

The GPS Height Transformation (v2.0)

An Ellipsoidal-CGVD28 Height Transformation
for Use With GPS in Canada

Marc Véronneau, André Mainville and Michael R. Craymer

Geodetic Survey Division, Natural Resources Canada
615 Booth Street, Ottawa, K1A 0E9

*marcv@nrcan.gc.ca
mainvill@nrcan.gc.ca
craymer@nrcan.gc.ca*

15 August, 2001

The GPS Height Transformation (v2.0)

Executive Summary

In theory, ellipsoidal heights (height above the reference ellipsoid) are related to orthometric heights (height above the geoid) through geoid heights (height of the geoid above the reference ellipsoid). This allows ellipsoidal heights measured with GPS to be transformed to orthometric heights, which are more commonly used for vertical positioning applications. In practice, however, the orthometric heights derived from GPS ellipsoidal heights and CGG2000 geoid heights are not equivalent to CGVD28 orthometric heights due to errors in the realization of both CGVD28 and the CGG2000 geoid model. These errors can amount to approximately 75 cm in places. The Geodetic Survey Division is working to improve both the vertical datum (levelling) and geoid model. In the meantime, the GPS Height Transformation v2.0 (HTv2.0) has been developed to model these errors and allow GPS, DGPS and WADGPS users in Canada to convert their NAD83(CSRS98) ellipsoidal heights to CGVD28 orthometric heights.

HTv2.0 was developed based upon 1926 survey stations positioned across Canada using GPS and levelling observations. The GPS-derived NAD83(CSRS98) ellipsoidal heights and levelling-derived CGVD28 orthometric heights, in addition to CGG2000 geoid heights, provided the basis for establishing this height transformation. The discrepancies between the GPS- and levelling-derived orthometric heights at scattered points were interpolated using an enhanced minimum curvature gridding technique to produce a regular 10 x 10 arcminute grid. This grid is added to the CGG2000 geoid grid to give the total HTv2.0 transformation grid for transforming NAD83(CSRS98) ellipsoidal heights to CGVD28-compatible heights. The HTv2.0 transformation value at any arbitrary point is then obtained from bi-quadratic interpolation of the HTv2.0 grid in the same manner as CGG2000 geoid heights are obtained from the CGG2000 geoid grid.

HTv2.0 allows users to obtain GPS-derived heights above mean sea level compatible with the surrounding CGVD28 vertical control, without the need to occupy benchmarks during field operations. HTv2.0 removes inconsistencies of the order of several cm between the three kinds of heights. The remaining errors are less than about 5 cm for 95% of benchmarks used in deriving HTv2.0 (mainly in the southern regions of Canada) but may amount to a few decimetres in remote or northern regions where there are few accurate CGVD28 heights to derive a reliable transformation. Strictly speaking, there is no defined CGVD28 in most of the far north of Canada, and so HTv2.0 can be thought of as the original definition of CGVD28 in those areas.

HTv2.0 has been implemented through the GPS-H software package and provides an effective means of establishing CGVD28-compatible heights from GPS for many mapping, navigation and other low accuracy applications. The HTv2.0 transformation grid may also be conveniently used in GPS processing and least-squares adjustment software by simply using the HTv2.0 grid in place of a geoid grid. HTv2.0 may be thought of as a modified geoid that incorporates both the CGG2000 geoid as well as the discrepancies between ellipsoidal, CGVD28 heights and geoid heights.

The GPS Height Transformation (v2.0)

For high accuracy applications, the GPS-H software also provides options for using the CGG2000 geoid model together with any vertical control points observed with GPS. However, for many lower accuracy applications HTv2.0 eliminates the need to include ties to vertical control, thereby increasing the cost-effectiveness of GPS surveying for determining CGVD28-compatible heights.

The GPS Height Transformation (v2.0)

Contents

Executive Summary	i
Contents	1
List of Tables	2
List of Figures	3
List of Appendices	5
1. Introduction.....	7
2. Vertical Reference Systems	8
2.1 CGVD28 Orthometric Heights	8
2.2 NAD83(CSRS98) Ellipsoidal Heights.....	11
2.3 CGG2000 Geoid heights.....	11
3. Reconciliation of Heights	12
4. Analysis of Height Discrepancies	14
5. The HTv2.0 GPS Height Transformation.....	16
6. HTv2.0 Implementation	19
7. Conclusions and Recommendations	19
Acknowledgments.....	20
References.....	21

The GPS Height Transformation (v2.0)

List of Tables

- Table 1 Statistics related to the CGG2000 geoid model.
- Table 2 Sea surface topography (SST) and water level difference at tide gauges in Vancouver (V), Rimouski (R) and Halifax (H) for different adjustments of the primary levelling network and geoid models. All adjustments use true orthometric heights.
- Table 3 Comparison of different geoid models (GSD95 and CGG2000) to geoid heights derived from GPS ellipsoidal heights (Supernet v3.1a) and two primary levelling network adjustments (CGVD28 and Jan01d).
- Table 4 Statistics related to the HT v2.0 height transformation.
- Table 5 Comparison of two height transformations (HT v1.01 and HT v2.0) to geoid heights derived from GPS ellipsoidal heights (Supernet v3.1a) and CGVD28 orthometric heights.
- Table 6 Relative discrepancies of CGG2000 against geoid height differences derived from GPS ellipsoidal heights (Supernet v3.1a) and Jan01d orthometric heights, and HT v.2.0 against geoid height differences derived from GPS ellipsoidal heights (Supernet v3.1a) and CGVD28 orthometric heights. The relative discrepancies include errors from the geoid model, levelling and GPS measurements; and all baselines are within 100 km.

List of Figures

- Figure 1 Canadian primary levelling network. The different colors indicate different epochs of the levelling surveys.
- Figure 2 The CGG2000 geoid model for North America. (Unit: m; C.I. 5 m)
- Figure 3 “Absolute” accuracy of the CGG2000 geoid model above degree 30 (wavelengths longer than approximately 600 km). (Unit: m; C.I.: 5 cm)
- Figure 4 Horizontal gradient of the CGG2000 geoid model. (Unit: mm/km)
- Figure 5 Difference between GSD95 and CGG2000 geoid models (CGG2000 – GSD95). (Unit: m; C.I.: 10 cm).
- Figure 6 Distribution of the 2834 GPS stations south of latitude 72°N forming Supernet (v3.1a). The 1926 stations used for the determination of the HTv2.0 GPS height transformation are in red.
- Figure 7a Discrepancies between Jan01d heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the GSD95 geoid model.
- Figure 7b Discrepancies between Jan01d heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the CGG2000 geoid model.
- Figure 8a Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (Supernet 3.1a) and the GSD95 geoid model.
- Figure 8b Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the CGG2000 geoid model.
- Figure 9 Corrector surface for CGG2000 (CGVD28). The contours represent the discrepancies between CGVD28 heights and GPS-derived orthometric heights. (Unit: m; C.I.: 5 cm)
- Figure 10 Corrector surface for CGG2000 (Jan01d). The contours represent the discrepancies between Jan01d heights and GPS-derived orthometric heights. (Unit: m; C.I.: 5 cm).
- Figure 11 Difference between HT v1.01 and HT v2.0 (Unit: m; C.I.: 10 cm).

The GPS Height Transformation (v2.0)

- Figure 12a Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (supernet 3.1a) and HT v1.01 height transformation.
- Figure 12b Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (supernet 3.1a) and HT v2.0 height transformation.
- Figure 13a Relative discrepancies of CGG2000 against geoid height differences derived from GPS ellipsoidal heights (Supernet v.3.1a) and Jan01d heights for baselines shorter than 100 km.
- Figure 13b Relative discrepancies of HT v.2.0 against geoid height differences derived from GPS ellipsoidal heights (Supernet v3.1a) and CGVD28 heights for baselines shorter than 100 km.
- Figure 14 Relative discrepancies of CGG2000 (Jan01d) for baselines shorter than 100 km. (Unit: m; C.I.: 2 cm)

The GPS Height Transformation (v2.0)

List of Appendices

- Appendix A GPS Supernet (v3.1a) Adjusted NAD83(CSRS98) Coordinates.
- Appendix B List of rejected stations for the determination of the CGG2000 corrector surface. GPS Supernet (v3.1a) Adjusted NAD83(CSRS98) Coordinates.
- Appendix C List of rejected stations for the analysis of the CGG2000 geoid model against geoid heights derived from GPS ellipsoidal heights and Jan01d orthometric heights. GPS Supernet (v3.1a) Adjusted NAD83(CSRS98) Coordinates.
- Appendix D Output of program Rndm4. Average of the reconciliation discrepancies found within 10 arcmin. x 10 arcmin. cell.
- Appendix E The reconciliation discrepancies used for the determination of the CGG2000 corrector surface.
- Appendix F Maps showing the agreement between GPS/CGG2000-derived orthometric heights and scientific Jan01d orthometric heights (in cm) at 1090 stations.
- Appendix G Maps showing the agreement between GPS/HT v2.0-derived orthometric heights and published CGVD28 orthometric heights (in cm) at 1967 stations

The GPS Height Transformation (v2.0)

1 Introduction

Many applications in mapping, navigation and engineering require knowledge of orthometric heights, defined in North America as heights above mean sea level. Official orthometric height values in Canada originate from a vertical control network of more than 80,000 first order geodetic benchmarks. The published heights are relative to mean sea level determined in 1928, referred to as the Canadian Geodetic Vertical Datum of 1928 (CGVD28).

GPS technology has been used to determine heights since the mid-1980s. However, GPS surveys give ellipsoid heights (heights above the reference ellipsoid) which are not directly compatible with the published orthometric heights used for most positioning applications. In order to obtain a GPS-derived orthometric height (H_{GPS}), the appropriate geoid height (N) must be removed from the GPS-derived ellipsoidal height (h_{GPS}) using the simple relation

$$H_{GPS} = h_{GPS} - N. \quad (1)$$

Due to the accuracy limitations of the CGVD28 heights, the GPS-derived orthometric heights can not correspond adequately to the published orthometric heights in Canada. Up to now, it has been necessary to model the errors in the local vertical control through GPS ties to local benchmarks for which precise orthometric height differences are available. It has long been recognized that eliminating the need to tie to geodetic benchmarks would expedite the determination of CGVD28 orthometric heights from GPS, DGPS and WADGPS surveys. The GPS Height Transformation v2.0 (HTv2.0) has been developed for this purpose.

To produce the transformation, a network of GPS-derived ellipsoidal heights was established for a number of geodetic benchmarks for which precise CGVD28 orthometric heights are available. The ellipsoidal heights are based on the NAD83(CSRS98) reference system, the most recent realization of the Canadian Spatial Reference System (Popelar and Kouba, 1996). The current geoid model (CGG2000) distributed by the Geodetic Survey Division was used to obtain the geoid heights for the computation of GPS-derived orthometric heights.

The discrepancies between the GPS-derived and CGVD28 orthometric heights were then modelled using an enhanced minimum curvature technique to produce the GPS Height Transformation v2.0 (HTv2.0). HTv2.0 allows GPS users to transform NAD83 (CSRS98) ellipsoidal heights to orthometric heights that are consistent with the published CGVD28 heights in their project area. HTv2.0 may be thought of as a modified geoid height that incorporates both the CGG2000 geoid model as well as the discrepancies between ellipsoidal, orthometric and geoid heights.

To understand the reasons for the inconsistencies between GPS-derived orthometric heights and published CGVD28 orthometric heights, this report begins by explaining the height systems involved. It then describes the method used to compute HTv2.0, the accuracy of the transformation, its implementation in software, and advice on when it should and should not be used. Recommendations for further refinements of the transformation are also provided.

2 Vertical Reference systems

This section consists of describing briefly three reference height systems commonly used in Canada: CGVD28 orthometric heights for heights above the mean sea level, NAD83(CSRS98) ellipsoidal heights and the CGG2000 geoid heights. However, GSD also develops, studies and continues to maintain other height systems: International Great Lakes Datum of 1985 (IGLD85), which corresponds to dynamic heights, scientific levelling networks of true orthometric heights and normal heights, ITRF ellipsoidal heights, telluroid (quasi-geoid) and the permanent sea surface topography (SST). Some of these height systems are summarized in (Mainville, 1994). For the more advance readers, we also recommend (Heiskanen and Moritz, 1967).

2.1 CGVD28 Orthometric Heights

The heights above mean sea level (MSL) that are commonly used in Canada are either directly or indirectly derived from the orthometric heights published by the Geodetic Survey Division (GSD) of Natural Resources Canada. These heights are established using very precise spirit levelling techniques for the primary vertical control network of more than 80,000 benchmarks (BM). The published orthometric heights are based upon the Canadian Geodetic Vertical Datum of 1928 (CGVD28).

The MSL used in establishing CGVD28 was determined in 1928 based upon an average of sea level determinations at six tide gauges. The six gauges were located on the Pacific Ocean at (1) Vancouver and (2) Prince Rupert, British Columbia, on the St. Lawrence River at (3) Pointe-au-Père, near Rimouski, Québec, on the Atlantic Ocean at (4) Halifax and (5) Yarmouth, Nova Scotia, as well as (6) a height at Rouses Point in southern Québec, determined relative to mean sea level at New York City (Canon, 1929). Figure 1 illustrates the coverage of the primary levelling network in Canada. The primary levelling networks for Newfoundland, Prince Edward Island and Vancouver Island belong to CGVD28 even though they are not directly tied to the six tide gauges mentioned above.

The published CGVD28 orthometric height system provides a standard vertical reference system that meets the needs of the majority of users in Canada. However, the published heights have not been corrected for certain systematic errors that have become relatively well known in recent years. While published values are occasionally corrected for gross errors, corrections for systematic errors that do not adversely affect the relative precision

The GPS Height Transformation (v2.0)

of published heights within a region are still pending. Published CGDV28 values will remain the official height system during the current efforts to address technical and implementation issues related to the introduction of an improved height system. The following describes some of the systematic errors and subsequent distortions in the CGVD28 orthometric height system:

- By definition, true orthometric heights must be computed using Earth gravity measurements whereas CGVD28 values have been computed using an approximate gravity value (normal gravity) based upon latitude. Recomputing CGVD28 heights using actual gravity data would decrease height values by up to several decimetres in the Rocky Mountains.
- There is significant evidence that mean sea level is rising at the rate of 1 to 2 mm per year (Tushingham and Peltier, 1991) due to the melting of Antarctica and Greenland, as well as other effects of global warming. Given this estimated rate of change, mean sea level may have risen by as much as 7 to 14 centimetres since 1928. A corresponding correction would have to be made to CGVD28 heights to reflect the change in sea level since the datum was originally established.
- The height of the Canadian landmass is changing due to the rebound of the Earth's crust following the last glaciation. Studies indicate that the land is rising by 1 cm per year (70 cm since 1928) around Hudson Bay (Tushingham and Peltier, 1991), while the rate of change decreases gradually as one moves away from this region. According to post-glacial rebound models, the movement reaches zero near the St. Lawrence River, as well as south of the Great Lakes, in the Pacific region, and in the Arctic. Sinking occurs beyond these regions of zero movement, as is the case in the Maritimes. The Halifax tide gauge indicates that the land has sunk by 30 cm since 1928, although the actual sinking effect due to post-glacial rebound may be in the 16 to 23 cm range since mean sea level is believed to have risen by 7 to 14 cm due to global warming.

Because the levelling measurements used to establish CGVD28 heights span many years, the systematic effect of post-glacial rebound must be applied to the levelling network. The first post-glacial rebound models for Canada were developed by Vaníček and Nagy (1980) and updated recently by Carrera et al. (1991). These maps were based on repeated geodetic levellings and covered only those parts of the country where levelling was available. More recently, Tushingham and Peltier (1991) and Peltier (1996) have determined models for the entire world based on geophysical evidence. No post-glacial rebound model has yet been applied to the primary levelling network.

- The application of corrections for even larger systematic errors is still being evaluated. These include errors due to atmospheric refraction, rod calibration and rod temperature, and the effects of solar and lunar tides on the Earth's geopotential

The GPS Height Transformation (v2.0)

surfaces. While the knowledge of sea surface topography is limited, this may also lead to improvements in the levelling network.

In summary, corrections for the above systematic errors have yet to be applied to the published CGVD28 heights, although several new experimental adjustments of the primary levelling network include these corrections. GPS technology and the ever-improving geoid models provide a means to verify the corrections for systematic errors in the levelling network and will facilitate the establishment of an improved height system in Canada. As an interim solution, HTv2.0 will be used to relate the CGVD28 orthometric heights of the levelling network to GPS-derived ellipsoidal heights. In combination with GPS technology, HTv2.0 offers the additional advantage of providing a common reference for heights across the country, reducing the dependency on local vertical datums. Such local datums are often established by users operating in areas of the country that are beyond the reach of the established levelling network, particularly in the north. It should however be noted that the HTv2.0 will be refined in the northern regions using future GPS surveys at tide gauges.

The precision of the levelling-derived CGVD28 heights was analyzed during the course of the development of HTv2.0. Based on an analysis of loop closures and assuming negligible systematic errors, the random error for first-order levelling in Canada was estimated to be about 1.6 mm/ $\sqrt{\text{km}}$. After 100 km of levelling, the error accumulates to 2 cm.

Finally, monument stability must also be considered, particularly when reconciling heights, which were measured at different epochs. In some cases the levelling surveys and the GPS surveys have been carried out many decades apart. While it has not been possible to verify the stability of every monument for which data is included in the height reconciliation project, standard field procedures at GSD have been to verify the local stability of benchmarks before conducting a levelling survey. This is accomplished by “check-levelling” between a minimum of three benchmarks and confirming the stability of at least two of these.

In addition, a significant number of levelling lines across the country have been levelled more than once. Out of 80,000 benchmarks, about one fifth of these, 18,500, have been relevelled after a number of years. Of these, 76% showed motions of less than 1 cm between the two levelling epochs, 95% showed motions of less than 2 cm, and 98% of less than 5 cm. These statistics indicate that the monuments in the primary levelling network remain stable over time to the 5-cm level, supporting the reconciliation of levelling-derived orthometric heights and GPS-derived ellipsoidal heights observed at different epochs.

2.2 NAD83(CSRS98) Ellipsoidal Heights

Traditionally, horizontal positioning in Canada has been related to the North American Datum of 1927 (NAD27) and more recently to the North American Datum of 1983 (NAD83). These are strictly horizontal datums, which have only a very weak definition of the vertical dimension. With the advent of three-dimensional (3D) positioning systems such as GPS, it was quickly realized that a proper 3D-reference system was needed. The best 3D-reference systems in use today are the various realizations of the global International Terrestrial Reference Frame (ITRF), which is now used as the basis for the official GPS reference frame (Kouba and Popelar, 1994; Boucher and Altamimi, 1996). This was also used as the basis for an improved realization of a 3D version of NAD83, called NAD83(CSRS98). This datum was defined in terms of a best fitting 7 parameter similarity transformation between the published NAD83 and ITRF89 coordinates of 11 VLBI stations in the US (Soler et al., 1992). The relation to more recent realizations of ITRF are obtained using the transformations between the various ITRF frames adopted by the International Earth Rotation Service (McCarthy, 1996).

To provide convenient access to this more accurate version of NAD83, the Canadian Base Network (CBN) was established cooperatively by GSD and the provincial survey control agencies. The federal component of the CBN consists of approximately 300 concrete pillars spaced at 200 to 500 km intervals across Canada. The positions of these stations were estimated in NAD83(CSRS98) using 72 hours of GPS observations. The precision of the resulting coordinates are better than about 0.5 cm horizontally and 3 cm vertically at the 95% confidence level (Craymer et al., 1997). Both the horizontal and vertical ellipsoidal coordinates are made available through the Canadian Geodetic Information System, the first time ellipsoidal heights have been officially published as survey control values in Canada.

2.3 CGG2000 Geoid Heights

The geoid heights are obtained from models of the geoid. Although global geoid models are readily available (e.g., OSU91 (Rapp et al., 1991) and EGM96 (Lemoine et al., 1998)), they are based on satellite and terrestrial gravity data that is averaged over relatively large (e.g., 30 x 30 minute) grid cells. Such models are not capable of representing the small wavelength (detailed) features of the geoid required for accurate (several cm-level) geoid heights. Instead, most national geodetic agencies distribute more accurate national geoid models developed specifically for their region. These usually improve on the global model by using a finer grid of terrestrial gravity and other data.

In Canada, the current national geoid model distributed by GSD is the Canadian Gravimetric Geoid model of 2000 (CGG2000) (Véronneau, 2001). The grid extends from 20°N to 84°N and 170°W to 10°W (190°E to 350°E). The resolution of the grid is two minutes of arc in both latitude and longitude. Although it covers most of North America, it is best determined for Canada. The CGG2000 geoid model and its “absolute” error at

The GPS Height Transformation (v2.0)

66% confidence level (1σ) are depicted in Figure 2 and Figure 3, respectively. The error model does not include the long wavelength errors of the global geoid model below degree 30, i.e., wavelengths longer than approximately 600 km. In addition, the error model could be too optimistic for several regions of Canada. Figure 4 illustrates the horizontal gradient of the geoid model in Canada south of latitude 72°N. CGG2000 replaces the previous model GSD95 (Véronneau, 1997). Figure 5 shows the difference between those two models. The largest discrepancies in Canada are over Baffin Island and central Québec, where a more accurate digital elevation model is now available. In addition, the two models are different by a long wavelength going across the country.

Table 1. Statistics related to the CGG2000 geoid model.

	Unit	No	Min	Max	Mean	Std Dev
CGG2000	m	9216000	-64.452	68.730	-0.711	30.806
“Abs.” Error CGG2000	m	9216000	0.002	0.181	0.026	0.017
Gradient CGG2000	cm/km	2563111	0.00	23.77	3.08	1.93
CGG2000 - GSD95	m	419616	-6.450	3.160	-0.408	0.456

CGG2000 can be used in conjunction with GPS-derived ellipsoidal heights to obtain orthometric heights using eqn. (1). However, biases in the geoid due to inaccuracies in the inherent global geoid model limit the achievable absolute accuracy.

Efforts are underway to refine the national geoid model for eventual use within an improved height system for Canada. Presently, better accuracy in the GPS-derived orthometric heights can be achieved by modelling the local biases, in both the geoid and vertical datum, through the use of GPS ties to local vertical control benchmarks during the course of GPS surveys. This gives orthometric heights that are consistent with the CGVD28 datum in the project area. Care must be taken, however, to use enough redundant benchmark ties to enable the reliable detection of any anomalous heights in levelling network.

3. Reconciliation of Heights

In order to derive a general transformation to model the discrepancies between GPS-derived and levelling-derived orthometric heights, it was necessary to obtain both GPS ellipsoidal heights and CGVD28 orthometric heights at vertical control stations. To cover as much of the country as possible, a network of GPS surveys conducted by GSD across Canada was assembled and integrated into NAD83(CRS98) using the CBN as the framework (Craymer and Lapelle, 1997). This network is referred to as the GPS Supernet (v3.1a). All GPS surveys from 1986 to 2000 that included occupations of vertical control benchmarks were considered for inclusion in the Supernet (v3.1a). A list of those stations used, together with their adjusted ellipsoidal coordinates and 3D 95% confidence regions, is given in Appendix A.

These surveys used a broad variety of equipment and observing procedures and session lengths (from less than an hour to a few days). Consequently, the computed coordinates were of varying precision, with the 95% confidence interval for ellipsoidal heights ranging mostly from 2 to 10 cm. There were, however, some older surveys which displayed vertical confidence intervals up to a few decimetres, mainly due to the use of single frequency receivers and the mixing of different types of antennae (no estimates of the relative phase centre offsets were available). Parts of the “GPS on BM” project in British Columbia suffered from these problems. In general, the 95% confidence limit is a good indicator of the precision of the ellipsoidal heights, while the average observation length of each project is a useful indicator of their reliability.

There were a total of 1967 stations in the Supernet (v3.1a) for which levelled orthometric heights were available from GSD’s Canadian Geodetic Information System (CGIS). However, forty-one of these were not used for the reconciliation of heights. A list of those rejected stations is given in Appendix B. Seven of these were part of a local datum, i.e., the heights were not tied to the CGVD28 network, which includes the mainland, Newfoundland, Prince Edward Island and Vancouver Island. Another thirty-four were rejected because the discrepancies (ΔH) between the three heights (H , h and N) were significantly different from the neighbouring stations. Eighteen of those thirty-four stations had ellipsoidal heights with standard deviations larger than 10 cm (95% confidence). The stability of the marker could explain the rejection of the other sixteen stations. This left a total of 1926 stations for which the location is illustrated in Figure 6.

The discrepancies (ΔH) between the GPS-derived and levelling-derived orthometric heights for these 1926 stations are computed using the equation:

$$\Delta H = H_{\text{GPS}} - H_{\text{CGVD28}} = (h_{\text{NAD83(CSRS98)}} - N_{\text{CGG2000/NAD83}}) - H_{\text{CGVD28}}, \quad (2)$$

where

H_{GPS}	= GPS-derived orthometric height,
H_{CGVD28}	= CGVD28 orthometric height,
$h_{\text{NAD83(CSRS98)}}$	= GPS-derived ellipsoidal height in NAD83(CSRS98),
$N_{\text{CGG2000/NAD83}}$	= CGG2000 geoid height in NAD83(CSRS98).

These height discrepancies represent a combination of the errors in the CGVD28 height network, the CGG2000 geoid model, and the GPS-derived NAD83(CSRS98) ellipsoidal heights. It is these discrepancies that were modelled in producing HT v2.0.

4. Analysis of Height Discrepancies

Before deriving the height transformation model, an analysis of the quality of the CGG2000 model was performed against geoid heights derived from GPS ellipsoidal

The GPS Height Transformation (v2.0)

heights and true orthometric heights. Thus, a new adjustment of the primary levelling network in Canada was conducted in order to realize this new vertical datum. The adjustment of the levelling observations included actual gravity measurements and all systematic errors that were omitted in the CGVD28 adjustment (see section 2.1). The adjustment was performed in two stages. The first stage consisted of adjusting, in a minimum constraint, all levelled height differences observed from 1982 to 2000. Benchmark “7629325” in Rimouski, Québec was held fix. In a second stage, we added to the first adjustment all observations since 1972; and all benchmarks from the first adjustment were held fix. This approach was chosen in order to minimize the effect of the post-glacial rebound.

This adjustment refers to as Jan01d. It indicates that the MSL of the Pacific Ocean in the vicinity of Vancouver is higher than the MSL of the Atlantic Ocean next to Halifax by 81 cm. On the other hand, the CGG2000 geoid model indicates a difference of 34 cm between the two coasts. These results are shown in Table 2, which also shows results for previous adjustments of the Canadian primary levelling network and the GSD95 geoid model.

Table 2. Sea surface topography (SST) and water level difference at tide gauges in Vancouver (V), Rimouski (R) and Halifax (H) for different adjustments of the primary levelling network and geoid models. All adjustments use true orthometric heights.

Datum	Sea Surface Topography (cm)			Δ SST (cm)	Comments
	V	H	R ¹		
Adj. 07-28	-6	-29	-41	+23	Levelling from 1907 to 1928
Adj. 66-71	+159	-46	-41	+205	Levelling from 1966 to 1971
NAVD88	+100	-51	-41	+151	North American Adjustment
GSD95	-60	-41	-41	-19	Geoid Model
Jan98	+54	-49	-41	+103	All Levelling (1907 to 1997)
Jan01d	+34	-47	-41	+81	Levelling from 1982 to 2000
CGG2000	-5	-39	-41	+34	Geoid Model
Jan01d*	-5	-47	-41	+42	Levelling from 1982 to 2000 ²

¹. Fixed station: (h ITRF97 epoch 97.0 – N CGG2000)*g = 4.2158 m kGal.

². Same as Jan01d but constrained in Rimouski and Vancouver to CGG2000.

There were a total of 1102 stations in the Supernet (v3.1a) for which heights were available from the Jan01d adjustment. Only twelve heights were rejected because their discrepancies were too large vis-à-vis the discrepancies in the immediate neighbourhood. A list of those twelve stations is in Appendix C. Thus, 1090 stations were available to validate the CGG2000 geoid model.

The height discrepancies between Jan01d heights and GPS-derived orthometric from GSD95 and CGG2000 geoid models as shown in Figures 7a and 7b, respectively. The modification of the weight function in the Stokes integral (Heiskanen and Moritz, 1967)

The GPS Height Transformation (v2.0)

used for the computation of the geoid heights allowed the removal of a significant east-west systematic error in GSD95. This east-west tilt in GSD95 is probably due to systematic errors in the gravity measurements and gravity reductions. Therefore, more weight was given to the long wavelength of the global geoid model EGM96. The remaining of the systematic error seen in Figure 7b may be from inaccuracy of the global geoid model or systematic error in the levelling. The water level difference between the two coasts may not be as large as 81 cm.

New digital elevation models (DEM) for British Columbia and Alberta contributed significantly in enhancing the geoid model in these two provinces. These new DEM allowed the determination of more accurate terrain corrections (Heiskanen and Moritz, 1967) to the gravity measurements. In addition, the new Canadian Digital Elevation Data (CDED) available from the Centre of Topographic Information of Natural Resources Canada contributed significantly in improving the geoid model in central Québec and Baffin Island (see Figure 5).

The discrepancies for CGG2000 have a standard deviation of 18 cm while it is 41 cm for GSD95. However, the standard deviation for CGG2000 is 8.5 cm after fitting out the systematic biases and tilt by using a four-parameter transformation (Sideris, 1993), which absorbs long wavelength errors. By using the same process, the standard deviation for GSD95 improved to 15 cm, but it remains almost twice as large as the one for CGG2000. These results are summarized in Table 3.

Table 3. Comparison of different geoid models (GSD95 and CGG2000) to geoid heights derived from GPS ellipsoidal heights (Supernet v.3.1a) and two primary levelling network adjustments (CGVD28 and Jan01d).

Geoid Model	Levelling Datum	No	Min (m)	Max (m)	Mean (m)	Std Dev* (m)
GSD95	Jan01d	1090	-1.214	0.404	-0.564	0.410 (0.149)
CGG2000	Jan01d	1090	-0.799	0.238	-0.260	0.179 (0.085)
GSD95	CGVD28	1926	-1.360	0.545	-0.621	0.304 (0.270)
CGG2000	CGVD28	1926	-0.768	0.312	-0.298	0.211 (0.179)

* The results in parentheses indicate the standard deviation after fitting out systematic biases and tilts by using a four-parameter transformation.

This kind of analysis is also produced with the CGVD28 orthometric heights, but Figures 8a and 8b demonstrate clearly the inaccuracy of the published orthometric heights (see Table 3 for statistics). The height transformation is to correct all these distortions, biases and systematic errors that exist in the CGVD28 height systems. The next section will explain the procedure adopted for the production of the height transformation.

5. The HTv2.0 GPS Height Transformation

The model of height discrepancies used in deriving the HTv2.0 GPS Height Transformation was determined by interpolating the 1926 height discrepancies to a 10 x 10 arcmin. grid using the enhanced minimum curvature gridding technique described by Smith and Wessel (1990). This method is often used to grid geophysical data such as gravity and aeromagnetic data and is an efficient technique for gridding randomly distributed spatial data. It has also been used by the U.S. National Geodetic Survey (NGS) to produce the transformation grids employed by their NADCON and VERTCON software (NGS, 1991; 1996) for transforming between horizontal and vertical datums, respectively. We used the same gridding software in deriving the height discrepancy grid.

The minimum curvature gridding method was enhanced by Smith and Wessel through the addition of a tension parameter that controls the degree of smoothing of the discrepancies. When the tension is set to zero it provides a minimum curvature surface and when the tension is set to 1 it provides a harmonic function. A tension of 0.3 was used here as suggested by NGS (D. Milbert, personal communication, 1996).

The minimum curvature gridding software requires one point for each 10 x 10 arcmin. cell. For cells that contained more than one station, the arithmetic mean of both the discrepancies and horizontal positions was used as the representative value for the cell. One hundred and eighty-nine such cells were found, containing between 2 and 40 stations each (see Appendix D). Replacing these with their cell averages leaves a total of 1554 points to be gridded (see Appendix E).

Using the minimum curvature gridding software, these 1554 stations were interpolated to produce a regular grid of 10 minutes of arc in both latitude and longitude. This grid was interpolated using a bi-quadratic technique to produce a regular grid with an interval of 2 minutes of arc. This final grid represents the corrector surface for CGG2000 (CGVD28) or the modelled height discrepancies, and is displayed as contour lines in Figure 9 using a 5-cm contour interval. The grid extends from 41°N to 84°N and 48°W to 142°W (218°E to 312°E) and contains values ranging from -0.776 m to +0.292 m (see Table 4). The total HTv2.0 transformation grid was then obtained by combining both this height discrepancy grid and the CGG2000 geoid grid.

Similarly, a corrector surface could be computed to allow the transformation between GPS ellipsoidal heights and Jan01d heights (see Figure 10 and Table 4). Because the latter heights are true orthometric, the corrector surface is smoother than for CGVD28 and shows clearly an east-west systematic error. Still, we can observe a series of local discrepancies across Canada that will require to be studied. These local distortions are either related to the levelling network or the geoid model. For example, the problem in the area of the Réservoir Manicouagan, Québec is probably related to out of date gravity measurements that were observed prior to the flooding caused by the construction of dams on the river. While the problem in Churchill, Manitoba could be caused by a bias of the shipboard gravity data on the Hudson Bay and post-glacial rebound. Other

The GPS Height Transformation (v2.0)

problems, such as in The Yukon Territory, could be related to the vertical motion of the markers.

The difference between HTv1.01 (previous version) and HTv2.0 is illustrated in Figure 11 with contour intervals of 10 cm. The large differences observed between GSD95 and CGG2000 are also observable in Figure 11 because they correspond to region where no vertical controls are available. There are also significant changes in Labrador and Québec lower north shore due to the modification of the weight function in the computation of the geoid heights. There are no vertical controls for these regions too. The addition of new vertical controls in Northern Ontario has altered the height transformation by as much as 20 cm. Finally, for most of Canada, the differences are within the allowed error.

Table 4. Statistics related to the HT v2.0 height transformation.

	Unit	No	Min	Max	Mean	Std Dev
Corrector Surface:CGVD28	M	158760	-0.774	0.288	-0.349	0.135
Corrector Surface:Jan01d	M	116424	-0.773	0.233	-0.235	0.196
HT v2.0 – HT v.1.01	M	354217	-1.860	3.130	-0.039	0.295

The HTv1.01 and HTv2.0 heights transformation can be compared to “GPS on BM” as it was done for GSD95 and CGG2000 geoid models. The discrepancies for HTv2.0 (see Figure 12b) are naturally small because the same points were used to produce the height transformation. The standard deviation of the discrepancies in Canada is 1.4 cm. On the other hand, the larger set of “GPS on BM” across in Canada has allowed the enhancement of the height transformation. When using HTv1.01 for the same set of “GPS on BM”, the discrepancies range from -0.242 m to +0.378 m with a standard deviation of 4.4 cm. The discrepancies are shown on a XY graph in Figure 12a. The numerical results are shown in Table 5.

Table 5. Comparison of two height transformations (HT v1.01 and HT v2.0) to geoid heights derived from GPS ellipsoidal heights (Supernet v3.1a) and CGVD28 orthometric heights.

Geoid Model	Levelling Datum	No	Min (m)	Max (m)	Mean (m)	Std Dev (m)
HT v1.01	CGVD28	1926	-0.242	0.378	0.009	0.044
HT v2.0	CGVD28	1926	-0.073	0.083	0.000	0.014

Finally, we determined the relative discrepancies ($\delta\Delta H$) of the HTv2.0 height transformation and CGG2000 geoid model as an indicator of the precision (relative accuracy) achievable. The relative discrepancies can be expressed as

$$\delta\Delta H = \Delta H_j - \Delta H_i, \quad (3)$$

where ΔH_i and ΔH_j are the height discrepancies (see eqn. 2) at stations i and j , respectively.

The analysis of the relative discrepancies across Canada was limited to baselines shorter than 100 km. However, it is emphasized that the relative discrepancies are due to combined errors in ellipsoidal, orthometric and geoid heights. Using Jan01d orthometric heights, the estimated relative accuracy for CGG2000 is better than 10 cm with 95% confidence level based on 6141 baselines across Canada. The relative discrepancies increase systematically from a few cm for baselines shorter than 20 km to the dm for baselines reaching 100 km as shown in Figures 13a. This indicates a systematic error in the levelling, the geoid model or a combination of both. The mean value of relative discrepancies is 4 cm (see Table 6).

Because the HTv2.0 height transformation models the height discrepancies, the estimated relative accuracy improves to 5 cm (95% confidence level) and is independent of the length of the baseline as shown in Figure 13b. In this case, the CGVD28 orthometric heights are used in the analysis. The mean value for 28376 baselines is 1.6 cm (Table 6). This result might be optimistic for the actual precision of HTv2.0. The relative accuracy obtained from CGG2000 could be more realistic and a better indicator of its actual precision. The relative discrepancies for CGG2000 are also illustrated with 2-cm contour intervals in Figure 14. It shows the location of the largest discrepancies in Canada.

Table 6. Relative discrepancies of CGG2000 against geoid heights derived from GPS ellipsoidal heights (Supernet v3.1a) and Jan01d orthometric heights, and HT v2.0 against geoid heights derived from GPS ellipsoidal heights (Supernet v3.1a) and CGVD28 orthometric heights. The relative discrepancies include errors from geoid model, levelling and GPS measurements, and all baselines are within 100 km.

Geoid Model	Levelling Datum	No	Min (m)	Max (m)	Mean (m)	Std Dev (m)
CGG2000	Jan01d	6141	0.000	0.362	0.040	0.028
HT v.2.0	CGVD28	28376	0.000	0.135	0.016	0.015

6. HT97 Implementation

The GPS-derived orthometric height (H_{GPS}) compatible to the CGVD28 is obtained at any arbitrary point from its ellipsoidal height (h_{GPS}) using the following equation

$$H_{GPS} = h_{GPS} - N_{HTv2.0}, \quad (4)$$

The GPS Height Transformation (v2.0)

where $N_{HTv2.0}$ is the combination of the CGG2000 geoid height and its corrector surface determine from the height discrepancies (ΔH).

This transformation has been implemented using GPS·H, a Windows-compatible software package that interpolates the HTv2.0 transformation grid. The interpolation is based on a least-squares fit of a bi-quadratic polynomial to nine surrounding grid points. Although GPS·H assumes by default that both the ellipsoidal and geoid heights are relative to the NAD83(CSRS98) reference system, the ITRF system is also supported.

For higher accuracy applications, the GPS·H software package also includes options for more precise local modelling of GPS/CGVD28 height discrepancies using the CGG2000 geoid model and GPS observations of local vertical control points.

7. Conclusion and Recommendations

The GPS Height Transformation v2.0 allows GPS users in Canada to convert their NAD83(CSRS98) ellipsoidal heights to CGVD28 orthometric heights (heights above mean sea level). HTv2.0 reconciles in a relatively simple way the three kinds of heights (ellipsoidal, orthometric and geoid) by removing inconsistencies of the order of a few dm. The remaining errors are less than about 5 cm for 95% of benchmarks used in deriving HTv2.0 (mainly in the southern regions of Canada) but may amount to a few decimetres in remote or northern regions where there are a few accurate CGVD28 heights to derive a reliable transformation. Strictly speaking, CGVD28 has not been available in most of the north of Canada, and so HTv2.0 can be thought of as providing the original definition of CGVD28 in those areas. At this level of accuracy, HTv2.0 is suitable for many GPS, DGPS and WADGPS positioning applications in navigation and mapping.

HTv2.0 is implemented through the interpolation of a grid. The grid may be used in place of a geoid model in commercial GPS processing and least-squares adjustment software and in GSD's software such as GHOST and GPS·H. HTv2.0 allows users to obtain GPS-derived orthometric heights compatible with the surrounding CGVD28 vertical control, without the need to occupy any benchmarks during field observations.

HTv2.0 in combination with GPS provides a very useful and effective means of establishing CGVD28 orthometric heights for many mapping and navigation applications, especially in remote areas, that require accuracies to about 1 m. It may also be used with caution for applications in the southern and more populous regions of Canada requiring decimeter-level precision.

HTv2.0 should not be used to derive orthometric heights for points within the U.S., as the results will be incompatible with the adopted height system there. The differences between the published height systems in the two countries can be as large as 1.5 metres in some areas.

The GPS Height Transformation (v2.0)

It is also recommended not to use HTv2.0 for high precision applications requiring accuracies better than 5 cm. It is recommended instead to use the CGG2000 geoid model together with GPS observations to local vertical control points to more accurately model the local errors in the both the geoid and CGVD28 orthometric heights. To facilitate this, the GPS-H software package also provides options to implement this more accurate local modelling.

As work continues toward the implementation of an improved height system in Canada, the height transformation will also be further refined. For the next version, it is recommended that:

- (1) any additional GPS/levelling stations that become available be used in the development of the height reconciliation model; and
- (2) the quality of the levelling-derived orthometric heights be further examined and improved when possible

Naturally, GSD will resume its research and development in geoid modelling towards an accuracy of 1 cm across Canada.

Acknowledgments

We gracefully acknowledge Dr. Michael Craymer and Earl Lapelle, who performed the adjustment and integration of the Supernet (v3.1); Dr. André Mainville, who prepared the list of the CGVD28 heights; and Warren T. Dewhurst of the U.S. National Geodetic Survey, for providing the minimum curvature interpolation software. We also acknowledge the contribution of DEM from British Columbia Environment, Lands and Parks; Alberta Environment Protection; New Brunswick Geographic Information Corporation; and Centre for Topographic Information of Natural Resources Canada.

References

- Boal, J.D. and J.P. Henderson (1988). **The NAD 83 Project - Status and Background.** In Papers for the CISM Seminars on the NAD '83 Redefinition in Canada and the Impact on Users, Canadian Institute of Surveying and Mapping, Ottawa, 1988.
- Boucher, C. and Z. Altamimi (1996). **International Terrestrial Reference Frame.** GPS World, September 1996, pp. 71-74.
- Canon, J.B. (1929). **Adjustments of the Precise Level Net of Canada 1928.** Publication No. 28, Geodetic Survey Division, Geomatics Canada, Ottawa.
- Carrera, G., P. Vaníček and M.R. Craymer (1991). **The Compilation of a Map of Recent Vertical Movements in Canada.** Contract report no. 91-001, Geodetic Survey Division, Natural Resources Canada, Ottawa.
- Craymer, M.R., R. Penney and E. Lapelle (1997). **CBN Status Report: Processing, Adjustment and Integration.** Presented to the Canadian Geodetic Reference System Committee, Ottawa, April 23.
- Craymer, M.R. and E. Lapelle (1997). **The GPS Supernet: An Integration of GPS Projects Across Canada.** Internal Report, Geodetic Survey Division, Geomatics Canada, Ottawa. In preparation.
- Duval, R., P. Héroux, and N. Beck (1996). **Canadian Active Control System: Delivering the Canadian Spatial Reference System.** Presented at the GIS96 International Symposium on Geographical Information Systems, Vancouver, Canada.
- Geodetic Survey Division (1978). **Specifications and Recommendations for Control Surveys and Survey Markers.** Surveys and Mapping Branch (now Geomatics Canada), Ottawa.
- Heiskanen, W.A. and H. Moritz (1967). **Physical Geodesy,** Freeman.
- Kouba, J., and J. Popelar (1994). **Modern Geodetic Reference Frames for Precise Satellite Positioning and Navigation.** Proceedings of KIS94: The International Symposium on Kinematic Systems in Geodesy, Geomatics and Navigation, Banff, Alberta, August 30 - September 2.

The GPS Height Transformation (v2.0)

- Lemoine, F.G., S.C. Kenyon, J.K. Factor, R. Trimmer, N.K. Pavlis, D.S. Chinn, C.M. Cox, S.M. Klosko, S.B. Luthcke, M.H. Torrence, Y.M. Wang, R.G. Williamson, E.C. Pavlis, R.H. Rapp and T.R. Olson (1998). **The Development of the NASA GSFC and the National Imagery and Mapping Agency (NIMA) Geopotential Model EGM96**. NASA/TP-1998-206861, National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, MD, USA.
- Mainville, A. (1994). **Earth Gravity and Height Systems**. Internal Report, Geodetic Survey Division of Natural Resources Canada, Ottawa, ON, Canada.
- McCarthy, D.D. (1996). **IERS Conventions (1996)**. IERS Technical Note 21, Central Bureau of IERS, Paris.
- National Geodetic Survey (1991). **NADCON version 1.03, April 91**. U.S. National Geodetic Survey, Silver Springs, MD.
- National Geodetic Survey (1994). **VERTCON version 2.0, August 1994**. U.S. National Geodetic Survey, Silver Springs, MD.
- Peltier, W.R. (1994). **Ice Age Paleotopography**. Science, Vol. 265, pp.195-201.
- Rapp, R.H., Y.M. Wang, N.K. Pavlis (1991). **The Ohio State 1991 Geopotential and Sea Surface Topography Harmonic Coefficient Models**. Report No. 410, Dept. of Geodetic Science and Surveying, The Ohio State University, Columbus, Ohio.
- Sideris, M.G. (1993). **Tests of a Gravimetric Geoid in GPS Networks**. Surveying and Land Information Systems, Vol. 53, No. 2, pp. 94-102.
- Smith, W.H.F., and P. Wessel (1990). **Gridding with Continuous Curvature Splines in Tension**. Geophysics, vol. 55, No. 3, pp. 293-305.
- Soler, T., J.D. Love, L.W. Hull and R.H. Foote (1992). **GPS Results from Statewide High Precision Networks in the United States**. Proceedings of the Sixth International Geodetic Symposium on Satellite Positioning, Columbus, OH, March 17-20, pp. 573-582.
- Tushingham, A.M., and W.R. Peltier (1991). **ICE-3G: A new Global Model of Late Pleistocene Deglaciation Based Upon Geophysical Predictions of Post-Glacial Relative Sea-Level Change**. Journal of Geophysical Research, Vol. 96, pp. 4497-4523.
- Vaniček, P., and D. Nagy (1980). **Report on the Compilation of the Map of Vertical Crustal Movements in Canada**. Open File Report No. 80-2, Geological Survey of Canada, Ottawa.

The GPS Height Transformation (v2.0)

Véronneau, M. (1997). **The GSD95 Geoid Model for Canada.** Gravity, Geoid and Marine Geodesy, Proceedings of the international symposium, Tokyo, Japan, 1996. Springer, Vol. 117, pp.573-580.

Véronneau, M. (2001). **The Canadian Gravimetric Geoid Model 2000 (CGG2000).** Report in preparation, Geodetic Survey Division of Natural Resources Canada, Ottawa, ON, Canada.

