573	9824468	275	0	614	456	67	36.5	65	28.0	80.0	9824891	9824623	515	63	953	
407	67	23.0	62	40.0	45.0	9824751	9824479	411	0	751	457	67	37.0	65	8.0	65.0	9824619	9824628	191	1	532	
408	67	23.0	64	58.0	60.0	9824535	9824479	242	4	587	458	67	38.5	62	53.0	46.0	9824822	9824644	320	0	660	
409		24.5	63	52.0	47.0	9824734	9824495	384	0	724	459	67	38.5	63	49.0	45.0	9824853	9824644	347	0	687	
410	67	25.0	65	27.0	90.0	9824117	9824500	-105	20	324	460	67	38.5	68	24.7	180.0	9824537	9824644	448		247	
411	67	25.5	65	5.0	65.0	9824348	9824505	43	6	389	461	67	39.0	64	21.0	44.0	9824844	9824650	330	0.	670	
412		26.0	62	40.0	45.0	9824782	9824511	410	0	750	462	67	39.5	65	8.0	67.0	9824506	9824655	58	1	399	
413 414	67	26.3	68	12.5	493.0	9823724	9824514	731	•	180	463	67	40.5	63	56.0	45.0	9824868	9824666	341	0	681	
415	67	27.0 27.0	63 65	57.0 27.0	48.0 88.0	9824715 9824310	9824522 9824522	342	0	682	464	67		62	53.0	47.0	9824802	9824671	276	0	616	
416	67	28.0	65	12.0	77.0	9824234	9824522	60 -61	19 0	488 279	465	67	41.0	6.5	3.0	60.0	9824546	9824671	60	1	402	
417	67	28.5	65	27.0	85.0	9824536	9824538	261	13	650	466 467	67	42.0	64 64	27.0 57.0	42.0 57.0	9824910	9824682	358 165	0	698 505	
418	67	29.0	62	38.0	45.0	9824807	9824543	403	0	743	468	67	42.0	65	17.0	80.0	9824671 9824670	9824682	235	4	579	
419	67	29.0	64	2.0	45.0	9824689	9824543	285	0	625	469	67	42.0	65	23.0	83.0	9824701	9824682 9824682	276	15	666	
420	67	29.4	68	27.9	382.0	9823900	9824547	532	-	105	470	67		64	7.0	44.0	9824942	9824687	391	0	731	
421	67	30.0	64	37.0	52.0	9824557	9824554	164	0	505	471	67	42.5	64	13.0	44.0	9824913	9824687	362	0	702	
422	67	30.5	64	28.0	50.0	9824594	9824559	189	0	529	472	67	42.5	64	20.0	45.0	9824882	9824687	334	0	674	
423	67	30.9	68	37.8	913.0	9822860	9824563	1114		93	473	67		68	44.2	368.0	9824232	9824688	680		268	
424	67	31.0	64	20.0	48.0	9824662	9824564	246	0	596	474	67	43.0	62	53.0	46.0	9824799	9824692	249	0	589	
425	67	31.0	64	45.0	53.0	9824492	9824564	91	0	431	475	67	43.0	62	58.0	47.0	9824788	9824692	241	0	581	
426	67	31.0	65	19.0	76.0	9824407	9824564	77	2	419	476	6.7	4.3.0	63	4.0	47.0	9824793	9824692	246	0	586	
427	67	31.5	65	27.0	82.0	9824524	9824570	207	15	597	477	67	43,0	63	9.0	47.0	9824781	9824692	234	0	574	
428		31.5	68	24.5	220.0	9824289	9824570	398		152	478	67	43.0	63	14.0	47.0	9824786	9824692	239	0	579	
429		32.0	62	35.0	44.0	9824799	9824575	360	0	700	479	67		63	19.0	47.0	9824785	9824692	238	0	578	
430		32.0	64	8.0	45.0	9824666	9824575	230	0	570	480	67	43.0	63	26.0	47.0	9824798	9824692	251	0	591	
431		32.0	64	11.0	45.0	9824666	9824575	230	0	570	481	67	43.0	63	31.0	46.0	9824823	9824692	273	0	613	
