

# BGS Land Gravity Data README

## Standard BGS Land Gravity data delivery format

SURVEY_AREA	Survey Area
STATION_ID	Station Identifier
STATION_CODE	Station code
LATITUDE	Latitude, OSGB36 degrees, positive north
LONGITUDE	Longitude, OSGB36 degrees, positive east
GRID_EAST	British National Grid, metres
GRID_NORTH	British National Grid, metres
STATION_ELEV	Station elevation relative to Ordnance Datum, metres
ELEVATION_UNIT	Elevation unit *
BOUGUER_DENS	Bouguer Reduction density Mg m <sup>-3</sup>
BASE_CODE	Base Station Code
OBSERVED_GRAV	-980000, mGal
FREE AIR AN	Free Air Anomaly mGal
ITOT_TC	Inner zone terrain correction mGal
TOT_TC	Total terrain correction mGal
TOT_TCZ	Total terrain correction Hammer zone
BOUGUER ANOMALY	Bouguer anomaly value mGal
SOURCE	Data Source *
READING_DATE	Reading date
GRS	Gravity Reference
TERRAIN CORRECTION NUMBER	*

\*Denotes field unused or frequently unpopulated

UK NATIONAL GRID SER NN_40D82	0	56.185329	-4.454330	247690.0	701890.0	32.000	2.700	-6	1598.8000	1.9400	0.0000	Q	3.4500	X	1.7700	-79	0	0
UK NATIONAL GRID SER NN_00D91	0	56.171829	-5.116670	206540.0	702050.0	2.100	2.700	-6	1612.6300	7.6700	0.0000	Q	1.4800	X	8.9100	-79	0	0
UK NATIONAL GRID SER NN_40D83	0	56.186668	-4.467670	246870.0	702070.0	32.000	2.700	-6	1597.7100	0.7400	0.0000	Q	3.7800	X	0.9000	-79	0	0
UK NATIONAL GRID SER NN_20D90	0	56.181000	-4.754500	229050.0	702120.0	446.500	2.700	-6	1507.5300	38.9400	0.0000	Q	8.8000	X	-2.8100	-79	0	0
UK NATIONAL GRID SER NN_30D83	0	56.184170	-4.645670	235820.0	702200.0	731.000	2.700	-6	1442.9301	61.8800	0.0000	Q	19.1400	X	-1.7400	-79	0	0
UK NATIONAL GRID SER NN_40D84	0	56.188332	-4.490000	245490.0	702310.0	34.000	2.700	-6	1597.2700	0.7700	0.0000	Q	2.7100	X	-0.3700	-79	0	0
UK NATIONAL GRID SER NN_20C84	0	56.181499	-4.843000	223570.0	702400.0	577.000	2.700	-23	1485.5800	57.2200	0.0000	Q	7.5800	X	-0.5200	-79	0	0
UK NATIONAL GRID SER NN_10C87	0	56.177502	-5.012170	213050.0	702390.0	110.000	2.700	-6	1585.7500	13.6200	0.0000	Q	5.4700	X	6.6400	-79	0	0
UK NATIONAL GRID SER NN_00C66	0	56.173500	-5.182830	202440.0	702430.0	53.200	2.700	-27	1601.5601	12.2300	0.0000	Q	1.9300	X	8.1400	-79	0	0
UK NATIONAL GRID SER NN_00D83	0	56.176670	-5.081330	208760.0	702500.0	6.000	2.700	-6	1610.5601	6.3900	0.0000	Q	2.1200	X	7.8300	-79	0	0
UK NATIONAL GRID SER NN_40C81	0	56.190830	-4.502000	244760.0	702610.0	62.700	2.700	-6	1591.5400	3.6900	0.0000	Q	2.4100	X	-1.0000	-79	0	0

## Note

Anomalies have been calculated with reference to the Geodetic Reference System 1967 (GRS67), the International Gravity Standardisation Net 1971 (IGSN71) and the National Gravity Reference Net 1973 (NGRN73)

Much of the BGS Land gravity data was formatted into 80 columns at time of collection (to fit punch-cards). The format was subsequently expanded to allow conventional units and additional information fields. In many cases the information for the additional fields is unavailable so the fields remain empty.

Some Observed Gravity values were corrupted at some point after processing and have been replaced with a null (999999.0) value