The GPS Height Transformation (v2.0)

The GPS Height Transformation (v2.0)

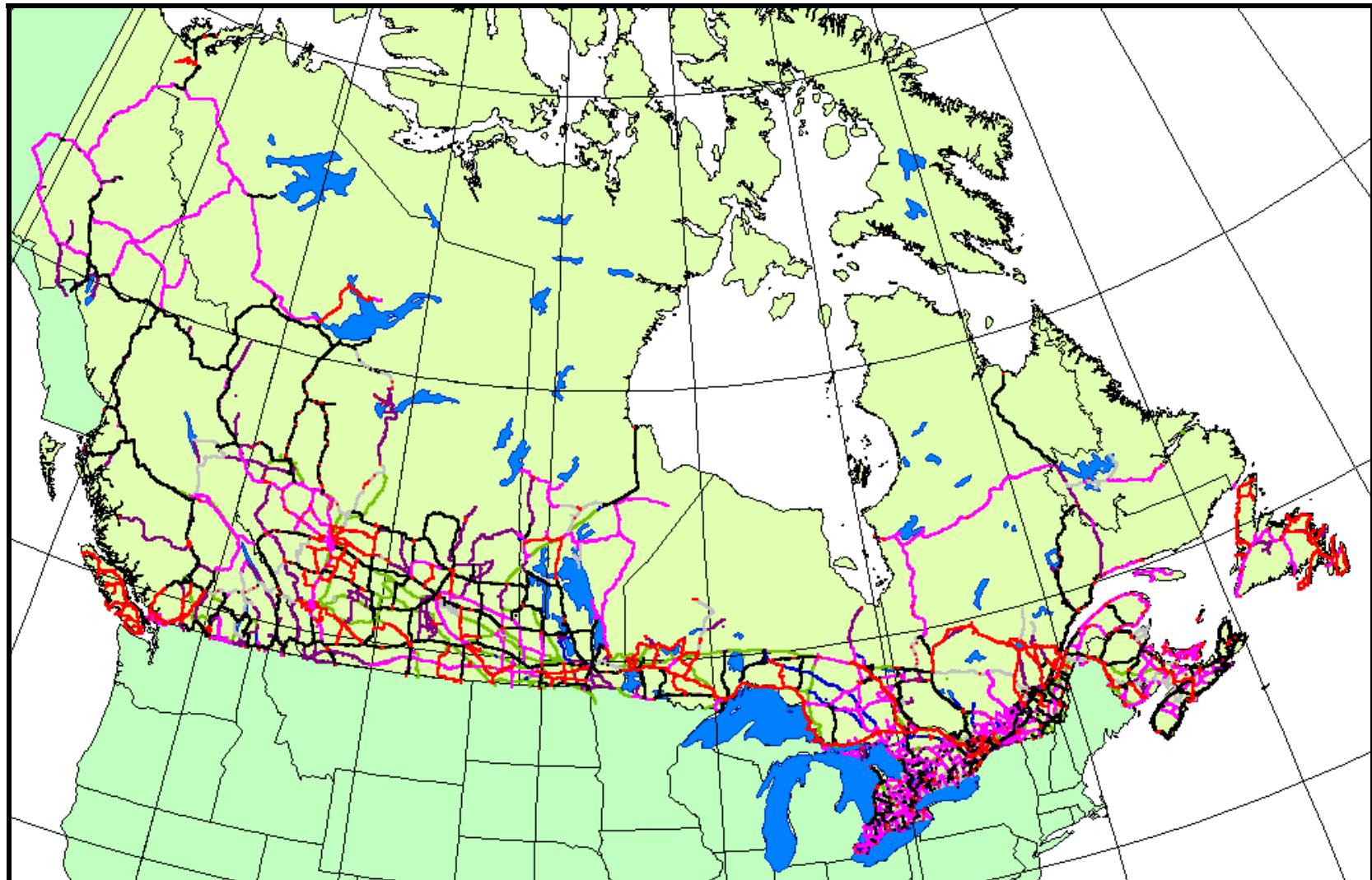


Figure 1: Canadian primary levelling network. The different colors indicate different epochs of levelling surveys.

The GPS Height Transformation (v2.0)

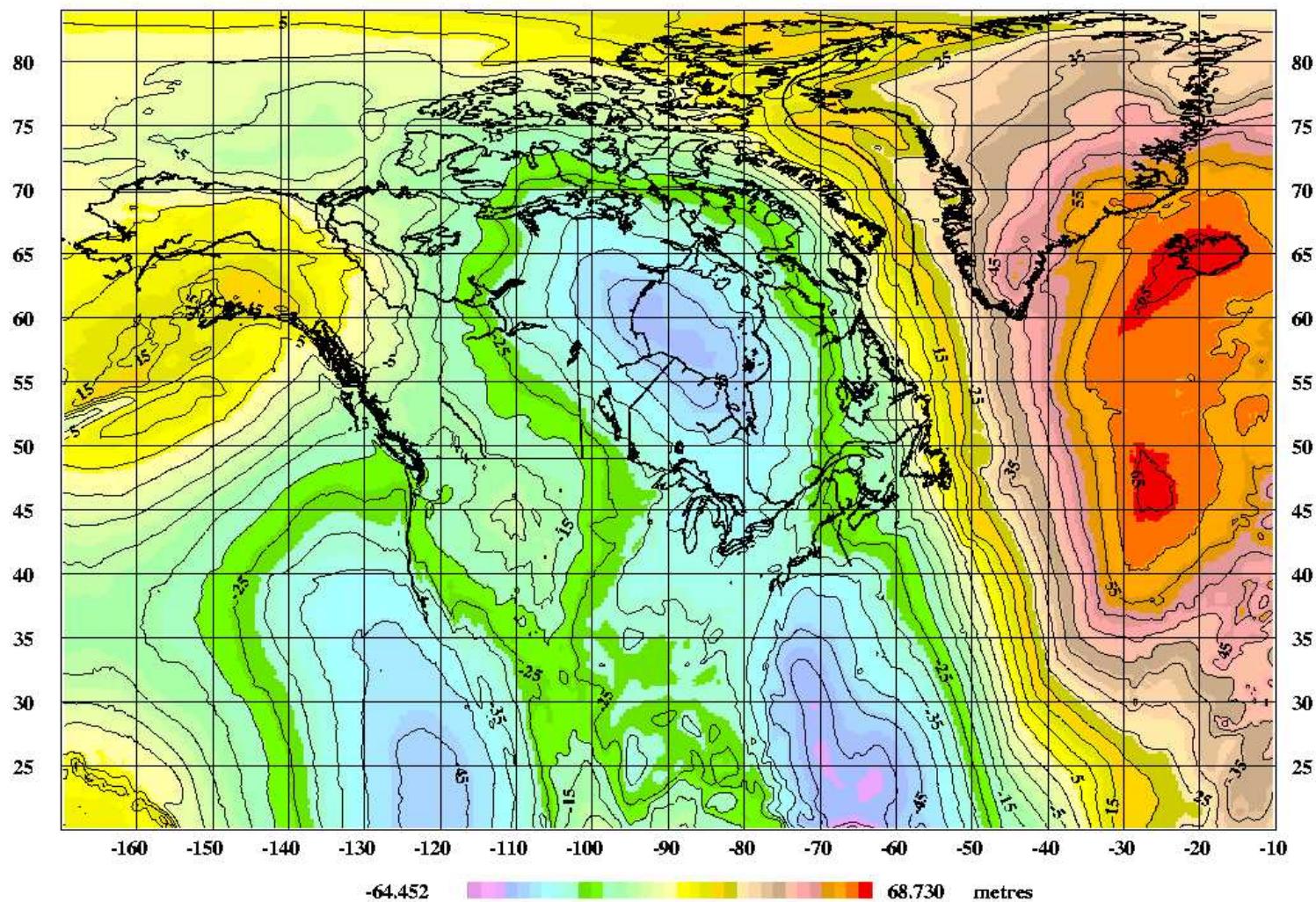


Figure 2: The CGG2000 geoid model for North America. (Unit: m; C.I.: 5 m)

The GPS Height Transformation (v2.0)

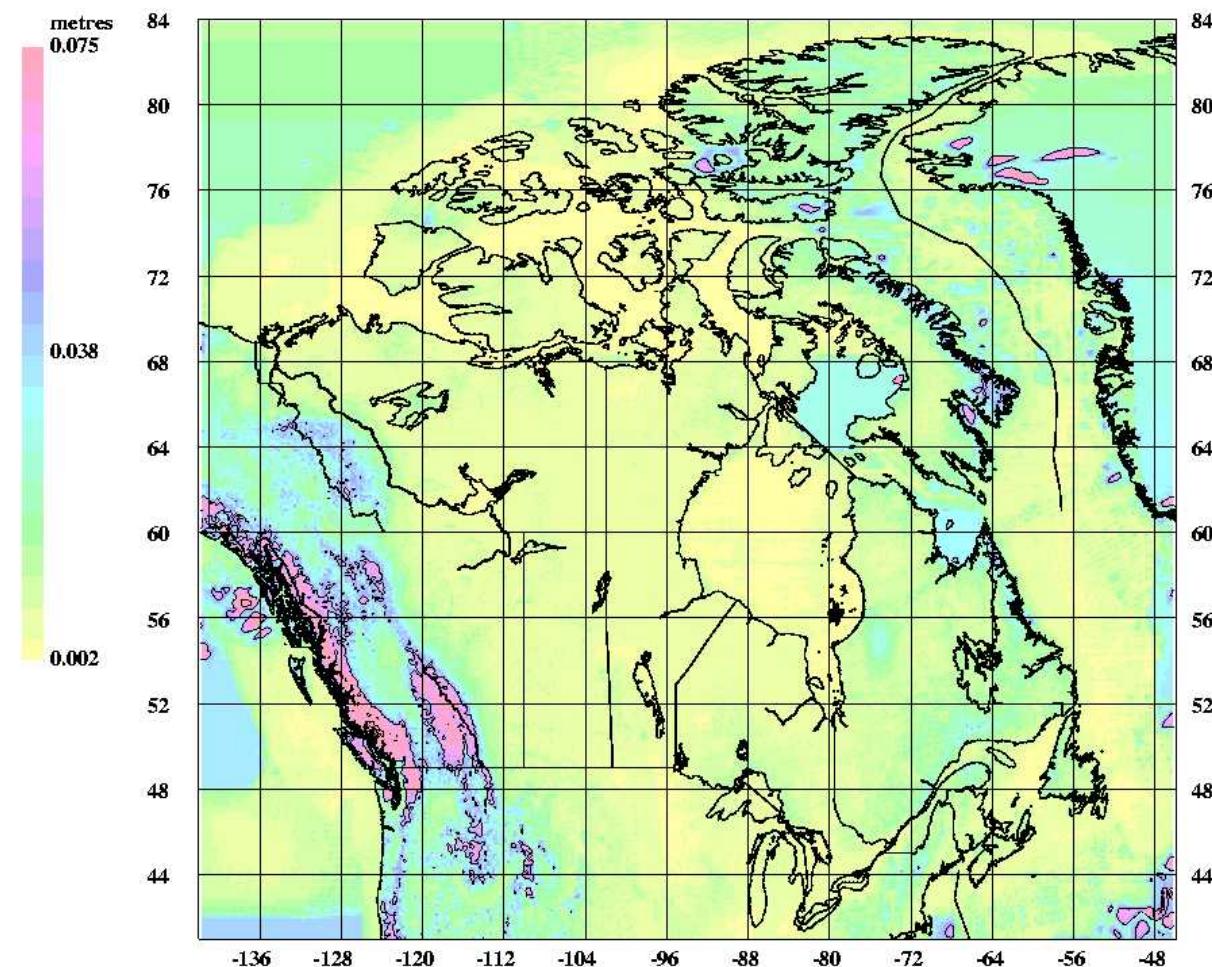


Figure 3: "Absolute" accuracy of the CGG2000 geoid model above degree 30 (wavelengths longer than approximately 600 km).
(Unit: m, C.I.: 5 cm)

The GPS Height Transformation (v2.0)

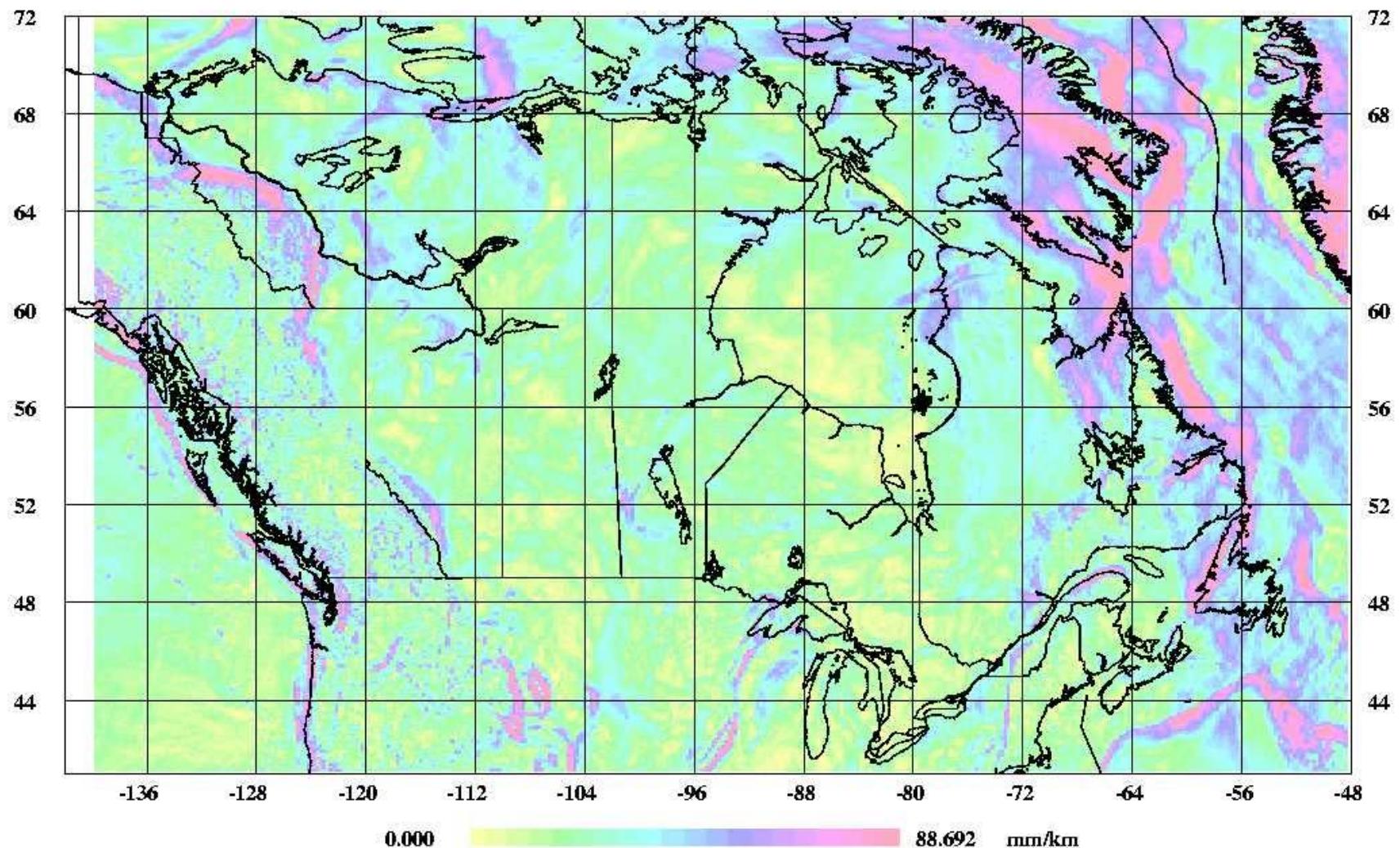


Figure 4: Horizontal gradient of the CGG2000 geoid model. (Unit: mm/km)

The GPS Height Transformation (v2.0)

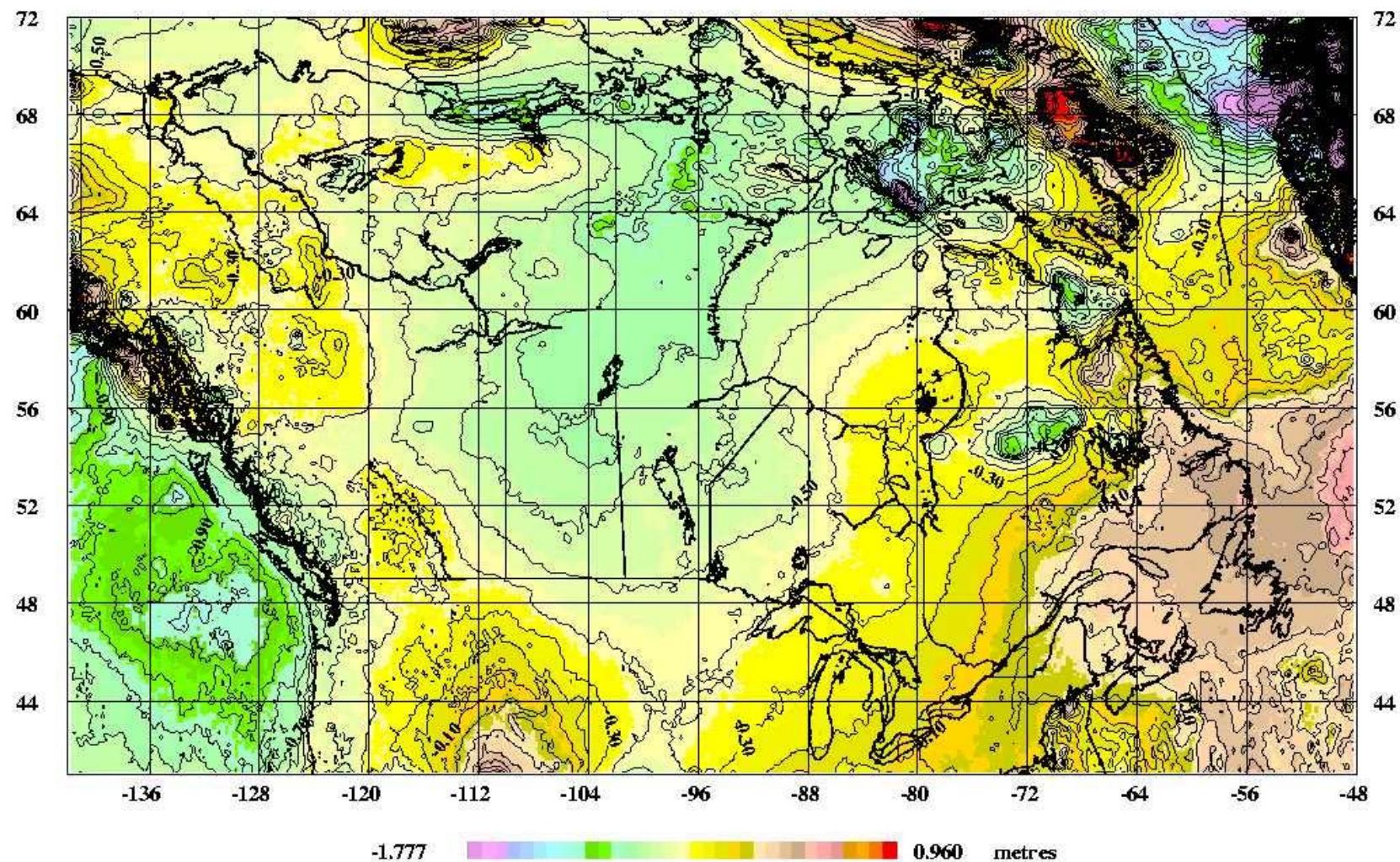


Figure 5: Difference between GSD95 and CGG2000 geoid models (CGG2000 – GSD95). (Unit: m; C.I.: 10 cm)

The GPS Height Transformation (v2.0)

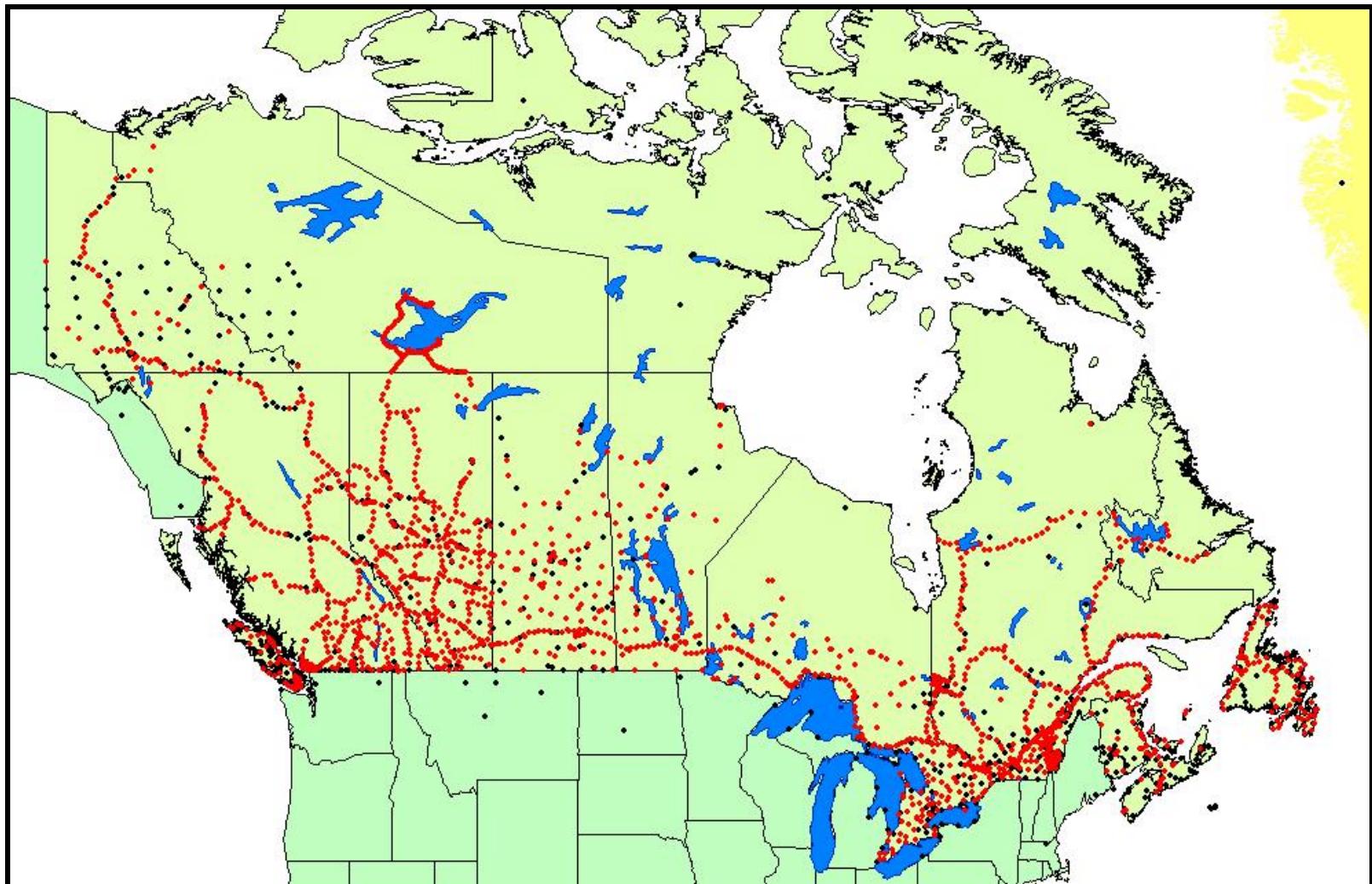
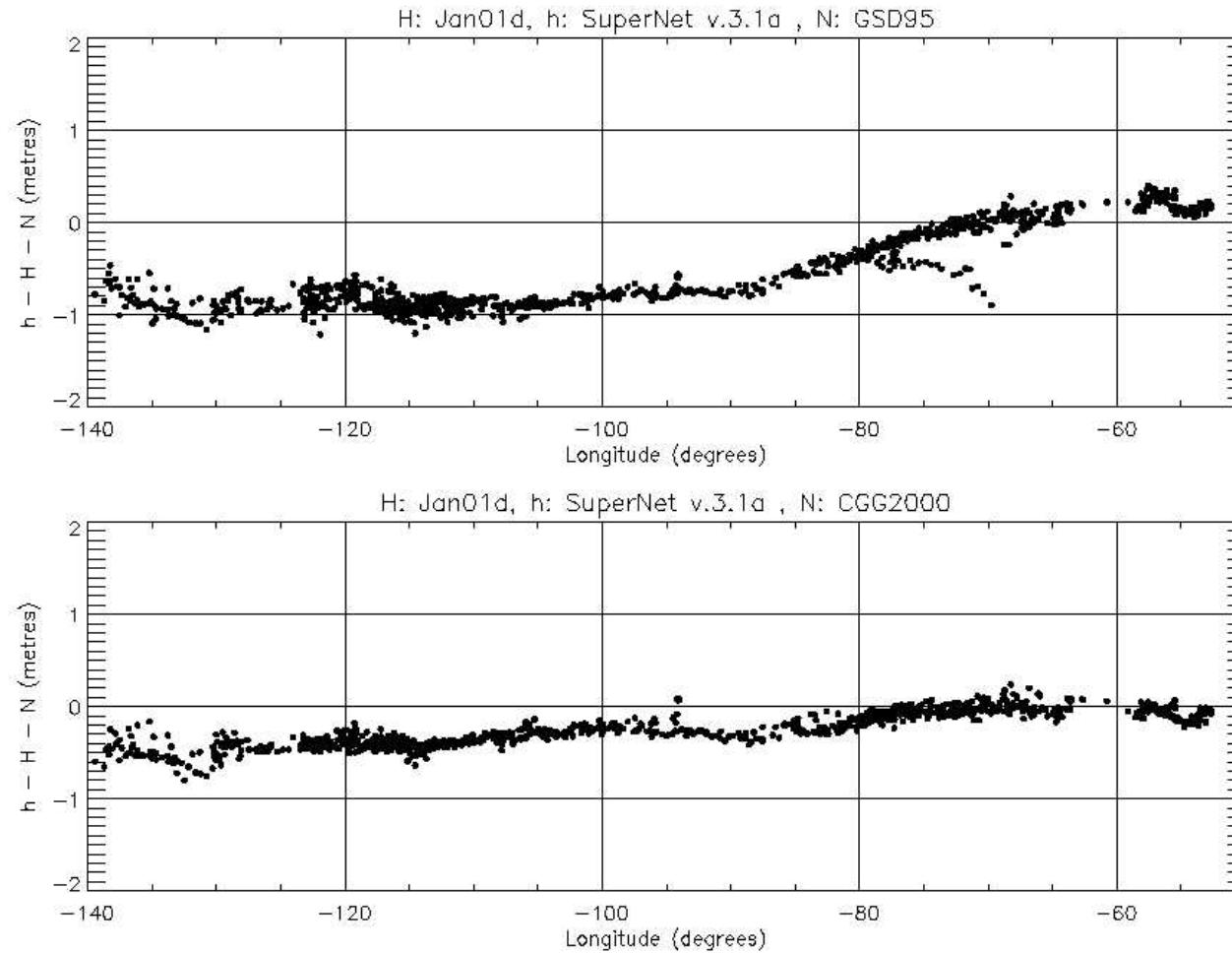


Figure 6: Distribution of the 2834 GPS stations south of latitude 72°N forming the Supernet (v3.1a). The 1926 stations used for the determination of the HTv2.0 GPS Height Transformation are in red.

The GPS Height Transformation (v2.0)

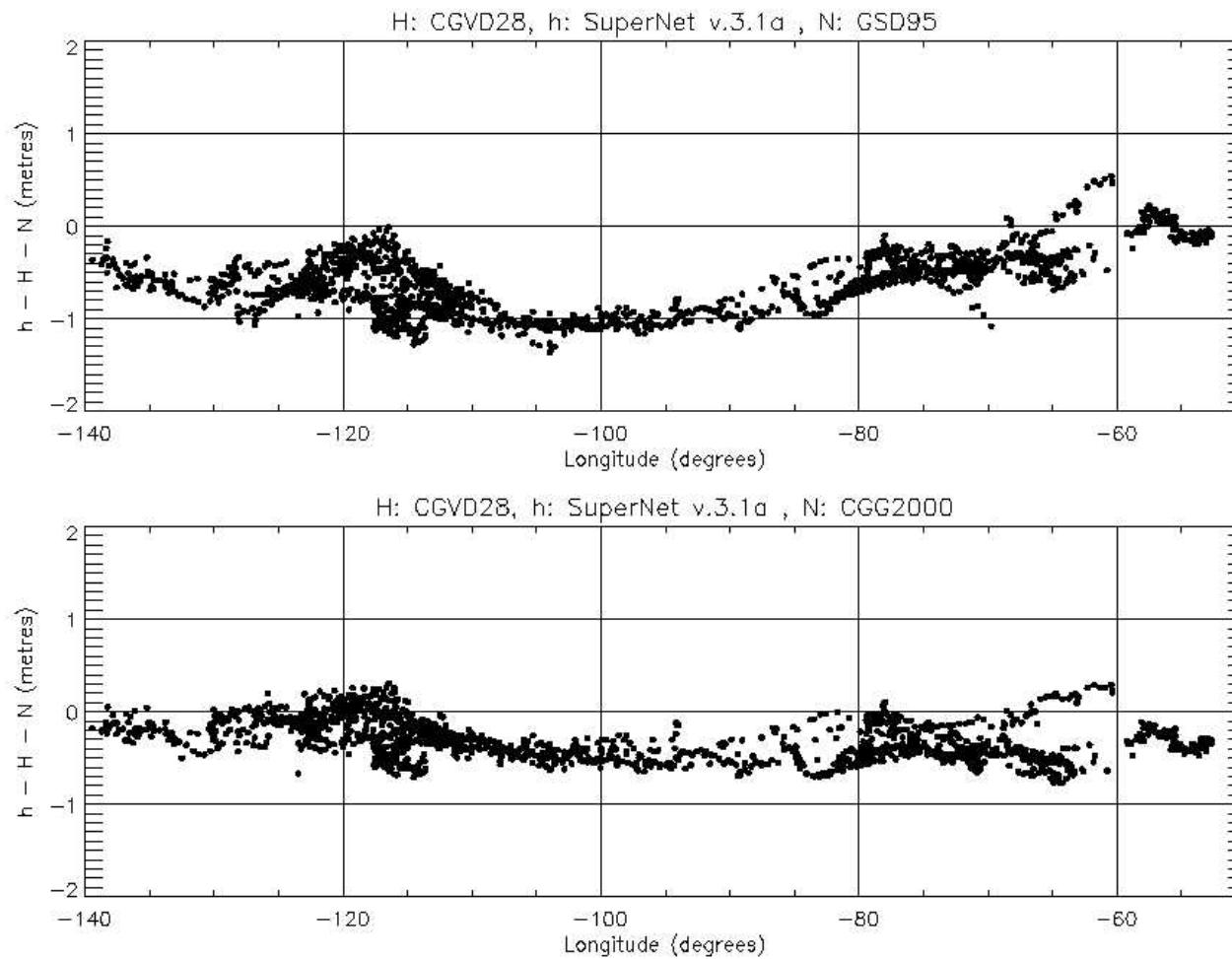
Figures 7a: Discrepancies between Jan01d heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the GSD95 geoid model.



Figures 7b: Discrepancies between Jan01d heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the CGG2000 geoid model.

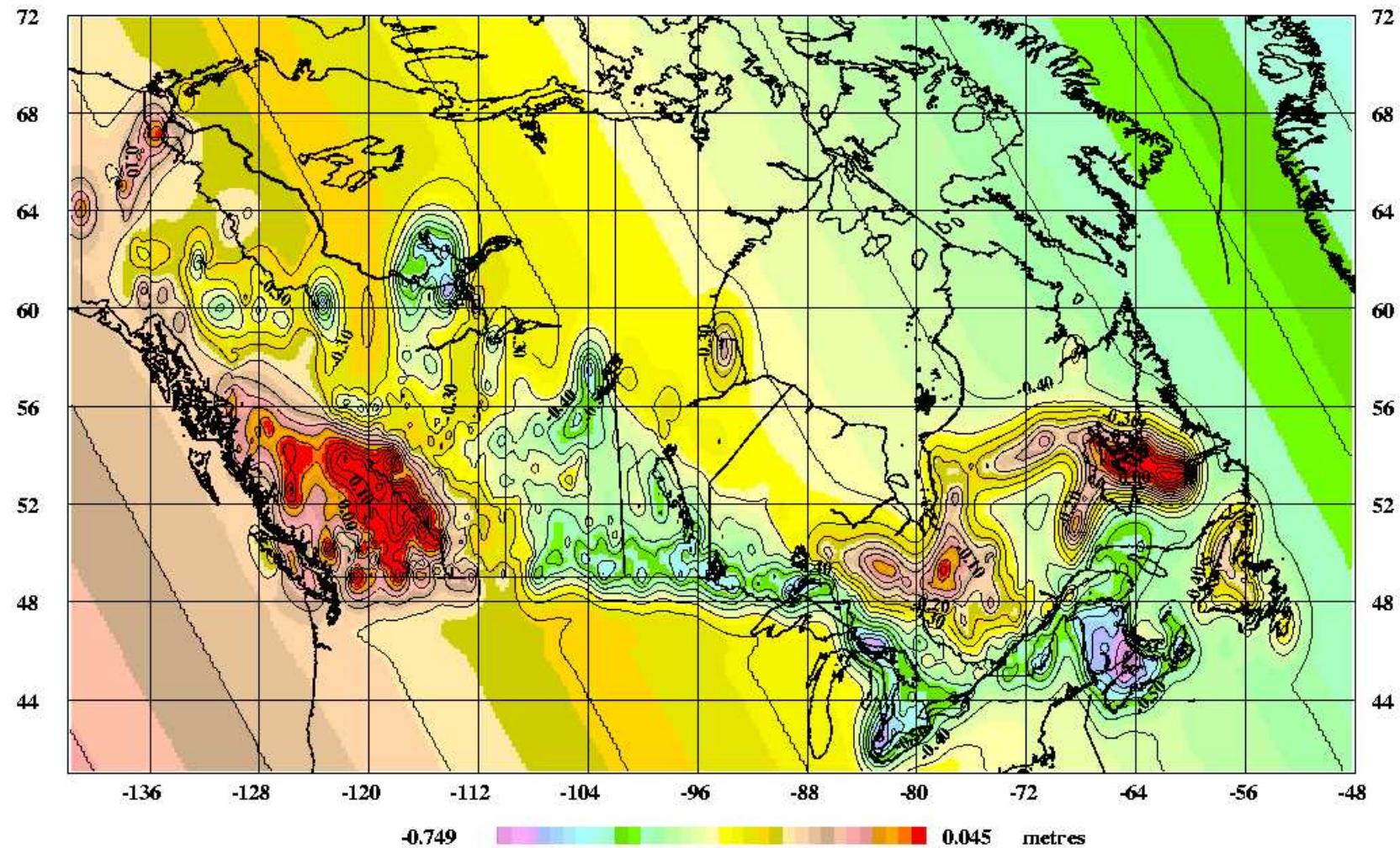
The GPS Height Transformation (v2.0)

Figures 8a: Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the GSD95 geoid model.



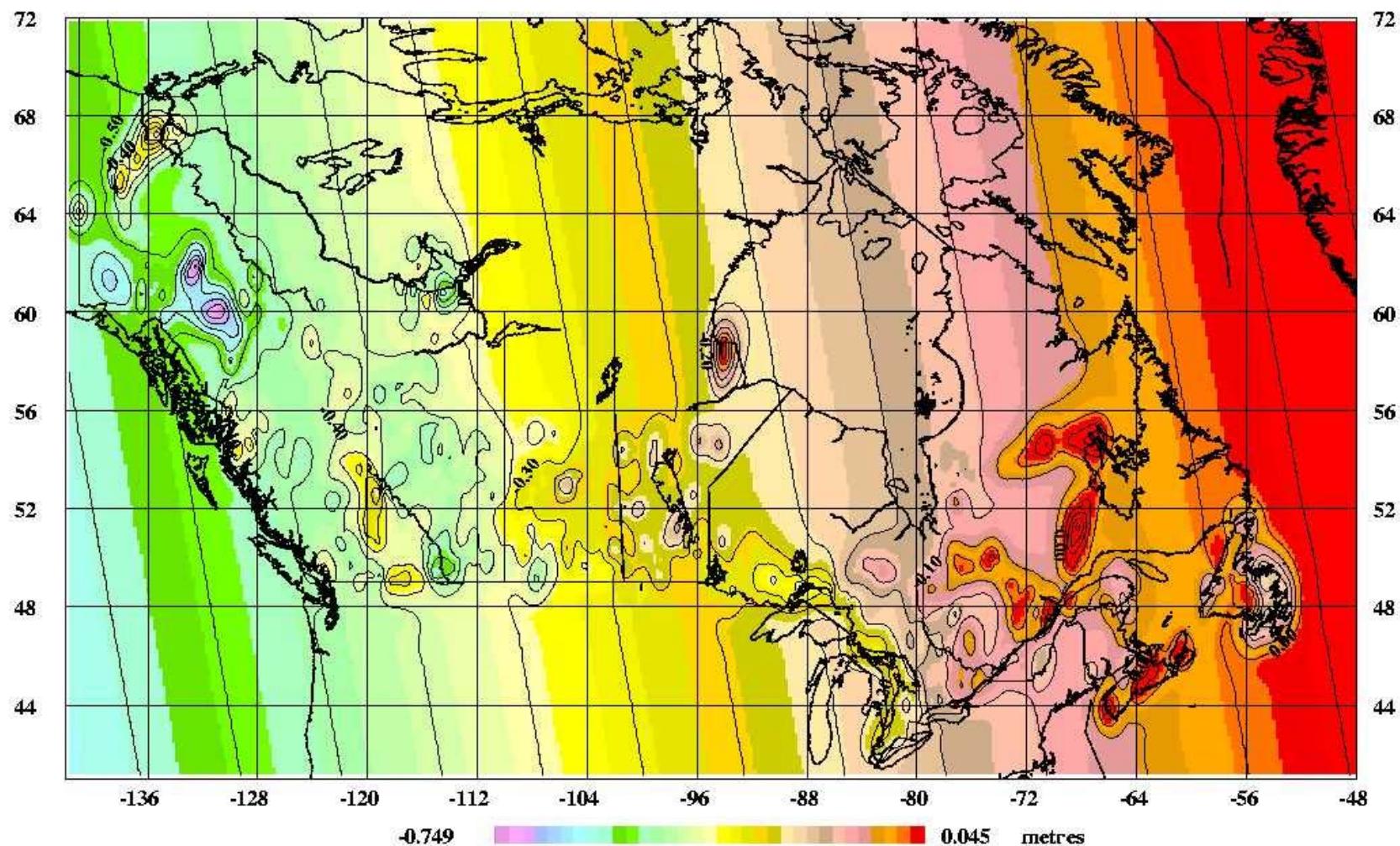
Figures 8b: Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (Supernet v3.1a) and the CGG2000 geoid model.

The GPS Height Transformation (v2.0)



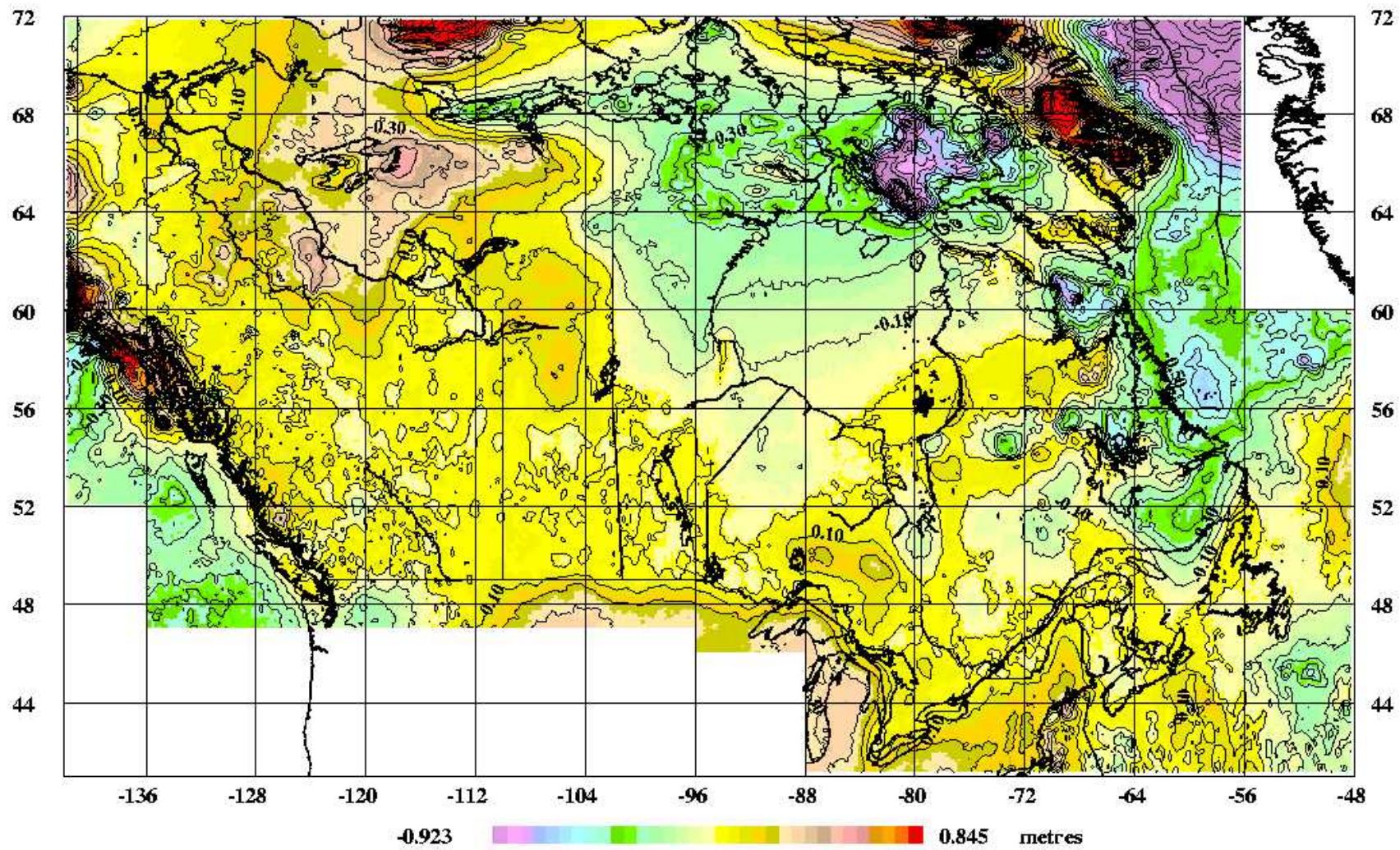
Figures 9: Corrector surface for CGG2000 (CGVD28). The contours represent the discrepancies between the CGVD28 heights and GPS-derived orthometric heights. (Unit: m; C.I.: 5 cm)

The GPS Height Transformation (v2.0)



Figures 10: Corrector surface for CGG2000 (Jan01d). The contours represent the discrepancies between the Jan01d heights and GPS-derived orthometric heights. (Unit: m; C.I.: 5 cm)

The GPS Height Transformation (v2.0)



Figures 11: Difference between HTv1.01 and HTv2.0. (Unit: m; C.I.: 10 cm)

The GPS Height Transformation (v2.0)

Figure 12a: Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (Supernet 3.1a) and the HT v1.01 GPS height transformation.

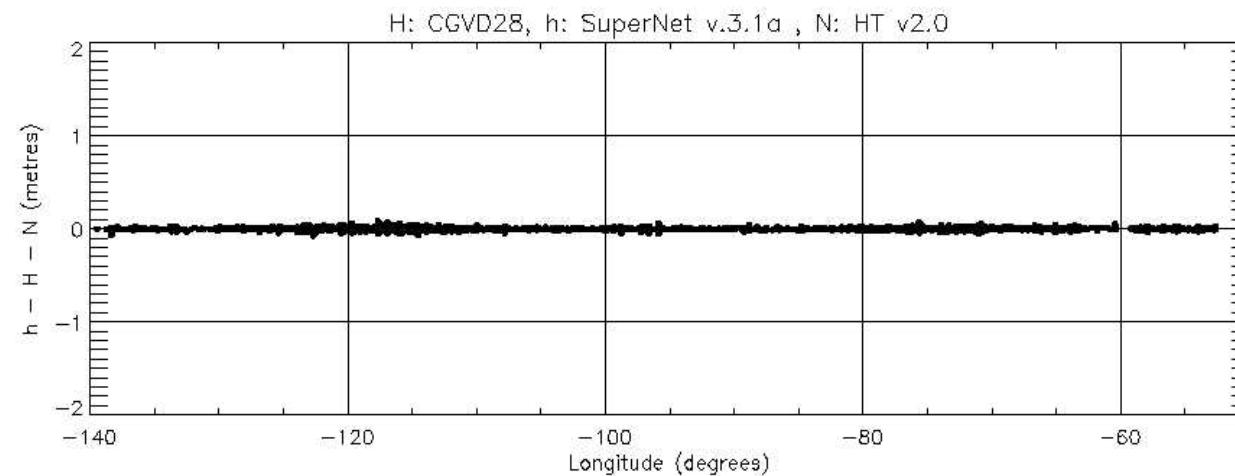
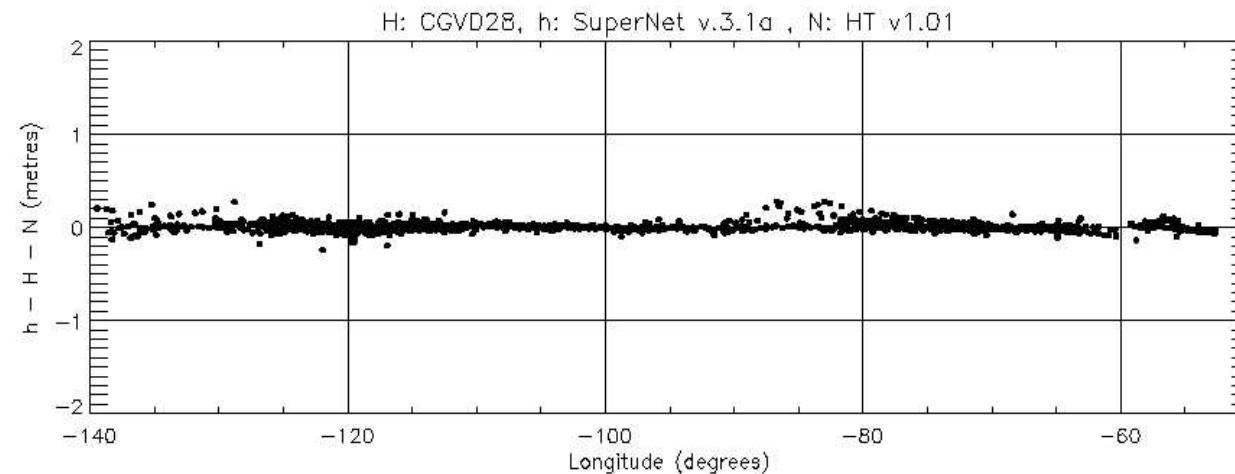


Figure 12b: Discrepancies between CGVD28 heights and orthometric heights derived from GPS ellipsoidal heights (Supernet 3.1a) and the HT v2.0 GPS height transformation.