432 433		32.0	64	53.0	55.0	9824518	9824575	113	0	453	482			63	37.0	47.0	9824854	9824692	307	0	647	
434		32.5	64	1.0 53.0	43.0	9824698	9824580	250	0	590 630	483	67	43.0	63	42.0	46.0	9824886	9824692	336	0	676	
435		33.0	63 65	3.0	46.0 60.0	9824734 9824684	9824586 9824586	290 283	0	630 624	484 485	67 67	43.0	63 63	48.0	45.0	9824899	9824692	346 368	0	686 708	
436		33.5	63	44.0	45.0	9824750	9824591	298	Ö	638	486	67	43.0	64	53.0	45.0 45.0	9824921 9824960	9824692 9824692	407	0	7.47	
437		33.5	65	25.0	78.0	9824641	9824591	291	15	646	487	67	43.0	64	3.0	44.0	9824953	9824692	397	0	737	
438		34.0	62	21.0	43.0	9824785	9824596	321	0	661	488	67		64	27.0	45.0	9824899	9824692	346	0	686	
439		34.0	62	25.0	43.0	9824798	9824596	334	0	674	489	67	43.5	64	32.0	46.0	9824844	9824698	288	0	628	
440	67	34.0	62	29.0	44.0	9824804	9824596	343	0	683	490	67	43.5	64	39.0	50.0	9824794	9824698	251	. 0	591	
441	67	34.0	62	34.0	44.0	9824801	9824596	340	0	680	491	67		64	47.0	53.0	9824754	9824703	215	0	555	
442	67	34.0	62	41.0	45.0	9824800	9824596	342	0	682	492	67	44.0	64	52.0	55.0	9824727	9824703	194	0, ,	533	
443	67	34.0	62	47.0	45.0	9824814	9824596	356	0	696	493	67	44.0	65	28.0	82.0	9824537	9824703	87	16	478	
444	67	34.0	62	53.0	45.0	9824799	9824596	341	0	681	494	67	44.2	68	33.4	143.0	9824723	9824705	459		300	
445	67	34.0	62	59.0	46.0	9824777	9824596	323	0	663	495	67	45.0	64	10.0	41.0	9824975	9824713	388	0	730	
446	67	34.0	63	5.0	47.0	9824751	9824596	300	0	640	496	67	45.0	64	27.0	47.0	9824898	9824713	330	0	670	
447		34.0	63	17.0	47.0	9824683	9824596	232	0	572	497	67	45.0	65	14.0	75.0	9824603	9824713	121	0	462	
448	67	34.0	63	26.0	46.0	9824699	9824596	245	0	585	498	67	45.0	65	31.0	82.0	9824396	9824713	-64	23	334	
449		34.0	63	35.0	45.0	9824723	9824596	265	0	605	499	67		65	21.0	80.0	9824464	9824719	-8	4	371	
450	67	34.5	64	13.0	45.0	9824697	9824602	234	0	574	500	67	47.0	64	17.0	47.0	9824965	9824735	375	0	715	

Station	Latit	uđe ^O S	Longit	ude ^O W	Height	Absolute	Theoretical	Free-air	Terrai	n Bouguer	Station	Latit	ude ^O S	Longi	tude ^O W	Height	Absolute	Theoretical	Free-air	Terrain	Bouguer
Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly		Anomaly	Number	Deg	Min	Deg	Min	m	Gravity	Gravity	Anomaly	Corr.	Anomaly
						gu	gu	gu	gu	gu							gu	gu	gu	gu .	gu
501		47.5	64	37.0	50.0	9824932	9824740	346	0	686	554	68	6.0	65		100.0	9824589	9824935	-37	48	489
502		47.5	65	21.0	80.0	9824567	9824740	74	2	451	555	68	6.0	66		1465.0	9821565	9824935	1151	47	-145
503	67	48.0	65	32.0	82.0	9824678	9824745	186	22	583	556	68	6.0	66		914.0	9822771	9824935	657	63	149