Figure 13a: Relative discrepancies of CGG2000 against geoid height differences derived from GPS ellipsoidal heights (Supernet v3.1a) and Jan01d orthometric heights for baselines shorter than 100 km.

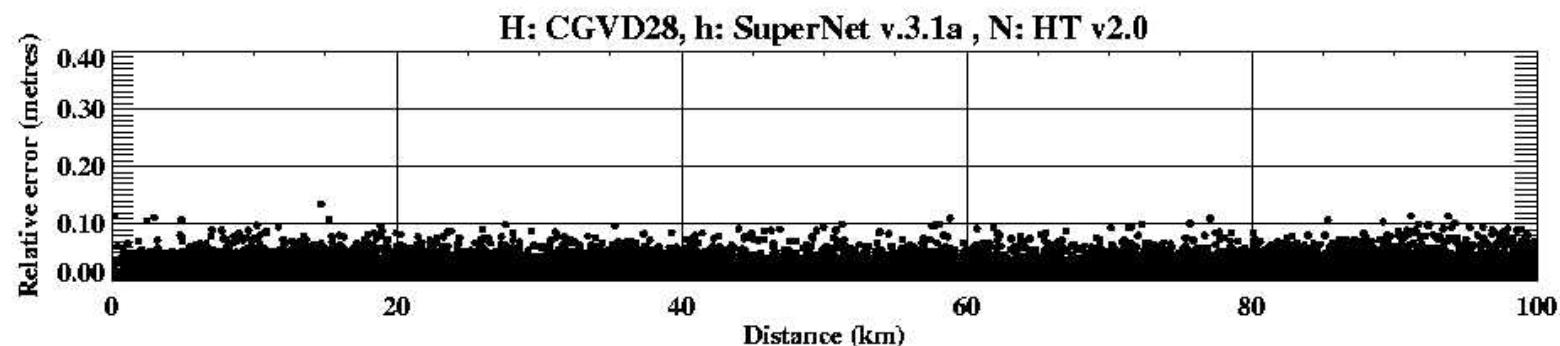
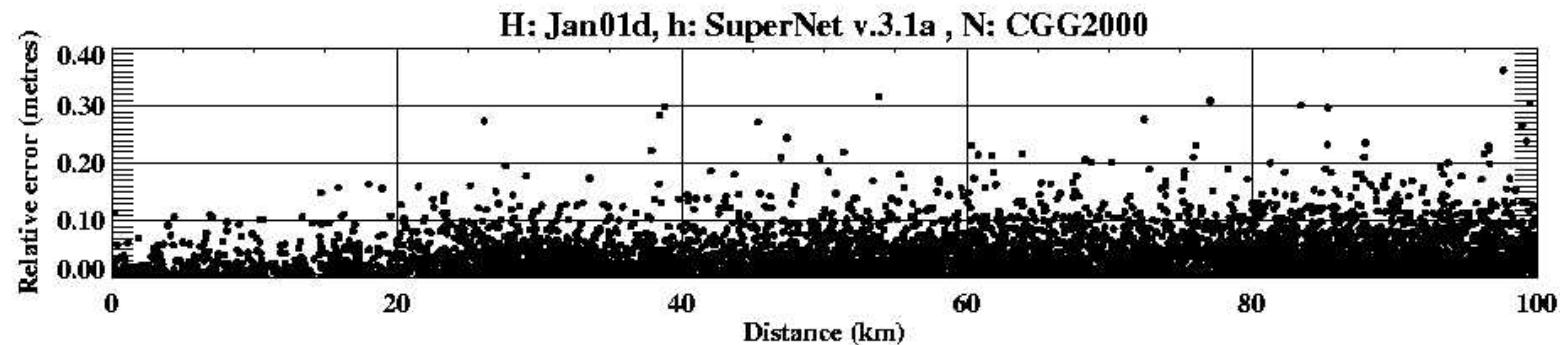


Figure 13b: Relative differences of HTv2.0 against geoid height differences derived from GPS ellipsoidal heights (Supernet v3.1a) and CGVD28 orthometric heights for baselines shorter than 100 km.

The GPS Height Transformation (v2.0)

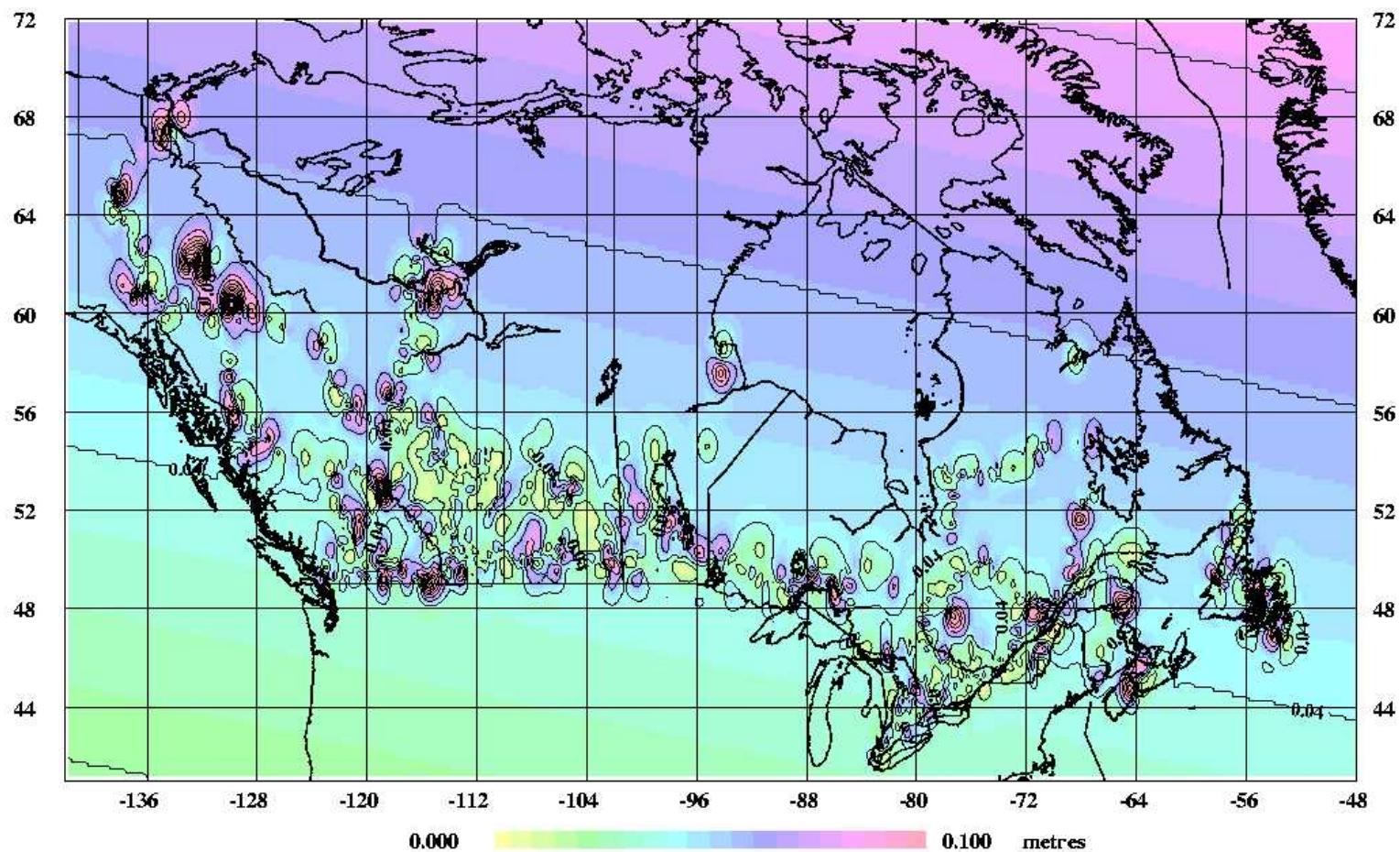


Figure 14: Relative discrepancies of CGG2000 (Jan01d) for baselines shorter than 100 km. (Unit: m; C.I.: 2 cm).

The GPS Height Transformation (v2.0)

Appendix A

GPS Supernet (v3.1a) Adjusted NAD83(CSRS98) Coordinates

LIST OF STATION CONFIDENCE ELLIPSOIDS												CONFIDENCE LEVEL 95.00 %		
STATION NAME	ORDER	ADJUSTED GEODETIC COORDINATES			S.D. (METERS)	LONGITUDE DD MM SECS	S.D. (METERS)	ELLIPSOID HEIGHT (METERS)	S.D. (METERS)	CONFIDENCE ELLIPSOIDS	MAJOR MINOR MID			
		LATITUDE DD MM SECS	S.D. (METERS)	LONGITUDE DD MM SECS										
1	927000	ALBH	WCDA-ACP	[]N 48 23 23.194420(0.0005M)	W123 29 14.835609(0.0006M)	32.0573(.0017694M.004937	0.0014	0.0016				
2	883160	ALGO	CACS-ACP	[]N 45 57 20.848079(0.0006M)	W 78 4 16.907733(0.0006M)	201.9543(.0013735M.003853	0.0015	0.0017				
3	887006	DRAO	WCDA-ACP	[]N 49 19 21.409141(0.0005M)	W119 37 29.877510(0.0005M)	542.2403(.0014964M.004177	0.0013	0.0014				
4	965000	FLIN	WCDA-ACP	[]N 54 43 32.074526(0.0006M)	W101 58 40.870303(0.0006M)	312.0411(.0026738M.007456	0.0016	0.0017				
5	927005	HOLDE	WCDA-ACP	[]N 50 38 25.256903(0.0008M)	W128 8 5.927285(0.0008M)	559.7603(.0041876M.011681	0.0021	0.0022				
6	943020	NRC1	CACS-ACP	[]N 45 27 14.951446(0.0006M)	W 75 37 25.766645(0.0007M)	83.5709(.0020743M.005790	0.0018	0.0019				
7	756047	FRDS	CACS-ACP	[]N 50 52 16.844675(0.0006M)	W114 17 36.531420(0.0006M)	1248.3957(.0028041M.007821	0.0016	0.0017				
8	947001	UCLU	WCDA-ACP	[]N 48 55 32.277856(0.0007M)	W125 32 29.848539(0.0007M)	10.3042(.0026331M.007344	0.0019	0.0020				
9	7787017	WHIT	WCDA-ACP	[]N 60 45 1.831545(0.0006M)	W135 13 19.518353(0.0006M)	1427.2442(.0024557M.006855	0.0017	0.0017				
10	937011	WILL	WCDA-ACP	[]N 52 14 12.706123(0.0006M)	W122 10 4.058993(0.0006M)	1095.9263(.0026261M.007324	0.0016	0.0017				
11	920000	STJO	CACS-ACP	[]N 47 35 42.825158(0.0020M)	W 52 40 39.912702(0.0008M)	153.8834(.0015798M.004433	0.0019	0.0021				
12	920000a	STJO	CACS-ACP	[]N 47 35 42.825158(0.0020M)	W 52 40 39.912763(0.0015M)	153.8779(.0068163M.019010	0.0043	0.0055				
13	920000b	STJO	95 CACS-ACP	[]N 47 35 42.825111(0.0035M)	W 52 40 39.912695(0.0025M)	153.8736(.0068133M.019015	0.0068	0.0099				
14	924001	CHUR97	CACS-ACP	[]N 58 45 32.646721(0.0006M)	W 94 5 19.370726(0.0005M)	-18.9216(.0024576M.006854	0.0015	0.0016				
15	924001a	CHUR95	CACS-ACP	[]N 58 45 32.646721(0.0006M)	W 94 5 19.370726(0.0005M)	-18.9483(.0042307M.011798	0.0015	0.0016				
16	924001b	CHUR96	CACS-ACP	[]N 58 45 32.646721(0.0006M)	W 94 5 19.370726(0.0005M)	-18.9311(.0038161M.010642	0.0015	0.0016				
17	924001c	CHUR00	CACS-ACP	[]N 58 45 32.646721(0.0006M)	W 94 5 19.370726(0.0005M)	-18.8879(.0029666M.008273	0.0015	0.0016				
18	924000x	DUB097	CACS-ACP	[]N 50 15 31.682829(0.0031M)	W 95 51 58.209024(0.0051M)	246.0579(.0103748M.028946	0.0087	0.0143				
19	924000y	DUB097	CACS-ACP	[]N 50 15 31.682789(0.0010M)	W 95 51 58.209095(0.0010M)	246.0298(.0043679M.012183	0.0026	0.0028				
20	924000a	STJO	96 CACS-ACP	[]N 50 15 31.682882(0.0014M)	W 95 51 58.209157(0.0012M)	246.0203(.0075053M.020930	0.0033	0.0038				
21	924000b	DUB000	CACS-ACP	[]N 50 15 31.683071(0.0011M)	W 95 51 58.209175(0.0009M)	246.0189(.0045651M.012732	0.0024	0.0030				
22	972000a	SCH297	CACS-ACP	[]N 54 49 55.481831(0.0007M)	W 66 49 57.410492(0.0008M)	498.9678(.0029275M.008167	0.0020	0.0021				
23	972000a	SCH200	CACS-ACP	[]N 54 49 55.481831(0.0007M)	W 66 49 57.410492(0.0008M)	499.0085(.0046417M.012946	0.0020	0.0021				
24	882035	SCH97	CACS-ACP	[]N 54 48 17.478648(0.0008M)	W 66 48 33.909922(0.0008M)	499.7307(.0039892M.011130	0.0022	0.0023				
25	882035a	SCH95	CACS-ACP	[]N 54 48 17.478648(0.0008M)	W 66 48 33.909922(0.0008M)	499.6677(.0045471M.012687	0.0022	0.0023				
26	882035b	SCH96	CACS-ACP	[]N 54 48 17.478648(0.0008M)	W 66 48 33.909922(0.0008M)	499.7120(.0067383M.018793	0.0022	0.0023				
27	889201	YELL97	CACS-ACP	[]N 62 28 51.194705(0.0005M)	W114 28 50.446391(0.0005M)	181.0161(.0020929M.005838	0.0014	0.0014				
28	889201a	YELL95	CACS-ACP	[]N 62 28 51.194705(0.0005M)	W114 28 50.446391(0.0005M)	181.0179(.0023877M.006660	0.0014	0.0014				
29	889201b	YELL96	CACS-ACP	[]N 62 28 51.194705(0.0005M)	W114 28 50.446391(0.0005M)	181.0120(.0022450M.006261	0.0014	0.0014				
30	889201c	YELL99	CACS-ACP	[]N 62 28 51.194705(0.0005M)	W114 28 50.446391(0.0005M)	181.0249(.0024313M.006781	0.0014	0.0014				
31	889201d	YELL00	CACS-ACP	[]N 62 28 51.194705(0.0005M)	W114 28 50.446391(0.0005M)	181.0285(.0022541M.006286	0.0014	0.0014				
32	958010s	FAIR	IGS-USA	[]N 64 58 40.797630(0.0008M)	W147 29 57.164319(0.0007M)	318.5938(.0031004M.008655	0.0020	0.0022				
33	942010s	WES2	IGS-USA	[]N 42 36 47.975502(0.0006M)	W 71 29 35.968843(0.0007M)	86.2309(.0016756M.004692	0.0017	0.0019				
34	99901DK	KELY	IGS-GRNLND	[]N 66 59 14.660187(0.0010M)	W 50 56 41.431547(0.0009M)	230.2190(.0042346M.011810	0.0026	0.0028				
35	99902DK	THU1	IGS-GRNLND	[]N 76 32 14.369824(0.0006M)	W 68 47 16.799808(0.0007M)	55.0147(.0024679M.006884	0.0017	0.0018				
36	987020	CHWR	WCDA-ACP	[]N 49 9 23.771269(0.0007M)	W122 0 30.277479(0.0006M)	174.3507(.0026400M.007362	0.0018	0.0019				
37	925000	PRAL	CACS-ACP	[]N 53 12 46.223838(0.0006M)	W105 55 51.461327(0.0006M)	455.0406(.0030049M.008382	0.0017	0.0017				
38	8865000	ST.JOHN'S		[]N 47 35 8.806806(0.0017M)	W 52 43 16.872325(0.0014M)	98.1602(.0042760M.011929	0.0038	0.0047				
39	94G0005	WHITBOURNE		[]N 47 24 32.100676(0.0017M)	W 53 32 20.649079(0.0014M)	78.3177(.0040754M.011369	0.0039	0.0047				
40	96G7000	NAIN		[]N 56 32 13.069713(0.0016M)	W 61 41 19.379592(0.0013M)	33.4864(.0086354M.024082	0.0036	0.0046				
41	96G7001	GOOSE BAY		[]N 53 17 45.453711(0.0013M)	W 60 32 16.795899(0.0012M)	265.2718(.0069283M.019323	0.0032	0.0037				
42	96G7002	CORNERBROOK		[]N 48 56 38.463699(0.0016M)	W 57 56 59.046890(0.0013M)	66.4685(.0083637M.023324	0.0037	0.0044				
43	96G7003	GRAND FALLS		[]N 48 55 44.065220(0.0016M)	W 55 40 16.223635(0.0014M)	54.6136(.0088270M.024619	0.0038	0.0046				
44	96G7004	ST LAWRENCE		[]N 46 54 36.288400(0.0015M)	W 55 22 6.839852(0.0012M)	71.3181(.0048609M.013558	0.0034	0.0041				
45	9610000	BIO		[]N 44 41 0.742503(0.0009M)	W 63 36 40.607879(0.0009M)	4.2806(.0035489M.009903	0.0024	0.0024				
46	NS28900	MCGRATH		[]N 44 31 39.266253(0.0010M)	W 63 51 32.60307(0.0009M)	21.7541(.0041289M.011518	0.0025	0.0026				
47	NS290006	WHITE HILL		[]N 45 29 14.405909(0.0009M)	W 62 48 53.5818046(0.0009M)	173.5949(.0040195M.011212	0.0025	0.0026				
48	NS29012			[]N 43 52 11.674195(0.0013M)	W 65 57 47.024728(0.0011M)	-0.9091(.0070972M.019792	0.0031	0.0037				
49	NS29013	BADDECK		[]N 46 6 48.434483(0.0010M)	W 60 46 31.268779(0.0010M)	31.1144(.0046017M.012834	0.0027	0.0027				
50	NS951001FOLLY MTN			[]N 45 30 20.085532(0.0010M)	W 63 32 27.463239(0.0010M)	219.8875(.0047343M.013203	0.0027	0.0029				
51	PE05803			[]N 46 22 37.026570(0.0012M)	W 62 8 7.769145(0.0011M)	22.7237(.0065736M.018332	0.0031	0.0034				
52	PE05804			[]N 46 45 4.431263(0.0011M)	W 64 11 26.348895(0.0010M)	6.8476(.0056122M.015651	0.0028	0.0031				
53	NB941001HOLTVILLE			[]N 46 30 56.462656(0.0009M)	W 66 28 57.684655(0.0009M)	191.9727(.0021552M.006016	0.0024	0.0026				
54	NB941002			[]N 47 24 4.061445(0.0009M)	W 68 21 50.280879(0.0008M)	162.5194(.0039854M.011115	0.0023	0.0024				
55	NB941003			[]N 47 37 18.564503(0.0011M)	W 65 47 2.877209(0.0010M)	73.3449(.0051249M.014292	0.0027	0.0030				
56	NB941004			[]N 46 7 55.080040(0.0010M)	W 64 57 32.687523(0.0010M)	87.3179(.0048975M.013658	0.0027	0.0028				
57	NB941005			[]N 45 17 43.151949(0.0009M)	W 66 6 42.266051(0.0008M)	11.8460(.0021751M.006077	0.0023	0.0024				
58	NB941006			[]N 45 18 29.278505(0.0013M)	W 67 14 53.240498(0.0011M)	138.9108(.0069094M.019268	0.0031	0.0036				
59	NB941007	FREDERICTON		[]N 45 56 0.392377(0.0009M)	W 66 39 34.608622(0.0008M)	95.8175(.0020318M.005677	0.0023	0.0026				
60	75K0046			[]N 48 28 48.665080(0.0010M)	W 71 11 56.161696(0.0009M)	55.4558(.0049910M.013919	0.0025	0.0028				
61	75K0139	PIER C CHAMBLY		[]N 45										

The GPS Height Transformation (v2.0)

81	94K0013	HAVRESTPIERRE	[]N 50 18 11.045246(0.0011M)	W 63 49 31.947843(0.0010M)	5.4826(.0054211M.015118	0.0027 0.0030
82	94K0014		[]N 49 7 21.049094(0.0013M)	W 66 32 16.881161(0.0011M)	-5.9742(.0070934M.019781	0.0032 0.0038
83	94K0015	CHANDLER AERO	[]N 48 22 54.216910(0.0009M)	W 64 33 40.911881(0.0009M)	2.6322(.0043860M.012231	0.0025 0.0026
84	94K0016		[]N 47 24 33.162203(0.0012M)	W 61 49 23.384114(0.0011M)	46.4695(.0060773M.016948	0.0030 0.0032
85	962000	GATINEAU CAGS	[]N 45 35 6.041203(0.0014M)	W 75 48 26.365867(0.0011M)	236.0219(.0075838M.021149	0.0031 0.0039
86	962001		[]N 47 32 59.570742(0.0014M)	W 70 19 35.871020(0.0011M)	413.4039(.0074483M.0202771	0.0032 0.0038
87	962002		[]N 47 20 28.980844(0.0010M)	W 70 0 30.796024(0.0009M)	104.2811(.0051145M.014263	0.0026 0.0028
88	96K0010	MANIC 5	[]N 51 14 56.312386(0.0016M)	W 68 11 47.633363(0.0013M)	416.2183(.0086854M.024222	0.0037 0.0046
89	96K0011	KUUKJUAQ	[]N 58 6 39.084002(0.0018M)	W 68 24 50.110989(0.0013M)	37.1358(.0090895M.025349	0.0036 0.0049
90	96K0012	SALLUIT	[]N 62 11 17.174718(0.0025M)	W 75 40 8.305226(0.0020M)	201.5280(.0129368M.036077	0.0054 0.0071
91	96K0013	INUUKJUAQ	[]N 58 27 28.844849(0.0024M)	W 78 6 21.739215(0.0019M)	4.7845(.0134982M.037642	0.0052 0.0068
92	96K0014	LAFORGE	[]N 54 35 51.432699(0.0023M)	W 71 16 21.801246(0.0018M)	501.5933(.0133040M.037101	0.0050 0.0065
93	813041	LONDON PIER 1	[]N 42 52 57.956787(0.0016M)	W 81 15 3.616806(0.0013M)	236.5056(.0089591M.024984	0.0037 0.0045
94	823033	PIER 3 BELLEVIL	[]N 44 13 39.017490(0.0011M)	W 77 11 17.705459(0.0009M)	65.8066(.0062011M.017293	0.0026 0.0030
95	833001	BOSSSLER (GA)	[]N 45 23 55.938977(0.0008M)	W 75 55 20.140633(0.0008M)	43.8607(.0040225M.011218	0.0022 0.0024
96	843025	PIER 2 CONESTOG	[]N 43 32 32.825273(0.0015M)	W 80 31 5.456770(0.0012M)	301.9544(.0083410M.023260	0.0034 0.0042
97	883071	MALLORYTOWN	[]N 44 28 19.671441(0.0010M)	W 75 52 5.525095(0.0009M)	69.7772(.0056734M.015823	0.0026 0.0029
98	883073	LAGGAN	[]N 45 23 24.857647(0.0010M)	W 74 42 8.898953(0.0009M)	54.1096(.0049142M.013704	0.0024 0.0027
99	963000	SSM GRAV	[]N 46 31 47.489537(0.0014M)	W 84 35 17.404970(0.0012M)	180.6312(.0078062M.021769	0.0034 0.0039
100	963001	THUND BAY GRAV	[]N 48 27 55.753945(0.0010M)	W 89 13 1.931819(0.0010M)	221.2572(.0054144M.015099	0.0028 0.0029
101	963002	KENORA	[]N 49 42 56.650801(0.0011M)	W 94 45 22.700927(0.0010M)	329.2353(.0055441M.015461	0.0028 0.0030
102	963003	BALMERTOWN	[]N 51 0 48.628000(0.0010M)	W 93 45 56.625977(0.0009M)	342.8394(.0048236M.013451	0.0025 0.0027
103	963004	PIESTONE RIVER	[]N 52 19 42.624251(0.0010M)	W 90 47 5.005596(0.0010M)	341.7725(.0053507M.014921	0.0026 0.0029
104	963005	SAVANT LAKE	[]N 50 42 13.338304(0.0010M)	W 90 33 43.151011(0.0010M)	373.6718(.0054671M.015246	0.0027 0.0029
105	963006	IGNACE	[]N 49 17 29.570220(0.0010M)	W 91 27 32.269960(0.0010M)	427.3639(.0054183M.015110	0.0027 0.0029
106	963010	MOOSENEE	[]N 51 17 15.782700(0.0014M)	W 80 36 45.810478(0.0013M)	-31.7898(.0079172M.022079	0.0036 0.0040
107	963011	LONGGLAC	[]N 49 46 46.559002(0.0014M)	W 86 31 1.646864(0.0012M)	286.2305(.0078859M.021991	0.0033 0.0039
108	963012	HEARST	[]N 49 40 2.769445(0.0014M)	W 83 30 39.736624(0.0012M)	229.2164(.0076643M.021373	0.0032 0.0039
109	963013	WAWA	[]N 48 4 27.399142(0.0015M)	W 84 45 52.198445(0.0012M)	323.6214(.0081821M.022817	0.0034 0.0041
110	963014	SUDSBURY	[]N 46 26 58.212707(0.0014M)	W 81 11 40.979290(0.0011M)	279.2401(.0079682M.022221	0.0032 0.0039
111	963015	TIMMINNS	[]N 48 31 22.690887(0.0012M)	W 81 32 23.934180(0.0010M)	288.2197(.0066943M.018668	0.0028 0.0034
112	963016	PORT ELGIN	[]N 44 26 41.533897(0.0018M)	W 81 23 47.669097(0.0015M)	160.5257(.0102987M.028270	0.0040 0.0050
113	963017	WINDSOR	[]N 42 14 59.532746(0.0017M)	W 83 1 12.999364(0.0014M)	150.2092(.0092299M.025739	0.0038 0.0047
114	963018	STCATHARINES	[]N 43 7 17.262440(0.0015M)	W 79 13 36.545947(0.0012M)	142.9461(.0086229M.024047	0.0034 0.0043
115	963019	PARRY SOUND	[]N 45 21 54.457835(0.0015M)	W 80 1 21.592124(0.0012M)	183.1510(.0086297M.024066	0.0033 0.0042
116	963020	TORONTO	[]N 43 43 35.866016(0.0011M)	W 79 36 34.630106(0.0010M)	144.9321(.0060492M.016870	0.0027 0.0031
117	963021	PETERBOROUGH	[]N 44 18 38.777390(0.0011M)	W 78 18 10.448759(0.0010M)	208.2492(.0060623M.016906	0.0027 0.0031
118	973001	GANANOQUE GRAV	[]N 44 20 45.489328(0.0015M)	W 76 10 14.351036(0.0012M)	66.7226(.0082793M.023089	0.0033 0.0041
119	973003	BANCROFT	[]N 45 2 37.243390(0.0010M)	W 77 53 20.736801(0.0009M)	347.5614(.0049265M.013738	0.0024 0.0027
120	973004	PEMBROKE	[]N 45 50 11.827235(0.0013M)	W 77 14 42.280847(0.0010M)	126.3613(.0070079M.019543	0.0029 0.0036
121	973005	NORTH BAY	[]N 46 17 47.050931(0.0013M)	W 79 25 29.555338(0.0011M)	183.5735(.0074019M.020642	0.0030 0.0037
122	973008	PEAWANUCK	[]N 55 0 47.854406(0.0011M)	W 85 24 32.041690(0.0015M)	-9.1380(.0055049M.015353	0.0031 0.0041
123	74RCB1	PIER 5	[]N 50 10 55.443449(0.0012M)	W 97 16 40.354813(0.0009M)	222.1446(.0046189M.012888	0.0026 0.0032
124	88V054		[]N 52 2 42.867317(0.0010M)	W 106 28 47.123634(0.0009M)	488.5736(.0055147M.015379	0.0024 0.0028
125	89R001	PIER A	[]N 49 51 15.291573(0.0010M)	W 97 28 41.697235(0.0009M)	212.4179(.0045914M.012807	0.0024 0.0027
126	94V053		[]N 49 40 43.339159(0.0010M)	W 102 58 38.209828(0.0009M)	604.4927(.0054457M.015187	0.0024 0.0027
127	94V057		[]N 51 13 9.098257(0.0010M)	W 102 24 15.464961(0.0009M)	488.7926(.0055663M.015523	0.0024 0.0028
128	94V059		[]N 52 50 31.725454(0.0010M)	W 102 23 0.912233(0.0009M)	348.5122(.0054024M.015066	0.0024 0.0027
129	94V062		[]N 55 9 44.092661(0.0010M)	W 105 17 58.954503(0.0009M)	352.5067(.0056990M.015893	0.0024 0.0028
130	94V064		[]N 58 3 35.060032(0.0011M)	W 103 47 56.534781(0.0009M)	375.0374(.0059203M.016510	0.0025 0.0030
131	95R500		[]N 49 53 9.292876(0.0011M)	W 99 54 41.058875(0.0010M)	373.8233(.0064854M.018086	0.0028 0.0032
132	95R501		[]N 51 4 51.760045(0.0011M)	W 99 59 49.640511(0.0010M)	275.3885(.0065101M.018154	0.0027 0.0032
133	95R502		[]N 52 4 0.218273(0.0012M)	W 101 16 31.103452(0.0010M)	321.7860(.0066568M.018564	0.0028 0.0033
134	95R503		[]N 51 37 25.237217(0.0010M)	W 98 44 8.337988(0.0009M)	227.7454(.0047741M.013314	0.0024 0.0028
135	95R504		[]N 53 16 18.767478(0.0013M)	W 99 19 59.016801(0.0010M)	223.2842(.0072177M.020128	0.0029 0.0036
136	95R505		[]N 54 41 43.459495(0.0013M)	W 99 0 36.083441(0.0011M)	204.1453(.0073969M.020628	0.0030 0.0037
137	95R506		[]N 55 50 48.291483(0.0012M)	W 98 1 22.523263(0.0010M)	197.4375(.0068677M.019152	0.0028 0.0034
138	95R507		[]N 56 51 41.957005(0.0013M)	W 101 4 4.062065(0.0010M)	318.2590(.0071696M.019994	0.0028 0.0036
139	964000		[]N 55 26 28.453973(0.0013M)	W 98 13 6.808849(0.0011M)	194.7085(.0075082M.020939	0.0030 0.0037
140	964001		[]N 56 23 20.718264(0.0013M)	W 95 53 56.499614(0.0011M)	162.1444(.0074564M.020794	0.0029 0.0037
141	964002		[]N 54 33 17.223471(0.0012M)	W 94 29 3.738479(0.0010M)	155.4068(.0065316M.018215	0.0028 0.0033
142	965001		[]N 52 11 46.492530(0.0014M)	W 106 23 54.022623(0.0012M)	579.4319(.0074128M.020672	0.0032 0.0040
143	77X1058	661-24.4 PIER4	[]N 51 5 47.100796(0.0009M)	W 114 22 24.087976(0.0008M)	1183.3022(.0047028M.013115	0.0022 0.0024
144	77X251	937 56.18	[]N 53 34 14.389115(0.0011M)	W 113 10 25.625250(0.0009M)	685.1257(.0052420M.014618	0.0025 0.0031
145	80X501	50114.66 FORT	[]N 50 49 43.438855(0.0011M)	W 115 12 1.053946(0.0009M)	2115.2299(.0060886M.016979	0.0025 0.0030
146	85X405	Pier 104214221	[]N 49 35 29.630253(0.0010M)	W 112 36 3.683480(0.0009M)	922.0855(.0054510M.015201	0.0024 0.0028
147	85X406	Pier 18444414	[]N 55 11 13.601316(0.0010M)	W 118 32 19.424841(0.0008M)	641.9199(.0053930M.015039	0.0023 0.0028
148	89X003	PIER C	[]N 53 33 53.955531(0.0012M)	W 124 23 35.806767(0.0010M)	667.1163(.0062255M.017361	0.0027 0.0033
149	89X004	PIER D	[]N 54 2 9.950066(0.0013M)	W 113 9 19.190623(0.0010M)	617.0300(.0064341M.017943	0.0028 0.0035
150	89X005	PIER E	[]N 53 35 57.651822(0.0011M)	W 114 43 13.669214(0.0009M)	773.4841(.0064250M.017917	0.0026 0.0032
151	89X006	PIER F	[]N 52 41 30.652720(0.0012M)	W 113 14 43.016276(0.0009M)	764.2245(.0067595M.018850	0.0026 0.0033
152	90V107	PIER 8	[]N 50 18 33.924686(0.0010M)	W 104 12 20.301253(0.0009M)	587.3427(.0056343M.015713	0.0025 0.0029
153	94G011	P32	[]N 50 49 58.289595(0.0010M)	W 113 55 9.357181(0.0008M)	1005.4004(.0054862M.015299	0.0023 0.0027
154	94V050		[]N 49 59 23.107889(0.0012M)	W 109 28 5.928417(0.0010M)	771.4102(.0065095M.018153	0.0027 0.0032
155	94V051		[]N					

The GPS Height Transformation (v2.0)

176	90HP4V	VERNON Pier 4	[]N 50 11 59.939442(0.0010M) W119 19 3.916574(0.0008M) 466.5436(.0053210M.014839 0.0023 0.0027
177	987005	GOLDEN	[]N 51 18 1.855292(0.0012M) W116 59 3.273369(0.0009M) 772.2761(.0065838M.018360 0.0026 0.0032
178	987006	SMITHERS	[]N 54 49 25.487721(0.0013M) W127 11 12.665170(0.0010M) 513.5902(.0072188M.020131 0.0029 0.0035
179	987007	SANDSPIT	[]N 53 15 33.178083(0.0017M) W131 49 24.733012(0.0014M) -3.4006(.0098233M.027395 0.0038 0.0047
180	987008	DEASE LAKE	[]N 58 26 12.397819(0.0015M) W130 1 45.146432(0.0012M) 984.1800(.0091550M.025531 0.0034 0.0043
181	987009	ATLIN	[]N 59 35 22.124352(0.0017M) W133 42 52.013875(0.0014M) 792.6870(.0103852M.028961 0.0038 0.0048
182	987010	FORT NELSON	[]N 58 50 30.697341(0.0014M) W122 34 39.614255(0.0011M) 366.6101(.0077440M.021596 0.0030 0.0038
183	987011	FORT ST. JOHN	[]N 56 14 48.213086(0.0011M) W120 43 47.413118(0.0009M) 684.8754(.0059855M.016692 0.0024 0.0030
184	987012	BELLA COOLA	[]N 52 23 17.734570(0.0016M) W126 35 21.246359(0.0012M) 24.8215(.0091970M.025648 0.0034 0.0045
185	987013	CAMPBELL RIVER	[]N 50 3 12.082010(0.0017M) W125 19 34.986461(0.0013M) 170.3664(.0100351M.027986 0.0036 0.0046
186	B326595	WEST VAN.Pier3	[]N 49 21 6.175820(0.0013M) W123 15 3.728218(0.0011M) 161.7972(.0075177M.020965 0.0030 0.0036
187	B669770	PRIN.GEO.Pier6	[]N 53 54 37.090318(0.0014M) W122 20 25.331626(0.0011M) 762.0746(.0075468M.021046 0.0030 0.0038
188	M009000	IQALUIT CBN	[]N 63 44 48.702764(0.0012M) W 68 32 48.111549(0.0009M) 22.3071(.0047037M.013122 0.0025 0.0032
189	M009001	IGLOOLIK CBN	[]N 69 22 33.955402(0.0014M) W 81 48 36.745982(0.0011M) 24.1727(.0062218M.017369 0.0029 0.0038
190	M009002	RESOLUTE CBN	[]N 74 41 26.919014(0.0019M) W 94 53 37.182352(0.0016M) 19.9139(.0105149M.029348 0.0043 0.0053
191	M009003	KUGLUKTUK CBN	[]N 67 49 5.562784(0.0016M) W115 7 56.319440(0.0012M) 8.3285(.0037833M.010623 0.0034 0.0044
192	M009005	BAKER LAKE CBN	[]N 64 19 4.118628(0.0014M) W 96 0 8.378116(0.0010M) 4.7002(.0054822M.015291 0.0028 0.0040
193	M009004	INVUVIK CBN	[]N 68 18 22.251764(0.0010M) W133 31 36.944981(0.0008M) 46.1635(.0039963M.011147 0.0022 0.0027
194	77X1056	661-24.2	[]N 51 5 47.104910(0.0009M) W114 21 47.089427(0.0008M) 1182.6416(.0051403M.014335 0.0023 0.0026
195	77X1057	661-24.3	[]N 51 5 47.105501(0.0009M) W114 22 3.886831(0.0008M) 1182.3831(.0051751M.014432 0.0023 0.0026
196	77X1059	661-24.5	[]N 51 5 47.097409(0.0009M) W114 22 47.270947(0.0009M) 1185.1271(.0053435M.014902 0.0023 0.0026
197	77X1060	661-24.6	[]N 51 5 47.085722(0.0009M) W114 23 3.732479(0.0009M) 1187.7643(.0054227M.015123 0.0024 0.0026
198	77X1061	661-24.7	[]N 51 5 47.070379(0.0009M) W114 23 48.778408(0.0009M) 1189.0741(.0055820M.015009 0.0024 0.0026
199	A305797	GPS 500	[]N 51 3 15.989111(0.0010M) W114 22 24.539240(0.0009M) 1171.6981(.0059427M.016573 0.0025 0.0029
200	A383299	GPS 100	[]N 51 5 20.149298(0.0010M) W114 22 25.193171(0.0009M) 1181.8702(.0059178M.016504 0.0025 0.0028
201	A425603	GPS 400	[]N 51 4 27.227447(0.0010M) W114 22 24.935002(0.0009M) 1178.4543(.0054565M.015217 0.0024 0.0027
202	75K0140	PIER D CHAMBLY	[]N 45 24 30.646209(0.0015M) W 73 20 3.955137(0.0012M) -6.7950(.0087362M.024363 0.0034 0.0041
203	95K0001		[]N 45 24 37.642870(0.0015M) W 73 17 12.020981(0.0012M) 6.2728(.0086963M.024252 0.0034 0.0041
204	95K0002		[]N 45 24 55.291526(0.0014M) W 73 29 59.556148(0.0011M) -14.6716(.0078805M.021977 0.0032 0.0038
205	95K0003		[]N 45 26 26.100635(0.0015M) W 73 45 11.366938(0.0012M) -4.6152(.0083774M.023363 0.0034 0.0041
206	95K0004		[]N 45 36 16.192944(0.0014M) W 73 42 2.966571(0.0011M) 3.8124(.0090294M.025181 0.0032 0.0038
207	883072	ZARAYCKI	[]N 45 22 53.022810(0.0010M) W 76 34 20.706206(0.0009M) 157.6451(.0058797M.016397 0.0025 0.0029
208	833012	PIER51	[]N 45 23 7.306877(0.0010M) W 75 56 35.949063(0.0009M) 36.9370(.0057237M.015962 0.0025 0.0029
209	882025	LOW	[]N 45 48 15.878935(0.0010M) W 75 58 49.397903(0.0009M) 136.3184(.0047312M.013194 0.0025 0.0028
210	883074	BABBAGE	[]N 45 19 43.492717(0.0010M) W 75 52 1.204525(0.0009M) 83.4857(.0054602M.015227 0.0025 0.0028
211	883075	DUNROBIN	[]N 45 24 25.855339(0.0010M) W 76 3 4.469212(0.0009M) 57.2540(.0059040M.016465 0.0025 0.0029
212	963022	KENDRY	[]N 44 13 28.371635(0.0010M) W 78 23 49.538559(0.0009M) 165.6657(.0054807M.015284 0.0025 0.0028
213	963023	LINDSAY	[]N 44 21 49.013326(0.0011M) W 78 46 39.633790(0.0010M) 233.4192(.0060339M.016826 0.0027 0.0032
214	963024	PETER AIRPORT	[]N 44 14 1.355046(0.0010M) W 78 21 7.078705(0.0009M) 155.8749(.0055310M.015424 0.0025 0.0029
215	973002	BURLEIGH FALLS	[]N 44 33 45.850359(0.0011M) W 78 12 44.999679(0.0009M) 212.6739(.0058908M.016427 0.0026 0.0030
216	74RCB5	PIER 5	[]N 50 10 55.747061(0.0011M) W 97 14 40.779131(0.0009M) 209.7422(.0045829M.012787 0.0025 0.0030
217	89R002	PIER B	[]N 50 14 28.589185(0.0012M) W 97 19 19.254685(0.0010M) 224.9307(.0047952M.013378 0.0026 0.0032
218	89R003	PIER C	[]N 50 14 28.758200(0.0012M) W 97 8 22.277926(0.0009M) 204.1014(.0047130M.013150 0.0026 0.0032
219	89R004	PIER D	[]N 50 3 46.086306(0.0012M) W 96 53 8.276834(0.0010M) 204.9733(.0052571M.014665 0.0027 0.0032
220	93K2001	PILLIER A	[]N 46 39 27.653235(0.0009M) W 71 55 48.805450(0.0008M) -17.0081(.0037540M.010470 0.0023 0.0026
221	85K0800	PILLIER A	[]N 46 44 7.322366(0.0011M) W 71 34 1.408287(0.0009M) 86.2257(.0039591M.011043 0.0025 0.0029
222	85K0802	PILLIER C	[]N 46 43 59.524566(0.0010M) W 71 34 20.392990(0.0009M) 76.2126(.0037770M.010535 0.0024 0.0028
223	93K2002	PILLIER B	[]N 46 45 41.874953(0.0011M) W 71 27 56.955990(0.0009M) 37.8880(.0038719M.010799 0.0025 0.0030
224	93K2003	PILLIER C	[]N 46 38 24.402660(0.0011M) W 71 32 30.581376(0.0009M) 57.5780(.0038776M.010815 0.0025 0.0030
225	93K2004	PILLIER D	[]N 46 32 54.900196(0.0011M) W 71 26 43.841253(0.0009M) 104.5959(.0039993M.011154 0.0026 0.0030
226	NB127313	POWER TWO	[]N 45 57 27.119341(0.0014M) W 66 52 16.107327(0.0011M) 31.3914(.0032673M.009114 0.0031 0.0038
227	NB127314	POWER ONE	[]N 45 56 57.007774(0.0012M) W 66 52 1.515817(0.0010M) 23.2156(.0028825M.008042 0.0029 0.0034
228	NE941021	BURRTS	[]N 46 5 11.258946(0.0011M) W 66 51 32.872175(0.0009M) 33.7139(.0021163M.005908 0.0025 0.0030
229	NE941022	RED ROCK	[]N 46 13 55.061595(0.0011M) W 66 40 46.918910(0.0009M) 158.1367(.0022018M.006146 0.0026 0.0031
230	NE941023	POKIOK	[]N 45 52 24.733259(0.0011M) W 67 4 54.545683(0.0009M) 150.3295(.0021126M.005899 0.0025 0.0030
231	NB941024	MEDUCTIC	[]N 45 59 42.002366(0.0011M) W 67 28 57.862564(0.0010M) 26.4301(.0022512M.006283 0.0027 0.0031
232	NE941026	BASELINE 2	[]N 45 57 28.972196(0.0010M) W 66 49 53.649462(0.0009M) -11.0820(.0020639M.005765 0.0025 0.0029
233	NS24803	HALIFAX BL3	[]N 44 50 48.941586(0.0010M) W 63 34 9.852954(0.0009M) 96.8793(.0041344M.011534 0.0025 0.0027
234	70N087	BM 70N087	[]N 44 51 17.591802(0.0010M) W 63 33 15.652593(0.0010M) 116.4314(.0047488M.013246 0.0027 0.0029
235	NS24801	HALIFAX BL1	[]N 44 51 3.274631(0.0011M) W 63 33 42.111924(0.0010M) 109.7302(.0047504M.013250 0.0027 0.0030
236	NS24802	HALIFAX BL2	[]N 44 50 55.659181(0.0010M) W 63 33 56.790710(0.0009M) 101.8120(.0045221M.012614 0.0026 0.0028
237	NS29250	HFXBL ROCK PLUG	[]N 44 50 46.439178(0.0010M) W 63 34 14.745585(0.0009M) 93.3578(.0045628M.012728 0.0026 0.0028
238	NS29251	FREEPER POND	[]N 44 50 57.519092(0.0010M) W 63 33 5.434458(0.0009M) 90.5835(.0045499M.012692 0.0026 0.0028
239	NS24805	HALIFAX BL5	[]N 44 50 31.699700(0.0015M) W 63 34 43.214591(0.0012M) 84.3433(.0061992M.017289 0.0034 0.0041
240	NS951002	ENFIELD	[]N 44 55 32.822582(0.0011M) W 62 32 22.46922(0.0010M) 6.0320(.0046239M.012897 0.0027 0.0030
241	NS951003	MUSQUOODOBOIT	[]N 44 47 29.373289(0.0010M) W 63 8 59.164107(0.0010M) -6.7467(.0046149M.012873 0.0027 0.0029
242	NS951004	MONTAGUE ROAD	[]N 44 43 44.281173(0.0010M) W 63 32 15.428274(0.0010M) 48.0961(.0045392M.012661 0.0027 0.0029
243	NS951005	MT UNIACKE	[]N 44 50 26.402701(0.0010M) W 63 48 24.289859(0.0009M) 114.0878(.0043419M.012112 0.0026 0.0028
244	94G0001	PILLAR 4	[]N 47 36 1.246629(0.0017M) W 52 46 24.876317(0.0014M) 186.6793(.0041179M.011489 0.0038 0.0047
245	94G0002	PILLAR 2	[]N 47 36 11.150326(0.0018M) W 52 46 13.741615(0.0014M) 179.1640(.0043682M.012186 0.0040 0.0050
246	94G0003	BROOKFIELD RD	[]N 47 30 58.963826(0.0019M) W 52 47 4.811700(0.0015M) 135.3691(.0045011M.012556 0.0041 0.0053
247	94G0004	CAPE BROYLE	[]N 47 4 13.685136(0.0020M) W 52 56 42.564724(0.0015M) 132.8697(.0048892M.013639 0.0043 0.0057
248	94G0006	BAY ROBERTS	[]N 47 33 49.298738(0.0017M) W 53 17 26.719568(0.0014M) 40.5031(.0041149M.011480 0.0039 0.0048
249	970001		[]N 51 29 55.888658(0.0018M) W 55 49 29.252552(0.0014M) 15.9063(.0095398M.026605 0.0040 0.0049
250	970002		[]N 51 29 55.094372(0.0037M) W 55 49 29.478666(0.0026M) 15.8963(.0209111M.058323 0.0071 0.0103
251	970003		[]N 51 29 54.946635(0.0036M) W 55 49 28.214849(0.0026M) 16.3882(.0194450M.054226 0.0069 0.0102
252	970004		[]N 51 29 55.760977(0.0017M) W 55 49 28.153499(0.0014M) 16.4036(.0090208M.025158 0.0039 0.0047
253	970005		[]N 47 38 4.722378(0.0036M) W 59 14 12.591259(0.0030M) 59.3851(.0233455M.065118 0.0082 0.0101
254	970006		[]N 47 38 4.013866(0.0034M) W 59 14 12.249098(0.0026M) 59.8695(.0195746M.0054591 0.0073 0.0093
255	970007		[]N 47 38 3.790700(0.0016M) W 59 14 13.294041(0.0013M) 59.6472(.0085385M.023812 0.0036 0.0044
256	970008		[]N 47 38 4.496038(0.0016M) W 59 14 13.645533(0.0013M) 59.4332(.0085103M.023733 0.0036 0.0044
257	970009		[]N 46 45 42.231297(0.0016M) W 53 10 20.237780(0.0013M) 177.5021(.0084505M.023568 0.0037 0.0044
258	970010		[]N 46 45 41.521724(0.0018M) W 53 10 40.419612(0.0015M) 177.5018(.0097786M.027272 0.0040 0.0049
259	970011		[]N 46 45 41.401256(0.0033M) W 53 10 49.293374(0.0025M) 178.0227(.0199689M.055688 0.0071 0.0092
260	970012		[]N 46 45 42.111518(0.0016M) W 53 10 49.147717(0.0013M) 178.0324(.0083542M.023299 0.0037 0.0044</

The GPS Height Transformation (v2.0)

271	58U2916	2916	[]N 47 28 54.303109(0.0016M) W 79 40 4.646753(0.0012M) 145.8811(.0071186M.019853 0.0033 0.0044
272	64D133	64-133	[]N 45 8 17.607375(0.0029M) W 77 16 26.051070(0.0021M) 326.5920(.0175555M.048960 0.0059 0.0080
273	66D8045	45-66	[]N 48 56 19.547506(0.0027M) W 90 8 59.318504(0.0018M) 440.5870(.0145570M.040597 0.0050 0.0076
274	66D8168	168-66	[]N 49 42 12.445883(0.0016M) W 92 34 37.777550(0.0013M) 352.7456(.0090704M.025294 0.0036 0.0045
275	670530		[]N 45 33 35.702174(0.0024M) W 75 4 2.821874(0.0019M) 18.5949(.0147189M.041047 0.0053 0.0068
276	69D298		[]N 44 53 27.553170(0.0032M) W 79 45 18.923737(0.0023M) 162.2404(.0190615M.053162 0.0064 0.0088
277	71U080		[]N 42 14 49.599458(0.0053M) W 82 5 58.545986(0.0038M) 162.8826(.0323845M.090321 0.0104 0.0149
278	71U385		[]N 51 38 56.506608(0.0028M) W 89 53 16.599199(0.0021M) 299.9885(.0155487M.043373 0.0057 0.0079
279	71U427		[]N 52 18 25.758419(0.0025M) W 90 33 49.436834(0.0020M) 303.8832(.0139490M.038902 0.0054 0.0069
280	72U180		[]N 44 19 58.975145(0.0023M) W 81 27 48.226467(0.0018M) 210.1676(.0135562M.037804 0.0050 0.0065
281	73D8006	738006	[]N 44 3 58.708725(0.0027M) W 80 47 37.997282(0.0021M) 339.7679(.0159519M.044487 0.0058 0.0074
282	74D8440	748440	[]N 45 30 5.229139(0.0028M) W 78 10 16.842440(0.0022M) 407.5830(.0173433M.048372 0.0061 0.0079
283	75D8394	758394	[]N 44 31 36.238311(0.0026M) W 77 29 16.871003(0.0021M) 149.6130(.0157485M.043920 0.0057 0.0074
284	76D8082	768082	[]N 44 54 6.374361(0.0024M) W 78 43 46.466671(0.0018M) 272.7309(.0140596M.039209 0.0049 0.0067
285	79D8053	798053	[]N 49 20 17.421495(0.0023M) W 89 22 45.991405(0.0017M) 435.6045(.0134782M.037587 0.0048 0.0063
286	79U255		[]N 42 57 42.630938(0.0026M) W 81 36 49.922525(0.0020M) 191.5030(.0150721M.042033 0.0056 0.0072
287	81D8049		[]N 49 12 43.829529(0.0022M) W 84 46 59.498766(0.0017M) 314.7960(.0129578M.036136 0.0047 0.0061
288	81U379		[]N 49 32 26.1112638(0.0022M) W 85 48 14.242465(0.0017M) 295.1937(.0126037M.035148 0.0047 0.0062
289	81U454		[]N 49 26 57.993210(0.0025M) W 82 33 16.331119(0.0019M) 193.2929(.0144932M.040417 0.0053 0.0069
290	82U019	82U019	[]N 46 19 47.501849(0.0013M) W 79 28 0.992171(0.0010M) 203.2619(.0070066M.019539 0.0029 0.0036
291	84D8124	848124	[]N 45 5 12.484881(0.0026M) W 76 27 2.685268(0.0020M) 156.6300(.0159005M.044343 0.0055 0.0073
292	84U021		[]N 49 42 16.777874(0.0022M) W 83 45 55.845264(0.0017M) 215.4382(.0125398M.034969 0.0047 0.0061
293	84U075		[]N 47 45 0.440497(0.0030M) W 83 23 17.796520(0.0020M) 406.9680(.0170561M.047572 0.0056 0.0084
294	84U123		[]N 44 16 21.148977(0.0025M) W 79 40 35.542207(0.0018M) 259.5543(.0144926M.040416 0.0051 0.0069
295	84U149		[]N 43 8 19.648939(0.0068M) W 80 42 0.027981(0.0042M) 263.5417(.0352642M.098351 0.0116 0.0190
296	88S011		[]N 46 5 30.569609(0.0028M) W 81 8 15.6592937(0.0021M) 187.3998(.0165159M.046063 0.0058 0.0078
297	88S017		[]N 44 43 51.827941(0.0023M) W 78 20 13.509403(0.0018M) 284.4145(.0133923M.037347 0.0048 0.0064
298	88S027		[]N 45 53 56.034453(0.0037M) W 80 9 35.380486(0.0026M) 203.6354(.0221902M.061893 0.0072 0.0103
299	88S029		[]N 45 33 5.450027(0.0031M) W 79 20 29.887868(0.0023M) 318.9899(.0193455M.053953 0.0065 0.0087
300	88S042		[]N 43 50 46.861460(0.0022M) W 77 9 36.045771(0.0017M) 42.5579(.0126806M.035363 0.0047 0.0060
301	88S062		[]N 43 51 50.525428(0.0023M) W 80 3 52.602537(0.0018M) 357.5043(.0138119M.038519 0.0050 0.0065
302	88S066		[]N 42 47 5.694266(0.0031M) W 80 36 40.806499(0.0025M) 195.4356(.0197727M.055141 0.0068 0.0087
303	90U107	90U107	[]N 48 47 42.951901(0.0022M) W 91 33 45.349243(0.0016M) 376.6468(.0125050M.034874 0.0045 0.0061
304	92U057		[]N 50 37 36.730215(0.0023M) W 94 16 21.397158(0.0018M) 370.5167(.0135471M.037778 0.0049 0.0064
305	92U190		[]N 50 39 36.117014(0.0022M) W 91 55 2.642079(0.0017M) 353.0795(.0130879M.036498 0.0048 0.0062
306	92U268		[]N 50 18 28.983459(0.0023M) W 93 11 4.099174(0.0018M) 351.0046(.0136181M.037976 0.0049 0.0064
307	93U112		[]N 50 9 49.728971(0.0020M) W 90 46 46.557492(0.0017M) 386.8166(.0118179M.032959 0.0047 0.0057
308	93U829		[]N 49 16 33.803951(0.0026M) W 81 40 4.822157(0.0019M) 202.9547(.0154000M.042946 0.0054 0.0071
309	95S001		[]N 47 42 38.093757(0.0021M) W 81 45 16.440218(0.0016M) 323.6150(.0121705M.033941 0.0044 0.0058
310	95S002		[]N 50 9 56.331280(0.0024M) W 80 40 20.982772(0.0017M) 276.2297(.0132375M.036915 0.0048 0.0068
311	95S003		[]N 48 9 59.748631(0.0024M) W 82 16 6.957790(0.0018M) 316.7353(.0142313M.039687 0.0051 0.0067
312	95S004		[]N 50 17 22.179429(0.0024M) W 89 3 3.152717(0.0018M) 306.8253(.0141941M.039584 0.0050 0.0066
313	95S005		[]N 51 0 45.291272(0.0023M) W 90 22 16.244397(0.0018M) 350.0650(.0135846M.037885 0.0049 0.0064
314	95S006		[]N 46 54 20.827322(0.0034M) W 83 15 14.282846(0.0021M) 331.9626(.0200197M.055837 0.0060 0.0093
315	24400		[]N 49 1 7.697132(0.0022M) W 95 26 25.071027(0.0018M) 304.5632(.0131526M.036679 0.0050 0.0062
316	35M961C		[]N 50 54 15.227829(0.0016M) W 98 52 1.691946(0.0013M) 222.5894(.0098796M.027552 0.0037 0.0046
317	39M546D		[]N 57 16 36.720683(0.0027M) W 94 10 50.656606(0.0020M) 75.6004(.0144527M.040304 0.0054 0.0076
318	39M556D		[]N 58 2 56.660005(0.0030M) W 94 9 16.325209(0.0021M) 25.2404(.0157607M.043952 0.0058 0.0083
319	62M124		[]N 52 22 27.555047(0.0014M) W 98 54 6.046112(0.0012M) 236.7922(.0081761M.022800 0.0032 0.0040
320	62M142		[]N 52 52 49.726834(0.0020M) W 99 7 18.859713(0.0015M) 236.1204(.0115492M.032208 0.0043 0.0054
321	65A002	OAK BLUFF	[]N 49 46 56.274540(0.0017M) W 97 19 23.540592(0.0014M) 210.2283(.0078984M.022028 0.0040 0.0047
322	65S293		[]N 54 45 17.314785(0.0014M) W 101 52 34.363490(0.0011M) 302.6139(.0083979M.023419 0.0032 0.0040
323	69M056	69M056	[]N 49 50 30.642669(0.0026M) W 99 58 35.167155(0.0020M) 371.5725(.0195044M.054392 0.0055 0.0071
324	69M103		[]N 49 57 52.042020(0.0020M) W 98 47 5.044901(0.0016M) 268.4318(.0116257M.032422 0.0045 0.0056
325	73M046		[]N 57 5 5.614389(0.0024M) W 101 59 51.709864(0.0018M) 339.1405(.0140714M.039241 0.0050 0.0066
326	74M192		[]N 56 37 37.160368(0.0022M) W 99 56 8.159231(0.0016M) 260.5710(.0132150M.036853 0.0046 0.0062
327	74M240		[]N 56 40 44.521852(0.0024M) W 99 44 21.592291(0.0018M) 247.7371(.0143231M.039944 0.0051 0.0068
328	74M288		[]N 55 49 43.115647(0.0022M) W 99 36 45.966134(0.0017M) 290.5266(.0128972M.035967 0.0046 0.0060
329	75RA50		[]N 51 43 41.731943(0.0021M) W 96 54 18.393227(0.0017M) 188.7103(.0125548M.035013 0.0047 0.0060
330	75RF52		[]N 54 33 12.283279(0.0011M) W 94 28 38.619945(0.0010M) 143.7767(.0061968M.017281 0.0026 0.0032
331	76M063		[]N 54 44 55.295230(0.0019M) W 95 58 41.365373(0.0015M) 150.2681(.0114593M.031957 0.0043 0.0054
332	76R518		[]N 54 36 27.951675(0.0015M) W 97 46 0.515618(0.0012M) 180.5197(.0085819M.023934 0.0034 0.0042
333	774031		[]N 50 31 16.443555(0.0015M) W 98 1 33.360818(0.0012M) 222.3210(.0083543M.023298 0.0034 0.0042
334	77M025		[]N 52 37 26.978684(0.0020M) W 96 10 59.642618(0.0015M) 225.1225(.0113024M.031521 0.0043 0.0054
335	77M104		[]N 51 3 52.404536(0.0021M) W 96 17 48.833961(0.0017M) 200.5382(.0123641M.034480 0.0046 0.0058
336	79M037		[]N 49 0 2.729081(0.0017M) W 97 12 34.574820(0.0014M) 214.6852(.0094932M.026474 0.0039 0.0047
337	79M195		[]N 50 28 37.378209(0.0026M) W 100 45 40.525996(0.0020M) 529.9249(.0202411M.056447 0.0056 0.0073
338	81M055		[]N 49 33 45.630318(0.0027M) W 100 57 41.784641(0.0021M) 241.2693(.0217211M.060573 0.0058 0.0076
339	81M137		[]N 50 31 37.409687(0.0026M) W 99 57 9.863028(0.0020M) 585.4200(.0198993M.055493 0.0056 0.0072
340	81M226		[]N 51 21 41.818364(0.0027M) W 100 1 8.235656(0.0020M) 242.6666(.0206707M.057644 0.0056 0.0076
341	81M335		[]N 51 59 51.718977(0.0021M) W 100 13 49.752012(0.0016M) 232.4723(.0117641M.034480 0.0045 0.0059
342	81M416		[]N 52 23 55.630130(0.0022M) W 101 6 11.483808(0.0017M) 291.4901(.0119885M.033433 0.0047 0.0063
343	82M304US		[]N 48 59 55.258307(0.0021M) W 100 3 8.503738(0.0016M) 675.7222(.0116134M.032389 0.0045 0.0057
344	83M066	83M066	[]N 49 41 4.207532(0.0022M) W 95 21 18.967572(0.0017M) 312.6249(.0124098M.034607 0.0048 0.0060
345	83M101		[]N 51 34 39.016918(0.0014M) W 98 42 20.904517(0.0012M) 218.9635(.0077921M.021730 0.0032 0.0040
346	83M201		[]N 53 21 11.255389(0.0027M) W 101 3 23.920314(0.0021M) 257.7891(.0159515M.044483 0.0059 0.0076
347	89M054		[]N 49 14 23.326409(0.0022M) W 98 40 36.336475(0.0017M) 378.8070(.0127060M.035434 0.0048 0.0061
348	89M161		[]N 51 12 53.337593(0.0021M) W 97 27 43.190065(0.0016M) 209.4332(.0119509M.033328 0.0046 0.0057
349	9043000		[]N 55 47 57.717906(0.0016M) W 97 52 3.991684(0.0012M) 179.5566(.0089815M.025047 0.0035 0.0044
350	91R022		[]N 56 16 16.950446(0.0015M) W 96 8 25.573477(0.0012M) 147.3007(.0085217M.023765 0.0033 0.0042
351	93M265		[]N 53 52 24.889664(0.0025M) W 99 14 23.838073(0.0019M) 244.8344(.0144286M.040237 0.0052 0.0069
352	93M290		[]N 54 40 18.431573(0.0024M) W 99 9 27.371379(0.0019M) 219.5937(.0136296M.038010 0.0052 0.0068
353	944000		[]N 54 34 25.461752(0.0027M) W 100 21 2.576434(0.0021M) 255.7934(.0150094M.041856 0.0058 0.0075
354	944001		[]N 53 4 12.810941(0.0016M) W 100 8 25.450264(0.0012M) 247.6891(.0091157M.025421 0.0035 0.0045
355	1SSR45		[]N 50 45 8.158489(0.0020M) W 102 8 46.815573(0.0016M) 508.8395(.0116710M.032547 0.0043 0.0055
356	22S660C		[]N 52 17 18.867669(0.0020M) W 109 52 52.465526(0.0016M) 655.5852(.0116160M.032393 0.0043 0.0056
357	64S142		[]N 55 33 39.873114(0.0016M) W 104 48 2.013697(0.0013M) 379.0920(.0095254M.026563 0.

The GPS Height Transformation (v2.0)

366	68S238	68 S 238	[]N 50 22 56.208336(0.0019M) W102 40 17.941686(0.0015M) 569.3319(.0115833M.032302 0.0042 0.0054
367	73VH068		[]N 55 29 22.095074(0.0022M) W102 18 18.048715(0.0017M) 268.0659(.0135877M.037892 0.0048 0.0063
368	73VT060		[]N 55 58 5.109458(0.0022M) W104 8 39.635631(0.0017M) 396.1846(.0132948M.037075 0.0047 0.0061
369	74M370		[]N 53 58 11.337905(0.0025M) W101 10 32.373505(0.0023M) 237.5438(.0161312M.044995 0.0063 0.0071
370	76VH059		[]N 56 35 12.603022(0.0024M) W103 35 30.472722(0.0018M) 369.7577(.0146878M.040960 0.0051 0.0066
371	77S058		[]N 51 6 8.285740(0.0022M) W105 52 8.140522(0.0017M) 570.7389(.0130553M.036408 0.0047 0.0062
372	78S032		[]N 52 23 49.042221(0.0019M) W107 13 4.894487(0.0015M) 475.8699(.0114884M.032038 0.0042 0.0054
373	78S308		[]N 49 0 0.177285(0.0026M) W107 49 3.435918(0.0020M) 845.9959(.0158179M.044113 0.0055 0.0074
374	78S345		[]N 49 51 52.555303(0.0023M) W104 36 13.692061(0.0019M) 594.1057(.0137886M.038452 0.0052 0.0065
375	78V040		[]N 57 21 22.905981(0.0022M) W103 59 11.298890(0.0017M) 388.1068(.0135031M.037656 0.0048 0.0062
376	79S047		[]N 52 42 20.341234(0.0024M) W106 17 44.211152(0.0018M) 485.7737(.0139265M.038838 0.0050 0.0067
377	79S161		[]N 52 12 7.889335(0.0022M) W105 20 14.992328(0.0017M) 539.0893(.0130303M.036337 0.0047 0.0060
378	79S266		[]N 52 1 13.138329(0.0022M) W104 4 36.970544(0.0017M) 509.5759(.0131392M.036641 0.0047 0.0062
379	79S557		[]N 51 43 49.378622(0.0021M) W102 52 27.524564(0.0016M) 498.7525(.0125835M.035092 0.0045 0.0058
380	80S033		[]N 49 22 42.147696(0.0024M) W109 14 8.354720(0.0018M) 948.2382(.0142362M.039700 0.0051 0.0068
381	80S094		[]N 49 43 37.175363(0.0024M) W108 9 29.595531(0.0018M) 854.7984(.0140177M.039091 0.0050 0.0066
382	80S144		[]N 49 40 7.639084(0.0018M) W106 55 47.776688(0.0014M) 710.6153(.0105459M.029409 0.0039 0.0050
383	80S202		[]N 49 31 22.995870(0.0024M) W105 36 57.682331(0.0018M) 745.1461(.0141947M.039584 0.0051 0.0068
384	80V052		[]N 55 43 39.215575(0.0028M) W108 19 47.526746(0.0020M) 415.0565(.0168579M.047024 0.0055 0.0078
385	81S039		[]N 49 0 3.182393(0.0028M) W101 37 39.801461(0.0021M) 474.4690(.0160257M.044691 0.0058 0.0078
386	81S086		[]N 50 56 4.418085(0.0020M) W102 49 24.442416(0.0016M) 531.6906(.0116052M.032363 0.0043 0.0055
387	81S193		[]N 49 38 23.212421(0.0025M) W102 16 34.965831(0.0019M) 609.8350(.0143347M.039976 0.0053 0.0070
388	81S316		[]N 53 21 57.904035(0.0022M) W107 55 20.383348(0.0017M) 667.5108(.0133048M.037103 0.0048 0.0062
389	81S391		[]N 51 52 52.200381(0.0021M) W101 43 13.396401(0.0016M) 436.8685(.0125004M.034860 0.0046 0.0058
390	82A574		[]N 50 38 41.090084(0.0025M) W110 5 51.781201(0.0018M) 731.1305(.0141621M.039495 0.0051 0.0069
391	82V337		[]N 57 33 22.080491(0.0026M) W109 23 6.695387(0.0019M) 508.2643(.0159447M.044467 0.0053 0.0073
392	82V394		[]N 58 18 43.693280(0.0019M) W109 32 58.805803(0.0014M) 322.9931(.0115796M.032293 0.0039 0.0052
393	83S029		[]N 52 50 26.836127(0.0020M) W109 23 22.881420(0.0016M) 647.1447(.0116711M.032549 0.0044 0.0057
394	83S241		[]N 52 13 50.218397(0.0019M) W109 8 41.918141(0.0015M) 644.1410(.0113120M.031546 0.0042 0.0053
395	84S090		[]N 51 13 2.833001(0.0020M) W101 36 27.954989(0.0016M) 494.3026(.0117692M.032820 0.0044 0.0055
396	84S113		[]N 51 14 29.227552(0.0015M) W108 1 39.997839(0.0012M) 590.5422(.0088988M.024816 0.0034 0.0043
397	84S275		[]N 50 50 46.394569(0.0019M) W103 49 53.536093(0.0015M) 570.0419(.0115591M.032234 0.0043 0.0054
398	84S316		[]N 51 27 35.531834(0.0021M) W103 50 46.685429(0.0017M) 642.4640(.0126673M.035325 0.0047 0.0060
399	84S343		[]N 51 43 16.465526(0.0020M) W107 36 13.791480(0.0016M) 556.5456(.0116735M.032556 0.0044 0.0055
400	85A044	85A044	[]N 49 56 22.332326(0.0018M) W110 8 27.090893(0.0014M) 727.8114(.0096746M.026980 0.0038 0.0050
401	85M301		[]N 50 3 23.632171(0.0016M) W101 26 49.042330(0.0013M) 508.8697(.0095993M.026769 0.0036 0.0045
402	85S113		[]N 50 28 14.805000(0.0019M) W105 58 14.307102(0.0014M) 582.9059(.0108450M.030243 0.0040 0.0054
403	85S361		[]N 55 9 33.079675(0.0025M) W106 22 3.544156(0.0018M) 402.6431(.0146463M.040847 0.0050 0.0069
404	85S413		[]N 55 6 21.700811(0.0025M) W107 42 9.836329(0.0018M) 402.4160(.0152049M.042406 0.0051 0.0071
405	85S460		[]N 54 19 20.848680(0.0023M) W107 48 38.069010(0.0018M) 441.8242(.0139806M.038987 0.0049 0.0065
406	86S005		[]N 52 47 2.954496(0.0021M) W104 2 7.157029(0.0018M) 452.7570(.0129997M.036252 0.0049 0.0060
407	86S193		[]N 53 39 23.259352(0.0023M) W106 59 12.486064(0.0018M) 496.9378(.0141514M.039464 0.0051 0.0065
408	86S313		[]N 54 14 25.374381(0.0019M) W105 41 40.438782(0.0014M) 493.1629(.0113349M.031610 0.0040 0.0052
409	87S033		[]N 53 25 2.314235(0.0017M) W104 29 10.930243(0.0014M) 394.1845(.0104000M.029002 0.0039 0.0047
410	91S038		[]N 49 57 58.956223(0.0023M) W103 35 56.206673(0.0018M) 593.0224(.0134326M.037459 0.0050 0.0063
411	91S125		[]N 50 54 22.845128(0.0016M) W104 52 12.317531(0.0012M) 533.4134(.0091681M.025567 0.0035 0.0044
412	91S512		[]N 49 7 54.529629(0.0026M) W102 50 12.785521(0.0019M) 560.3858(.0146035M.040728 0.0054 0.0071
413	91S597		[]N 53 2 25.089887(0.0019M) W107 1 27.759887(0.0014M) 538.2849(.0110281M.030755 0.0040 0.0054
414	93S000		[]N 53 20 6.145088(0.0015M) W108 52 20.567914(0.0012M) 559.5570(.0089350M.024917 0.0034 0.0043
415	93S001		[]N 53 40 4.602819(0.0026M) W105 48 48.751330(0.0020M) 505.9359(.0160348M.044719 0.0055 0.0072
416	93M330		[]N 54 26 26.960478(0.0027M) W101 22 12.512606(0.0023M) 266.7023(.0168243M.046925 0.0064 0.0075
417	90E017		[]N 59 45 56.248816(0.0016M) W111 32 21.103963(0.0014M) 185.7093(.0105246M.029355 0.0037 0.0047
418	90E018		[]N 59 7 2.855554(0.0020M) W112 26 15.557751(0.0015M) 193.4398(.0121151M.033788 0.0040 0.0055
419	28C609J	609J	[]N 50 32 50.436938(0.0037M) W122 29 22.555552(0.0031M) 265.0375(.0248557M.069319 0.0081 0.0108
420	45C257F	257F	[]N 59 58 13.557295(0.0020M) W131 13 26.114564(0.0016M) 867.6548(.018320M.032996 0.0046 0.0057
421	56C031	1099J	[]N 51 55 37.119931(0.0028M) W122 50 42.554737(0.0021M) 1101.4744(.0160906M.044872 0.0059 0.0079
422	56C067	1135J	[]N 52 6 47.584951(0.0029M) W124 3 47.241294(0.0021M) 897.0689(.0162201M.045234 0.0060 0.0080
423	59C037	1316J	[]N 50 15 45.930788(0.0026M) W120 25 55.367151(0.0020M) 639.1827(.0151355M.042212 0.0056 0.0071
424	61C051	1616J	[]N 50 47 52.574538(0.0032M) W115 59 41.974703(0.0030M) 1130.2972(.0197930M.055227 0.0073 0.0096
425	63C020	1798J	[]N 54 6 5.198182(0.0021M) W125 17 17.320277(0.0016M) 699.5625(.0120068M.033483 0.0044 0.0058
426	65T000	AIRPORT	[]N 58 50 27.995017(0.0015M) W122 34 31.518365(0.0012M) 364.9510(.0088236M.024606 0.0035 0.0043
427	67C015	67C015	[]N 54 19 14.003182(0.0026M) W122 38 25.253187(0.0019M) 713.7174(.0147933M.041254 0.0054 0.0073
428	67C066	67C066	[]N 55 36 44.993860(0.0033M) W121 57 55.192114(0.0023M) 626.5730(.0184124M.051354 0.0063 0.0090
429	68C047	68C047	[]N 50 52 22.122698(0.0021M) W118 55 31.657613(0.0016M) 340.0842(.0102240M.028512 0.0044 0.0059
430	68C129	68C129	[]N 51 27 15.059624(0.0028M) W117 6 17.772257(0.0020M) 787.8412(.0159594M.044506 0.0056 0.0078
431	70C078	70C078	[]N 50 45 34.494825(0.0019M) W118 2 18.336209(0.0015M) 574.0432(.0111565M.031112 0.0040 0.0053
432	70C147	70C147	[]N 49 52 25.772155(0.0023M) W118 5 50.837272(0.0017M) 431.5780(.0135037M.037659 0.0048 0.0065
433	75C134	75C134	[]N 56 55 12.682852(0.0035M) W130 9 19.761754(0.0025M) 484.4590(.0191119M.053314 0.0071 0.0098
434	76C183	76C183	[]N 58 40 54.453288(0.0029M) W124 2 40.626854(0.0022M) 770.8569(.0171519M.047831 0.0062 0.0080
435	77C462	77C462	[]N 59 12 22.928780(0.0030M) W125 56 35.957159(0.0024M) 684.5153(.0190405M.053099 0.0067 0.0085
436	77C754	77C754	[]N 53 50 53.183203(0.0025M) W119 31 39.457909(0.0018M) 784.2646(.0144921M.040414 0.0051 0.0069
437	77C810	77C810	[]N 53 18 6.967973(0.0018M) W120 9 56.402677(0.0014M) 705.4522(.0105449M.029406 0.0038 0.0051
438	79C120	79C120	[]N 49 3 15.831183(0.0031M) W115 3 52.103162(0.0023M) 838.7154(.0183086M.051061 0.0062 0.0086
439	79C490	79C490	[]N 49 0 28.453540(0.0041M) W118 17 53.920842(0.0030M) 494.4573(.0234681M.065446 0.0084 0.0115
440	79C598	79C598	[]N 52 11 55.322061(0.0028M) W119 13 55.661335(0.0021M) 692.0873(.0164293M.045822 0.0056 0.0078
441	79C681	79C681	[]N 51 40 28.166780(0.0030M) W119 32 46.449364(0.0021M) 525.6209(.0159494M.044487 0.0058 0.0082
442	80C054	80C054	[]N 55 40 35.416236(0.0020M) W120 4 6.438232(0.0016M) 671.4818(.0119401M.033297 0.0044 0.0057
443	82C014	82C014	[]N 50 59 53.891484(0.0027M) W121 31 50.910929(0.0021M) 786.2276(.0171002M.047687 0.0059 0.0076
444	82C101	82C101	[]N 51 56 20.926755(0.0015M) W121 46 13.790814(0.0012M) 52.4235(.0164923M.045993 0.0057 0.0074
445	82C226	82C226	[]N 52 41 42.628067(0.0024M) W122 27 12.028137(0.0018M) 508.7975(.0133206M.037148 0.0051 0.0067
446	82C301	82C301	[]N 53 31 24.730458(0.0019M) W122 38 40.013608(0.0015M) 663.6772(.0111407M.031068 0.0041 0.0054
447	83C089	83C089	[]N 49 24 3.560199(0.0025M) W120 14 8.929394(0.0017M) 546.1471(.0142428M.039724 0.0048 0.0069
448	83C125	83C125	[]N 49 5 5.561148(0.0020M) W119 34 33.289911(0.0017M) 578.5398(.0095694M.026689 0.0048 0.0057
449	83C174	83C174	[]N 49 22 12.335839(0.0019M) W121 29 40.069357(0.0015M) 20.1794(.0127039M.035429 0.0041 0.0053
450	83C211	83C211	[]N 49 47 7.805625(0.0026M) W123 9 23.549522(0.0020M) 52.4235(.0164923M.045993 0.0057 0.0074
451	84C217	84C217	[]N 56 14 23.525024(0.0026M) W121 24 10.229073(0.0020M) 623.4306(.0159047M.044353 0.0056 0.0

The GPS Height Transformation (v2.0)

461	87C145	87C145	[]N 58 31 52.434803(0.0030M) W122 41 2.356726(0.0024M) 488.9701(.0174931M.048782 0.0065 0.0083
462	87C359	87C359	[]N 59 15 29.602610(0.0018M) W129 37 18.446142(0.0014M) 919.8719(.0100726M.028090 0.0038 0.0050
463	87C419	87C419	[]N 55 44 49.203580(0.0040M) W128 50 9.353406(0.0032M) 197.5402(.0217722M.060720 0.0087 0.0112
464	88C007	88C007	[]N 58 18 46.085346(0.0022M) W129 53 46.980469(0.0017M) 1209.2918(.0120920M.033722 0.0047 0.0061
465	88C037	88C037	[]N 57 49 29.580698(0.0020M) W129 58 8.808718(0.0016M) 837.2339(.0111687M.031148 0.0044 0.0057
466	897001	897001	[]N 49 43 50.2020365(0.0028M) W114 13 13.389645(0.0021M) 1131.5166(.0171946M.047951 0.0058 0.0077
467	897009	897009	[]N 49 30 30.664440(0.0029M) W117 16 51.915888(0.0020M) 518.5900(.0182671M.050942 0.0057 0.0080
468	897012	897012	[]N 49 29 39.579459(0.0037M) W119 7 17.628941(0.0028M) 809.4139(.0217814M.060743 0.0078 0.0104
469	897025	897025	[]N 51 19 8.311287(0.0026M) W118 18 37.663680(0.0019M) 572.5804(.0137367M.038307 0.0052 0.0072
470	897039	897039	[]N 53 55 1.775070(0.0024M) W121 47 39.602016(0.0018M) 712.5850(.0139619M.038935 0.0051 0.0068
471	897041	897041	[]N 54 48 2.765722(0.0028M) W122 49 49.370401(0.0021M) 683.1173(.0158284M.044141 0.0057 0.0078
472	897053	897053	[]N 50 26 27.112215(0.0028M) W117 9 34.355078(0.0021M) 658.2169(.0161600M.045066 0.0057 0.0079
473	897066	897066	[]N 51 32 5.959180(0.0025M) W120 52 49.016559(0.0020M) 1117.9262(.0143952M.040145 0.0055 0.0071
474	897086	897086	[]N 52 31 22.767265(0.0029M) W125 26 19.351204(0.0022M) 1125.4695(.0163743M.045663 0.0061 0.0082
475	89C042	89C042	[]N 50 58 6.827816(0.0027M) W120 13 51.931883(0.0022M) 353.3738(.0165936M.046276 0.0063 0.0076
476	89C125	89C125	[]N 50 11 30.018336(0.0024M) W121 34 21.965378(0.0020M) 277.6248(.0159223M.044404 0.0055 0.0068
477	90HP1V	PIER 1	[]N 50 11 41.768559(0.0021M) W119 19 18.603880(0.0021M) 456.6041(.0094721M.026416 0.0058 0.0059
478	987015	987015	[]N 52 4 45.645991(0.0027M) W118 33 31.912196(0.0021M) 777.6661(.0163257M.045533 0.0057 0.0077
479	43Y003	GEM-D (63G34)	[]N 60 44 21.687693(0.0062M) W135 6 11.998377(0.0040M) 720.8014(.0266442M.074314 0.0112 0.0171
480	648000	SATELLITE	[]N 60 43 33.997751(0.0022M) W135 5 26.7711486(0.0017M) 729.2666(.0128331M.035787 0.0047 0.0062
481	72Y023	72Y023 (848004)	[]N 60 21 2.835922(0.0111M) W129 3 17.446641(0.0073M) 839.4850(.0396668M.110680 0.0187 0.0318
482	77Y040	77Y040	[]N 60 0 24.752897(0.0020M) W132 8 39.547908(0.0016M) 799.5101(.0109255M.030473 0.0044 0.0057
483	829117	FORT LIARD	[]N 60 13 59.172549(0.0027M) W123 28 37.556655(0.0022M) 204.3336(.0164177M.045784 0.0060 0.0075
484	878001	878001	[]N 60 27 16.123240(0.0022M) W134 13 50.587881(0.0017M) 726.1127(.0131234M.036597 0.0048 0.0063
485	88Y102	88Y102	[]N 60 24 49.307751(0.0018M) W133 42 36.402281(0.0014M) 864.7380(.0097160M.027096 0.0039 0.0051
486	3839122	H. S. 6	[]N 43 37 51.803290(0.0017M) W79 24 8.134445(0.0014M) 39.8337(.0095922M.026750 0.0038 0.0047
487	58U507	IBC-55	[]N 42 59 26.177453(0.0030M) W82 25 16.289586(0.0024M) 143.7246(.0166249M.046375 0.0060 0.0086
488	60U9503	GROS 1-1960	[]N 46 31 39.880379(0.0012M) W84 34 56.452525(0.0011M) 148.0344(.0068352M.019061 0.0031 0.0034
489	68U323		[]N 44 14 40.304445(0.0018M) W76 25 14.025581(0.0014M) 61.6023(.0103465M.028854 0.0039 0.0049
490	70U652	70-U-652	[]N 48 50 10.987026(0.0016M) W87 31 17.232668(0.0013M) 168.4194(.0093298M.026018 0.0037 0.0045
491	70U667		[]N 42 17 19.695534(0.0022M) W82 42 42.819653(0.0018M) 141.8684(.0129895M.036224 0.0049 0.0062
492	70U672		[]N 42 3 40.024024(0.0021M) W83 6 12.131624(0.0017M) 140.9487(.0124508M.034722 0.0047 0.0060
493	7139192	8244-1971 CHS	[]N 43 17 49.033559(0.0017M) W79 48 5.861530(0.0014M) 40.3341(.0097040M.027062 0.0038 0.0047
494	71U102		[]N 42 2 19.115479(0.0020M) W82 43 53.508480(0.0016M) 155.5601(.0114071M.031812 0.0044 0.0055
495	72U135		[]N 43 41 15.885913(0.0018M) W81 42 24.045623(0.0015M) 179.9861(.0106547M.029713 0.0041 0.0052
496	73U114		[]N 45 20 14.779140(0.0018M) W80 2 11.072740(0.0014M) 142.5737(.0102767M.028658 0.0038 0.0049
497	7629325	8096-1976	[]N 48 28 39.735865(0.0014M) W68 30 38.884793(0.0012M) -21.1968(.0076017M.021199 0.0033 0.0039
498	78U3005		[]N 43 57 22.632257(0.0018M) W78 9 51.789638(0.0015M) 40.6557(.0104782M.029220 0.0042 0.0051
499	80U014		[]N 42 55 22.066211(0.0017M) W79 14 22.849979(0.0014M) 138.3838(.0098707M.027527 0.0039 0.0048
500	81U111		[]N 42 43 46.1112167(0.0022M) W82 28 37.511163(0.0018M) 142.0729(.0129270M.036049 0.0049 0.0062
501	83U057		[]N 45 3 26.590410(0.0026M) W74 33 55.745423(0.0025M) 17.9092(.0165703M.046237 0.0063 0.0076
502	913007	913007	[]N 47 57 41.694413(0.0018M) W84 54 9.377135(0.0014M) 156.7079(.0104958M.029269 0.0040 0.0050
503	913033	913033	[]N 45 59 17.620216(0.0030M) W81 54 55.786742(0.0022M) 142.4822(.0165910M.046270 0.0058 0.0086
504	9233051	92-1	[]N 44 30 30.128062(0.0020M) W80 13 12.016074(0.0016M) 141.9528(.0117273M.032704 0.0043 0.0057
505	9409451		[]N 46 15 14.602483(0.0020M) W83 33 10.638862(0.0016M) 142.1132(.0116765M.032562 0.0044 0.0055
506	953000		[]N 44 24 23.435800(0.0016M) W89 13 20.731844(0.0013M) 150.3221(.0093717M.026134 0.0037 0.0045
507	973006		[]N 42 39 31.045407(0.0019M) W81 12 48.401256(0.0015M) 140.3971(.0108499M.030257 0.0042 0.0053
508	973007		[]N 45 13 26.837645(0.0021M) W81 38 7.871789(0.0016M) 172.7501(.0121526M.033890 0.0044 0.0059
509	D40040	03882 0006	[]N 43 14 40.775044(0.0018M) W79 13 3.140667(0.0014M) 41.2448(.0100826M.028118 0.0039 0.0050
510	XXU9577	H. S. 2	[]N 44 49 31.090032(0.0024M) W75 19 3.443226(0.0021M) 44.8363(.0156345M.043601 0.0057 0.0068
511	XXU9650	84-1	[]N 44 35 12.327688(0.0021M) W75 40 54.217241(0.0016M) 43.2071(.0126105M.035168 0.0046 0.0059
512	763010US	LSC 5C93	[]N 43 52 37.700086(0.0021M) W82 40 28.623339(0.0016M) 143.7716(.0121519M.033888 0.0045 0.0058
513	803010US	N 235	[]N 42 28 25.212553(0.0028M) W82 52 56.347278(0.0022M) 142.6499(.0156812M.043734 0.0060 0.0078
514	813010US	D 362	[]N 42 9 11.313420(0.0020M) W80 4 42.436499(0.0016M) 140.5887(.0117904M.032880 0.0044 0.0056
515	833020US	J 299	[]N 45 46 41.253206(0.0021M) W84 43 35.853023(0.0016M) 144.1773(.0120506M.033605 0.0046 0.0058
516	893010US	ONTOPORT	[]N 46 51 0.007857(0.0019M) W89 22 6.937027(0.0015M) 162.9960(.0109757M.030608 0.0041 0.0052
517	953010US	9018K	[]N 46 32 47.686863(0.0017M) W87 22 43.146479(0.0014M) 153.1002(.0106713M.029759 0.0039 0.0048
518	963010US	U-346	[]N 47 28 26.877794(0.0018M) W87 51 35.465204(0.0014M) 154.5059(.0105295M.029363 0.0040 0.0050
519	973010US	DETOUR MA	[]N 45 59 56.205715(0.0021M) W83 54 1.931028(0.0017M) 141.1394(.0126575M.035298 0.0047 0.0059
520	973020US	DRN LAUNC	[]N 44 39 40.977639(0.0022M) W83 17 8.657765(0.0016M) 141.7021(.0129385M.036082 0.0046 0.0061
521	973030US	905 2000F	[]N 44 7 25.900542(0.0017M) W76 19 44.322505(0.0013M) 57.4866(.0092468M.025787 0.0036 0.0046
522	973040US	905 2030J	[]N 43 27 58.818576(0.0016M) W76 30 38.653867(0.0013M) 41.9577(.0089200M.024876 0.0035 0.0044
523	973050US	905 2058K	[]N 43 16 9.485560(0.0014M) W77 37 40.912048(0.0012M) 40.0604(.0079959M.022298 0.0032 0.0040
524	973060US	905 2076H	[]N 43 20 3.940446(0.0015M) W78 43 9.898760(0.0013M) 51.5583(.0089605M.024988 0.0035 0.0043
525	973070US	906 3020H	[]N 42 52 37.377619(0.0016M) W78 53 23.361108(0.0013M) 141.3307(.0090572M.025258 0.0036 0.0045
526	973110US	3090 G	[]N 41 57 32.596156(0.0020M) W83 15 39.590706(0.0016M) 141.2953(.0113737M.031718 0.0044 0.0055
527	650001	GOOSE BAY SAT.	[]N 53 18 30.356044(0.0027M) W60 21 50.010513(0.0021M) 24.9692(.0140910M.039298 0.0057 0.0077
528	760032		[]N 53 17 57.487567(0.0015M) W60 27 4.558009(0.0013M) 38.8343(.0081443M.022713 0.0035 0.0043
529	10100		[]N 45 13 47.181223(0.0037M) W66 39 10.994139(0.0036M) 265.3390(.0199365M.055722 0.0083 0.0110
530	17105	MT HOPE	[]N 46 2 27.373155(0.0022M) W66 29 24.164788(0.0017M) 168.8343(.0128221M.035764 0.0047 0.0063
531	18100		[]N 45 47 56.560434(0.0037M) W68 38 23.922606(0.0027M) 313.2337(.0201487M.056195 0.0075 0.0104
532	20204	MATANE	[]N 48 49 15.479468(0.0025M) W67 33 12.374955(0.0019M) 64.2233(.0079149M.022085 0.0054 0.0068
533	21104		[]N 46 9 31.508820(0.0033M) W60 50 2.156279(0.0034M) 347.4594(.0173578M.048441 0.0088 0.0096
534	22214		[]N 48 32 39.170782(0.0025M) W72 13 57.651029(0.0020M) 136.3245(.0083620M.023337 0.0055 0.0070
535	23247	YORK	[]N 48 42 29.837954(0.0033M) W64 30 23.452903(0.0023M) 563.9306(.0178721M.049840 0.0064 0.0091
536	25100	RED PINE	[]N 47 26 58.100252(0.0030M) W65 30 28.278460(0.0021M) 158.3204(.0158706M.044261 0.0058 0.0084
537	26112		[]N 46 12 11.397572(0.0032M) W62 59 59.979513(0.0022M) 71.1373(.0174229M.048589 0.0062 0.0088
538	27107		[]N 44 36 32.695239(0.0051M) W64 30 31.256654(0.0031M) 172.6444(.0266856M.074486 0.0085 0.0139
539	28103		[]N 47 25 31.021617(0.0032M) W67 58 7.059132(0.0020M) 469.1465(.0157009M.043789 0.0056 0.0089
540	28204	SENNETERRE	[]N 48 21 20.949371(0.0015M) W77 13 37.363436(0.0012M) 375.9956(.0073174M.020408 0.0033 0.0041
541	28225	JOANNE	[]N 48 13 27.507960(0.0014M) W78 54 58.244326(0.0012M) 286.1333(.0060180M.016783 0.0033 0.0039
542	28312	NORTH BAY	[]N 46 19 26.182068(0.0034M) W79 29 53.288547(0.0027M) 169.7093(.0108556M.030296 0.0074 0.0094
543	55215	EXPLORER	[]N 49 30 15.018226(0.0033M) W74 23 0.753931(0.0023M) 413.6321(.0116410M.032475 0.0063 0.0092
544	632508	MARTIN	[]N 45 33 50.193315(0.0015M) W73 44 13.992983(0.0013M) 9.0955(.0079454M.022159 0.0035 0.0043
545	64KP087	GA 38	[]N 49 11 46.383567(0.0032M) W68 14 7.589219(0.0023M) 32.5508(.0169874M.047373 0.0063 0

The GPS Height Transformation (v2.0)