504			64	44.0	53.0	9824870	9824761	272	. 0	612	557	68	6.5	65	39.0	96.0	9824528	9824940	-116	51	379
505	67	49.5	65	11.0	73.0	9824768	9824761	232	0	573	558	68	6.5	66		1263.0	9821946	9824940	904	70	-245
506	67	50.0	64	27.0	50.0	9824986	9824766	374	0	714	559	68	6.5	66	34.0	915.0	9822763	9824940	647	63	138
507	67	50.0	65	21.0	80.0	9824633	9824766	113	2	490	560	68	7.0	64	49.0	182.0	9825355	9824945	971	9	867
508	67	51.5	64	51.0	57.0	9824832	9824782	226	0	566	561	68	7.0	65	18.0	84.0	9824822	9824945	136	18	564
509	67	51.5	65	34.0	84.0	9824517	9824782	-6	24	393	562	68	7.5	65	24.0	82.0	9824838	9824951	141	23	574
510	67	52.0	64	34.0	53.0	9824892	9824788	268	0	607	563	68	7.5	66	50.0	336.0	9823998	9824951	84	33	-93
511	67	52.0	65	8.0	70.0	9824744	9824788	172	0	513	564	68	8.0	66	53.0	294.0	9824105	9824956	57	16	-110
512	67	53.0	65	16.0	80.0	9824666	9824798	115	2	492	565	68	9.0	65	14.0	83.0	9824877	9824966	167	30	572
513		53.0	65	27.0	83.0	9824514	9824798	-28	18	365	566	68	9.5	64	22.0	53.0	9824971	9824971	163	0	503
514	67	53.5	64	41.0	56.0	9824879	9824803	248	0	588	567	68	9.5	65	13.0	83.0	9824953	9824971	238	23	636
515	67	55.0	64	55.0	63.0	9824794	9824819	169	0	510	568	68	10.0	64	41.0	53.0	9825124	9824977	311	2	653
516	67	55.5	65	12.0	80.0	9824621	9824825	43	1	419	569		10.0	64	49.0	182.0	9825093	9824977	678	. 33	598
517	67	55.5	65	22.0	82.0	9824633	9824825	62	8	445	570		10.0	65	19.0	75.0	9825004	9824977	259	37	637
518	67	56.0	64	47.0	57.0	9824826	9824830	172	0	512	571	68	10.0	66	55.0	224.0	9824372	9824977	87	13	-40
519	6.7	57.0	65	4.0	74.0	9824738	9824840	126	0	467	572	68	11.0	66	58.0	124.0	9824693	9824987	89	9	20
520	67	57.5	65	14.0	82.0	9824662	9824846	69	4	448	573		11.5	64	51.0	54.0	9825118	9824992	292	28	660
521	67	58.0	64	53.0	59.0	9824823	9824851	154	. 0	494	574		11.5	65	12.0	285.0	9824605	9824992	492	72	408
522	67	58.5	64	59.0	71.0	9824761	9824856	124	1	466	575	68	12.5	64	23.0	58.0	9824936	9825003	112	0	452
523	67	58.5	65	7.0	81.0	9824717	9824856	111	2	488	576	68	14.0	64	47.0	62.0	9824945	9825018	118	3	462
524	67	59.5	65	7.0	82.0	9824666	9824867	52	3	430	577	68	14.0	64	56.0	60.0	9824951	9825018	118	15	474
525	68	0.0	64	47.0	45.0	9824931	9824872	198	1	-539	578	68	14.0	65	11.0	65.0	9824891	9825018	73	38	451
526	68	0.5	65	0.0	75.0	9824737	9824877	91	9	441	579	68	15.5	65	4.0	65.0	9824829	9825034	-4	18	354
527	68	1.0	65	15.0	87.0	9824536	9824882	-78	5	337	580	68	16.0	64	25.0	63.0	9824830	9825039	-15	0	326
528	68	1.5	64	43.0	40.0	9825055	9824888	291	0	631	581	68	16.0	65	8.0	66.0	9824788	9825039	-48	12	304