556	762026	762026	[]N 49 6 7.540839(0.0022M) W 68 11 33.076209(0.0019M) -16.9838(.0062376M.017413 0.0052 0.0060
557	77K0197		[]N 45 19 30.139056(0.0039M) W 72 7 41.138118(0.0029M) 295.8754(.0221782M.061851 0.0080 0.0108
558	90L400		[]N 47 12 32.186615(0.0038M) W 72 53 36.809852(0.0030M) 89.2196(.0137480M.038412 0.0083 0.0103
559	932001	932001	[]N 47 2 7.018988(0.0017M) W 76 32 9.364255(0.0013M) 336.7814(.0083338M.023243 0.0037 0.0049
560	943001		[]N 45 24 2.933070(0.0027M) W 75 42 15.706206(0.0021M) 71.5849(.0155145M.043271 0.0057 0.0076
561	943002		[]N 45 24 1.079846(0.0025M) W 75 42 14.646068(0.0019M) 50.9671(.0139274M.038845 0.0052 0.0069
562	943003		[]N 45 24 1.733238(0.0025M) W 75 42 15.042273(0.0019M) 50.9514(.0139256M.038839 0.0052 0.0069
563	943004		[]N 45 24 0.396481(0.0025M) W 75 42 14.229768(0.0019M) 54.7304(.0139315M.038856 0.0053 0.0069
564	60L9510	BMI-190 CHS	[]N 62 12 34.896232(0.0028M) W 75 39 28.124136(0.0020M) -23.6054(.0148012M.041276 0.0056 0.0079
565	672026	GREAT	[]N 55 14 26.760522(0.0046M) W 77 49 14.793579(0.0035M) 108.0511(.0275221M.076750 0.0097 0.0129
566	72KA102		[]N 55 16 51.703391(0.0039M) W 77 44 51.755273(0.0029M) -3.1284(.0245482M.068468 0.0081 0.0110
567	72KP050		[]N 58 6 33.069776(0.0022M) W 68 24 38.079173(0.0017M) 30.2056(.0122412M.034138 0.0046 0.0062
568	73L263	73L263	[]N 52 10 17.030989(0.0022M) W 77 8 39.616158(0.0017M) 177.7639(.0107451M.029965 0.0047 0.0061
569	742000	CHIMO DOPPLER	[]N 58 6 37.633154(0.0019M) W 68 24 49.858678(0.0014M) 37.0009(.0103618M.028896 0.0039 0.0054
570	76L576	76L576	[]N 54 30 44.463117(0.0029M) W 71 15 27.146270(0.0021M) 430.6676(.0117120M.032662 0.0059 0.0081
571	8423018	INU-101	[]N 58 27 49.183079(0.0026M) W 78 5 21.575693(0.0020M) -14.3867(.0144543M.040309 0.0055 0.0073
572	85KA159	85-30	[]N 58 6 47.542439(0.0018M) W 68 23 13.378777(0.0013M) 12.2070(.0094452M.026341 0.0037 0.0050
573	86KA061	86-5	[]N 58 27 28.598543(0.0024M) W 78 6 21.128917(0.0019M) 2.9223(.0135553M.037801 0.0051 0.0068
574	86KA066	86-1	[]N 58 6 31.469302(0.0021M) W 68 23 11.625412(0.0015M) 22.1666(.0114399M.031903 0.0043 0.0058
575	86KS003		[]N 55 16 29.801973(0.0027M) W 77 46 4.011280(0.0022M) -28.7594(.0129374M.036078 0.0061 0.0075
576	86KS004		[]N 55 16 42.195048(0.0025M) W 77 44 46.994811(0.0021M) -4.3750(.0147763M.041208 0.0060 0.0070
577	88KA037		[]N 55 16 43.668079(0.0017M) W 77 45 4.375498(0.0019M) -6.5171(.0092996M.025936 0.0048 0.0052
578	88KA040	88-1	[]N 58 27 8.246661(0.0027M) W 78 6 29.714611(0.0021M) -18.0633(.0151303M.042194 0.0057 0.0076
579	88KA042	88-1A	[]N 62 12 4.015073(0.0026M) W 75 38 34.116714(0.0019M) 28.7631(.0134621M.037541 0.0053 0.0072
580	88L181	88L181	[]N 51 13 14.871875(0.0020M) W 68 14 19.829828(0.0016M) 370.3549(.0097490M.027190 0.0043 0.0055
581	89L310		[]N 55 16 42.038490(0.0017M) W 77 44 49.402567(0.0018M) -8.0207(.0088430M.024664 0.0046 0.0051
582	89L314		[]N 55 16 7.984608(0.0018M) W 77 46 46.166509(0.0017M) -40.7133(.0099179M.027658 0.0047 0.0051
583	92KA001		[]N 62 12 10.476231(0.0026M) W 75 38 15.143902(0.0021M) 12.7265(.0128356M.035795 0.0058 0.0072
584	92KA002		[]N 62 10 51.320673(0.0028M) W 75 39 51.471082(0.0021M) 203.9569(.0148697M.041467 0.0058 0.0078
585	12301	AMELIASBURG	[]N 44 2 48.597272(0.0021M) W 77 25 43.723787(0.0016M) 87.6964(.0125154M.034902 0.0046 0.0060
586	21310	CARLOW	[]N 43 46 49.343645(0.0026M) W 81 37 40.979742(0.0020M) 253.6355(.0151258M.042182 0.0056 0.0072
587	57319	SIOUX	[]N 50 5 21.614868(0.0019M) W 92 0 1.622781(0.0015M) 411.6368(.0106512M.029703 0.0042 0.0053
588	61313	GORE	[]N 43 46 5.448080(0.0022M) W 79 38 49.157193(0.0017M) 154.9813(.0130514M.036397 0.0048 0.0062
589	653050	TIMMINS SAT	[]N 48 33 56.634215(0.0016M) W 81 22 15.303241(0.0013M) 254.8181(.0075195M.020969 0.0035 0.0045
590	663056	WELLAND	[]N 43 0 10.175404(0.0022M) W 79 11 54.006246(0.0017M) 151.5693(.0128169M.035743 0.0048 0.0061
591	673221	HENRI	[]N 48 23 21.847753(0.0023M) W 94 21 5.572212(0.0018M) 307.1275(.0131127M.036568 0.0050 0.0065
592	683026	WESTMINSTER II	[]N 42 53 5.336118(0.0017M) W 81 4 5.581466(0.0014M) 249.0277(.0094861M.026454 0.0038 0.0047
593	703064	70U364	[]N 46 28 33.360348(0.0024M) W 80 59 37.071932(0.0018M) 229.8391(.0141066M.039341 0.0051 0.0067
594	713016	OSHAWA	[]N 43 53 2.721566(0.0023M) W 78 48 12.696453(0.0017M) 82.4478(.0131257M.036605 0.0048 0.0063
595	723007	LOWTHER	[]N 49 33 15.340411(0.0017M) W 83 0 34.957013(0.0014M) 216.3162(.0097332M.027143 0.0038 0.0048
596	743012	ZUBER CORNER	[]N 43 35 1.256127(0.0022M) W 80 27 19.039011(0.0018M) 323.0371(.0131054M.036547 0.0049 0.0063
597	753125	DALEY	[]N 49 46 42.562063(0.0023M) W 86 25 53.654673(0.0017M) 336.5238(.0126137M.035175 0.0046 0.0064
598	803001	WHITEFISH	[]N 49 14 53.452238(0.0019M) W 94 1 43.489327(0.0016M) 362.8452(.0107634M.030016 0.0043 0.0053
599	830020	GLOBE	[]N 49 37 38.822005(0.0023M) W 90 21 2.651563(0.0017M) 446.6374(.0134745M.037576 0.0047 0.0063
600	82D8001	82B8001	[]N 44 59 38.295112(0.0030M) W 79 18 23.415668(0.0022M) 240.7792(.0179980M.050197 0.0062 0.0085
601	87D0336	008870336	[]N 45 7 28.594443(0.0029M) W 77 34 58.405958(0.0021M) 266.7721(.0174629M.048701 0.0059 0.0081
602	973026	J.TUZO WILSON	[]N 43 43 0.475452(0.0026M) W 79 20 18.762230(0.0019M) 87.6328(.0149665M.041756 0.0053 0.0072
603	D48709	008911003	[]N 44 49 45.585668(0.0028M) W 76 0 26.855486(0.0019M) 93.9028(.0157193M.043840 0.0054 0.0077
604	60422		[]N 51 13 8.798948(0.0026M) W 99 52 2.398567(0.0020M) 234.2629(.0203199M.056666 0.0056 0.0073
605	664050		[]N 56 51 42.886803(0.0014M) W 101 4 1.795699(0.0011M) 317.8596(.0077718M.021674 0.0030 0.0038
606	714002C		[]N 56 30 14.883924(0.0021M) W 94 12 47.172465(0.0017M) 46.2232(.0128725M.035899 0.0046 0.0060
607	714006		[]N 54 56 58.462867(0.0027M) W 98 38 18.544860(0.0022M) 213.0667(.0154534M.043095 0.0060 0.0077
608	714007		[]N 55 44 9.271462(0.0020M) W 97 50 59.911637(0.0016M) 217.1306(.0117327M.032720 0.0043 0.0055
609	75RA05		[]N 53 11 6.286406(0.0019M) W 99 16 56.732285(0.0014M) 212.2869(.0105321M.029372 0.0040 0.0052
610	774006	NT.765E-1-9-23	[]N 49 23 27.424317(0.0026M) W 100 27 47.416412(0.0020M) 407.4493(.0195627M.054554 0.0054 0.0072
611	774032		[]N 50 30 23.863645(0.0032M) W 97 2 40.996351(0.0025M) 202.2128(.0184723M.051519 0.0068 0.0088
612	77R204		[]N 55 7 32.637700(0.0019M) W 101 6 47.619269(0.0015M) 285.6450(.0113415M.031628 0.0042 0.0054
613	804009		[]N 51 32 32.763230(0.0020M) W 98 11 15.318593(0.0016M) 271.4564(.0117869M.032871 0.0045 0.0056
614	82R311		[]N 50 56 57.306966(0.0021M) W 97 2 19.090048(0.0016M) 192.8018(.0121596M.033910 0.0046 0.0058
615	82R382		[]N 50 45 59.352227(0.0021M) W 98 1 5.053995(0.0016M) 232.2082(.0116948M.032614 0.0046 0.0057
616	23509		[]N 49 10 50.822579(0.0039M) W 106 3 16.482924(0.0028M) 926.2548(.0223163M.062248 0.0077 0.0109
617	23611	SAGE	[]N 49 9 18.428708(0.0038M) W 110 24 6.638920(0.0030M) 973.4196(.0172421M.048087 0.0083 0.0106
618	24503		[]N 49 1 26.526464(0.0024M) W 102 17 30.548795(0.0018M) 567.1050(.0135501M.037795 0.0050 0.0068
619	29513		[]N 52 32 50.434807(0.0032M) W 107 8 29.653033(0.0025M) 565.3395(.0199094M.055525 0.0068 0.0090
620	30504		[]N 52 56 12.232293(0.0035M) W 104 58 35.817648(0.0026M) 433.6098(.0208822M.058234 0.0072 0.0097
621	47605	ATHABASCA	[]N 53 24 30.260607(0.0036M) W 117 47 11.791557(0.0027M) 1566.8465(.0157192M.043836 0.0073 0.0101
622	57507		[]N 54 58 38.606666(0.0042M) W 105 21 53.692692(0.0029M) 369.6250(.0254871M.071078 0.0079 0.0119
623	58509		[]N 56 17 8.225574(0.0048M) W 103 35 23.090652(0.0033M) 460.4647(.0272506M.075997 0.0093 0.0136
624	61551		[]N 51 21 27.996870(0.0035M) W 102 0 19.225327(0.0026M) 504.4401(.0211665M.059028 0.0072 0.0096
625	61556		[]N 52 13 40.044567(0.0036M) W 102 34 27.270218(0.0026M) 557.2783(.0217223M.060577 0.0073 0.0102
626	61A189	61A189	[]N 53 16 54.231529(0.0032M) W 110 40 47.174563(0.0023M) 642.9701(.0153858M.042914 0.0065 0.0090
627	655016	ALSASK	[]N 51 29 10.647923(0.0028M) W 109 59 15.684305(0.0021M) 736.8892(.0132443M.036934 0.0058 0.0077
628	656009	ATLEE	[]N 50 47 29.190140(0.0032M) W 110 55 35.843088(0.0022M) 825.4938(.0132597M.036981 0.0063 0.0088
629	656025	ASTRO A	[]N 50 52 16.971069(0.0013M) W 114 17 36.607465(0.0011M) 1247.5282(.0068310M.019051 0.0029 0.0037
630	655007		[]N 52 44 28.783003(0.0037M) W 108 25 22.594164(0.0028M) 536.1137(.0225733M.062955 0.0078 0.0103
631	666200	HOUSE	[]N 55 55 0.819537(0.0030M) W 112 4 51.401711(0.0022M) 673.0336(.0118854M.033146 0.0061 0.0083
632	705026		[]N 51 41 47.025753(0.0038M) W 105 32 50.280364(0.0029M) 544.7921(.0226076M.063048 0.0080 0.0105
633	760004	MISERY	[]N 56 12 59.447700(0.0028M) W 117 18 43.022451(0.0022M) 489.8573(.0095697M.026699 0.0061 0.0076
634	765070		[]N 54 7 30.974636(0.0037M) W 108 30 15.291214(0.0028M) 456.6811(.0227677M.063495 0.0078 0.0104
635	765140		[]N 56 11 22.837280(0.0037M) W 108 50 35.116735(0.0027M) 433.0638(.0221936M.061895 0.0076 0.0103
636	775003		[]N 57 49 22.457640(0.0035M) W 103 52 25.305748(0.0026M) 390.2618(.0211962M.059111 0.0072 0.0097
637	775535	SEWARD	[]N 50 11 0.639405(0.0035M) W 108 3 59.160413(0.0025M) 874.3219(.0211327M.058936 0.0069 0.0098
638	776010	52114-2	[]N 52 29 40.747988(0.0036M) W 115 31 3.262132(0.0026M) 1165.4180(.0151821M.042343 0.0073 0.0102
639	77X1052	658+8.3	[]N 51 4 1.352910(0.0027M) W 113 54 15.348313(0.0019M) 1055.5541(.0119995M.033465 0.0053 0.0075
640	785016		[]N 51 16 12.508065(0.0039M) W 103 57 40.691312(0.0028M) 643.6226(.0237375M.066199 0.0078 0.0109
641	785344		[]N 49 52 47.897408(0.0028M) W 104 35 58.071770(0.0021M) 578.1363(.0155109M.043267 0.0058 0.0078

The GPS Height Transformation (v2.0)

651	46807	TESLIN	[]N 60 16 42.234506(0.0025M)	W132 45 21.870435(0.0019M)	1595.6995(.0138787M.038703	0.0052 0.0068
652	828102	WHSE VLBI	[]N 60 42 40.460179(0.0044M)	W135 4 37.401633(0.0033M)	710.2222(.0256785M.071610	0.0093 0.0124
653	889203	IQALUIT GPS88	[]N 63 44 47.442868(0.0012M)	W 68 32 44.638412(0.0009M)	20.8718(.0047185M.013164	0.0025 0.0032
654	7597027	CCM6	[]N 63 45 33.766241(0.0012M)	W 68 32 4.473231(0.0009M)	44.9525(.0050754M.014159	0.0026 0.0034
655	5799053	CCM28 PALUG3608	[]N 63 44 39.414736(0.0014M)	W 68 28 55.659393(0.0010M)	107.4315(.0056455M.015748	0.0029 0.0039
656	9297009	CCM49	[]N 63 44 54.933283(0.0014M)	W 68 30 44.256592(0.0010M)	45.6129(.0054666M.015250	0.0028 0.0038
657	959000	RESOLUTE TACP	[]N 74 43 6.671072(0.0020M)	W 94 59 0.464332(0.0017M)	67.6306(.0109045M.030420	0.0046 0.0056
658	749159	HOBSON RESOLUTE	[]N 74 43 8.210221(0.0021M)	W 94 59 15.093320(0.0017M)	56.9845(.0118598M.033104	0.0046 0.0057
659	569123	RESOLUTE SH	[]N 74 43 24.576015(0.0021M)	W 94 55 7.057136(0.0017M)	166.1986(.0117419M.032779	0.0047 0.0058
660	639045	COPPERMINE	[]N 67 49 13.859394(0.0016M)	W115 6 52.642017(0.0012M)	45.1488(.0037153M.010423	0.0033 0.0043
661	86T500	86T500	[]N 67 49 5.581077(0.0018M)	W115 7 55.921732(0.0013M)	6.9911(.0040155M.011282	0.0036 0.0047
662	7597050	2L27	[]N 67 49 5.190511(0.0016M)	W115 7 57.089378(0.0012M)	5.4937(.0037153M.010423	0.0033 0.0043
663	639513	HBC	[]N 64 19 4.877869(0.0017M)	W 96 1 58.704770(0.0012M)	-36.0724(.0065360M.018231	0.0032 0.0046
664	639509	BAKER	[]N 64 18 23.445182(0.0017M)	W 96 7 12.513382(0.0012M)	89.0954(.0067355M.018786	0.0034 0.0048
665	848130	848130	[]N 63 57 30.590008(0.0030M)	W138 41 39.905784(0.0019M)	455.2401(.0147460M.041127	0.0053 0.0084
666	78Y011		[]N 64 12 44.388153(0.0026M)	W138 33 34.755845(0.0018M)	746.1571(.0121491M.033881	0.0050 0.0073
667	78Y029		[]N 64 37 6.748835(0.0019M)	W138 21 53.257502(0.0014M)	1173.7607(.0079707M.022230	0.0038 0.0052
668	78Y036		[]N 64 50 16.448782(0.0018M)	W138 21 34.835176(0.0013M)	1014.2563(.0077476M.021609	0.0037 0.0051
669	78Y047	78Y047	[]N 65 4 5.345289(0.0015M)	W138 14 55.706184(0.0011M)	1026.6153(.0065328M.018219	0.0032 0.0042
670	78Y070		[]N 65 35 44.995556(0.0015M)	W138 9 57.703014(0.0011M)	529.5479(.0062004M.017294	0.0031 0.0041
671	78Y077	78Y077	[]N 65 46 20.180451(0.0015M)	W137 50 46.990428(0.0011M)	761.8868(.0062497M.017432	0.0031 0.0042
672	78Y117		[]N 66 15 37.859832(0.0015M)	W136 48 33.578378(0.0011M)	632.6736(.0061979M.017288	0.0031 0.0041
673	78Y130	BMT8Y130	[]N 66 33 54.264625(0.0021M)	W136 18 27.739588(0.0015M)	709.6259(.0089075M.024850	0.0042 0.0058
674	78T005		[]N 67 5 52.037932(0.0019M)	W136 7 31.749159(0.0013M)	712.3679(.0078420M.021879	0.0037 0.0051
675	78T018		[]N 67 14 40.473366(0.0020M)	W135 12 25.160825(0.0015M)	413.9120(.0086780M.024212	0.0041 0.0056
676	78T026		[]N 67 25 42.938441(0.0018M)	W134 51 55.693790(0.0013M)	19.4539(.0078388M.021872	0.0037 0.0051
677	76T021	BMT6T021	[]N 67 26 14.584751(0.0019M)	W133 46 17.337557(0.0014M)	49.7070(.0082069M.022894	0.0039 0.0053
678	7597019	CCM 30	[]N 68 18 7.732315(0.0013M)	W133 30 38.161124(0.0010M)	52.1542(.0043515M.012142	0.0029 0.0035
679	68T9000	FBI-1968	[]N 63 43 40.619196(0.0017M)	W 68 31 41.241802(0.0012M)	-4.7280(.0068401M.019083	0.0034 0.0048
680	82T9001	BM 1-1982	[]N 74 41 2.638971(0.0021M)	W 94 53 30.069269(0.0017M)	-5.4553(.0116658M.032565	0.0047 0.0057
681	71T9506	BM4-1971	[]N 74 40 57.941636(0.0023M)	W 94 53 58.116824(0.0018M)	-4.3278(.0123267M.034421	0.0049 0.0061
682	879241	EXPEDITOR	[]N 67 53 9.706108(0.0016M)	W115 13 23.485176(0.0016M)	-9.5229(.0046997M.013109	0.0044 0.0047
683	82T9400	BM6-1982	[]N 67 53 9.897165(0.0017M)	W115 13 27.057475(0.0015M)	-18.1021(.0045537M.012721	0.0042 0.0048
684	83T9401	BM26-1983	[]N 67 53 8.780090(0.0016M)	W115 13 34.836034(0.0015M)	-16.9797(.0043756M.012215	0.0041 0.0046
685	60T006	60T006 ECC	[]N 64 19 4.162126(0.0017M)	W 96 1 59.179836(0.0012M)	-37.5970(.0067915M.018944	0.0033 0.0047
686	M0092900	GEOMAGNETIC	[]N 69 22 31.386181(0.0014M)	W 81 48 4.734778(0.0011M)	-0.6864(.0062649M.017487	0.0029 0.0038
687	M0097000CLS150/151/124		[]N 69 22 36.371517(0.0013M)	W 81 48 37.203383(0.0010M)	23.4441(.0060636M.016925	0.0029 0.0037
688	W5018714		[]N 67 49 3.998443(0.0017M)	W115 8 5.072487(0.0013M)	2.1805(.0039371M.011059	0.0035 0.0046
689	86929000	86C17	[]N 64 19 5.884240(0.0013M)	W 96 0 19.598620(0.0010M)	6.5016(.0051329M.014316	0.0027 0.0037
690	86929001	86C32	[]N 64 19 17.214814(0.0017M)	W 96 6 10.205480(0.0012M)	56.6403(.0067319M.018777	0.0034 0.0048
691	621512	MACDONALD	[]N 45 45 1.558933(0.0014M)	W 62 5 11.365673(0.0013M)	279.9338(.0080540M.022461	0.0035 0.0040
692	691003		[]N 45 8 17.549436(0.0016M)	W 64 37 27.425782(0.0013M)	188.5523(.0084608M.023595	0.0036 0.0045
693	741000		[]N 45 43 11.629199(0.0014M)	W 63 48 18.751304(0.0012M)	90.0908(.0073898M.020610	0.0033 0.0038
694	741105		[]N 46 26 33.985011(0.0014M)	W 63 48 24.567810(0.0012M)	-2.9116(.0074080M.020659	0.0033 0.0040
695	NB941008		[]N 46 9 53.679421(0.0019M)	W 67 35 17.281394(0.0015M)	75.0807(.0107225M.029904	0.0042 0.0052
696	NB941009		[]N 46 7 58.566591(0.0014M)	W 65 57 18.178543(0.0011M)	26.8294(.0069430M.019363	0.0031 0.0039
697	NB941010		[]N 45 35 34.061409(0.0017M)	W 67 18 12.349883(0.0013M)	136.1163(.0086088M.024009	0.0037 0.0046
698	NB941011		[]N 47 1 25.010688(0.0019M)	W 67 39 31.205522(0.0014M)	191.4151(.01020245M.028454	0.0039 0.0053
699	NB941012		[]N 47 30 8.108528(0.0015M)	W 67 21 13.263015(0.0012M)	315.4928(.0082244M.022936	0.0034 0.0042
700	NB941013		[]N 46 45 28.099892(0.0015M)	W 66 31 48.756205(0.0012M)	315.6951(.0079373M.022136	0.0033 0.0041
701	NB941014		[]N 47 59 40.747909(0.0017M)	W 66 39 57.389063(0.0013M)	8.2154(.0084618M.023598	0.0036 0.0047
702	NB941015		[]N 47 31 31.802817(0.0017M)	W 64 57 24.504462(0.0013M)	-4.0607(.0082514M.023012	0.0037 0.0049
703	NB941016		[]N 47 4 35.182356(0.0017M)	W 65 24 58.529293(0.0013M)	7.4462(.0090380M.025206	0.0037 0.0048
704	NB941017		[]N 46 34 53.834861(0.0018M)	W 64 55 59.1594375(0.0014M)	1.6702(.0098434M.027451	0.0040 0.0051
705	NB941018		[]N 46 5 48.109990(0.0015M)	W 63 58 0.467208(0.0013M)	27.2929(.0080339M.022406	0.0035 0.0042
706	NB941019		[]N 45 46 51.047071(0.0019M)	W 65 20 8.244167(0.0015M)	28.5885(.0105276M.029359	0.0042 0.0052
707	NB941020		[]N 44 38 56.055592(0.0017M)	W 66 48 59.215641(0.0014M)	-8.4265(.0091505M.025519	0.0039 0.0049
708	NB941025		[]N 46 6 21.851162(0.0019M)	W 64 49 47.793481(0.0016M)	25.7288(.0095064M.026511	0.0044 0.0052
709	N13830		[]N 46 38 42.694155(0.0019M)	W 61 1 3.569360(0.0015M)	16.7344(.0103349M.028822	0.0041 0.0052
710	NS24069		[]N 45 6 11.431673(0.0020M)	W 63 25 40.675345(0.0015M)	46.6255(.0107634M.030019	0.0042 0.0055
711	NS29007		[]N 45 3 24.043780(0.0019M)	W 62 30 6.24885(0.0015M)	52.2228(.0109226M.030463	0.0042 0.0054
712	NS29008		[]N 45 19 10.795167(0.0018M)	W 61 28 57.048586(0.0014M)	213.6357(.0093299M.026019	0.0038 0.0049
713	NS29009		[]N 44 20 4.622835(0.0020M)	W 64 38 6.088527(0.0016M)	68.8019(.0109916M.030653	0.0044 0.0056
714	NS29010		[]N 43 40 16.333271(0.0024M)	W 65 26 2.043993(0.0018M)	-2.9996(.0127491M.035555	0.0050 0.0066
715	NS29011		[]N 44 32 51.198060(0.0020M)	W 65 46 52.289456(0.0016M)	125.2349(.0110616M.030861	0.0043 0.0056
716	NS29100		[]N 44 53 34.659236(0.0016M)	W 65 10 23.538012(0.0013M)	7.9669(.0082893M.023117	0.0035 0.0044
717	NS29101		[]N 46 9 42.545192(0.0019M)	W 60 15 37.705777(0.0015M)	30.6600(.0104174M.029051	0.0043 0.0052
718	NS29102		[]N 45 41 44.031852(0.0017M)	W 61 26 37.235744(0.0014M)	160.0379(.0091612M.025549	0.0038 0.0047
719	PE00146		[]N 46 2 23.759723(0.0015M)	W 62 41 17.456862(0.0013M)	55.5187(.0085845M.023941	0.0037 0.0043
720	PE00984		[]N 46 8 16.021227(0.0015M)	W 63 14 3.538138(0.0013M)	-4.7624(.0082727M.023070	0.0035 0.0043
721	PE05802		[]N 46 26 10.263953(0.0016M)	W 63 47 46.718054(0.0013M)	33.3018(.0083159M.023191	0.0036 0.0044
722	26225		[]N 47 2 5.325144(0.0017M)	W 70 54 6.217296(0.0013M)	-21.1684(.0099837M.027842	0.0037 0.0046
723	66KP026		[]N 46 32 7.879015(0.0027M)	W 70 50 19.136028(0.0019M)	288.6465(.0115910M.032324	0.0053 0.0075
724	66KP126	E-25	[]N 46 18 59.179566(0.0024M)	W 71 56 23.375440(0.0018M)	95.4010(.0110967M.030947	0.0049 0.0067
725	67KP369		[]N 45 53 16.570985(0.0028M)	W 72 32 20.210533(0.0020M)	64.6189(.0153482M.042817	0.0054 0.0078

The GPS Height Transformation (v2.0)

746	6530197	NCC 197	[]N 45 23 33.421603(0.0026M) W 75 23 30.356202(0.0019M) 37.7695(.0148185M.041325 0.0054 0.0071
747	653438	650438	[]N 43 26 29.565040(0.0022M) W 80 12 42.287284(0.0018M) 283.7447(.0131685M.036723 0.0049 0.0063
748	673007	STRATFORD	[]N 43 20 24.655459(0.0026M) W 81 0 32.184516(0.0020M) 328.3130(.0150035M.041841 0.0056 0.0071
749	670039		[]N 43 51 7.387015(0.0056M) W 79 3 16.011539(0.0048M) 50.1904(.0301562M.084178 0.0113 0.0167
750	683035	CHATAM CITY	[]N 42 23 48.152396(0.0050M) W 82 11 34.302351(0.0037M) 145.0584(.0306354M.085444 0.0102 0.0139
751	693503		[]N 43 1 16.465175(0.0021M) W 79 47 25.700826(0.0017M) 159.1380(.0126439M.035261 0.0047 0.0060
752	69U088	69U088	[]N 48 31 59.602677(0.0018M) W 89 33 2.144207(0.0016M) 326.1413(.0103724M.028926 0.0044 0.0052
753	690260	69U260	[]N 48 39 9.441510(0.0017M) W 85 26 45.452065(0.0014M) 361.3315(.0103933M.028984 0.0040 0.0049
754	71D8193	BM 193-71	[]N 48 42 46.595481(0.0022M) W 80 46 54.699022(0.0017M) 255.2480(.0130498M.036392 0.0047 0.0061
755	720219		[]N 44 45 56.725687(0.0024M) W 81 8 32.801080(0.0018M) 176.5876(.0146478M.040848 0.0051 0.0068
756	73D8505	738505	[]N 44 47 54.651367(0.0028M) W 76 40 45.323931(0.0020M) 194.7467(.0162398M.045293 0.0055 0.0077
757	77D8235	778235	[]N 45 30 0.751280(0.0025M) W 77 8 18.232646(0.0019M) 193.8801(.0147321M.041084 0.0053 0.0069
758	79U121		[]N 48 43 13.202926(0.0018M) W 94 35 15.208221(0.0015M) 299.2709(.0102398M.028556 0.0041 0.0050
759	79U216		[]N 44 52 21.265241(0.0023M) W 77 42 6.782171(0.0018M) 306.2396(.0141054M.039337 0.0051 0.0065
760	81D8270	818270	[]N 43 49 2.622739(0.0026M) W 81 9 50.341843(0.0020M) 309.5387(.0154742M.043155 0.0057 0.0073
761	81U190		[]N 43 25 52.855537(0.0026M) W 81 30 5.531924(0.0020M) 239.1539(.0150799M.042054 0.0056 0.0072
762	82D8084	828084	[]N 43 7 28.385080(0.0112M) W 80 20 37.074623(0.0066M) 207.1596(.0551531M.153833 0.0184 0.0312
763	84D0611	010840611	[]N 45 46 7.818569(0.0030M) W 80 37 11.539891(0.0022M) 144.3794(.0184450M.051445 0.0062 0.0084
764	84U112		[]N 45 7 46.062809(0.0029M) W 79 44 34.746768(0.0022M) 208.8396(.0176832M.049317 0.0060 0.0081
765	85U2904	RMY62-300	[]N 44 0 34.727116(0.0025M) W 79 28 8.796684(0.0018M) 215.4282(.0145524M.040584 0.0051 0.0069
766	873009	PIER 15	[]N 45 0 45.480391(0.0032M) W 74 47 11.351309(0.0028M) 31.0166(.0205919M.057431 0.0075 0.0091
767	87D5257	010875257	[]N 45 20 26.415421(0.0030M) W 79 12 59.219723(0.0023M) 309.3224(.0184875M.051560 0.0063 0.0084
768	883005		[]N 44 31 20.799149(0.0027M) W 76 41 40.030486(0.0021M) 136.8348(.0168973M.047126 0.0059 0.0076
769	883022		[]N 46 11 19.074993(0.0030M) W 77 52 20.820598(0.0023M) 140.3677(.0212518M.059265 0.0062 0.0084
770	883028		[]N 46 1 42.337554(0.0026M) W 79 20 21.391364(0.0020M) 280.8020(.0159202M.044397 0.0056 0.0073
771	883044		[]N 44 6 21.816046(0.0024M) W 78 59 41.917020(0.0022M) 217.9080(.0142055M.039617 0.0060 0.0068
772	883045		[]N 44 7 1.779859(0.0031M) W 79 19 1.084088(0.0021M) 220.5501(.0175579M.048969 0.0059 0.0087
773	883046		[]N 44 5 32.024527(0.0024M) W 79 39 52.261163(0.0018M) 209.0699(.0143342M.039975 0.0050 0.0066
774	883047		[]N 44 18 19.719473(0.0025M) W 80 51 18.233878(0.0018M) 313.7121(.0147536M.041143 0.0051 0.0069
775	883050		[]N 43 37 50.172042(0.0023M) W 80 4 9.464128(0.0018M) 328.4362(.0133489M.037227 0.0049 0.0063
776	883053		[]N 42 44 30.177963(0.0030M) W 81 42 53.699759(0.0023M) 186.2414(.0179134M.049956 0.0063 0.0083
777	883063		[]N 44 6 59.800346(0.0024M) W 80 17 12.252088(0.0018M) 473.0237(.0143352M.039977 0.0050 0.0068
778	913015	913015	[]N 47 14 17.982342(0.0024M) W 84 38 41.553100(0.0018M) 170.6308(.0141413M.039436 0.0050 0.0066
779	923002	923002	[]N 48 9 40.928790(0.0018M) W 80 0 24.209737(0.0014M) 307.0422(.0065307M.018213 0.0038 0.0051
780	93U194		[]N 49 0 51.045433(0.0022M) W 88 12 15.287935(0.0017M) 195.5945(.0130557M.036408 0.0048 0.0063
781	93U446		[]N 49 6 58.518524(0.0024M) W 85 54 31.103323(0.0018M) 285.1762(.0134870M.037611 0.0049 0.0068
782	93U541		[]N 46 17 20.485289(0.0027M) W 81 44 20.071059(0.0021M) 171.8468(.0158380M.044170 0.0057 0.0075
783	93U587		[]N 46 30 16.914091(0.0025M) W 80 34 42.78326(0.0019M) 191.4562(.0149207M.041610 0.0053 0.0071
784	93U605		[]N 46 24 24.865557(0.0026M) W 80 4 14.368202(0.0020M) 174.6020(.0155273M.043302 0.0055 0.0073
785	93U711		[]N 46 46 0.695315(0.0020M) W 79 48 26.529737(0.0015M) 257.5211(.0112481M.031369 0.0042 0.0055
786	95D0200	008950200	[]N 46 15 14.503964(0.0028M) W 82 33 56.886048(0.0021M) 221.7316(.0165584M.046177 0.0059 0.0077
787	96D0303	008960303	[]N 45 40 8.456830(0.0034M) W 79 44 35.758184(0.0025M) 247.4875(.0207323M.057822 0.0068 0.0094
788	D12037	008710400	[]N 48 47 22.008864(0.0023M) W 86 38 42.638622(0.0017M) 221.5735(.0134039M.037379 0.0048 0.0066
789	D15608	008740602	[]N 45 34 46.248727(0.0025M) W 77 25 41.706830(0.0019M) 151.5882(.0147069M.041014 0.0053 0.0069
790	D18706	008810595	[]N 43 57 11.879987(0.0073M) W 79 16 42.581092(0.0065M) 209.3713(.0446228M.124510 0.0149 0.0225
791	D25693	009724290	[]N 43 57 48.433522(0.0023M) W 79 51 15.057695(0.0018M) 242.2298(.0141032M.039330 0.0050 0.0065
792	D45848	00890632	[]N 46 14 55.538380(0.0030M) W 78 11 0.200059(0.0022M) 253.4906(.0171430M.047814 0.0061 0.0083
793	D46369	008910574	[]N 48 32 42.217902(0.0023M) W 88 54 39.460641(0.0017M) 180.7208(.0130713M.036452 0.0048 0.0063
794	D48690	008940177	[]N 49 13 30.672775(0.0017M) W 92 44 55.340515(0.0014M) 425.1850(.0095473M.026625 0.0039 0.0048
795	D48691	008930200	[]N 48 43 8.334657(0.0018M) W 93 3 46.611097(0.0015M) 323.7853(.0105314M.029369 0.0042 0.0051
796	D48692	008960229	[]N 42 59 26.159087(0.0026M) W 82 3 59.393745(0.0020M) 185.2088(.0151165M.042156 0.0057 0.0072
797	D48693	008970105	[]N 44 34 39.378717(0.0024M) W 80 53 13.183579(0.0018M) 197.1002(.0145378M.040541 0.0051 0.0068
798	D48694	008970111	[]N 42 55 8.269897(0.0022M) W 78 57 52.570504(0.0017M) 152.7096(.0128694M.035890 0.0048 0.0061
799	D48695	008970110	[]N 43 13 47.333585(0.0022M) W 79 57 5.173487(0.0017M) 185.5642(.0127283M.035647 0.0048 0.0060
800	D48696	008970109	[]N 43 30 56.764383(0.0023M) W 79 41 58.764660(0.0017M) 135.6845(.0133549M.037243 0.0049 0.0063
801	D48697	008971107	[]N 45 3 21.855210(0.0032M) W 75 27 32.927308(0.0027M) 45.7883(.0201979M.056329 0.0074 0.0092
802	D48698	008970107	[]N 44 24 19.960477(0.0023M) W 77 2 12.831744(0.0018M) 136.2555(.0135775M.037864 0.0050 0.0064
803	D48699	00880537	[]N 44 47 32.026626(0.0031M) W 77 10 37.923217(0.0023M) 241.6316(.0197213M.054998 0.0064 0.0086
804	D48700	008970108	[]N 45 1 24.384663(0.0029M) W 76 46 31.533401(0.0021M) 277.7197(.0171485M.047825 0.0057 0.0080
805	D48701	008940203	[]N 45 14 46.954923(0.0025M) W 78 53 32.245369(0.0019M) 286.6360(.0147929M.041255 0.0051 0.0070
806	D48702	008970104	[]N 44 32 21.195973(0.0024M) W 79 27 22.232487(0.0018M) 210.8340(.0138836M.038717 0.0050 0.0066
807	D48703	008950190	[]N 45 30 26.724606(0.0034M) W 78 43 34.284086(0.0027M) 404.4019(.0213896M.059655 0.0076 0.0094
808	D48704	008970100	[]N 46 21 46.242415(0.0025M) W 80 49 39.539552(0.0019M) 190.3050(.0147957M.041263 0.0052 0.0071
809	D48705	008970101	[]N 45 35 16.406371(0.0031M) W 82 0 54.022489(0.0023M) 157.1001(.0181185M.050532 0.0063 0.0086
810	D48706	008970102	[]N 45 45 33.467800(0.0023M) W 85 5 40.480680(0.0017M) 206.6978(.0131470M.036663 0.0047 0.0064
811	D48707	008970103	[]N 47 39 27.420174(0.0020M) W 80 42 18.203476(0.0015M) 355.8259(.0116225M.032414 0.0043 0.0056
812	D48708	008970106	[]N 43 50 58.739592(0.0025M) W 79 21 36.008994(0.0019M) 147.1393(.0150990M.042109 0.0052 0.0071
813	D48710	008970113	[]N 46 19 59.398502(0.0013M) W 79 28 59.597565(0.0010M) 209.1218(.0068313M.019051 0.0029 0.0035
814	D48711	008970112	[]N 43 43 22.121809(0.0015M) W 79 29 12.950120(0.0012M) 167.8610(.0083606M.023315 0.0033 0.0042
815	79U168	79U168	[]N 48 36 17.389661(0.0021M) W 93 28 21.739398(0.0016M) 316.0216(.0121949M.034008 0.0046 0.0058
816	22507		[]N 49 0 42.992406(0.0046M) W 107 28 19.0099(0.0035M) 881.0721(.0269644M.075227 0.0098 0.0126
817	23510		[]N 49 8 45.894207(0.0058M) W 105 47 42.463075(0.0044M) 902.7978(.0385678M.107564 0.0122 0.0163
818	23513		[]N 49 1 59.872764(0.0052M) W 105 2 29.189046(0.0036M) 808.7118(.0272967M.076154 0.0101 0.0144
819	23516		[]N 49 1 29.466923(0.0040M) W 103 50 44.068137(0.0029M) 696.0907(.0232716M.064913 0.0080 0.0112
820	24501		[]N 49 7 18.449466(0.0042M) W 102 55 9.924062(0.0031M) 566.5843(.0262599M.073234 0.0086 0.0116
821	24508		[]N 49 2 42.152651(0.0038M) W 101 24 32.542720(0.0028M) 466.8582(.0223669M.062391 0.0078 0.0107
822	29522B		[]N 52 33 55.620013(0.0039M) W 105 47 51.638526(0.0030M) 558.2156(.0247083M.068904 0.0085 0.0110
823	48511		[]N 49 51 46.477336(0.0045M) W 105 25 17.295486(0.0033M) 858.2765(.0264676M.073823 0.0089 0.0126
824	625506		[]N 52 9 30.976117(0.0041M) W 103 31 57.040246(0.0031M) 588.8292(.0243801M.067992 0.0084 0.0115
825	745143		[]N 50 25 33.579109(0.0047M) W 105 27 57.691076(0.0033M) 555.8480(.0294111M.082024 0.0092 0.130
826	75VP037		[]N 53 12 34.901180(0.0043M) W 105 44 15.178570(0.0032M) 403.7595(.0267872M.074704 0.0088 0.0119
827	765047B		[]N 49 52 22.747451(0.0044M) W 109 58 16.360672(0.0032M) 827.7238(.0261708M.072985 0.0089 0.0122
828	765059		[]N 50 34 19.671743(0.0040M) W 109 57 50.355509(0.0030M) 746.8087(.0231542M.064582 0.0082 0.0110
829	775016		[]N 53 4 28.707187(0.0042M) W 104 0 6.164441(0.0030M) 352.6611(.0253947M.070820 0.0084 0.0116
830	775021		[]N 53 27 56.255351(0.0037M) W 103 54 12.317743(0.0028M) 347.5831(.0232564M.064857 0.0080 0.0104
831	775511		[]N 54 23 52.804810(0.0039M) W 109 21 11.027047(0.0031M) 529.5672(.0242610M.067656 0.0085 0.0109

The GPS Height Transformation (v2.0)

841	785593	[]N 52 8 36.863529(0.0053M) W106 43 5.320614(0.0040M) 481.6602(.0307223M.085692 0.0105 0.0151
842	805092	[]N 51 58 7.370496(0.0045M) W109 24 22.894749(0.0035M) 673.0860(.0292336M.081524 0.0097 0.0126
843	805531	[]N 53 32 23.085255(0.0043M) W103 25 51.574640(0.0031M) 289.1910(.0240761M.067148 0.0085 0.0121
844	825002	[]N 56 46 10.258193(0.0042M) W108 56 15.042435(0.0033M) 464.2872(.0262149M.073105 0.0091 0.0119
845	82V061	[]N 51 28 44.456571(0.0050M) W101 34 14.477201(0.0035M) 565.7481(.0288041M.080325 0.0096 0.0142
846	XY507US	[]N 48 59 59.754577(0.0047M) W109 45 22.199946(0.0033M) 837.1145(.0247865M.069142 0.0091 0.0129
847	1867029	[]N 55 48 38.630349(0.0041M) W120 0 4.836139(0.0030M) 639.6750(.0220836M.061604 0.0080 0.0114
848	55A019	[]N 49 27 53.321338(0.0039M) W112 36 35.713751(0.0032M) 953.3440(.0129785M.036200 0.0090 0.0109
849	61A139	[]N 53 30 36.904969(0.0038M) W112 5 28.092890(0.0029M) 617.2191(.0141288M.039422 0.0077 0.0108
850	656008	[]N 49 56 55.344070(0.0031M) W110 35 47.137796(0.0023M) 759.6064(.0173934M.048512 0.0064 0.0087
851	67A215	[]N 54 2 9.5557785(0.0037M) W113 1 32.622767(0.0027M) 625.3943(.0121356M.033849 0.0075 0.0104
852	716023	[]N 52 9 14.118746(0.0039M) W111 8 34.288927(0.0038M) 905.1156(.0227520M.063481 0.0100 0.0111
853	71A235	[]N 52 20 55.625043(0.0037M) W116 19 19.497842(0.0028M) 1314.2804(.0155666M.043413 0.0077 0.0103
854	756011	[]N 51 10 59.873123(0.0035M) W113 42 8.840547(0.0026M) 973.0716(.0187481M.052286 0.0072 0.0097
855	76X054	[]N 50 54 52.644961(0.0042M) W114 27 14.891783(0.0030M) 1247.3144(.0226725M.063229 0.0085 0.0116
856	776001	[]N 54 32 44.356440(0.0028M) W110 18 30.113295(0.0020M) 541.6167(.0132591M.036978 0.0054 0.0079
857	776371	[]N 55 15 25.115731(0.0056M) W114 43 49.170428(0.0098M) 587.8040(.0307623M.086371 0.0153 0.0256
858	776394	108720 []N 55 29 56.034932(0.0061M) W114 55 28.133669(0.0046M) 558.9040(.0315861M.088090 0.0127 0.0170
859	776518	[]N 54 28 17.084130(0.0038M) W110 54 48.452756(0.0033M) 536.2302(.0204416M.057026 0.0090 0.0105
860	776532	[]N 54 27 23.562943(0.0039M) W111 12 8.846494(0.0029M) 552.3127(.0204238M.056959 0.0076 0.0111
861	77A025	[]N 53 34 55.465434(0.0057M) W116 20 9.166072(0.0036M) 858.3890(.0175610M.048977 0.0100 0.0158
862	77X1003	[]N 50 51 47.249221(0.0051M) W114 2 50.672391(0.0039M) 1045.8788(.0257822M.071963 0.0109 0.0139
863	77X1072	[]N 51 9 15.078815(0.0047M) W113 57 29.686909(0.0029M) 1079.2252(.0207836M.057969 0.0080 0.0131
864	77X369	68312 []N 55 21 14.162021(0.0048M) W114 59 4.495653(0.0048M) 563.6693(.0138958M.038856 0.0118 0.0145
865	77X379	[]N 54 8 7.518425(0.0051M) W115 44 22.445277(0.0039M) 732.2461(.0254795M.071074 0.0108 0.0141
866	77X385	505+92-903 []N 49 42 12.109864(0.0040M) W112 46 2.431439(0.0034M) 897.0798(.0113568M.031675 0.0094 0.0111
867	78A103	78A103 []N 52 49 11.127792(0.0042M) W113 27 14.817453(0.0031M) 783.4150(.0149373M.041670 0.0083 0.0119
868	79X102	[]N 55 59 3.187755(0.0039M) W111 58 52.547506(0.0028M) 680.1353(.0223152M.062230 0.0078 0.0109
869	80A625	[]N 55 17 39.499881(0.0038M) W114 46 34.907751(0.0037M) 561.2333(.0119038M.033229 0.0101 0.0108
870	80A718	[]N 55 24 58.435575(0.0038M) W116 17 39.556536(0.0029M) 574.4800(.0097863M.027296 0.0081 0.0106
871	80X387	[]N 54 28 54.217018(0.0038M) W116 46 56.940714(0.0027M) 777.3988(.0202463M.056461 0.0077 0.0107
872	81X126	[]N 55 17 13.752637(0.0041M) W118 36 56.564090(0.0034M) 691.5609(.0125144M.034916 0.0095 0.0113
873	81X157	[]N 55 11 58.477665(0.0043M) W118 18 29.415895(0.0031M) 594.1032(.0221229M.061706 0.0082 0.0121
874	81X370	[]N 55 22 27.415304(0.0034M) W116 27 47.667743(0.0025M) 593.6324(.0186691M.052067 0.0071 0.0094
875	82A127	[]N 56 13 57.017389(0.0035M) W117 36 35.893831(0.0028M) 632.8829(.0099985M.027938 0.0076 0.0096
876	82A140	[]N 56 29 44.877473(0.0032M) W117 39 49.050544(0.0026M) 618.3256(.0105461M.029445 0.0072 0.0088
877	82A283	[]N 58 29 12.514874(0.0164M) W117 10 12.354635(0.0114M) 306.3400(.0736194M.205374 0.0283 0.0475
878	82A287	[]N 58 31 13.952963(0.0049M) W117 8 0.249450(0.0050M) 305.2780(.0122723M.034401 0.0127 0.0143
879	82X158	[]N 52 34 54.175379(0.0046M) W113 39 50.437120(0.0032M) 839.5277(.0227353M.063401 0.0088 0.0128
880	82X205	[]N 53 44 36.213556(0.0036M) W112 45 1.692761(0.0032M) 634.4075(.0206830M.057689 0.0087 0.0102
881	83A291	83A291 []N 52 3 35.938285(0.0036M) W111 18 49.710701(0.0028M) 756.8262(.0137759M.038426 0.0077 0.0100
882	83X050	333088 []N 58 20 25.733124(0.0141M) W116 0 36.437527(0.0143M) 255.6712(.0480994M.135922 0.0241 0.0455
883	83X593	[]N 49 37 59.941146(0.0038M) W114 29 5.102462(0.0027M) 1315.3529(.0216269M.060312 0.0075 0.0108
884	84X034	[]N 53 36 52.444203(0.0038M) W112 15 47.186458(0.0030M) 649.8125(.0199446M.055628 0.0078 0.0111
885	84X422	52116-229 []N 52 28 44.205896(0.0017M) W116 4 15.592805(0.0015M) 1301.6303(.0089529M.024977 0.0041 0.0047
886	85A075	85A075 []N 54 20 26.356573(0.0045M) W110 4 48.069816(0.0030M) 518.3031(.0168241M.046917 0.0077 0.0129
887	85X013	[]N 52 23 4.959859(0.0050M) W114 51 36.682376(0.0044M) 980.4571(.0282306M.078746 0.0120 0.0140
888	85X178	[]N 53 16 45.326701(0.0048M) W117 31 26.569715(0.0035M) 1370.7535(.0293251M.081781 0.0096 0.0134
889	85X242	[]N 53 19 51.175862(0.0017M) W117 45 16.543471(0.0013M) 1200.5296(.0096355M.026871 0.0037 0.0048
890	86A458	86A458 []N 53 24 54.443009(0.0036M) W117 33 24.122608(0.0026M) 979.7411(.0155245M.043302 0.0071 0.0102
891	87X024	[]N 53 22 8.351192(0.0043M) W117 39 20.206840(0.0031M) 1015.6225(.0196881M.054918 0.0084 0.0121
892	89E012	[]N 53 15 37.107505(0.0045M) W117 45 52.992288(0.0034M) 1107.3068(.0232624M.064879 0.0090 0.0129
893	89E016	[]N 51 2 0.643023(0.0037M) W115 2 26.555514(0.0033M) 1360.7981(.0179957M.050214 0.0089 0.0104
894	89E017	[]N 50 48 22.462184(0.0048M) W115 9 50.291992(0.0060M) 1558.3189(.0212486M.059440 0.0123 0.0171
895	90E003	[]N 54 11 12.579628(0.0039M) W115 47 8.873719(0.0037M) 724.6837(.0137901M.038530 0.0101 0.0108
896	90E020	[]N 55 46 40.539316(0.0035M) W112 11 34.842986(0.0030M) 642.3349(.0135050M.037672 0.0084 0.0097
897	90E031	954478 []N 58 30 53.747490(0.0047M) W116 27 38.445867(0.0042M) 289.7933(.0114096M.032031 0.0113 0.0129
898	90E049	90E049 []N 50 42 23.686031(0.0034M) W112 14 19.512170(0.0025M) 764.0908(.0150474M.041963 0.0070 0.0095
899	A101782	[]N 54 28 17.269093(0.0043M) W110 13 57.480900(0.0029M) 516.1312(.0223836M.062425 0.0078 0.0122
900	A106864	[]N 54 23 15.471644(0.0042M) W110 10 5.109192(0.0028M) 518.8333(.0222931M.062173 0.0077 0.0118
901	A128850	[]N 56 44 4.880681(0.0042M) W111 23 24.394984(0.0032M) 227.0212(.0237118M.066125 0.0090 0.0118
902	A144915	[]N 50 6 40.967710(0.0038M) W110 43 57.576813(0.0027M) 708.8423(.0184365M.051424 0.0074 0.0106
903	A150722	[]N 55 10 22.191125(0.0059M) W118 43 5.070826(0.0048M) 660.7374(.0290455M.081021 0.0134 0.0165
904	A156224	[]N 56 16 36.289458(0.0032M) W117 22 12.103673(0.0025M) 543.9405(.0191779M.053484 0.0070 0.0089
905	A176917	[]N 49 35 18.761702(0.0051M) W114 9 56.847593(0.0052M) 1183.9901(.0256506M.071662 0.0118 0.0161
906	A179036	[]N 53 34 30.804281(0.0057M) W116 24 33.917866(0.0039M) 580.4511(.0250044M.069740 0.0107 0.0159
907	A18523	[]N 53 23 22.582459(0.0037M) W117 35 22.831418(0.0027M) 1056.0204(.0173434M.048373 0.0072 0.0103
908	A185660	[]N 49 33 43.749267(0.0045M) W114 16 43.859620(0.0034M) 1204.8537(.0239865M.066930 0.0094 0.0124
909	A192070	[]N 53 34 41.674870(0.0051M) W116 30 27.378861(0.0036M) 930.8142(.0250481M.069860 0.0101 0.0142
910	A217430	[]N 55 11 59.190663(0.0060M) W118 51 34.422478(0.0049M) 644.9757(.0292214M.081514 0.0135 0.0165
911	A223446	[]N 53 35 43.119353(0.0059M) W116 26 2.288024(0.0037M) 910.7919(.0255897M.071369 0.0103 0.0165
912	A227868	[]N 49 40 35.893789(0.0050M) W112 54 52.853617(0.0070M) 922.8542(.0259323M.072419 0.0139 0.0191
913	A230581	[]N 49 58 39.183054(0.0034M) W110 45 46.264399(0.0026M) 706.4752(.0181872M.050729 0.0071 0.0095
914	A238311	[]N 52 13 46.979903(0.0057M) W113 43 8.047937(0.0047M) 883.3897(.0307210M.085680 0.0131 0.0158
915	A240465	[]N 53 55 41.876437(0.0040M) W118 57 28.305712(0.0031M) 1096.1942(.0220196M.061413 0.0084 0.0112
916	A240911	[]N 49 44 5.522305(0.0046M) W112 36 2.915941(0.0039M) 845.5218(.0241081M.067241 0.0107 0.0127
917	A24125	[]N 56 45 5.325290(0.0047M) W111 26 16.359428(0.0033M) 336.0976(.0259779M.072450 0.0093 0.0132
918	A267195	[]N 53 2 49.265843(0.0045M) W12 48 44.287830(0.0041M) 719.3383(.0239612M.066933 0.0102 0.0132
919	A268201	[]N 53 29 25.833462(0.0042M) W112 1 2.079031(0.0031M) 613.9377(.0212062M.059165 0.0082 0.0119
920	A272138	[]N 56 40 51.730221(0.0041M) W111 20 23.613330(0.0032M) 328.8069(.0231984M.064693 0.0090 0.0114
921	A295832	[]N 50 35 59.583726(0.0044M) W111 54 47.823715(0.0034M) 740.2922(.0238599M.066544 0.0093 0.0126
922	A307389	[]N 52 58 27.207269(0.0039M) W112 49 58.789597(0.0033M) 718.6443(.0221375M.061743 0.0089 0.0111
923	A309781	[]N 55 26 49.610789(0.0033M) W116 29 19.469806(0.0024M) 573.8173(.0183366M.051137 0.0068 0.0092
924	A318675	[]N 55 24 13.802635(0.0038M) W116 31 1.763424(0.0028M) 580.9798(.0214773M.059896 0.0079 0.0107
925	A342378	[]N 55 12 17.141673(0.0059M) W118 47 40.272264(0.0048M) 674.3246(.0290768M.081111 0.0134 0.0165
926	A350280	350280 []N 58 29 16.226975(0.0171M) W117 10 8.532893(0.0266M) 306.4992(.1071982M.302182 0.0458 0.0611
927	A37754	[]N 52 22 14.743285(0.0050M) W114 57 39.843663(0.0043M) 949.6966(.0290266M.080968 0.0118 0.0140
928	A422238	[]N 56 39 46.284760(0.0041M) W111 19 22.693380(0.0032M) 347.8178(.0229354M.063960 0.0090 0.0113
929	A43703	[]N 52 20 49.598826(0.0050M) W113 50 32.513831(0.0044M) 883.6271(.0280382M.078212 0.0122 0.0139
930	A444356	[]N 58 30 59.693887(0.0068M) W117 5 6.862509(0.0054M) 302.3704(.0402837M.112381 0.

The GPS Height Transformation (v2.0)

936	A604405	[]N 53 53 12.181435(0.0046M) W119 5 16.187695(0.0034M) 1106.2539(.0264922M.073882	0.0094 0.0129
937	A605915	[]N 53 54 13.949087(0.0037M) W119 10 5.119859(0.0029M) 949.8788(.0200425M.055913	0.0080 0.0103
938	A688622	[]N 53 52 3.963741(0.0041M) W119 9 21.324943(0.0031M) 1109.9098(.0223678M.062391	0.0086 0.0115
939	A696609	[]N 50 32 34.327917(0.0049M) W111 54 17.002673(0.0035M) 753.7448(.0242238M.067561	0.0092 0.0141
940	A730556	[]N 50 33 21.462041(0.0035M) W111 49 59.174358(0.0027M) 734.9893(.0171782M.047905	0.0069 0.0103
941	A74567	[]N 49 37 31.594782(0.0043M) W114 37 34.268291(0.0028M) 1362.2002(.0230710M.064348	0.0078 0.0119
942	A863936	[]N 50 5 29.785672(0.0034M) W110 48 2.451690(0.0026M) 725.2434(.0182594M.050930	0.0071 0.0095
943	A88120	[]N 56 15 40.918893(0.0036M) W117 17 4.851500(0.0028M) 319.2703(.0213540M.059550	0.0077 0.0101
944	A949164	[]N 54 9 8.515906(0.0036M) W113 8 28.652725(0.0027M) 628.2378(.0204236M.056958	0.0074 0.0102
945	A95273	[]N 50 55 22.410839(0.0040M) W113 55 24.752797(0.0027M) 1013.4176(.0202151M.056376	0.0073 0.0112
946	A96024	[]N 55 8 2.162215(0.0059M) W118 44 37.376096(0.0048M) 631.7158(.0291726M.081376	0.0134 0.0165
947	A988493	[]N 54 9 7.813356(0.0051M) W115 38 20.260456(0.0039M) 668.1622(.0254069M.070873	0.0109 0.0141
948	99701US AIS1	[]N 55 4 8.646313(0.0014M) W131 35 58.256080(0.0011M) 32.2121(.0080983M.022584	0.0032 0.0039
949	99702US GUS2	[]N 58 25 3.915119(0.0015M) W135 41 49.303031(0.0012M) 19.7199(.0089425M.024939	0.0034 0.0042
950	99703US NEAH	[]N 48 17 52.259948(0.0007M) W124 37 29.607679(0.0007M) 460.1270(.0039785M.011095	0.0020 0.0021
951	99704US SEDR	[]N 48 31 17.590630(0.0019M) W122 13 25.792832(0.0014M) 30.1737(.0114227M.031855	0.0040 0.0052
952	99705US WHD1	[]N 48 18 45.760059(0.0019M) W122 41 46.057452(0.0014M) 14.1731(.0116799M.032574	0.0039 0.0052
953	77301US LAKEPORT	[]N 43 8 25.503903(0.0027M) W8 29 41.897502(0.0022M) 145.8945(.0177877M.049604	0.0062 0.0077
954	83301US A 293	[]N 46 29 2.311368(0.0017M) W8 34 37 56.454145(0.0014M) 151.3114(.0099951M.027873	0.0038 0.0047
955	94101US	[]N 44 24 16.053687(0.0043M) W8 68 0.43.561791(0.0035M) -17.8299(.0266014M.074201	0.0096 0.0119
956	94102US	[]N 46 8 0.597487(0.0037M) W8 68 4.55.242394(0.0026M) 192.4256(.0211566M.059003	0.0072 0.0103
957	94301US ESSEX A	[]N 43 37 42.574411(0.0024M) W8 83 50 17.623619(0.0019M) 143.7139(.0145683M.040628	0.0052 0.0066
958	95501US AA2866, DAKOTA	[]N 46 49 15.290034(0.0019M) W100 49 9.613183(0.0017M) 532.4426(.0103762M.028936	0.0046 0.0053
959	95502US Q256 TJ0152	[]N 48 10 29.599102(0.0018M) W106 36 32.630938(0.0015M) 621.7244(.0116111M.032381	0.0042 0.0051
960	95503US HAVR CBL 1230	[]N 48 32 47.071344(0.0017M) W109 46 22.750752(0.0015M) 769.6882(.0110515M.030820	0.0041 0.0048
961	95601US SHELBY TL0751	[]N 48 32 25.610485(0.0017M) W111 52 2.265839(0.0015M) 1030.5583(.0110004M.030676	0.0041 0.0047
962	95602US MEYERS SS0418	[]N 47 20 25.205452(0.0018M) W110 31 16.162617(0.0015M) 1333.8565(.0113401M.031626	0.0042 0.0050
963	96401US AA2869	[]N 47 44 42.564721(0.0022M) W 90 20 4.663363(0.0017M) 156.0965(.0120872M.033713	0.0048 0.0062
964	96402US TB0641	[]N 48 34 4.822238(0.0019M) W9 23 53.741048(0.0015M) 328.6659(.0113834M.031749	0.0043 0.0054
965	96403US TD1252	[]N 48 45 37.896241(0.0019M) W9 96 56 20.665277(0.0016M) 222.4604(.0117850M.032865	0.0044 0.0053
966	44701US Z 264 1944	[]N 48 32 29.333699(0.0018M) W117 53 15.096482(0.0013M) 551.4260(.0101878M.028411	0.0037 0.0051
967	86F9000	[]N 56 32 39.322567(0.0017M) W61 41 16.550210(0.0013M) -4.9280(.0091386M.025486	0.0037 0.0048
968	89F9032	[]N 53 20 39.202787(0.0025M) W60 24 3.598365(0.0019M) -7.3486(.0145598M.040603	0.0053 0.0071
969	9375001 TERA	[]N 54 28 21.978746(0.0038M) W128 34 33.6558471(0.0031M) 206.9887(.0217070M.060536	0.0087 0.0107
970	907001 ALBH VLBI	[]N 48 23 22.308793(0.0010M) W123 29 12.991932(0.0009M) 25.5382(.0028847M.008045	0.0024 0.0028
971	867001 PGC	[]N 48 38 54.940516(0.0024M) W123 27 3.823743(0.0020M) 1.9229(.0117609M.032814	0.0054 0.0068
972	09702 SHERINGHAM	[]N 48 22 38.879896(0.0046M) W125 55 22.455650(0.0036M) -1.5112(.0164457M.045997	0.0100 0.0124
973	677018 TRIANGLE	[]N 48 25 2.517356(0.0013M) W123 30 40.00108(0.0010M) 203.1417(.0030083M.008839	0.0028 0.0036
974	11703 DOUGLAS	[]N 48 29 35.051373(0.0012M) W123 20 48.282357(0.0010M) 206.4206(.0069429M.019361	0.0028 0.0033
975	877025 PORT RENFREW 87	[]N 48 33 22.558453(0.0015M) W124 24 1.676324(0.0014M) 23.5296(.0039527M.011036	0.0039 0.0040
976	917000 917000	[]N 48 49 27.774059(0.0062M) W123 43 6.451990(0.0035M) 30.0243(.0329631M.091931	0.0097 0.0172
977	907002 BAMFIELD	[]N 48 49 41.534512(0.0014M) W125 8 0.950832(0.0012M) 18.6587(.0078960M.022020	0.0032 0.0039
978	90C02 AMPHITRITE	[]N 48 55 32.300624(0.0052M) W125 32 29.721305(0.0036M) 9.6241(.0224230M.062534	0.0101 0.0145
979	84C065 84C065	[]N 48 55 55.311420(0.0069M) W124 47 8.606598(0.0039M) 303.4010(.0337993M.094265	0.0106 0.0191
980	917001 917001	[]N 49 4 13.265570(0.0080M) W123 52 50.54.57133(0.0044M) 19.2649(.0401031M.111842	0.0121 0.0222
981	767004 BDY B, AIRPORT	[]N 49 4 39.267606(0.0012M) W122 59 45.015919(0.0010M) -18.4239(.0078293M.021834	0.0027 0.0032
982	867010 867010	[]N 49 5 2.595852(0.0015M) W125 50 28.689223(0.0012M) 107.4079(.0080478M.022444	0.0034 0.0041
983	77C3023 9048-77	[]N 49 15 38.504471(0.0084M) W125 22 13.806650(0.0048M) 190.0515(.0419720M.117050	0.0133 0.0235
984	84C004 84C004	[]N 49 16 14.052343(0.0089M) W124 11 32.478000(0.0049M) 8.2853(.0444985M.124101	0.0135 0.0247
985	917002 917002	[]N 49 17 45.533898(0.0093M) W124 55 32.546460(0.0052M) 38.3677(.0472708M.131837	0.0143 0.0258
986	73C066 73C066	[]N 49 18 13.475268(0.0114M) W124 27 39.875923(0.0063M) 116.1906(.0592111M.165129	0.0174 0.0317
987	5009501 H.S. 128-1950	[]N 49 20 14.378065(0.0010M) W123 15 11.872282(0.0009M) -14.1564(.0073174M.020406	0.0025 0.0028
988	917003 917003	[]N 49 27 3.115459(0.0083M) W124 43 1.100144(0.0049M) 49.0278(.0442354M.123367	0.0135 0.0231
989	66C2000 L.S. BM-1966	[]N 49 40 45.043308(0.0095M) W126 7 2.873619(0.0055M) -11.0307(.0466499M.130096	0.0146 0.0267
990	767021 COMOX	[]N 49 41 48.533486(0.0094M) W124 51 59.528445(0.0057M) 13.3458(.0515815M.143859	0.0156 0.0264
991	77C3018 9032-77	[]N 49 52 58.085771(0.0016M) W125 41 52.677924(0.0013M) 221.4341(.0086826M.024215	0.0035 0.0046
992	77C014 77C014	[]N 49 53 43.965168(0.0108M) W125 8 50.597270(0.0067M) -12.6544(.0584755M.163083	0.0181 0.0305
993	917004 917004	[]N 50 6 41.354461(0.0084M) W125 20 36.175996(0.0055M) 38.0432(.0474849M.132422	0.0151 0.0235
994	917005 917005	[]N 50 13 16.873458(0.0116M) W125 32 54.297569(0.0066M) 149.8551(.0628816M.175377	0.0181 0.0322
995	89C676 89C676	[]N 50 15 14.689705(0.0094M) W126 45 25.730500(0.0056M) 117.6575(.0516778M.144114	0.0156 0.0264
996	89C640 89C640	[]N 50 17 38.233961(0.0096M) W126 18 20.535392(0.0055M) 321.6737(.0524454M.146259	0.0152 0.0270
997	78HT001 BM 747	[]N 50 20 10.458024(0.0096M) W125 54 45.00.005612(0.0055M) -5.2536(.0533570M.148802	0.0152 0.0268
998	89C703 89C703	[]N 50 29 59.837694(0.0101M) W126 59 31.156403(0.0062M) 68.0759(.0550903M.153636	0.0168 0.0284
999	90C072 90C072	[]N 50 32 35.604430(0.0121M) W128 1 50.091353(0.0076M) 21.2929(.0588885M.164226	0.0189 0.0350
1000	757030 KLUCKSWI 2	[]N 50 34 21.814425(0.0013M) W127 9 49.983835(0.0012M) 345.6018(.0080351M.022407	0.0032 0.0037
1001	89C727 89C727	[]N 50 39 42.170677(0.0094M) W127 22 16.835666(0.0057M) 37.6662(.0524337M.146224	0.0154 0.0265
1002	90C040 90C040	[]N 50 42 7.141115(0.0102M) W127 44 18.675562(0.0062M) 283.0407(.0561974M.156721	0.0170 0.0286
1003	87C9766 87C9766	[]N 48 25 27.040158(0.0030M) W123 22 14.177616(0.0023M) -13.0755(.0171434M.047808	0.0065 0.0084
1004	7979149 PEA (32018)	[]N 48 31 53.731355(0.0190M) W124 27 37.546898(0.0035M) -9.4137(.0756216M.230458	0.0356 0.0542
1005	7073001 TOFINO	[]N 49 9 14.789649(0.0330M) W125 54 34.981548(0.0376M) -13.7612(.1116679M.311621	0.0913 0.1049
1006	427015 RACE ROCKS	[]N 48 17 55.267757(0.0063M) W123 33 55.291586(0.0052M) -7.5371(.0162040M.167994	0.0135 0.0181
1007	79H1099 POST 79H1099	[]N 48 18 57.323897(0.0012M) W123 39 2.947557(0.0010M) 49.9255(.0080619M.022482	0.0027 0.0032
1008	7872900 0210B	[]N 48 22 37.565698(0.0018M) W123 55 15.145461(0.0014M) -5.1939(.0138467M.038614	0.0039 0.0050
1009	10700 DISCOVERY	[]N 48 25 31.641660(0.0012M) W123 13 36.793177(0.0010M) 12.3798(.0081589M.022753	0.0028 0.0032
1010	897156 JORDAN RIDGE	[]N 48 27 53.123833(0.0017M) W124 6 12.492288(0.0014M) 552.4806(.0118197M.032962	0.0038 0.0047
1011	097019 CONSPICUOUS	[]N 48 27 55.510548(0.0014M) W123 40 24.721344(0.0012M) 658.2216(.0106772M.029775	0.0032 0.0039
1012	31704 BONILLA 3	[]N 48 35 38.166685(0.0024M) W124 42 58.284500(0.0019M) -15.2672(.0177374M.049464	0.0051 0.0069
1013	897155 LAZAR	[]N 48 36 43.717323(0.0014M) W123 49 26.988238(0.0012M) 827.9959(.0097535M.027200	0.0033 0.0040
1014	8779763 SATURNA	[]N 48 46 26.872330(0.0012M) W123 10 17.070273(0.0010M) 382.1676(.0044760M.012483	0.0029 0.0033
1015	897154 YOUBOU	[]N 48 54 3.806021(0.0015M) W124 15 43.863258(0.0013M) 767.0791(.0108221M.030181	0.

The GPS Height Transformation (v2.0)

1031	847002	GLACIER GEOD	[]N 49 33 7.831078(0.0014M) W125 21 51.855150(0.0011M) 1951.3954(.0080262M.022383 0.0032 0.0039
1032	46H0095	PIERCE	[]N 49 37 8.281991(0.0013M) W126 7 18.945356(0.0011M) 1387.4739(.0070459M.019649 0.0030 0.0035
1033	34HN034	BEECHER	[]N 49 38 59.684321(0.0015M) W125 13 24.441949(0.0012M) 1370.3920(.0086430M.024104 0.0035 0.0043
1034	927011	WASH	[]N 49 45 8.502859(0.0015M) W125 17 48.952987(0.0012M) 1561.2903(.0081033M.022598 0.0033 0.0041
1035	347019	WASHINGTON	[]N 49 45 11.767435(0.0068M) W125 17 46.636583(0.0054M) 1575.0210(.0480252M.133971 0.0143 0.0192
1036	827008	ANA	[]N 49 47 20.380146(0.0013M) W126 32 49.298499(0.0011M) 1104.7042(.0072392M.020188 0.0030 0.0035
1037	667013	ANNA	[]N 50 29 26.308240(0.0016M) W125 18 55.020414(0.0013M) 1145.2425(.0093301M.026020 0.0036 0.0045
1038	957000	NANO WCDA	[]N 49 17 41.300055(0.0006M) W124 5 11.265189(0.0007M) 6.8367(.0024383M.006800 0.0018 0.0018
1039	967000	WSLR WCDA	[]N 50 7 35.523824(0.0006M) W122 55 16.222662(0.0006M) 909.5457(.0030511M.008509 0.0017 0.0018
1040	937002	ALICE	[]N 50 27 28.550134(0.0013M) W127 31 9.205347(0.0011M) 11.5608(.0076480M.021328 0.0031 0.0037
1041	937003	KOPRINO	[]N 50 29 9.075862(0.0019M) W127 53 57.882797(0.0015M) 217.8321(.0110324M.030766 0.0042 0.0053
1042	937005	MOORE	[]N 50 33 24.557901(0.0040M) W128 5 1.012639(0.0033M) 102.3916(.0245119M.068358 0.0093 0.0111
1043	937006	JENSEN	[]N 50 38 44.880378(0.0017M) W128 15 54.168904(0.0014M) 370.7220(.0097638M.027228 0.0039 0.0047
1044	937004	SCARLET	[]N 50 39 12.678355(0.0018M) W128 0 27.188562(0.0014M) -12.6707(.0105151M.029323 0.0040 0.0050
1045	897151	ST. PATRICK	[]N 50 40 39.126831(0.0016M) W128 19 36.188476(0.0013M) 404.6327(.0090517M.025243 0.0037 0.0043
1046	937001	HARDY	[]N 50 41 53.899997(0.0019M) W127 22 51.593811(0.0015M) -10.6765(.0108673M.030306 0.0042 0.0052
1047	937001a	HARDY	[]N 50 41 53.900355(0.0063M) W127 22 51.593928(0.0049M) -10.6475(.0110295M.030758 0.0135 0.0176
1048	20701	SHUSHARTIE	[]N 50 46 51.358054(0.0013M) W127 48 33.881771(0.0011M) 623.4656(.0072821M.020308 0.0030 0.0035
1049	21703	COX	[]N 50 48 48.526513(0.0015M) W128 35 56.938595(0.0012M) 147.6847(.0086692M.024176 0.0035 0.0041
1050	21701	BULLOCK	[]N 50 57 40.974230(0.0013M) W127 6 34.881840(0.0012M) 609.1825(.0081632M.022764 0.0032 0.0037
1051	20702	ROBINSON	[]N 51 11 10.065449(0.0015M) W127 36 4.078475(0.0013M) 504.5929(.0090617M.025270 0.0036 0.0042
1052	20703	SEYMOUR	[]N 51 27 52.847362(0.0017M) W127 16 46.898171(0.0014M) 1290.4064(.0104556M.029157 0.0040 0.0047
1053	21704	CALVERT	[]N 51 32 38.409627(0.0019M) W127 57 13.964598(0.0016M) 853.4550(.0111199M.031010 0.0044 0.0052
1054	21705	KING	[]N 51 51 15.623936(0.0019M) W127 46 17.007353(0.0016M) 1038.4690(.0117434M.032749 0.0044 0.0053
1055	867007	PACHENA	[]N 48 51 53.319073(0.0019M) W125 2 35.368987(0.0016M) 630.0857(.0104674M.029191 0.0043 0.0054
1056	867008	FREDY	[]N 48 59 6.502233(0.0017M) W125 30 24.714250(0.0014M) 720.2793(.0096502M.026912 0.0039 0.0048
1057	867006	GREY GEOD	[]N 48 59 43.884695(0.0011M) W124 42 15.291457(0.0009M) 1314.3983(.0056680M.015806 0.0025 0.0029
1058	27721	HANDY	[]N 49 4 9.419713(0.0011M) W124 57 31.916472(0.0010M) 1233.3910(.0062307M.017376 0.0027 0.0031
1059	867005	PAT	[]N 49 8 17.072339(0.0013M) W124 42 54.205647(0.0011M) 1223.7797(.0074865M.020878 0.0031 0.0038
1060	867013	FOURTH TRY	[]N 49 11 30.162489(0.0012M) W125 16 56.290809(0.0010M) 1519.9451(.0066956M.018672 0.0028 0.0033
1061	867002	ANDERSON	[]N 49 12 15.502955(0.0013M) W125 2 0.696432(0.0011M) 1243.3161(.0074768M.020851 0.0031 0.0038
1062	27717A	ARROWSMITH A	[]N 49 13 25.590562(0.0013M) W124 35 40.801613(0.0011M) 1802.4300(.0070852M.019759 0.0030 0.0036
1063	907008	BALLENAS I	[]N 49 20 50.608616(0.0011M) W124 9 30.391216(0.0009M) 29.2433(.0056874M.015861 0.0025 0.0029
1064	867004	MARK MT	[]N 49 21 50.348501(0.0015M) W124 44 2.618500(0.0012M) 949.1784(.0082651M.023049 0.0035 0.0043
1065	27718	JOAN	[]N 49 24 54.700146(0.0016M) W124 55 12.435163(0.0013M) 1540.7900(.0087022M.024268 0.0035 0.0043
1066	907004	TOBY	[]N 49 29 23.173291(0.0011M) W124 39 51.407395(0.0009M) -9.4595(.0059337M.016547 0.0026 0.0031
1067	11707	SHEPHERD	[]N 49 32 4.566387(0.0014M) W124 11 14.644242(0.0012M) 868.3677(.0078248M.021821 0.0032 0.0040
1068	907005	SECHELT	[]N 49 35 54.309673(0.0015M) W123 52 38.070409(0.0012M) 1113.9723(.0081723M.022790 0.0033 0.0041
1069	50H1407	DAVIES	[]N 49 35 55.042094(0.0013M) W124 19 11.659577(0.0011M) 744.0278(.0073228M.020421 0.0030 0.0037
1070	50H1408	POCAHONTAS	[]N 49 42 34.298586(0.0013M) W124 26 42.291046(0.0011M) 470.4121(.0072869M.020321 0.0030 0.0037
1071	907006	EARLS COVE	[]N 49 45 10.171661(0.0014M) W123 58 32.747366(0.0011M) 111.3513(.0078090M.021777 0.0031 0.0038
1072	907007	POWELL	[]N 49 48 24.079818(0.0014M) W124 27 20.116554(0.0011M) 181.0572(.0075619M.021088 0.0031 0.0038
1073	947002	947002	[]N 48 49 16.894462(0.0073M) W125 7 9.230814(0.0059M) 48.1487(.0431138M.120242 0.0162 0.0205
1074	27725	BOLD BLUFF	[]N 48 52 0.860026(0.0014M) W125 17 23.931371(0.0012M) 4.6418(.0082286M.022948 0.0033 0.0041
1075	90C501	90C501	[]N 48 56 22.284504(0.0008M) W125 32 44.237356(0.0008M) 10.4103(.0041515M.011577 0.0022 0.0024
1076	967002	WICKANINNISH	[]N 49 0 42.843285(0.0015M) W125 40 32.399306(0.0012M) -12.8410(.0084645M.023607 0.0034 0.0041
1077	75C9000	HS2-1975	[]N 49 15 53.993187(0.0015M) W124 8 15.911456(0.0012M) -13.3169(.0085930M.023964 0.0034 0.0042
1078	77C006		[]N 49 13 1.444950(0.0037M) W123 12 7.317178(0.0029M) -15.8518(.0216199M.060293 0.0081 0.0103
1079	77C576		[]N 50 2 27.632952(0.0019M) W125 14 50.145918(0.0016M) -10.9770(.0109588M.030560 0.0043 0.0054
1080	78C9501	BM 2-1978	[]N 48 39 8.797543(0.0021M) W123 26 52.849043(0.0016M) -15.3522(.0119374M.033290 0.0044 0.0058
1081	86H1360	ZEBALLOS	[]N 49 58 46.758323(0.0034M) W126 50 42.764161(0.0029M) -12.7024(.0193562M.053985 0.0074 0.0099
1082	97C9104		[]N 49 20 14.851611(0.0040M) W123 15 11.674188(0.0030M) -9.3361(.0236296M.065897 0.0083 0.0111
1083	97C9106		[]N 49 9 13.361803(0.0035M) W125 54 14.448493(0.0027M) -2.6753(.0204376M.056998 0.0075 0.0096
1084	97C9107		[]N 48 50 7.230365(0.0036M) W125 8 6.483985(0.0029M) 9.5347(.0213186M.059452 0.0081 0.0101
1085	98C9101		[]N 50 43 27.073424(0.0035M) W127 29 29.411372(0.0026M) -11.3554(.0194322M.054191 0.0072 0.0097
1086	98C9102		[]N 50 23 38.637963(0.0101M) W125 57 34.064361(0.0092M) -8.1016(.0486910M.136087 0.0186 0.0320
1087	98C9103		[]N 54 19 2.008115(0.0035M) W130 19 22.459797(0.0026M) 10.5154(.0180897M.050446 0.0065 0.0103
1088	98C9104		[]N 53 15 12.193324(0.0067M) W132 4 12.025939(0.0056M) -1.5757(.0338368M.094475 0.0128 0.0202
1089	98C9105		[]N 49 17 13.401959(0.0146M) W123 6 35.771033(0.0086M) -14.1374(.0738487M.205960 0.0226 0.0413
1090	98C9106		[]N 52 8 45.889068(0.0030M) W128 5 21.801895(0.0022M) -8.8757(.0166442M.046418 0.0062 0.0085
1091	98C9107		[]N 49 40 46.461821(0.0022M) W126 7 34.739573(0.0018M) -10.3326(.0127933M.035676 0.0049 0.0063
1092	98C9108		[]N 52 22 30.195810(0.0041M) W126 47 43.031263(0.0027M) -8.4157(.0215103M.059997 0.0074 0.0115
1093	907011	907011	[]N 48 23 22.061814(0.0007M) W123 29 11.577000(0.0007M) 23.7636(.0042901M.011964 0.0019 0.0021
1094	76HP5R0	PIER #5	[]N 48 29 26.923407(0.0011M) W123 23 9.204759(0.0009M) 16.8266(.0029254M.008159 0.0025 0.0031
1095	91H0480	MALAHAT	[]N 48 35 4.885677(0.0013M) W123 31 46.867140(0.0010M) 277.8864(.0033283M.009284 0.0028 0.0035
1096	967003	SCHOONER	[]N 49 17 21.567309(0.0033M) W124 8 6.626484(0.0031M) -13.0192(.0204319M.056997 0.0084 0.0095
1097	667015	66C101	[]N 49 17 40.096743(0.0032M) W124 5 10.430923(0.0024M) 8.5676(.0194496M.054243 0.0068 0.0090
1098	957000B	NANO REF B	[]N 49 17 41.790546(0.0032M) W124 5 10.748277(0.0024M) 5.1139(.0193979M.054100 0.0068 0.0090
1099	947001B	UCLU REF B	[]N 48 55 30.662290(0.0025M) W125 32 29.399389(0.0019M) 4.7449(.0146026M.040724 0.0053 0.0069
1100	677016	SPEEDY	[]N 48 24 48.753010(0.0011M) W123 19 30.949518(0.0009M) 47.8501(.0026294M.007334 0.0025 0.0030
1101	84H0238	8362608	[]N 48 25 8.490003(0.0012M) W124 24 41.661684(0.0009M) -11.2500(.0028279M.007891 0.0026 0.0033
1102	80H3866		[]N 48 26 18.597048(0.0044M) W123 17 41.695478(0.0031M) -10.5257(.0089858M.025123 0.0076 0.0126
1103	86H1398		[]N 48 26 24.289528(0.0019M) W123 28 36.977975(0.0013M) 45.1714(.0037067M.010374 0.0036 0.0051
1104	86H2500125_001		[]N 48 26 37.807091(0.0018M) W123 21 42.682005(0.0013M) 6.1286(.0040036M.011166 0.0037 0.0049
1105	677017	TOILMIE	[]N 48 27 24.424744(0.0076M) W123 19 32.126753(0.0056M) 105.1384(.0142687M.040559 0.0143 0.0206
1106	21710	SAANICH	[]N 48 31 6.817951(0.0069M) W123 24 54.483613(0.0042M) 176.5562(.0128038M.035846 0.0115 0.0192
1107	77H6138		[]N 48 34 40.431563(0.0087M) W123 26 57.933502(0.0060M) 46.1285(.0162789M.045437 0.0152 0.0252
1108	64H3300	ELK	[]N 48 35 4.206644(0.0127M) W123 31 48.396441(0.0078M) 282.0248(.0230516M.064562 0.0215 0.0350
1109	79H0493	B614438	[]N 48 39 11.551343(0.0013M) W125 25 64.652926(0.0012M) -4.3793(.0030523M.008513 0.0033 0.0036
1110	11702	BRUCE	[]N 48 46 1.049483(0.0152M) W123 30 26.772255(0.0117M) 684.4113(.0305071M.086458 0.0264 0.0437
1111	B103556		[]N 48 38 41.843213(0.0019M) W123 28 0.880917(0.0015M) -17.1324(.0038040M.010609 0.0041 0.0052
1112	B108530		[]N 48 29 40.884657(0.0019M) W123 29 4.461972(0.0013M) 139.9132(.0038828M.010831 0.0036 0.0052
1113	B109132		[]N 48 27 24.171747(0.0018M) W123 29 20.992634(0.0013M) 55.1016(.0036785M.010262 0.0035 0.0050
1114	B126672		[]N 48 32 3.220405(0.0021M) W123 26 15.210786(0.0014M) 33.4480(.0040749M.011364 0.0039 0.0059
1115	B127662	99H2263	[]N 48 29 46.732527(0.0028M) W123 59 29.018311(0.0020M) 374.5374(.0057100M.015940 0.0055 0.0077

The GPS Height Transformation (v2.0)

1126	B194662	99H2254	[]N 48 44 2.618394(0.0024M) W123 11 36.368418(0.0018M) -14.6391(.0048561M.013553 0.0047 0.0069
1127	B200840	99H2270	[]N 48 20 24.592120(0.0028M) W123 32 35.360632(0.0021M) -5.4787(.0054593M.015276 0.0057 0.0080
1128	B202408	99H2266	[]N 48 30 37.207548(0.0021M) W123 43 33.291484(0.0016M) 232.1768(.0045536M.012710 0.0044 0.0058
1129	B208025	99H2255	[]N 48 46 30.775538(0.0022M) W123 22 0.754772(0.0016M) -10.6015(.0044875M.012517 0.0045 0.0061
1130	B211458		[]N 48 29 29.422737(0.0017M) W123 25 15.479304(0.0012M) 30.6519(.0036262M.010113 0.0033 0.0047
1131	B21584		[]N 48 33 4.527062(0.0020M) W123 25 53.778609(0.0014M) 107.9653(.0041815M.011666 0.0039 0.0057
1132	B222869		[]N 48 25 41.797954(0.0012M) W123 25 13.860841(0.0009M) -2.4390(.0028702M.008005 0.0026 0.0033
1133	B230003		[]N 48 31 56.732244(0.0020M) W123 29 55.790648(0.0014M) 191.3289(.0043053M.012013 0.0040 0.0056
1134	B236232		[]N 48 24 34.398130(0.0016M) W123 32 24.017799(0.0012M) 43.9471(.0035921M.010017 0.0035 0.0045
1135	B237073		[]N 48 31 34.648994(0.0021M) W123 24 43.420419(0.0014M) 104.9756(.0041677M.011630 0.0037 0.0059
1136	B241778		[]N 48 41 1.805387(0.0018M) W123 24 45.561830(0.0015M) 7.2834(.0041716M.011638 0.0041 0.0051
1137	B254201		[]N 48 25 50.646655(0.0016M) W123 21 31.456507(0.0012M) 6.6315(.0037209M.010377 0.0035 0.0044
1138	B254359		[]N 48 27 35.504479(0.0018M) W123 30 40.919985(0.0013M) 60.9657(.0039670M.011065 0.0036 0.0050
1139	B255885		[]N 48 25 47.129950(0.0014M) W123 27 28.298124(0.0010M) -15.9995(.0032557M.009097 0.0029 0.0038
1140	B26864	CON.MON. #9	[]N 48 39 53.750172(0.0019M) W123 33 5.594401(0.0014M) 34.7071(.0040496M.011302 0.0040 0.0053
1141	B293092		[]N 48 37 54.776337(0.0018M) W123 28 4.593277(0.0014M) -1.8278(.0043023M.012003 0.0039 0.0051
1142	B295741	77H2550	[]N 48 46 48.812085(0.0023M) W123 41 48.493228(0.0017M) -7.7380(.0048184M.013448 0.0047 0.0065
1143	B304469		[]N 48 27 13.392060(0.0019M) W123 15 58.269328(0.0014M) -11.7629(.0038690M.010799 0.0039 0.0052
1144	B304923		[]N 48 40 18.176886(0.0020M) W123 28 49.202658(0.0016M) -7.7765(.0039390M.011018 0.0045 0.0056
1145	72C023	BM 72C023	[]N 48 24 42.226678(0.0017M) W123 18 7.723931(0.0013M) -10.2389(.0038064M.010638 0.0035 0.0048
1146	B325757	99H2261	[]N 48 30 50.126277(0.0027M) W124 17 18.115251(0.0021M) 192.1368(.0058724M.016400 0.0057 0.0076
1147	B362582		[]N 48 37 0.246348(0.0024M) W123 25 55.400003(0.0016M) 118.3052(.0046053M.012946 0.0045 0.0066
1148	B363358		[]N 48 23 37.614487(0.0020M) W123 30 36.515330(0.0016M) 44.8118(.0045567M.012714 0.0045 0.0057
1149	B370254	CHS 28-1959	[]N 48 52 17.925428(0.0023M) W123 18 37.691726(0.0018M) -15.2291(.0053165M.014835 0.0049 0.0065
1150	B378042		[]N 48 31 19.075141(0.0022M) W123 26 21.059232(0.0015M) 37.1014(.0046366M.012953 0.0041 0.0062
1151	B381673		[]N 48 29 50.295901(0.0018M) W123 30 40.882565(0.0013M) 126.5748(.0037175M.010368 0.0035 0.0050
1152	B384982	99H2274	[]N 48 34 20.570653(0.0014M) W123 22 2.515547(0.0011M) -17.8006(.0032405M.009037 0.0031 0.0039
1153	B38869	LIZARD	[]N 48 36 26.186172(0.0046M) W124 13 30.531473(0.0033M) 54.7506(.0094824M.026975 0.0083 0.0124
1154	B395442		[]N 48 30 26.2161400(0.0019M) W123 21 25.481917(0.0015M) 8.0465(.0043071M.012023 0.0042 0.0053
1155	B412171		[]N 48 31 23.363879(0.0018M) W123 33 6.569350(0.0013M) 129.3215(.0039215M.010940 0.0036 0.0050
1156	B418541	657H016	[]N 48 27 49.925798(0.0013M) W123 16 34.367913(0.0010M) -15.8725(.0030731M.008574 0.0028 0.0036
1157	B420265		[]N 48 27 19.291270(0.0016M) W123 27 35.15867(0.0011M) -6.4297(.0034188M.009535 0.0032 0.0045
1158	B422311		[]N 48 26 0.374377(0.0018M) W123 19 26.158438(0.0013M) -4.4686(.0039542M.011036 0.0036 0.0049
1159	B431411		[]N 48 32 36.209722(0.0021M) W123 22 34.814457(0.0015M) -0.1971(.0043468M.012130 0.0041 0.0057
1160	B440172	WILLEY LEGAL	[]N 48 48 56.297747(0.0023M) W123 19 28.737247(0.0017M) -15.2351(.0049291M.013747 0.0048 0.0064
1161	B463950		[]N 48 34 46.657291(0.0020M) W123 27 45.404443(0.0015M) 10.2152(.0043567M.012157 0.0042 0.0056
1162	B465575		[]N 48 27 58.234590(0.0015M) W123 21 23.373919(0.0011M) 23.1738(.0034551M.009636 0.0032 0.0041
1163	B46938		[]N 48 38 40.022221(0.0017M) W123 24 0.631889(0.0013M) -16.3177(.0036787M.010262 0.0037 0.0047
1164	B473066		[]N 48 31 26.559971(0.0018M) W123 31 30.444587(0.0014M) 235.7532(.0040253M.011240 0.0037 0.0050
1165	B480392		[]N 48 33 16.659003(0.0020M) W123 24 2.644773(0.0014M) 73.9687(.0042850M.011951 0.0040 0.0055
1166	B482398	EAST POINT 99	[]N 48 47 0.907636(0.0015M) W123 2 42.426471(0.0016M) -7.9331(.0035648M.009963 0.0042 0.0044
1167	B487512		[]N 48 30 21.502043(0.0026M) W123 51 15.183531(0.0019M) 421.5689(.0054259M.015147 0.0053 0.0073
1168	B492603	99H2268	[]N 48 21 33.710768(0.0023M) W123 44 28.249197(0.0017M) 1.6849(.0047147M.013154 0.0047 0.0064
1169	B500884		[]N 48 39 58.235289(0.0016M) W123 26 15.748134(0.0014M) -11.9624(.0035118M.009798 0.0039 0.0045
1170	B513093		[]N 48 37 48.551429(0.0015M) W123 26 29.684921(0.0013M) 36.0737(.0032867M.009169 0.0035 0.0042
1171	B519819		[]N 48 27 51.063955(0.0016M) W123 22 58.727687(0.0012M) -5.0724(.0035228M.0099830 0.0034 0.0046
1172	B526442		[]N 48 26 52.996635(0.0019M) W123 20 0.135413(0.0014M) 10.5105(.0042512M.011867 0.0039 0.0054
1173	B533224		[]N 48 24 54.617526(0.0015M) W123 29 6.975509(0.0011M) 58.0599(.0034338M.009598 0.0030 0.0040
1174	B542597		[]N 48 41 22.445100(0.0020M) W123 28 27.752957(0.0016M) 6.2926(.0043874M.012241 0.0044 0.0057
1175	B546374	99H2258	[]N 48 47 41.196567(0.0025M) W123 29 41.557423(0.0018M) 104.2764(.0048883M.013641 0.0049 0.0070
1176	B553343		[]N 48 38 53.105801(0.0015M) W123 26 23.913040(0.0013M) -7.5293(.0032393M.009036 0.0037 0.0043
1177	B555029		[]N 48 30 34.367403(0.0017M) W123 30 44.984416(0.0013M) 142.9538(.0037694M.010513 0.0035 0.0048
1178	B565044		[]N 48 26 57.031213(0.0020M) W123 17 46.112270(0.0015M) -13.9529(.0041304M.011519 0.0043 0.0057
1179	B574822	99H2271	[]N 48 39 31.593498(0.0030M) W123 41 56.075794(0.0021M) 131.7663(.0062596M.017473 0.0058 0.0084
1180	B600411	ESQUQUIMALT-ACP	[]N 48 25 45.330856(0.0008M) W123 25 43.292150(0.0008M) 21.4477(.0022901M.006387 0.0022 0.0023
1181	B611566		[]N 48 25 56.504942(0.0020M) W123 18 15.736995(0.0016M) -15.5420(.0042487M.011853 0.0044 0.0055
1182	B635896		[]N 48 41 44.785123(0.0019M) W123 26 3.877079(0.0015M) 35.9452(.0041737M.011651 0.0042 0.0052
1183	B644054		[]N 48 27 54.623038(0.0016M) W123 27 1.814920(0.0011M) 17.0122(.0034708M.009681 0.0031 0.0044
1184	B655084		[]N 48 37 58.975556(0.0015M) W123 24 49.870529(0.0013M) -9.5624(.0033614M.009374 0.0036 0.0043
1185	B656215		[]N 48 34 33.631421(0.0019M) W123 26 0.738378(0.0014M) 33.7206(.0042336M.011808 0.0038 0.0052
1186	B657817		[]N 48 36 55.580513(0.0019M) W123 24 7.968562(0.0014M) -7.2562(.0040909M.011408 0.0039 0.0052
1187	B667303		[]N 48 35 38.921000(0.0017M) W123 23 40.800209(0.0013M) -7.3163(.0036370M.010147 0.0037 0.0046
1188	B673251		[]N 48 35 52.163320(0.0017M) W123 25 50.187277(0.0013M) 19.2829(.0035764M.009973 0.0036 0.0046
1189	B680165		[]N 48 25 50.105487(0.0021M) W123 32 34.986222(0.0014M) 51.6033(.0043894M.012250 0.0040 0.0058
1190	B691741		[]N 48 30 32.552612(0.0019M) W123 31 49.860623(0.0014M) 204.2357(.0044341M.012131 0.0038 0.0053
1191	B698241	99H2260	[]N 48 35 18.439019(0.0030M) W123 51 51.267626(0.0023M) -10.7872(.0063539M.018250 0.0064 0.0087
1192	B709485		[]N 48 34 20.753131(0.0015M) W123 23 45.788205(0.0012M) 1.3464(.0034551M.009636 0.0033 0.0043
1193	B716712		[]N 48 26 8.923880(0.0015M) W123 30 39.435372(0.0011M) 46.3590(.0033652M.009386 0.0032 0.0042
1194	B727727		[]N 48 29 19.812454(0.0018M) W123 18 46.718058(0.0013M) 35.9504(.0037158M.010371 0.0035 0.0050
1195	B740282		[]N 48 33 27.617604(0.0016M) W123 22 19.601543(0.0012M) 8.9842(.0037243M.010391 0.0034 0.0045
1196	B760983		[]N 48 28 13.514081(0.0016M) W123 29 22.143478(0.0011M) 75.7210(.0034514M.009625 0.0031 0.0043
1197	B89548	B761288	[]N 48 22 56.034233(0.0031M) W123 51 51.267626(0.0023M) -10.7872(.0063539M.018250 0.0064 0.0087
1198	B775817		[]N 48 27 57.935465(0.0018M) W123 18 24.0496424(0.0013M) 40.3260(.0036974M.010320 0.0035 0.0050
1199	B779462		[]N 48 33 26.453219(0.0021M) W123 30 19.948133(0.0015M) -10.3114(.0042075M.011736 0.0042 0.0057
1200	B797811		[]N 48 30 34.943636(0.0016M) W123 27 0.089239(0.0012M) 55.3747(.0035380M.009867 0.0032 0.0046
1201	B799015	99H2256	[]N 48 23 53.069942(0.0040M) W123 58 4.669816(0.0029M) 46.3436(.00379027M.022115 0.0076 0.0113
1202	B821074		[]N 48 30 34.436210(0.0018M) W123 28 42.216582(0.0013M) 157.8127(.0039509M.011026 0.0036 0.0049
1203	B822932		[]N 48 30 32.134778(0.0017M) W123 25 7.517225(0.0012M) 55.4021(.0036506M.010180 0.0034 0.0049
1204	B832576		[]N 48 30 20.390502(0.0014M) W123 23 6.530869(0.0011M) 66.0289(.0034836M.009722 0.0031 0.0040
1205	B836957		[]N 48 27 35.721986(0.0019M) W123 32 55.5854071(0.0013M) 56.5744(.0040339M.011254 0.0037 0.0053
1206	B842088		[]N 48 25 56.569418(0.0014M) W123 22 55.246785(0.0011M) 3.4639(.0033848M.009441 0.0031 0.0039
1207	B855999		[]N 48 24 53.730521(0.0014M) W123 23 6.227453(0.0010M) -12.6905(.0030619M.008546 0.0029 0.0039
1208	B864264		[]N 48 27 10.816025(0.0018M) W123 31 56.846805(0.0013M) 47.0294(.0039102M.010915 0.0035 0.0050
1209	B883561		[]N 48 29 50.178112(0.0021M) W123 32 1.484219(0.0014M) 197.2487(.0045009M.012564 0.0039 0.0058
1210	92C059	B904037	[]N 48 39 22.413602(0.0042M) W124 27 50.238464(0.0033M) 107.9789(.0094348M.026513 0.0089 0.0115
1211	B913681		[]N 48 27 55.894175(0.0017M) W123 25 2.641854(0.0012M) 10.7016(.0035417M.009878 0.0033 0.0048
1212	B917278		[]N 48