529	68	2.0	64	42.0	40.0	9825056	9824893	287	1	628	582	68	17.0	65	12.0	67.0	9824768	9825050	-75	17	282
530	68	2.0	65	8.0	83.0	9824594	9824893	-43	2	334	583	68	17.0	66	42.0	130.0	9824804	9825050	156	28	91
531	68	2.0	65	21.0	90.0	9824556	9824893	-59	12	362	584	68	18.0	. 66	23.0	776.0	9823379	9825060	714	31	263
532	68	2.0	65	59.0	845.0	9822938	9824893	653	21	25	585	68	18.0	66	34.0	310.0	9824404	9825060	301	44	116
533	68	2.5	65	0.0	106.0	9824893	9824898	322	100	382	586	68	19.0	64	27.0	67.0	9824819	9825070	-45	0	295
534	68	2.5	66	6.0	996.0	9822476	9824898	652	13	-153	587	68	19.0	64	49.0	70.0	9824937	9825070	83	1	425
535	68	3.0	64	37.0	43.0	9825042	9824903	271	0	611	588	68	20.0	64	48.0	70.0	9824956	9825081	91	1	433
536	68	3.0	65	5.0	82.0	9824681	9824903	31	4	445	589	68	22.0	64	28.0	70.0	9824958	9825102	72	0	413
537	68	3.0	65	28.0	93.0	9824545	9824903	-71	25	398	590	68	22.0	66	16.0	929.0	9822859	9825102	624	19	63
538	68	3.0	66	13.0	1170.0	9821974	9824903	681	16	-316	591	68	25.0	64	30.0	73.0	9825017	9825133	110	0	451
539	68	4.0	65	13.0	85.0	9824515	9824914	-137	6	279	592	68	26.0	64	51.0	80.0	9824814	9825143	-82	2	329
540	68	4.0	65	54.0	490.0	9823734	9824914	332	90	94	593	68	26.0	66	4.0	746.0	9822839	9825143	-2	33	-435
541	68	4.0	66	25.0	1476.0	9821445	9824914	1086	5	-264	594	68	28.0	64	31.0	75.0	9825034	9825164	102	0	443
542	68	5.0	64	36.0	45.0	9825177	9824924	392	1	733	595	68	29.5	65	3.0	85.0	9824903	9825179	-14	6	402
543	68	5.0	64	53.0	60.0	9825244	9824924	505	10	493	596	68	30.0	65	49.0	456.0	9823402	9825184	-375	56	-604
544	68	5.0	65	2.0	104.0	9824935	9824924	332	9	284	597	68	31.0	64	32.0	75.0	9825063	9825195	100	0	441
545	68	5.0	65	21.0	87.0	9824489	9824924	-167	11	254	598	68	32.0	6.5	16.0	90.0	9824659	9825205	-268	14	190
546	68	5.0	65	50.0	188.0	9824355	9824924	11	111	-41	599	68	32.5	64	41.0	79.0	9824897	9825210	-69	0	. 306
547	68	5.5	64	29.0	48.0	9825059	9824930	278	0	618	600	6,8	32.5	64	51.0	85.0	9824798	9825210	-150	0	260
548	68	5.5	65	27.0	90.0	9824512	9824930	-140	16	320	601	68	32.5	65	33.0	305.0	9823885	9825210	-384	38	-536
549	68	5.5	65	30.0	93.0	9824450	9824930	-193	20	271	602	68	33.0	65	1.0	89.0	9824724	9825215	-217	2	229
550	68	5.5	66	42.0	516.0	9823570	9824930	233	74	-18	603	68	33.0	65	24.0	155.0	9824324	9825215	-413	25	-485
551	68	5.5	66	44.0	453.0	9823551	9824930	19	64	-188	604	68	35.0	65	12.0	93.0	9824523	9825236	-426	4	22
552	68	5.5	66	48.0	419.0	9823750	9824930	113	34	-115	605	75	56.4	84	14.9	1278.0	9826256	9829104	1095		920
553	68	6.0	65	9.0	81.0	9824661	9824935	-24	17	368											

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