The GPS Height Transformation (v2.0)

1221	B967166	[]N 48 32 23.581788(0.0017M) W123 24 51.320148(0.0012M) 50.5084(.0037218M.010381 0.0035 0.0047
1222	B972828	[]N 48 27 54.141886(0.0020M) W123 19 49.955039(0.0014M) 21.1773(.0040839M.011399 0.0040 0.0057
1223	B979161 99H2253	[]N 48 58 34.034581(0.0030M) W123 32 23.333389(0.0021M) 57.4603(.0064766M.018073 0.0059 0.0084
1224	B986463	[]N 48 28 51.253389(0.0018M) W123 30 30.800114(0.0013M) 94.8330(.0037311M.010406 0.0036 0.0051
1225	B993675	[]N 48 31 59.759368(0.0017M) W123 27 33.261383(0.0012M) 130.3314(.0037113M.010351 0.0035 0.0048
1226	B995464 94H1534	[]N 48 30 13.188928(0.0015M) W123 33 16.190686(0.0011M) 138.2587(.0034285M.009562 0.0032 0.0042
1227	36704A FRASER REF A	[]N 51 58 26.940910(0.0019M) W122 13 46.945528(0.0015M) 1314.3231(.0120757M.033678 0.0040 0.0052
1228	897071	[]N 52 15 13.809628(0.0018M) W122 6 57.930927(0.0014M) 766.1183(.0116638M.032529 0.0039 0.0050
1229	937011B WILL REF B	[]N 52 14 11.867396(0.0012M) W122 10 1.757097(0.0010M) 1085.9717(.0071366M.019902 0.0029 0.0034
1230	947003	[]N 52 11 11.816672(0.0019M) W122 14 7.042331(0.0015M) 946.8079(.0128692M.035891 0.0042 0.0052
1231	947004	[]N 52 8 47.485627(0.0020M) W122 8 8.426140(0.0016M) 749.7016(.0132095M.036840 0.0044 0.0055
1232	56C019 1087-J	[]N 51 57 40.241832(0.0023M) W122 22 13.536939(0.0018M) 942.5207(.0173342M.048344 0.0050 0.0065
1233	637000 GRAHAM	[]N 52 4 56.433717(0.0023M) W122 58 59.963066(0.0024M) 1649.0085(.0181553M.050634 0.0064 0.0066
1234	82C256	[]N 53 1 37.958252(0.0034M) W122 30 22.774096(0.0020M) 529.1275(.0163794M.045685 0.0052 0.0097
1235	947005	[]N 52 7 49.921612(0.0028M) W122 8 12.370945(0.0021M) 603.2598(.0218405M.060911 0.0059 0.0078
1236	79702US	[]N 49 0 2.000937(0.0247M) W116 10 51.665322(0.0271M) 789.7485(.0760725M.212474 0.0636 0.0792
1237	897058 897058	[]N 49 0 17.219082(0.0049M) W122 45 28.883808(0.0039M) -3.5066(.0239525M.066854 0.0104 0.0137
1238	79C438	[]N 49 0 33.325130(0.0233M) W119 24 40.054984(0.0298M) 553.7269(.0571192M.162178 0.0590 0.0820
1239	60C053	[]N 49 2 40.742589(0.0183M) W117 52 25.841787(0.0187M) 1227.7730(.0480666M.135116 0.0452 0.0547
1240	897014	[]N 49 3 53.859801(0.0157M) W120 47 12.059679(0.0169M) 1169.5995(.0448035M.127935 0.0316 0.0489
1241	25C421J	[]N 49 4 9.912165(0.0319M) W119 0 8.589328(0.0357M) 586.6455(.0823422M.231138 0.0697 0.1108
1242	897052	[]N 49 4 11.894873(0.0218M) W117 16 35.352955(0.0222M) 604.4603(.0616031M.177030 0.0391 0.0647
1243	25703 GREENWOOD	[]N 49 4 21.940853(0.0044M) W118 43 50.784017(0.0066M) 1447.0559(.0089851M.025291 0.0124 0.0182
1244	23600 BEAZER	[]N 49 5 40.279969(0.0097M) W113 27 52.664420(0.0081M) 1460.0586(.0207671M.057978 0.0223 0.0272
1245	897051	[]N 49 5 50.169921(0.0909M) W116 59 21.109018(0.0871M) 1390.2147(.2229991M.628852 0.1769 0.2883
1246	897015	[]N 49 6 18.383690(0.0158M) W121 21 8.17.999821(0.0171M) 518.0490(.0445460M.127634 0.0318 0.0486
1247	657004 KOBAN ASTRO	[]N 49 6 57.315544(0.0023M) W119 40 33.634503(0.0233M) 1847.0969(.0068790M.019191 0.0064 0.0066
1248	25C432J	[]N 49 7 37.078466(0.0101M) W118 38 29.873885(0.0104M) 811.1858(.0322633M.090156 0.0263 0.0301
1249	897056 897056	[]N 49 7 41.903850(0.0020M) W122 18 9.285574(0.016M) -9.9724(.0146416M.040833 0.0043 0.0056
1250	19713 STEVESTON	[]N 49 7 44.733103(0.0012M) W123 11 43.833822(0.0099M) -15.9669(.0041588M.011603 0.0023 0.0032
1251	55A090	[]N 49 7 55.924099(0.0161M) W113 51 11.440811(0.0162M) 1330.9252(.016072M.116494 0.0412 0.0474
1252	897010	[]N 49 8 8.744364(0.0162M) W117 30 55.267274(0.0165M) 609.1354(.0450070M.125909 0.0386 0.0505
1253	77C001	[]N 49 11 15.896324(0.0261M) W116 37 36.800954(0.0291M) 521.0390(.0820957M.229758 0.0672 0.0837
1254	83C109	[]N 49 12 53.903413(0.0364M) W119 54 35.766009(0.0409M) 416.5382(.1030775M.288925 0.0926 0.1178
1255	83C053	[]N 49 14 44.730440(0.0209M) W120 34 57.627582(0.0222M) 1220.8702(.0561721M.157916 0.0446 0.0695
1256	25709 MOYIE	[]N 49 15 13.887270(0.0050M) W115 45 55.068437(0.0076M) 2076.6428(.0098673M.027919 0.0139 0.0207
1257	25709A MOYIE REF 1 AZ	[]N 49 15 14.445477(0.0094M) W115 45 54.650358(0.0087M) 2076.7168(.0575447M.160479 0.0215 0.0285
1258	557012	[]N 49 16 51.114239(0.0623M) W115 49 57.747850(0.0630M) 916.9219(.1435797M.423731 0.1124 0.1709
1259	897019 897019	[]N 49 16 51.979400(0.0026M) W121 46 51.667822(0.0026M) -3.1146(.0188653M.052613 0.0071 0.0073
1260	79C415	[]N 49 17 28.351329(0.0183M) W119 1 42.926426(0.0259M) 766.2137(.0449831M.131295 0.0365 0.0706
1261	79C109	[]N 49 17 36.656192(0.0705M) W115 7 28.631822(0.0698M) 907.3754(.1820293M.508215 0.1681 0.2184
1262	84C360	[]N 49 17 56.384743(0.0110M) W117 13 24.951543(0.0111M) 731.9202(.0314342M.088159 0.0273 0.0326
1263	77C107	[]N 49 18 47.256056(0.0067M) W122 35 59.39799412(0.0074M) -16.5839(.0192879M.053905 0.0172 0.0216
1264	671109 MCGREGOR	[]N 49 20 31.828969(0.0389M) W116 50 29.023750(0.0356M) 2226.8220(.0883985M.248740 0.0748 0.1223
1265	897016	[]N 49 21 45.332352(0.0159M) W121 28 16.822190(0.0172M) 37.8645(.0444904M.127665 0.0319 0.0486
1266	55A105	[]N 49 26 11.462619(0.0286M) W113 55 38.915287(0.0337M) 1248.7398(.0858721M.239664 0.0797 0.0936
1267	60C101	[]N 49 28 26.233322(0.0096M) W120 30 12.777099(0.0102M) 689.8842(.0296123M.082793 0.0245 0.0299
1268	897002	[]N 49 31 21.993711(0.0388M) W115 3 33.912227(0.0353M) 993.3549(.0889516M.254775 0.0632 0.1185
1269	83C193	[]N 49 33 33.804230(0.0132M) W123 14 1.074915(0.0149M) -12.4141(.0381642M.106625 0.0348 0.0427
1270	79A018	[]N 49 35 17.729893(0.0156M) W114 9 42.601651(0.0157M) 1179.2171(.0401415M.112412 0.0402 0.0458
1271	83C146	[]N 49 35 56.028677(0.0345M) W120 25 39.2486250(0.0373M) 395.2263(.0932155M.262397 0.0831 0.1090
1272	74X059	[]N 49 37 37.994929(0.0089M) W114 28 15.603301(0.0090M) 1302.3795(.0264427M.073879 0.0236 0.0260
1273	897050	[]N 49 37 46.005552(0.0745M) W116 3 24.019531(0.0738M) 943.9809(.1968484M.550357 0.1746 0.2313
1274	897006	[]N 49 39 17.127904(0.0420M) W116 55 46.921078(0.0383M) 540.1041(.0950589M.267133 0.0813 0.1322
1275	897017	[]N 49 39 59.512732(0.0347M) W121 25 11.961380(0.0375M) 112.6752(.0882780M.258739 0.0593 0.1022
1276	30701 LIVINGSTONE	[1]N 49 42 8.033112(0.0073M) W120 55 18.549027(0.0058M) 2007.7743(.0303604M.084899 0.0143 0.0206
1277	61C011	[]N 49 43 27.902415(0.0087M) W120 36 45.778719(0.0093M) 955.9762(.0264526M.073983 0.0230 0.0263
1278	79C385	[]N 49 45 23.333973(0.0383M) W119 7 36.998440(0.0397M) 1180.0798(.1033674M.299963 0.0656 0.1118
1279	25C485J	[]N 49 46 5.675579(0.0305M) W117 28 23.834737(0.0328M) 522.8456(.0778778M.217980 0.0742 0.0988
1280	897003	[]N 49 46 10.981071(0.0211M) W115 44 22.227522(0.0205M) 759.6715(.0525203M.147410 0.0444 0.0670
1281	897007	[]N 49 46 27.447559(0.0264M) W116 54 14.618934(0.0270M) 520.4468(.0594940M.170346 0.0586 0.0788
1282	83C213	[]N 49 47 34.542444(0.0211M) W123 7 57.156735(0.0227M) 151.1313(.0561373M.159443 0.0451 0.0675
1283	59A133	[]N 49 48 26.375969(0.0100M) W114 26 42.276939(0.0097M) 1500.3439(.0305751M.085279 0.0253 0.0294
1284	897013	[]N 49 51 35.294750(0.0325M) W119 35 24.926562(0.0353M) 455.6967(.0889540M.251256 0.0749 0.1036
1285	897018	[]N 49 53 46.774395(0.0159M) W121 26 53.061065(0.0174M) 125.2813(.0445281M.125482 0.0356 0.0522
1286	897004	[]N 50 0 2.852954(0.0214M) W115 45 31.506608(0.0210M) 863.5605(.0534456M.149693 0.0463 0.0684
1287	897008	[]N 50 0 20.799819(0.0293M) W117 22 44.528836(0.0286M) 601.7021(.0681960M.197350 0.0592 0.0824
1288	84C473	[]N 50 0 28.876071(0.0043M) W118 21 6.425498(0.0030M) 1144.1197(.0117018M.032646 0.0082 0.0119
1289	85C081	[]N 50 3 56.796918(0.0159M) W119 22 43.941817(0.0166M) 493.3255(.0428757M.120341 0.0380 0.0497
1290	897057	[]N 50 4 40.807477(0.0113M) W120 40 17.239573(0.0115M) 1079.4884(.0361458M.101094 0.0282 0.0343
1291	84C452	[]N 50 6 1.895239(0.0110M) W117 54 23.583911(0.0100M) 458.6311(.0315620M.088077 0.0248 0.0332
1292	897059	[]N 50 6 25.960810(0.0306M) W122 59 15.712576(0.0336M) 625.8077(.0829240M.238505 0.0632 0.0931
1293	896018	[]N 50 7 4.919617(0.0280M) W114 25 50.777808(0.0269M) 1692.0030(.0841435M.237714 0.0618 0.0804
1294	66C147	[]N 50 7 59.712472(0.0195M) W121 34 4.289205(0.0212M) 200.2023(.0540429M.151801 0.0458 0.0635
1295	897005	[]N 50 8 47.536712(0.0183M) W116 57 24.844917(0.0179M) 521.0992(.0450885M.126450 0.0399 0.0576
1296	657016 OYAMA	[1]N 50 9 0.865860(0.0151M) W119 23 53.160969(0.0158M) 959.6878(.0411502M.115512 0.0358 0.0476
1297	897062	[]N 50 12 35.831921(0.0162M) W118 36 7.561675(0.0164M) 749.1748(.0433249M.121610 0.0374 0.0504
1298	84C278	[]N 50 12 59.303873(0.0292M) W115 52 5.740072(0.0281M) 840.4869(.0748290M.211034 0.0602 0.0904
1299	897021	[]N 50 13 41.246726(0.0118M) W121 21 21.795723(0.0257M) 215.8377(.0640245M.179603 0.0590 0.0758
1300	84C508	[]N 50 14 23.927418(0.0159M) W119 2 23.991676(0.0165M) 527.5509(.0426588M.119759 0.0378 0.0496
1301	897055	[]N 50 20 33.889515(0.0087M) W117 52 46.854962(0.0088M) 483.6689(.0252627M.070680 0.0227 0.0255
1302	59A109	[]N 50 21 26.916572(0.0343M) W114 38 4.013763(0.0442M) 1573.6433(.0883103M.246775 0.0947 0.1230
1303	79C324 79C324	[]N 50 23 34.055688(0.0115M) W119 13 11.509897(0.0086M) 430.8996(.0263955M.073726 0.0229 0.0325
1304	62C007	[]N 50 23 54.219512(0.0187M) W121 39 59.043028(0.0201M) 387.9951(.0499167M.140038 0.0462 0.0592
1305	897020	[]N 50 25 1.837584(0.0240M) W121 21 21.795723(0.0257M) 215.8377(.0640245M.179603 0.0425 0.0492
1306	58C144 1303J	[]N 50 28 21.160815(0.0070M) W120 15 44.160233(0.0051M) 724.1638(.0400385M.111746 0.0138 0.0193
1307	27C545J	[]N 50 29 17.548358(0.0222M) W119 36 10.707532(0.0236M) 577.8786(.0623957M.174190 0.0575 0.0691
1308	84C304	[]N 50 32 0.702458(0.0267M) W116 0 23.420157(0.0267M) 873.1259(.0686659M.192018 0.0641 0.0824
1309	59A098	[]N 50 33 0.666367(0.0177M) W114 57 25.862898(0.0186M) 1962.7285(.0459542M.128390 0.0442 0.0560
1310	79C303	

The GPS Height Transformation (v2.0)

1316	897061	[]N 50 43 40.094361(0.0334M) W122 12 13.027174(0.0392M) 236.1201(.0897704M.253932 0.0815 0.1103
1317	21A166	[]N 50 44 47.636764(0.0210M) W114 20 49.042572(0.0209M) 1203.2915(.0529330M.147687 0.0526 0.0634
1318	61C048	[]N 50 45 11.285365(0.0230M) W115 55 47.749034(0.0227M) 1108.4911(.0591155M.165478 0.0545 0.0705
1319	66C207	[]N 50 45 28.643222(0.0297M) W120 49 11.587879(0.0319M) 338.8410(.0803859M.225318 0.0741 0.0934
1320	897022	[]N 50 46 29.376961(0.0067M) W119 43 14.160977(0.0047M) 336.4815(.0362160M.101078 0.0128 0.0183
1321	68C026	[]N 50 49 51.027396(0.0079M) W119 19 46.562691(0.0054M) 404.8505(.0372741M.104034 0.0149 0.0219
1322	82C180	[]N 50 53 22.479362(0.0250M) W121 45 27.610038(0.0268M) 791.1773(.0721640M.203771 0.0574 0.0782
1323	62C080	[]N 50 54 48.277701(0.0129M) W120 14 38.701017(0.0135M) 346.6456(.0341766M.095465 0.0339 0.0393
1324	897023	[]N 50 56 37.830559(0.0084M) W118 29 9.308985(0.0052M) 481.0729(.0374217M.104396 0.0143 0.0233
1325	15739	QUEEST [1]N 50 59 12.980128(0.0067M) W118 52 14.312621(0.0046M) 2069.5260(.0282206M.078734 0.0127 0.0186
1326	897063	[]N 51 0 54.868651(0.0066M) W118 5 13.107241(0.0054M) 523.6809(.0214413M.059839 0.0148 0.0184
1327	61C065	[]N 51 1 33.147211(0.0095M) W115 58 57.329045(0.0093M) 1254.7702(.0321332M.089659 0.0245 0.0278
1328	47C063	[]N 51 5 31.643297(0.0144M) W116 41 5.824240(0.0163M) 777.0196(.0405550M.113362 0.0394 0.0455
1329	88X016	[]N 51 7 40.640477(0.0142M) W114 33 16.338279(0.0126M) 1261.9096(.0384110M.108047 0.0302 0.0410
1330	68A050	[]N 51 8 48.337275(0.0074M) W114 43 55.803675(0.0042M) 1395.6135(.0324693M.090600 0.0118 0.0204
1331	62C068	[]N 51 10 11.125256(0.0128M) W120 7 49.767225(0.0134M) 364.7696(.0334704M.093543 0.0334 0.0390
1332	82X047	[]N 51 10 59.164152(0.0142M) W114 33 36.022753(0.0125M) 1226.1248(.0383388M.107875 0.0301 0.0410
1333	896021	896021 []N 51 11 18.463471(0.0054M) W115 45 10.838722(0.0041M) 1390.6072(.03191654M.089152 0.0115 0.0152
1334	2677000	[]N 51 13 40.689569(0.0095M) W116 2 59.492853(0.0092M) 1631.4905(.0319753M.089239 0.0241 0.0276
1335	897064	897064 []N 51 14 38.678356(0.0113M) W117 38 25.072729(0.0068M) 996.1230(.0458035M.127775 0.0186 0.0314
1336	28C644J	[]N 51 18 29.257809(0.0199M) W121 22 29.732259(0.0212M) 1067.3231(.0535114M.149494 0.0519 0.0614
1337	897026	[]N 51 22 44.329450(0.0163M) W116 30 43.859452(0.0185M) 1228.7508(.0427886M.119776 0.0412 0.0541
1338	897065	897065 []N 51 23 1.528582(0.0113M) W117 26 58.649471(0.0072M) 829.2563(.0462398M.129001 0.0195 0.0317
1339	897085	[]N 51 25 23.727368(0.0085M) W120 12 29.950532(0.0087M) 375.8962(.0225522M.063023 0.0216 0.0258
1340	896027	896027 []N 51 27 42.000423(0.0047M) W116 13 27.426778(0.0037M) 1597.6334(.0297049M.082845 0.0104 0.0131
1341	30709	BEGBIE [1]N 51 28 33.263881(0.0177M) W121 21 59.593627(0.0176M) 1260.8368(.0420053M.117901 0.0422 0.0538
1342	897067	[]N 51 28 41.205323(0.0099M) W120 33 42.942945(0.0103M) 1158.3911(.0257495M.072175 0.0258 0.0294
1343	59A053	[]N 51 29 17.086160(0.0205M) W115 4 33.497616(0.0203M) 1475.2548(.0538733M.150547 0.0490 0.0630
1344	82C056	[]N 51 32 56.8672798(0.0155M) W121 21 58.185535(0.0148M) 189.4177(.0360922M.101191 0.0363 0.0462
1345	79C702	[]N 51 37 10.790567(0.0169M) W119 56 15.892542(0.0180M) 406.2747(.0445377M.124477 0.0441 0.0522
1346	70C038	BM 70-C-038 []N 51 40 1.708811(0.0146M) W118 36 59.798091(0.0179M) 596.2024(.0377800M.105640 0.0398 0.0499
1347	84A025	[]N 51 40 4.451626(0.0390M) W116 26 45.650247(0.0320M) 1942.3661(.0871970M.255014 0.0571 0.1032
1348	85X227	[]N 51 43 10.978600(0.0149M) W115 38 19.193306(0.0152M) 1606.4170(.0395330M.110486 0.0361 0.0464
1349	897024	[]N 51 47 41.185852(0.0145M) W118 39 32.647410(0.0178M) 574.1366(.0376476M.105293 0.0396 0.0496
1350	82C083	[]N 51 48 20.634471(0.0154M) W121 26 18.882145(0.0146M) 818.8128(.0355333M.099679 0.0360 0.0457
1351	59A032	[]N 51 49 21.065579(0.0182M) W115 11 7.863524(0.0191M) 1313.3354(.0475921M.132935 0.0456 0.0573
1352	896028	[]N 51 51 23.929375(0.0356M) W116 38 51.909602(0.0304M) 1663.9632(.0847920M.249703 0.0531 0.0882
1353	897070	[]N 51 54 19.077222(0.0266M) W124 35 51.521698(0.0269M) 906.7294(.0626909M.179265 0.0568 0.0796
1354	897038	[]N 51 54 47.143627(0.0112M) W119 19 17.851302(0.0104M) 617.6856(.0266619M.074748 0.0251 0.0336
1355	776008	51116-60 []N 51 58 22.817645(0.0083M) W116 44 28.586234(0.0066M) 1426.8797(.0320104M.089342 0.0179 0.0233
1356	36704	FRASER []N 51 58 26.887386(0.0050M) W122 13 48.900180(0.0111M) 0.0270 0.0121
1357	896029	[]N 52 2 30.417377(0.0146M) W116 51 47.092411(0.0149M) 1440.2222(.0433512M.121248 0.0377 0.0433
1358	59A008	[]N 52 3 34.476138(0.0170M) W115 39 34.963499(0.0171M) 1471.5562(.0432049M.120717 0.0428 0.0513
1359	71A090	[]N 52 3 43.555636(0.0242M) W116 24 55.545793(0.0470M) 1348.2446(.0404383M.143662 0.0433 0.1092
1360	697300	COLUMBIA []N 52 4 26.645696(0.0154M) W118 33 51.032872(0.0186M) 565.3234(.0396196M.110910 0.0414 0.0520
1361	89HT001	[]N 52 5 5.157847(0.0159M) W123 17 0.834103(0.0168M) 751.9348(.0416514M.117420 0.0354 0.0509
1362	897069	[]N 52 6 42.802884(0.0254M) W125 1 39.121549(0.0261M) 1103.0323(.0605945M.172344 0.0582 0.0762
1363	82C119	BM 82-C-119 []N 52 7 0.643189(0.0139M) W121 57 28.145312(0.0130M) 700.0241(.0322314M.090628 0.0317 0.0411
1364	897068	[]N 52 7 47.988195(0.0198M) W123 41 38.247993(0.0238M) 815.9198(.04877756M.137020 0.0524 0.0666
1365	896019	[]N 52 12 34.308218(0.0075M) W115 58 1.561152(0.0081M) 1480.2431(.0229499M.064033 0.0208 0.0226
1366	84A069	[]N 52 13 4.303236(0.0129M) W117 11 37.844880(0.0132M) 1999.4232(.0338603M.094622 0.0328 0.0391
1367	897089	[]N 52 16 59.850857(0.0256M) W125 5 48.404070(0.0262M) 1118.1457(.0605573M.172264 0.0587 0.0762
1368	887004	[]N 52 22 30.664278(0.0220M) W126 47 42.017199(0.0271M) -7.7288(.0594870M.165907 0.0606 0.0762
1369	896030	[]N 52 24 57.377391(0.0171M) W117 23 48.273823(0.0174M) 1576.1572(.0441163M.123292 0.0434 0.0518
1370	897087	[]N 52 25 7.7979565(0.0081M) W126 26 9.879458(0.0088M) 69.3390(.0254323M.070984 0.0216 0.0252
1371	79C595	[]N 52 25 17.380011(0.0146M) W119 9 20.579182(0.0128M) 717.3935(.0337804M.095253 0.0307 0.0423
1372	82C208	[]N 52 26 58.255258(0.0128M) W122 24 7.130590(0.0133M) 468.4284(.0321601M.090034 0.0336 0.0381
1373	897088	[]N 52 31 52.744061(0.0077M) W125 48 49.985984(0.0084M) 1477.6345(.0238828M.066605 0.0209 0.0238
1374	776009	52116-2 []N 52 32 20.270751(0.0177M) W117 38 35.290536(0.0178M) 1388.0844(.0450593M.126405 0.0432 0.0534
1375	896031	[]N 52 36 45.644585(0.0189M) W117 50 28.084001(0.0191M) 1206.6425(.0482488M.135428 0.0461 0.0570
1376	896013	[]N 52 41 55.946388(0.0063M) W116 19 0.461393(0.0068M) 1322.9898(.0188628M.052639 0.0176 0.0190
1377	79C592	[]N 52 42 14.000951(0.0200M) W119 15 19.096196(0.0193M) 794.1495(.0460717M.130073 0.0438 0.0605
1378	39700	CANOE [1]N 52 42 14.870787(0.0172M) W119 9 47.051900(0.0168M) 2637.7650(.0397337M.112558 0.0364 0.0528
1379	896032	[]N 52 48 59.450529(0.0129M) W118 3 3.985313(0.0911M) 1053.6975(.2100108M.647692 0.1298 0.2313
1380	77A147	[]N 52 52 58.558947(0.1533M) W118 22 38.766899(0.1218M) 1110.3374(.2949067M.919163 0.1809 0.3111
1381	77C739	[]N 52 55 12.064508(0.0525M) W118 48 8.744377(0.0586M) 1029.7139(.1311687M.370080 0.1238 0.1721
1382	77C740	[]N 52 57 59.610537(0.0274M) W119 25 30.318994(0.0270M) 751.5968(.0626972M.178937 0.0541 0.0843
1383	897034	[]N 53 2 3.751513(0.0276M) W119 13 46.411201(0.0270M) 809.1990(.0629862M.179700 0.0546 0.0847
1384	65A188	[]N 53 2 3.958478(0.0194M) W116 41 39.295220(0.0190M) 1323.0457(.0452268M.126693 0.0433 0.0609
1385	896033	[]N 53 4 40.880910(0.1582M) W118 2 3.336403(0.1264M) 989.8381(.2986627M.933877 0.1831 0.3269
1386	897035	[]N 53 5 25.620053(0.0187M) W119 42 22.405375(0.0186M) 733.6680(.0421466M.119314 0.0403 0.0578
1387	896011	[]N 53 10 27.475481(0.0246M) W117 0 30.671798(0.0242M) 1178.2946(.0570223M.159912 0.0554 0.0769
1388	897036	[]N 53 15 4.229087(0.0341M) W120 1 46.481707(0.0338M) 708.2942(.0772645M.224800 0.0615 0.1002
1389	82C282	[]N 53 18 8.123697(0.0307M) W122 31 37.980727(0.0402M) 647.5486(.0803247M.224252 0.0850 0.1122
1390	896010	[]N 53 18 27.270648(0.0252M) W117 18 42.001049(0.0251M) 1179.7140(.0593413M.166131 0.0586 0.0787
1391	77C794	[]N 53 21 58.598436(0.0214M) W120 19 58.233150(0.0227M) 779.3651(.0532223M.150640 0.0491 0.0669
1392	896009	[]N 53 25 9.833835(0.0084M) W117 44 37.679748(0.0082M) 1324.4713(.0238166M.066489 0.0212 0.0247
1393	77C812	[]N 53 30 29.745519(0.0314M) W120 38 59.179185(0.0306M) 853.3825(.0749764M.215475 0.0588 0.0938
1394	65A131	[]N 53 33 27.826750(0.0086M) W118 0 50.115723(0.0083M) 1311.2659(.0244873M.068398 0.0213 0.0252
1395	897037	[]N 53 42 29.290174(0.0344M) W121 3 4.787371(0.0353M) 682.6834(.0883316M.249642 0.0777 0.1059
1396	896008	[]N 53 45 56.763965(0.0676M) W118 22 30.246174(0.1475M) 1389.5226(.1110486M.448879 0.1105 0.2950
1397	54C022	[]N 53 48 2.095141(0.0538M) W124 23 39.604211(0.0634M) 644.6948(.1251375M.349969 0.1408 0.1824
1398	77C851	[]N 53 51 7.306451(0.0302M) W121 27 36.749945(0.0302M) 686.0946(.0735782M.212399 0.0562 0.0895
1399	77C876	[]N 53 52 57.774982(0.0646M) W122 7 18.400060(0.0621M) 758.1318(.1241918M.387219 0.0799 0.1616
1400	897090	[]N 53 53 31.472177(0.0639M) W123 32 17.452015(0.0646M) 765.5939(.1560286M.437753 0.1483 0.1998
1401	62C126	[]N 53 57 31.740656(0.0514M) W123 57 5.800281(0.0574M) 732.1288(.1220677M.342222 0.1380 0.1609
1402	897094	[]N 54 1 9.801102(0.0256M) W128 42 32.136915(0.0306M) 15.6772(.0691015M.193149 0.0698 0.0856
1403	86C100	[]N 54 1 36.880646(0.0324M) W124 23 21.759306(0.0351M) 690.2995(.0801337M.224866 0.0815 0.1024
1404	787001	FERGUSON [1]N 54 2 48.221944(0.0324M) W122 53 36.309778(0.0318M) 983.7016(.0687039M.204593 0.0496 0.0915
1405	897040</td	

The GPS Height Transformation (v2.0)

1411	887005	[]N 54 17 35.146310(0.0202M) W130 21 10.374604(0.0460M) -0.3700(.0527855M.147442	0.0542 0.1289	
1412	86C392	[]N 54 20 9.716941(0.0304M) W129 16 7.114570(0.0477M) 6.4582(.0779466M.217895	0.0815 0.1342	
1413	65A079	[]N 54 21 20.826387(0.0478M) W118 20 26.746991(0.0403M) 1198.9073(.1011752M.302407	0.0604 0.1219	
1414	86C199	[]N 54 23 58.293123(0.0147M) W126 39 3.762777(0.0156M) 585.2714(.0403235M.112522	0.0388 0.0454	
1415	86C172	[]N 54 24 10.547285(0.0323M) W126 3 6.121983(0.0363M) 762.8403(.0831593M.232281	0.0899 0.1007	
1416	86C380	[]N 54 24 49.510843(0.1530M) W128 53 11.316613(0.0404M) 31.1971(.1660945M 1,1947	0.1622 0.4614	
1417	86C187	[]N 54 30 9.994901(0.0193M) W126 28 36.874345(0.0219M) 616.1414(.0496137M.138469	0.0506 0.0636	
1418	86C366	[]N 54 31 3.667127(0.0336M) W128 35 57.093922(0.0420M) 60.1549(.0822032M.230158	0.0899 0.1183	
1419	67C018	[]N 54 34 48.848398(0.0214M) W122 42 49.047166(0.0216M) 677.4872(.0526098M.148331	0.0518 0.0635	
1420	896006	[]N 54 35 33.752346(0.0140M) W118 12 25.118622(0.0136M) 871.0099(.0333399M.094997	0.0306 0.0405	
1421	897093	[]N 54 35 53.776084(0.0305M) W128 24 9.705856(0.0329M) 89.5350(.0811687M.227170	0.0811 0.0934	
1422	86C218	[]N 54 37 19.574306(0.0144M) W126 51 18.385178(0.0151M) 547.0880(.0395775M.110487	0.0383 0.0434	
1423	86C335	[]N 54 48 9.056724(0.0212M) W128 16 36.053118(0.0223M) 118.9965(.0567283M.158781	0.0573 0.0623	
1424	74H2594 PIPER	74H2594[]N 54 49 14.474765(0.0229M) W127 11 35.973132(0.0250M) 503.8082(.0609371M.170847	0.0587 0.0720	
1425	896005	[]N 54 51 44.487382(0.0137M) W118 15 13.352674(0.0130M) 683.7050(.0318620M.091366	0.0283 0.0392	
1426	86C320	[]N 55 0 0.544718(0.0202M) W128 20 18.250237(0.0212M) 149.1724(.0538005M.150502	0.0543 0.0598	
1427	897092	[]N 55 0 54.144069(0.0277M) W127 19 41.835817(0.0298M) 370.9947(.0734169M.207069	0.0662 0.0866	
1428	67C033	[]N 55 3 39.114703(0.0399M) W123 1 50.499999(0.0598M) 669.2239(.0791358M.223787	0.0890 0.1756	
1429	86C307	[]N 55 5 55.753176(0.0175M) W128 4 31.939354(0.0213M) 169.5977(.0465100M.130667	0.0469 0.0589	
1430	80A245	[]N 55 10 53.944355(0.0174M) W118 52 52.822520(0.0151M) 650.7407(.0366145M.106486	0.0334 0.0458	
1431	80A225	[]N 55 11 46.751833(0.0221M) W119 23 49.721908(0.0279M) 729.0009(.0498082M.141241	0.0562 0.0777	
1432	80A271	[]N 55 12 50.283321(0.0050M) W118 8 57.444148(0.0084M) 618.4001(.0075941M.028417	0.0108 0.163	
1433	897042	[]N 55 13 22.105370(0.0313M) W122 43 6.762363(0.0316M) 728.6693(.0742502M.209141	0.0754 0.0939	
1434	54629 HERMIT	[1]N 55 14 4.488889(0.0262M) W119 3 4.209578(0.0283M) 741.8517(.0637735M.179413	0.0652 0.0822	
1435	86C280	[]N 55 14 48.461470(0.0279M) W127 35 25.479891(0.0300M) 313.8065(.0738179M.208515	0.0662 0.0871	
1436	75C265	[]N 55 18 37.165961(0.0321M) W128 25 21.051193(0.0344M) 355.9897(.0842237M.237122	0.0794 0.0992	
1437	80A211	[]N 55 20 28.635494(0.0221M) W119 38 26.785638(0.0279M) 734.4901(.0493567M.140086	0.0559 0.0775	
1438	897043	[]N 55 26 5.510172(0.0349M) W122 41 47.196804(0.0455M) 792.2854(.0767981M.218412	0.0865 0.1273	
1439	80A203	[]N 55 26 48.526186(0.0325M) W119 53 49.887813(0.0357M) 777.8145(.0793564M.223000	0.0827 0.1025	
1440	897072	[]N 55 29 40.546852(0.0311M) W128 16 5.384288(0.0335M) 337.5175(.0819772M.230992	0.0760 0.0968	
1441	87C437	[]N 55 35 3.277131(0.0320M) W128 25 27.634124(0.0344M) 282.5923(.0838768M.236382	0.0789 0.0989	
1442	67C061	[]N 55 36 55.260356(0.0639M) W122 17 17.956067(0.0612M) 632.2343(.1390083M.415675	0.1052 0.1650	
1443	897044	[]N 55 42 56.004844(0.0670M) W121 23 37.662676(0.0723M) 708.5858(.1422531M.406450	0.1536 0.2099	
1444	897047	[]N 55 43 5.960857(0.0323M) W121 12 32.346747(0.0357M) 527.8065(.0787065M.221464	0.0821 0.1022	
1445	50C452E	[]N 55 45 8.287644(0.0668M) W120 27 28.279889(0.0717M) 821.4687(.1418350M.404825	0.1532 0.2094	
1446	897045	[]N 55 49 44.938954(0.0622M) W121 48 57.610664(0.0606M) 702.1352(.1397606M.398061	0.1316 0.1865	
1447	50705 ROLLA EB	[]N 55 53 52.538665(0.0075M) W120 7 23.324862(0.0076M) 677.8181(.0157201M.044226	0.0163 0.0241	
1448	75C217	75C217	[]N 55 54 42.670368(0.0046M) W130 1 2.934759(0.0062M) 2.0001(.0226025M.063031	0.0128 0.0172
1449	80C026	[]N 55 57 32.538610(0.0257M) W120 36 45.110765(0.0298M) 646.8696(.0535512M.153106	0.0636 0.0826	
1450	667007 CANYON	[1]N 56 0 36.308632(0.0164M) W122 11 19.125505(0.0188M) 709.5092(.0370336M.105283	0.0392 0.0536	
1451	75C224	[]N 56 0 59.791319(0.0211M) W129 7 4.683251(0.0235M) 248.7905(.0537439M.154495	0.0478 0.0638	
1452	84C228	[]N 56 7 14.179586(0.0643M) W121 44 41.354180(0.0612M) 464.7335(.1427933M.408508	0.1324 0.1884	
1453	80C006	[]N 56 13 9.956625(0.0323M) W120 47 37.708357(0.0359M) 642.7408(.0805347M.226356	0.0826 0.1023	
1454	897046	[]N 56 22 22.943613(0.0349M) W121 49 49.614819(0.0333M) 820.6828(.0660345M.199090	0.0603 0.0936	
1455	88C109	88C109	[]N 56 25 23.066435(0.0032M) W129 22 0.063930(0.0036M) 393.7727(.0144189M.040214	0.0088 0.0100
1456	897048	[]N 56 33 10.578152(0.0246M) W121 21 29.307668(0.0220M) 849.3333(.0524054M.150342	0.0508 0.0680	
1457	88C095	88C095	[]N 56 36 34.458266(0.0030M) W129 39 25.972046(0.0032M) 522.6211(.0135770M.037867	0.0082 0.0091
1458	88C088	[]N 56 45 7.710720(0.0233M) W129 55 39.212596(0.0256M) 569.5831(.0585964M.167425	0.0576 0.0683	
1459	53707 GUNDY	[]N 56 56 4.791088(0.0278M) W122 4 19.326859(0.0274M) 1028.2771(.0667636M.189906	0.0643 0.0796	
1460	87C057	[]N 57 2 17.207988(0.0163M) W122 27 30.010885(0.0139M) 1113.8144(.0347350M.100448	0.0300 0.0444	
1461	75C119	75C119	[]N 57 15 22.068759(0.0015M) W130 14 52.534481(0.0013M) 698.8127(.0081494M.022726	0.0037 0.0042
1462	44C947J	[]N 57 17 54.763179(0.0542M) W122 47 7.056766(0.0513M) 1203.8568(.1130504M.340442	0.0845 0.1401	
1463	897049	[]N 57 30 43.320219(0.0370M) W122 54 30.738191(0.0369M) 1153.2576(.0856828M.244933	0.0834 0.1067	
1464	88C048	[]N 57 35 19.319489(0.0197M) W130 8 3.925185(0.0214M) 854.7788(.0487481M.139457	0.0488 0.0571	
1465	837024 TELEGRAPH CREEK	[]N 57 54 9.303320(0.0195M) W131 9 29.166291(0.0235M) 276.4627(.0530936M.153925	0.0451 0.0587	
1466	75C098	[]N 58 2 45.730480(0.0110M) W129 55 19.809571(0.0128M) 776.3545(.0287637M.081466	0.0292 0.0339	
1467	897150	[]N 58 2 55.5541578(0.0372M) W122 42 57.808514(0.0367M) 565.4392(.0853936M.244287	0.0835 0.1065	
1468	87C131	[]N 58 17 40.029077(0.0352M) W122 40 0.141534(0.0348M) 603.4342(.0808329M.231812	0.0778 0.1003	
1469	87C394	[]N 58 32 10.227327(0.0144M) W130 1 42.367330(0.0161M) 809.7585(.0366740M.105747	0.0322 0.0433	
1470	897096	[]N 58 44 7.998398(0.0308M) W130 4 44.251590(0.0325M) 902.0377(.0761758M.217970	0.0757 0.0865	
1471	877005	[]N 58 54 11.826836(0.0289M) W123 7 28.745307(0.0289M) 459.6714(.0730263M.205939	0.0761 0.0803	
1472	878006	[]N 60 3 2.296969(0.0151M) W128 54 25.997770(0.0161M) 613.9415(.0379098M.108328	0.0339 0.0457	
1473	89C250	89C250	[]N 49 53 52.597033(0.0036M) W120 54 10.060487(0.0026M) 901.8739(.0276565M.077128	0.0072 0.0101
1474	89C294	89C294	[]N 49 30 20.901665(0.0030M) W121 11 58.467110(0.0022M) 575.4394(.0224770M.062682	0.0061 0.0084
1475	77C048	77C048	[]N 49 5 48.026768(0.0032M) W122 20 24.840040(0.0027M) -0.3367(.0227371M.063409	0.0074 0.0088
1476	B192740 SURREY NURSERY	[]N 49 3 42.133300(0.0012M) W122 42 8.880395(0.0010M) 27.1859(.0077338M.021569	0.0029 0.0034	
1477	657005 INK	[]N 49 13 31.251137(0.0052M) W119 30 38.320276(0.0055M) 830.6750(.0149107M.042697	0.0116 0.0148	
1478	657006 DISH	[]N 49 20 37.732645(0.0059M) W119 40 19.427548(0.0062M) 1405.1393(.0166744M.047359	0.0140 0.0170	
1479	657007 MCCELLAN	[]N 49 20 26.655817(0.0051M) W119 36 29.432886(0.0053M) 930.7900(.0144389M.041053	0.0120 0.0147	
1480	657009 MATHESON	[]N 49 25 8.247812(0.0052M) W119 31 42.427563(0.0055M) 1208.9157(.0145505M.041614	0.0114 0.0151	
1481	827001 WHITE	[]N 49 18 36.308374(0.0062M) W119 36 55.456669(0.0065M) 739.6269(.0177131M.050480	0.0143 0.0179	
1482	827011 MARSEL	[]N 49 18 44.408094(0.0053M) W119 46 14.874691(0.0057M) 1373.4556(.0152857M.043580	0.0125 0.0153	
1483	837030 OLD DRAO VLBI	[]N 49 19 21.297537(0.0005M) W119 37 11.565725(0.0005M) 529.8574(.0161921M.004722	0.0013 0.0015	
1484	977001 NEW DRAO VLBI	[]N 49 19 20.200003(0.0005M) W119 37 21.833766(0.0005M) 531.5124(.01616899M.004715	0.0013 0.0015	
1485	687532 STA 680432	[]N 49 12 59.684774(0.0075M) W123 14 14.80541(0.0049M) 78.8363(.0146640M.040966	0.0124 0.0215	
1486	78H8538	[]N 49 11 47.693438(0.0072M) W123 5 29.226213(0.0063M) -17.5503(.0137329M.048408	0.0159 0.0211	
1487	88H4187	[]N 49 2 47.985323(0.0079M) W123 4 46.828345(0.0058M) -18.2518(.0167482M.046720	0.0159 0.0223	
1488	90H6222	[]N 49 9 9.355100(0.0045M) W122 54 14.790871(0.0033M) 86.4883(.0101129M.028234	0.0085 0.0128	
1489	82H5827	[]N 49 7 17.640036(0.0065M) W122 25 37.287816(0.0048M) 124.8252(.0129251M.036134	0.0108 0.0196	
1490	88H4601	[]N 49 10 52.189076(0.0080M) W122 40 9.693487(0.0060M) -10.2008(.0167688M.046804	0.0149 0.0235	
1491	89HP3S PIER #3	[]N 49 3 46.589994(0.0060M) W122 41 30.358574(0.0054M) 28.1794(.0135494M.037865	0.012	

The GPS Height Transformation (v2.0)

1506	85H0764	[]N 49 13 21.599309(0.0046M) W122 32 5.206314(0.0034M) 76.3994(.0102954M.028780	0.0084 0.0134
1507	66H6202 UTAH 6202	[]N 49 5 28.154833(0.0071M) W122 54 45.333832(0.0078M) -12.5852(.0175295M.049102	0.0182 0.0226
1508	037016 MON 229	[]N 49 0 3.197105(0.0082M) W115 43 42.714235(0.0141M) 1787.8269(.0146958M.043473	0.0225 0.0370
1509	979701US G381	[]N 48 59 31.306337(0.0124M) W116 29 40.110940(0.0178M) 567.0665(.0177170M.056389	0.0304 0.0445
1510	377020S MON 207	[]N 48 59 59.550314(0.0074M) W116 29 57.276187(0.0116M) 533.0428(.0123967M.036241	0.0206 0.0306
1511	XX764US MON 199	[]N 48 59 58.983291(0.0114M) W116 49 42.333822(0.0236M) 1240.7603(.0181969M.069341	0.0316 0.0459
1512	397041 MON 190	[]N 48 59 58.628015(0.0066M) W117 14 42.329233(0.0106M) 1575.0307(.0128535M.036624	0.0180 0.0287
1513	377242 MON 181	[]N 49 0 2.640003(0.0051M) W117 37 39.290861(0.0079M) 396.8342(.0100273M.028403	0.0142 0.0214
1514	027001 MON 174	[]N 49 0 1.451708(0.0056M) W117 53 38.897054(0.0101M) 1526.1699(.0105244M.031350	0.0155 0.0260
1515	377241 MON 165	[]N 49 0 0.242228(0.0051M) W118 13 27.914913(0.0082M) 487.5320(.0099239M.028221	0.0142 0.0222
1516	047013 MON 153	[]N 49 0 0.256720(0.0058M) W118 31 36.080309(0.0096M) 616.1950(.0108420M.031217	0.0161 0.0258
1517	377239 MON 143	[]N 49 0 0.293167(0.0047M) W118 45 43.853330(0.0067M) 612.3600(.0090864M.025574	0.0130 0.0184
1518	377265 MON 132	[]N 49 0 0.262074(0.0041M) W119 1 0.832517(0.0064M) 814.9880(.0086531M.024438	0.0113 0.0176
1519	377254 MON 121	[]N 49 0 0.309942(0.0052M) W119 20 29.107148(0.0094M) 1096.5289(.0102761M.030176	0.0143 0.0245
1520	377278 MON 112	[]N 49 0 0.377801(0.0030M) W119 39 15.096318(0.0056M) 424.8564(.0073490M.020952	0.0082 0.0151
1521	XX793US MON 103	[]N 48 59 58.814773(0.0067M) W119 56 43.165606(0.0144M) 2456.9717(.0130171M.042706	0.0168 0.0342
1522	377144 MON 95	[]N 48 59 59.965426(0.0092M) W120 10 54.633042(0.0204M) 2469.6463(.0293672M.097042	0.0210 0.0269
1523	377139 MON 90	[]N 49 0 1.725723(0.0047M) W120 24 40.161087(0.0131M) 2289.7764(.0109940M.037874	0.0128 0.0290
1524	377167 MON 83	[]N 49 0 0.773517(0.0061M) W120 38 42.809293(0.0225M) 1976.1479(.0151156M.064650	0.0159 0.0397
1525	377160 MON 76	[]N 49 0 1.138660(0.0033M) W120 54 37.977052(0.0059M) 1985.4829(.0075881M.022022	0.0090 0.0154
1526	377124 MON 68	[]N 49 0 2.763880(0.0032M) W121 15 4.205725(0.0066M) 2315.4041(.0075447M.022157	0.0087 0.0172
1527	XY7140S MON 56	[]N 48 59 57.356054(0.0033M) W121 34 0.912668(0.0061M) 1879.9172(.0076143M.021531	0.0089 0.0166
1528	XY7060S MON 48	[]N 48 59 55.587675(0.0031M) W121 51 2.316439(0.0056M) 1771.3290(.0072225M.0202620	0.0083 0.0151
1529	377315 MON 43	[]N 49 0 8.681058(0.0099M) W122 5 53.022919(0.0366M) 713.4236(.0187360M.104357	0.0266 0.0480
1530	377324 MON 34	[]N 49 0 8.720169(0.0028M) W122 13 50.868547(0.0049M) -6.9434(.0064796M.018515	0.0073 0.0133
1531	377343 MON 19	[]N 49 0 8.092815(0.0032M) W122 29 49.129514(0.0050M) 24.2375(.0069252M.019349	0.0085 0.0142
1532	377308 MON 5-D	[]N 49 0 7.524958(0.0037M) W122 45 21.234723(0.0079M) -10.3573(.0069804M.024225	0.0085 0.0176
1533	377347 MON 0	[]N 49 0 7.414626(0.0055M) W123 5 26.501648(0.0099M) -17.4547(.0096936M.032153	0.0138 0.0224
1534	877003 877003	[]N 58 39 39.579781(0.0226M) W124 29 16.560060(0.0230M) 1015.6282(.01626305M.175013	0.0574 0.0684
1535	877004	[]N 58 40 34.366642(0.0236M) W124 42 40.843787(0.0240M) 811.3248(.0637677M.178370	0.0606 0.0703
1536	877008	[]N 58 43 4.940953(0.0370M) W124 54 46.986419(0.0378M) 905.8074(.0989336M.276631	0.0938 0.1122
1537	877001	[]N 58 46 43.801956(0.0561M) W125 41 15.134726(0.0584M) 809.3361(.1377832M.388253	0.1228 0.1812
1538	877002	[]N 58 50 51.777663(0.0414M) W125 13 53.426492(0.0433M) 700.1952(.1078429M.301607	0.1040 0.1288
1539	76C164	[]N 58 51 6.577067(0.0312M) W123 27 7.003735(0.0321M) 435.5182(.0810993M.227360	0.0814 0.0917
1540	77C453	[]N 59 0 50.064707(0.0242M) W125 46 9.926416(0.0266M) 832.5943(.0620212M.173446	0.0579 0.0809
1541	83C316	[]N 59 7 48.899115(0.0348M) W123 14 54.197755(0.0362M) 393.5777(.0906196M.254057	0.0923 0.1019
1542	877025US	[]N 59 15 45.498816(0.0562M) W135 28 48.637340(0.0564M) 14.3372(.1440096M.403116	0.1358 0.1722
1543	877006	[]N 59 22 13.407517(0.0652M) W123 17 39.180553(0.0727M) 460.4641(.1657427M.467426	0.1464 0.2187
1544	877024US	[]N 59 24 29.527715(0.0550M) W135 58 8.111178(0.0561M) 56.3529(.1464761M.410209	0.1385 0.1658
1545	46C367F	[]N 59 24 42.462749(0.0192M) W126 5 47.479280(0.0199M) 428.8557(.0494813M.138508	0.0453 0.0614
1546	48C508F	[]N 59 27 1.375606(0.0534M) W136 21 45.126734(0.0543M) 257.0577(.1445452M.404883	0.1367 0.1582
1547	877030US	[]N 59 27 30.772211(0.0530M) W135 19 6.128755(0.0544M) 15.2444(.1353312M.378632	0.1318 0.1628
1548	46C359F	[]N 59 33 12.974008(0.0501M) W126 28 42.816730(0.0529M) 436.8083(.1245006M.348869	0.1214 0.1591
1549	46C343F	[]N 59 39 26.811858(0.0493M) W126 57 25.893218(0.0529M) 470.0633(.1325342M.370377	0.1314 0.1510
1550	48C497F	[]N 59 43 14.119607(0.0508M) W136 36 29.892228(0.0514M) 1016.3024(.1375859M.385636	0.1282 0.1506
1551	77C632 77C632	[]N 59 43 53.740721(0.0413M) W127 28 10.861082(0.0442M) 736.3439(.0994848M.278466	0.0995 0.1342
1552	43CY Y3	[]N 59 45 48.354868(0.0047M) W134 58 13.558781(0.0032M) 892.5760(.0234343M.065352	0.0087 0.0132
1553	77C666	[]N 59 54 39.537685(0.0293M) W131 36 6.175773(0.0305M) 931.8942(.0689335M.193159	0.0672 0.0952
1554	46C313F	[]N 59 57 28.942558(0.0284M) W128 8 50.833540(0.0291M) 592.4390(.0688605M.192743	0.0668 0.0900
1555	877000	[]N 59 57 51.931830(0.0393M) W127 30 59.418861(0.0421M) 678.8165(.0958921M.268387	0.0953 0.1273
1556	48C489F 489-F	[]N 59 58 21.709587(0.0167M) W136 49 8.086161(0.01259M) 925.1157(.2690531M.760068	0.3039 0.3494
1557	77Y011 77Y011	[]N 60 4 56.828773(0.0034M) W129 22 7.222448(0.0033M) 736.3439(.0994848M.278466	0.0995 0.1342
1558	878004	[]N 60 5 8.073961(0.0346M) W130 44 24.784716(0.0347M) 925.6592(.0834830M.234098	0.0775 0.1098
1559	77Y027	[]N 60 7 12.022261(0.0390M) W130 18 55.440273(0.0408M) 867.9454(.0942569M.263705	0.0945 0.1240
1560	77Y052	[]N 60 9 42.685313(0.0442M) W132 42 9.852293(0.0457M) 692.8085(.1024139M.287206	0.1010 0.1425
1561	43Y052 R2	[]N 60 9 51.930897(0.0036M) W134 42 22.652427(0.0024M) 664.6902(.0179331M.050019	0.0067 0.0100
1562	878005	[]N 60 10 0.570540(0.0370M) W129 45 17.778195(0.0393M) 841.7757(.0889090M.248764	0.0905 0.1187
1563	47Y480F	[]N 60 11 54.297652(0.0547M) W136 59 12.210989(0.0547M) 731.1193(.1436177M.403673	0.1383 0.1575
1564	45Y220F	[]N 60 20 26.252160(0.0493M) W133 3 53.310758(0.0515M) 692.7296(.1149088M.322138	0.1167 0.1575
1565	878002	[]N 60 22 59.947825(0.0292M) W133 46 35.417320(0.0294M) 814.2396(.0669013M.187701	0.0638 0.0940
1566	43Y035	[]N 60 26 54.993877(0.0265M) W134 55 55.456959(0.0265M) 772.9084(.0621642M.174740	0.0601 0.0825
1567	878003 878003	[]N 60 29 17.284949(0.0018M) W133 17 36.442010(0.0014M) 740.5171(.0100571M.028047	0.0040 0.0051
1568	878000	[]N 60 34 38.727037(0.0275M) W134 41 5.433962(0.0236M) 674.5133(.0518975M.146617	0.0449 0.0873
1569	808515 808515	[]N 60 45 30.700618(0.0474M) W137 32 47.881457(0.0441M) 603.2163(.1187792M.333062	0.1105 0.1385
1570	43Y081	[]N 60 46 21.260249(0.0336M) W136 31 51.652702(0.0311M) 714.2897(.0780518M.219405	0.0751 0.0996
1571	43Y092	[]N 60 47 10.872164(0.0471M) W136 28 47.252096(0.0496M) 714.4507(.1188539M.334495	0.1228 0.1390
1572	78Y504	[]N 60 51 8.176999(0.0222M) W135 38 41.527233(0.0203M) 688.7287(.0509977M.143260	0.0522 0.0634
1573	43Y108	[]N 60 51 33.036507(0.0444M) W137 37 46.187522(0.0415M) 659.3242(.1085905M.304615	0.1030 0.1306
1574	84Y014	[]N 61 2 41.836048(0.0056M) W135 13 17.984502(0.0047M) 758.5102(.0265493M.074048	0.0130 0.0155
1575	878029	[]N 61 13 44.605731(0.0770M) W135 26 28.568929(0.0636M) 827.3121(.1710757M.487565	0.1472 0.2140
1576	84Y040	[]N 61 27 0.405941(0.0224M) W135 46 11.999578(0.0208M) 745.9376(.0539157M.151316	0.0544 0.0633
1577	84Y051	[]N 61 41 21.833206(0.0359M) W135 55 19.765678(0.0336M) 647.6968(.0893564M.251068	0.0844 0.1038
1578	84Y062	[]N 61 54 16.174513(0.0355M) W136 8 23.312780(0.0340M) 616.2722(.0909841M.254093	0.0903 0.1022
1579	828017 RAWLIN	[]N 62 5 16.495518(0.0225M) W136 27 19.2973413(0.0230M) 543.6458(.0992530M.276865	0.0528 0.0723
1580	878032	[]N 62 17 2.880815(0.0284M) W136 18 15.430806(0.0269M) 520.9118(.0784142M.219369	0.0687 0.0829
1581	84Y094	[]N 62 27 55.813110(0.0308M) W136 39 47.845021(0.0298M) 511.1548(.0862211M.241120	0.0738 0.0924
1582	51Y595E 595E	[]N 62 35 58.419949(0.0234M) W136 51 31.765474(0.0234M) 474.6143(.0782741M.218565	0.0582 0.0708
1583	51Y604E	[]N 62 48 3.182153(0.0613M) W136 35 40.347012(0.0578M) 507.7411(.1467625M.411679	0.1409 0.1826
1584	848135 848135	[]N 63 8 5.943201(0.0326M) W136 29 15.517052(0.0316M) 771.4209(.0968770M.270896	0.0811 0.0951
1585	878031	[]N 63 22 4.505071(0.0506M) W136 40 42.942739(0.0465M) 498.5923(.1317428M.368813	0.1139 0.1507
1586	74Y135	[]N 63 32 27.045125(0.0616M) W137 20 32.633212(</td		

The GPS Height Transformation (v2.0)

1601	90HP10V PIER 10	[]N 49 53 19.447503(0.0031M)	W119 20 35.614156(0.0025M)	623.4728(.0104980M.029279	0.0069 0.0087
1602	B202697 GREEN TIMBERS N	[]N 49 10 42.773648(0.0014M)	W122 49 48.482135(0.0012M)	65.8137(.0082747M.023078	0.0033 0.0040
1603	B266148 TYNEMEAD PARK	[]N 49 10 44.293857(0.0015M)	W122 44 6.867314(0.0012M)	49.2026(.0083506M.023290	0.0034 0.0041
1604	B336131 PIER 1 SURREYBL	[]N 49 3 39.468380(0.0014M)	W122 41 30.282015(0.0011M)	28.9166(.0079339M.022127	0.0032 0.0038
1605	B693275 PIER 6 SURREYBL	[]N 49 4 27.051685(0.0015M)	W122 41 30.794868(0.0012M)	25.0479(.0083271M.023224	0.0034 0.0041
1606	B777771 FRASER HTG PARK	[]N 49 8 16.815391(0.0014M)	W122 17 15.563333(0.0014M)	31.0510(.0087649M.024446	0.0039 0.0041
1607	73Y180 73Y180	[]N 63 10 30.254256(0.0025M)	W130 12 1.916183(0.0019M)	1178.9605(.0153078M.042691	0.0053 0.0070
1608	73Y141 73Y141	[]N 62 37 24.345343(0.0014M)	W131 16 56.222637(0.0012M)	892.4279(.0081569M.022748	0.0033 0.0039
1609	848061 848061	[]N 62 20 41.927935(0.0276M)	W131 35 43.178465(0.0384M)	827.5499(.0788354M.232289	0.0458 0.0982
1610	60Y0028 M28-1960	[]N 61 55 45.300634(0.0022M)	W132 29 46.426994(0.0017M)	808.9859(.0107933M.030100	0.0047 0.0061
1611	848025 848025	[]N 61 54 4.044322(0.0021M)	W132 24 39.393524(0.0017M)	813.1097(.0099606M.027777	0.0046 0.0060
1612	73Y063 73Y063 (848126)	[]N 61 34 55.948210(0.0024M)	W133 5 10.095815(0.0018M)	1087.3280(.0116967M.032619	0.0050 0.0069
1613	848127 848127	[]N 61 13 0.467426(0.0026M)	W133 1 53.752237(0.0020M)	824.8314(.0115386M.032178	0.0055 0.0073
1614	88Y089 88Y089	[]N 60 29 13.648540(0.0030M)	W133 17 59.664882(0.0022M)	716.0221(.0177249M.049429	0.0062 0.0084
1615	T75C019 ECC75C019	[]N 59 35 8.808999(0.0030M)	W129 13 25.344940(0.0022M)	674.3879(.0184099M.051355	0.0059 0.0083
1616	T78C386 ECC78C386	[]N 58 46 54.901339(0.0024M)	W130 5 41.787425(0.0016M)	809.2200(.0132389M.036926	0.0045 0.0065
1617	T75C126 ECC75C126	[]N 57 4 48.239872(0.0025M)	W130 15 50.654661(0.0018M)	662.8769(.0149346M.041648	0.0051 0.0070
1618	T88C088 ECC88C088	[]N 56 45 7.684395(0.0037M)	W129 55 39.135434(0.0030M)	569.5393(.0185182M.051643	0.0085 0.0104
1619	75C190 75C190	[]N 56 6 22.827841(0.0038M)	W129 21 38.824807(0.0041M)	276.0355(.0168293M.046948	0.0104 0.0115
1620	T88C161 ECC88C161	[]N 56 10 8.057433(0.0040M)	W129 36 40.414543(0.0044M)	419.2130(.0167523M.046746	0.0111 0.0122
1621	T88C168 ECC88C168	[]N 56 5 45.862001(0.0031M)	W129 52 51.110814(0.0059M)	131.6171(.0146147M.040766	0.0087 0.0163
1622	75C508	[]N 49 6 50.674328(0.0026M)	W119 40 24.047157(0.0022M)	1827.5738(.0094822M.026446	0.0062 0.0072
1623	677208 UPPER	[]N 49 5 40.324567(0.0026M)	W119 37 58.478433(0.0022M)	1263.7180(.0106901M.029814	0.0061 0.0074
1624	677207 CAROL	[]N 49 6 16.095746(0.0026M)	W119 37 6.623706(0.0022M)	999.3282(.0110640M.030859	0.0060 0.0072
1625	75C2002 BOTTOM	[]N 49 5 5.537428(0.0026M)	W119 35 37.427236(0.0021M)	664.7140(.012045M.031252	0.0060 0.0073
1626	75C2001 BING	[]N 49 4 33.247528(0.0027M)	W119 33 19.553635(0.0022M)	570.4836(.0115533M.032228	0.0060 0.0074
1627	75C2000 BARRY	[]N 49 2 7.449857(0.0061M)	W119 29 13.48311(0.0044M)	327.8320(.0294017M.082012	0.0123 0.0170
1628	79C443	[]N 49 0 0.541542(0.0057M)	W119 27 42.634707(0.0041M)	285.8177(.0275489M.076843	0.0114 0.0159
1629	83C122	[]N 49 1 22.268023(0.0065M)	W119 41 1.288764(0.0046M)	459.2207(.0355475M.099131	0.0128 0.0181
1630	629102 YELLOWKNIFE SE	[]N 62 28 29.577948(0.0009M)	W114 26 26.309020(0.0008M)	182.2628(.0053832M.015012	0.0021 0.0025
1631	66T015 66T015	[]N 62 28 45.446975(0.0010M)	W114 43 36.823543(0.0009M)	154.1066(.0058246M.016243	0.0026 0.0027
1632	699062 699062	[]N 62 27 30.035106(0.0016M)	W114 35 11.959851(0.0015M)	164.7618(.0060174M.016781	0.0041 0.0046
1633	869505 PIER 84-5	[]N 62 27 59.670039(0.0009M)	W114 22 33.214747(0.0008M)	176.1906(.0040388M.011265	0.0022 0.0026
1634	686006A FORT SMITH	[]N 59 59 57.300552(0.0023M)	W111 50 20.120514(0.0019M)	185.0980(.0147973M.041283	0.0051 0.0066
1635	869215 869215	[]N 59 59 58.228381(0.0021M)	W112 36 17.222724(0.0018M)	196.1207(.0125003M.034877	0.0049 0.0059
1636	869216 869216	[]N 60 2 49.688317(0.0021M)	W112 48 34.291846(0.0018M)	202.3841(.0122337M.034132	0.0049 0.0058
1637	906015	[]N 59 24 52.061717(0.0040M)	W117 16 20.246864(0.0033M)	300.2331(.0143303M.039984	0.0091 0.0110
1638	58900 SWAN	[]N 60 2 16.511369(0.0041M)	W116 52 57.541475(0.0031M)	279.1830(.0153986M.042949	0.0086 0.0114
1639	82T026 82T026	[]N 60 20 35.825968(0.0039M)	W116 26 42.267029(0.0029M)	268.9208(.0149490M.041689	0.0081 0.0109
1640	82T037 82T037	[]N 60 30 21.616492(0.0040M)	W118 15 10.970457(0.0029M)	250.4191(.0150367M.041935	0.0080 0.0111
1641	55606 KEG RIVER EB	[]N 57 47 17.395864(0.0084M)	W117 36 40.459331(0.0079M)	389.5468(.0122276M.037262	0.0139 0.0249
1642	55611 RELAY	[]N 55 11 5.705172(0.0051M)	W114 2 17.593987(0.0057M)	641.6106(.0105637M.029790	0.0130 0.0163
1643	686004 FORT	[]N 58 43 22.097186(0.0055M)	W111 19 8.1712805(0.0065M)	247.6748(.0160985M.045223	0.0152 0.0175
1644	49A827H	[]N 58 59 43.792592(0.0055M)	W117 39 22.072862(0.0051M)	315.1809(.0136045M.038153	0.0129 0.0158
1645	79A2002	[]N 56 34 43.874545(0.0080M)	W115 18 28.167435(0.0088M)	485.8938(.0107426M.035403	0.0142 0.0231
1646	79A2036	[]N 57 21 35.353293(0.0080M)	W115 22 37.046714(0.0085M)	449.3991(.0108679M.033764	0.0157 0.0241
1647	82A065	[]N 56 9 37.555759(0.0087M)	W117 17 6.608278(0.0086M)	541.9954(.0118520M.038526	0.0128 0.0244
1648	82A103	[]N 56 6 35.451986(0.0063M)	W118 3 9.998303(0.0059M)	651.4693(.0112878M.032505	0.0107 0.0199
1649	82A119	[]N 56 10 9.272867(0.0067M)	W118 30 3.799141(0.0065M)	640.9608(.0120661M.034669	0.0123 0.0214
1650	82A181	[]N 57 1 1.504142(0.0071M)	W117 35 51.822770(0.0068M)	461.6005(.0109150M.032931	0.0115 0.0215
1651	82A195	[]N 57 14 5.415115(0.0064M)	W117 32 36.573235(0.0061M)	537.6895(.0105003M.030831	0.0108 0.0200
1652	82A273	[]N 58 17 30.210534(0.0044M)	W117 13 57.944645(0.0043M)	306.4136(.011047M.031121	0.0114 0.0123
1653	82A359	[]N 59 37 32.387978(0.0084M)	W117 10 11.510101(0.0076M)	282.8241(.0154973M.044243	0.0149 0.0261
1654	82A395	[]N 56 24 32.979647(0.0069M)	W118 42 45.774079(0.0065M)	667.5419(.0123920M.035497	0.0131 0.0216
1655	82A418	[]N 56 30 30.910580(0.0078M)	W119 11 10.052678(0.0074M)	627.4948(.0144052M.041155	0.0155 0.0242
1656	86A053	[]N 58 30 55.099765(0.0041M)	W116 9 7.669058(0.0039M)	285.1197(.0107604M.030091	0.0107 0.0114
1657	86A070	[]N 58 32 5.951210(0.0055M)	W115 40 32.927439(0.0052M)	299.3088(.0118934M.033467	0.0132 0.0159
1658	86A086	[]N 58 35 19.132276(0.0056M)	W115 10 20.559041(0.0053M)	339.6566(.0121940M.034272	0.0133 0.0162
1659	86A134	[]N 57 54 6.842523(0.0055M)	W115 30 40.956927(0.0054M)	345.4945(.0105888M.029903	0.0141 0.0156
1660	86A205	[]N 56 51 56.433652(0.0077M)	W115 13 35.210747(0.0084M)	466.9836(.0105890M.033398	0.0148 0.0233
1661	86A246	[]N 56 3 10.839430(0.0082M)	W115 20 29.874440(0.0094M)	617.8792(.0123175M.039063	0.0160 0.0244
1662	906010	[]N 56 19 50.032609(0.0078M)	W119 58 17.309782(0.0074M)	721.8674(.0157521M.044534	0.0161 0.0243
1663	906011	[]N 56 33 58.623353(0.0080M)	W119 33 12.808534(0.0074M)	683.2373(.0152367M.043380	0.0165 0.0240
1664	906012	[]N 57 31 15.272888(0.0087M)	W117 28 36.579140(0.0081M)	573.6298(.0120672M.037422	0.0143 0.0249
1665	906013	[]N 58 44 58.829937(0.0057M)	W117 16 57.408178(0.0054M)	325.7485(.0130869M.036763	0.0151 0.0153
1666	906014	[]N 59 12 2.498752(0.0055M)	W117 31 43.906046(0.0051M)	304.0631(.0140031M.039259	0.0131 0.0160
1667	906016	[]N 59 32 28.856734(0.0130M)	W111 27 39.794724(0.05092M)	179.6082(.4921006M.1.7312	0.6500 1.1097
1668	906019	[]N 58 58 51.663625(0.0302M)	W111 49 16.653547(0.0429M)	195.7131(.5430325M.1.8593	0.7075 1.2149
1669	906029	[]N 58 1 15.740060(0.0050M)	W117 21 54.247515(0.0048M)	323.0570(.0110160M.031003	0.0117 0.0149
1670	906030	[]N 56 44 29.013805(0.0080M)	W117 38 39.314560(0.0075M)	583.0250(.0114643M.035502	0.0124 0.0233
1671	906032	[]N 58 8 22.806433(0.0064M)	W115 43 11.354879(0.0060M)	265.8944(.0114311M.032482	0.0139 0.0191
1672	906033	[]N 57 36 48.294184(0.0052M)	W115 19 46.071438(0.0051M)	392.3480(.0100156M.028261	0.0139 0.0143
1673	906034	[]N 57 5 43.842667(0.0098M)	W115 6 20.412961(0.0104M)	442.4558(.0120354M.041922	0.0164 0.0261
1674	906035	[]N 56 17 16.667525(0.0100M)	W115 21 24.379865(0.0136M)	545.4427(.0116659M.047097	0.0168 0.0278
1675	906036	[]N 55 47 58.320165(0.0085M)	W115 9 45.672578(0.0099M)	630.4792(.0115470M.040705	0.0124 0.0236
1676	906041	[]N 56 4 32.452688(0.0047M)	W111 52 48.100239(0.0045M)	703.2531(.0131465M.036730	0.0123 0.0132
1677	906042						

The GPS Height Transformation (v2.0)

1696	67A199	[]N 54 21 23.461594(0.0090M) W112 56 19.794019(0.0124M) 654.0087(.0128275M.043627 0.0192 0.0289
1697	79A803	[]N 53 50 5.263156(0.0053M) W114 44 46.583288(0.0060M) 698.7093(.0110709M.030944 0.0148 0.0168
1698	80A112	[]N 55 17 0.473407(0.0061M) W117 3 9.284389(0.0139M) 614.6700(.0113074M.042437 0.0166 0.0266
1699	80A133	[]N 55 28 6.490313(0.0055M) W116 42 49.168351(0.0126M) 588.5746(.0113951M.038492 0.0153 0.0276
1700	80A285	[]N 55 5 28.721389(0.0072M) W117 41 14.350831(0.0127M) 676.9892(.0101641M.043214 0.0143 0.0196
1701	80A3002	[]N 53 57 51.949191(0.0051M) W110 10 31.710378(0.0079M) 680.8328(.0124337M.034916 0.0141 0.0218
1702	80A648	[]N 55 18 5.997869(0.0053M) W115 21 35.876047(0.0092M) 572.0096(.0132334M.038205 0.0141 0.0239
1703	80A689	[]N 54 43 3.315763(0.0084M) W115 24 14.467914(0.0195M) 1127.6406(.0146299M.058260 0.0234 0.0352
1704	81A061	[]N 54 20 38.030623(0.0065M) W113 54 44.601554(0.0109M) 594.4952(.0114583M.035525 0.0175 0.0268
1705	81A125	[]N 54 9 9.305587(0.0085M) W113 58 32.127798(0.0121M) 627.3482(.0160275M.047234 0.0225 0.0308
1706	81A145	[]N 54 9 8.763942(0.0057M) W114 22 30.460253(0.0118M) 657.2842(.0104705M.035273 0.0155 0.0264
1707	81A171	[]N 54 17 2.476191(0.0069M) W114 40 34.638359(0.0106M) 648.1143(.0116998M.036211 0.0172 0.0263
1708	82A028	[]N 55 43 55.754287(0.0073M) W117 7 54.004477(0.0166M) 569.3401(.0113126M.050019 0.0177 0.0271
1709	90E002	[]N 54 4 8.619586(0.0054M) W115 23 15.832397(0.0079M) 748.3964(.0139041M.039028 0.0145 0.0220
1710	90E004	[]N 54 26 50.577889(0.0061M) W115 32 15.731963(0.0120M) 1058.2279(.0126283M.038302 0.0168 0.0302
1711	90E006	[]N 54 28 59.563382(0.0078M) W116 58 14.941335(0.0101M) 767.3242(.0155083M.043841 0.0211 0.0278
1712	90E007	[]N 54 45 7.778361(0.0068M) W117 12 10.616630(0.0123M) 645.6401(.0127767M.040539 0.0184 0.0287
1713	90E008	[]N 55 1 52.287676(0.0082M) W117 16 25.506048(0.0170M) 714.7637(.0142112M.054203 0.0211 0.0309
1714	90E009	[]N 55 27 34.771691(0.0060M) W118 39 45.168700(0.0106M) 785.6250(.0089681M.035357 0.0118 0.0197
1715	90E021	[]N 54 59 57.105808(0.0078M) W113 40 1.214985(0.0121M) 636.8966(.0125895M.042631 0.0182 0.0263
1716	90E022	[]N 54 5 33.984007(0.0085M) W112 36 54.540458(0.0114M) 633.7464(.0134816M.042553 0.0160 0.0303
1717	90E024	[]N 54 31 22.072159(0.0071M) W115 5 36.267166(0.0126M) 804.6367(.0124910M.039841 0.0189 0.0299
1718	90E025	[]N 55 0 15.47.197155(0.0060M) W115 15 35.269886(0.0190M) 729.3567(.0147312M.056552 0.0166 0.0360
1719	90E026	[]N 54 50 56.082644(0.0104M) W114 4 3.075049(0.0124M) 633.3365(.0128511M.044840 0.0215 0.0293
1720	90E027	[]N 55 4 11.438232(0.0075M) W114 1 41.486513(0.0075M) 586.2276(.0125582M.036102 0.0182 0.0214
1721	90E028	[]N 55 12 30.5000878(0.0075M) W114 24 13.892839(0.0110M) 576.1321(.0143755M.042624 0.0187 0.0288
1722	27625 INNISFAIL	[]N 52 3 47.492783(0.0095M) W113 53 36.979743(0.0060M) 1008.0224(.0176308M.049202 0.0167 0.0264
1723	28642 VERMILION SH 12	[]N 53 17 29.900073(0.0103M) W110 52 58.045893(0.0070M) 661.1770(.0203315M.056886 0.0195 0.0284
1724	28662 CARVEL	[]N 53 23 23.831771(0.0075M) W114 8 21.685888(0.0055M) 770.9811(.0142659M.039784 0.0154 0.0208
1725	666004 WINTER	[]N 53 33 41.772863(0.0069M) W113 39 52.873206(0.0051M) 675.9646(.0131185M.0363590 0.0141 0.0193
1726	716024 FLEET	[]N 52 11 6.157915(0.0086M) W111 47 18.197861(0.0060M) 830.1183(.0179777M.050157 0.0165 0.0239
1727	82X168 52112.220	[]N 52 27 46.806833(0.0087M) W113 20 55.568428(0.0056M) 846.5325(.0167319M.046667 0.0155 0.0243
1728	13AL15 13AL15	[]N 53 38 42.123519(0.0081M) W112 29 23.854000(0.0054M) 669.5691(.0162018M.045189 0.0149 0.0227
1729	13AL31 13AL31	[]N 53 20 8.122027(0.0084M) W111 10 14.775189(0.0058M) 602.9563(.0168975M.047301 0.0162 0.0230
1730	15AS95 15AS95	[]N 51 28 4.504372(0.0131M) W110 58 24.783853(0.0076M) 768.6671(.0214025M.059693 0.0207 0.0369
1731	16AU7 16AU7	[]N 53 48 50.182642(0.0092M) W113 42 0.508057(0.0060M) 688.0516(.0167333M.046809 0.0165 0.0256
1732	19AZ18 19AZ18	[]N 52 17 24.809485(0.0094M) W112 15 6.717605(0.0066M) 799.5152(.0191320M.053402 0.0184 0.0260
1733	19AZ25 19AZ25	[]N 52 8 9.437656(0.0090M) W111 40 50.463562(0.0063M) 796.9877(.0183601M.051358 0.0171 0.0249
1734	19AZ45 19AZ45	[]N 51 52 35.103091(0.0101M) W110 3 4.999001(0.0120M) 691.0089(.0218314M.061289 0.0273 0.0335
1735	19AZ9 19AZ9	[]N 52 18 52.791870(0.0167M) W112 52 21.839066(0.0099M) 790.1780(.0265041M.073917 0.0272 0.0466
1736	20A046 20A046	[]N 50 23 50.440335(0.0095M) W112 24 31.943279(0.0089M) 806.2673(.0192409M.053801 0.0243 0.0267
1737	21ACC3A 21ACC3A	[]N 50 29 11.541510(0.0094M) W113 51 52.311874(0.0073M) 1055.4002(.0171225M.047779 0.0204 0.0262
1738	22A682C 22A682C	[]N 53 2 50.586344(0.0085M) W113 26 36.182701(0.0055M) 738.2625(.0167686M.046768 0.0152 0.0238
1739	22AH46A 22AH46A	[]N 53 18 26.527640(0.0080M) W113 32 25.006149(0.0065M) 701.8905(.0160604M.044805 0.0180 0.0223
1740	25A51H3 25A51H3	[]N 53 23 10.257269(0.0082M) W112 45 15.563988(0.0056M) 699.4013(.0152815M.042629 0.0156 0.0229
1741	48A633D 48A633D	[]N 51 51 8.472448(0.0072M) W111 21 6.314711(0.0046M) 752.6707(.0148241M.041367 0.0129 0.0200
1742	48A651D 48A651D	[]N 51 33 32.758154(0.0126M) W111 20 29.538814(0.0075M) 743.0217(.0212005M.059150 0.0207 0.0353
1743	48A660D 48A660D	[]N 51 52 53.494279(0.0094M) W111 50 52.269308(0.0059M) 819.4236(.0175706M.049085 0.0162 0.0263
1744	48A673D 48A673D	[]N 51 30 12.220801(0.0094M) W111 40 6.548781(0.0063M) 793.3186(.0176693M.049299 0.0175 0.0262
1745	48A680D 48A680D	[]N 51 18 0.666775(0.0096M) W111 40 9.771068(0.0062M) 739.0972(.0180123M.050279 0.0173 0.0268
1746	48A688D 48A688D	[]N 51 4 0.994661(0.0112M) W111 35 12.788841(0.0073M) 717.7724(.0211707M.059197 0.0203 0.0309
1747	48A699D 48A699D	[]N 50 50 1.137638(0.0097M) W111 38 36.730932(0.0069M) 677.1403(.0190376M.053119 0.0189 0.0272
1748	52A758D 52A758D	[]N 49 14 45.579741(0.0076M) W110 15 10.679172(0.0054M) 953.4631(.0189139M.052826 0.0149 0.0211
1749	52A772D 52A772D	[]N 49 25 16.558224(0.0087M) W110 48 48.659426(0.0060M) 861.1758(.0196807M.054903 0.0165 0.0243
1750	52A785D 52A785D	[]N 49 28 46.483159(0.0105M) W111 14 14.732413(0.0065M) 868.5685(.0195948M.054648 0.0178 0.0294
1751	52A796D 52A796D	[]N 49 29 58.187257(0.0079M) W111 42 36.230771(0.0060M) 883.0424(.0168777M.047090 0.0167 0.0222
1752	52A805D 52A805D	[]N 49 30 57.493208(0.0081M) W112 6 48.180874(0.0058M) 933.7502(.0166656M.046486 0.0159 0.0227
1753	55A032 55A032	[]N 49 20 51.454855(0.0070M) W112 59 13.235662(0.0063M) 1050.8284(.0157573M.043961 0.0171 0.0200
1754	55A051 55A051	[]N 49 27 6.190313(0.0089M) W113 18 38.290304(0.0078M) 995.9664(.0193609M.054056 0.0215 0.0247
1755	55A069 55A069	[]N 49 7 51.552856(0.0110M) W113 42 18.579672(0.0090M) 1248.8402(.0230251M.064265 0.0246 0.0309
1756	55A124 55A124	[]N 49 1 42.100729(0.0110M) W112 56 35.370595(0.0102M) 1309.2490(.0227009M.063451 0.0283 0.0307
1757	55A138 55A138	[]N 49 5 11.238635(0.0104M) W112 28 39.444012(0.0080M) 1171.1544(.0227918M.063867 0.0217 0.0286
1758	55A146 55A146	[]N 49 6 56.656186(0.0110M) W112 8 34.790456(0.0084M) 1067.5668(.0237915M.066773 0.0229 0.0302
1759	60A031 60A031	[]N 54 20 24.565436(0.0084M) W110 25 47.637016(0.0060M) 516.0142(.0191100M.053329 0.0168 0.0235
1760	60A047 60A047	[]N 54 11 45.202922(0.0076M) W110 49 49.633810(0.0068M) 561.9459(.0170376M.047580 0.0180 0.0219
1761	61A044 61A044	[]N 53 53 27.827353(0.0099M) W113 19 25.883659(0.0059M) 618.0073(.0169715M.047360 0.0162 0.0277
1762	61A085 61A085	[]N 53 55 6.965660(0.0095M) W110 53 42.897400(0.0079M) 622.1225(.0207982M.058171 0.0213 0.0266
1763	61A100 61A100	[]N 53 37 19.733718(0.0116M) W110 51 57.245886(0.0088M) 953.6279(.0252408M.071152 0.0241 0.0311
1764	61A129 61A129	[]N 53 25 43.657823(0.0091M) W111 45 17.611871(0.0067M) 662.6832(.0189371M.052886 0.0185 0.0253
1765	61A157 61A157	[]N 53 46 28.117689(0.0101M) W112 53 20.644780(0.0060M) 660.2272(.0169471M.047284 0.0166 0.0282
1766	68A174 68A174	[]N 50 7 45.818101(0.0065M) W113 51 31.868571(0.0037M) 757.3102(.0185114M.051649 0.0099 0.0183
1767	71A004 71A004	[]N 51 27 49.957649(0.0120M) W112 44 41.922378(0.0136M) 665.0432(.0220085M.061445 0.0326 0.0388
1768	71A039 71A039	[]N 53 2 50.834017(0.0109M) W112 49 7.747328(0.0071M) 718.2869(.0198397M.055400 0.0197 0.0302
1769	71A104 71A104	[]N 52 34 53.080531(0.0087M) W115 21 26.285668(0.0063M) 997.9402(.0189353M.052828 0.0162 0.0251
1770	71A131 71A131	[]N 52 54 37.578729(0.0124M) W115 24 14.433442(0.0092M) 941.3336(.0248037M.069226 0.0241 0.0354
1771	71A149 71A149	[]N 53 10 18.122576(0.0096M) W115 19 3.642263(0.0075M) 897.9108(.0187200M.052227 0.0201 0.0273
1772	71A181 71A181	[]N 53 18 38.744832(0.0125M) W114 58 33.749504(0.0086M) 795.8536(.0234511M.065580 0.0239 0.0345
1773	71A203X 71A203X	[]N 53 35 5.998467(0.0078M) W114 37 50.043964(0.0061M) 782.0683(.0150475M.042026 0.0171 0.0217
1774	76A024 76A024	[]N 50 51 46.847881(0.0088M) W114 24 49.139503(0.0053M) 1044.5525(.0153870M.042994 0.0147 0.0243
1775	76X120 76X120	[]N 52 23 11.206080(0.0109M) W114 50 28.464655(0.0077M) 985.3283(.0206141M.057596 0.0213 0.0303
1776	77A011 77A011	[]N 53 36 24.611178(0.0079M) W115 52 59.966182(0.0068M) 840.7074(.0155243M.043398 0.0181 0.0225
1777	77A038 77A038	[]N 53 36 53.708400(0.0143M) W115 22 29.856336(0.0096M) 782.5149(.0234431M.065381 0.0266 0.0398
1778	78A118 78A118	[]N 52 33 17.842530(0.0086M) W113 39 49.046318(0.0055M) 823.5511(.0163389M.045613 0.0154 0.0239
1779	78A144 78A144	[]N 52 9 19.971942(0.0093M) W113 52 13.036237(0.0060M) 878.3881(.0172421M.048106 0.0167 0.0260
1780	78A161 78A161	[]N 51 51 13.161815(0.0114M) W114 3 19.331540(0.0070M) 986.7525(.0200576M.055937 0.0190 0.0320
1781	78A175 78A175	[]N 51 37 13.824131(0.0107M) W114 5 44.550815(0.0068M) 1028.9112(.0189945M.052981 0.0186 0.0299
1782	78A191 78A191	[]N 51 21 3.890460(0.0171M) W114 0 8.

The GPS Height Transformation (v2.0)

1791	82A469	82A469	[] N 49 48 53.455059(0.0078M) W111 55 24.047196(0.0063M) 801.2680(.0159639M.044543 0.0175 0.0216
1792	82A488	82A488	[] N 49 49 47.443577(0.0101M) W111 29 39.404494(0.0076M) 775.7181(.0196072M.054718 0.0210 0.0282
1793	82A499	82A499	[] N 49 52 24.932575(0.0088M) W111 5 41.069676(0.0060M) 828.5236(.0171320M.047847 0.0163 0.0247
1794	82A538	82A538	[] N 50 10 39.259127(0.0120M) W110 19 11.749706(0.0089M) 750.7153(.0214909M.060778 0.0225 0.0334
1795	82A557	82A557	[] N 50 23 49.451638(0.0120M) W110 5 46.048950(0.0095M) 797.2390(.0219743M.062391 0.0239 0.0334
1796	82A576	82A576	[] N 50 40 29.924573(0.0101M) W110 5 51.740565(0.0081M) 726.9814(.0199364M.055855 0.0220 0.0281
1797	82A595	82A595	[] N 50 55 14.542405(0.0092M) W110 8 55.301585(0.0061M) 598.3922(.0189828M.053038 0.0169 0.0254
1798	82A612	82A612	[] N 51 9 16.592159(0.0101M) W110 12 53.932880(0.0068M) 690.7721(.0203333M.056815 0.0188 0.0281
1799	82A630	82A630	[] N 51 23 16.366729(0.0120M) W110 28 27.358959(0.0069M) 746.5600(.0203589M.056852 0.0188 0.0337
1800	82A649	82A649	[] N 51 40 41.558968(0.0096M) W110 30 1.281802(0.0100M) 746.1950(.0195571M.054658 0.0263 0.0278
1801	82A671	82A671	[] N 51 59 24.323623(0.0074M) W110 31 45.764644(0.0061M) 655.9691(.0177879M.049741 0.0166 0.0205
1802	82A703	82A703	[] N 52 17 19.267318(0.0080M) W110 50 15.811764(0.0085M) 749.9391(.0162741M.045503 0.0207 0.0248
1803	82A723	82A723	[] N 52 34 44.804151(0.0092M) W110 49 13.242195(0.0089M) 686.6280(.0196669M.055137 0.0237 0.0261
1804	82A743	82A743	[] N 52 50 30.930870(0.0092M) W110 51 16.666941(0.0067M) 658.9235(.0180000M.050302 0.0187 0.0254
1805	83A081	83A081	[] N 52 58 15.739632(0.0127M) W111 27 21.287833(0.0076M) 676.0519(.0208552M.058167 0.0205 0.0358
1806	83A129	83A129	[] N 53 5 17.864750(0.0109M) W110 52 58.421452(0.0074M) 649.7550(.0208327M.058413 0.0203 0.0300
1807	83A145	83A145	[] N 53 20 20.201640(0.0088M) W110 51 32.733059(0.0065M) 606.8453(.0186023M.052244 0.0178 0.0238
1808	83A175	83A175	[] N 52 51 3.392550(0.0085M) W110 18 59.108393(0.0073M) 645.4218(.0206025M.057772 0.0197 0.0236
1809	83A329	83A329	[] N 51 23 9.295127(0.0074M) W110 4 30.008675(0.0052M) 691.0459(.0176461M.049265 0.0145 0.0205
1810	84A150	84A150	[] N 50 9 54.823944(0.0095M) W113 38 48.824469(0.0082M) 1027.0609(.0180448M.050381 0.0226 0.0267
1811	86A304	86A304	[] N 52 22 12.156329(0.0103M) W113 47 42.424153(0.0069M) 845.5287(.0195987M.054739 0.0193 0.0286
1812	86A367	86A367	[] N 52 25 13.493361(0.0075M) W115 14 15.819615(0.0057M) 1036.0920(.0166049M.046345 0.0153 0.0212
1813	86A484	86A484	[] N 53 5 21.089641(0.0077M) W114 58 48.845837(0.0062M) 764.5188(.0153460M.042837 0.0171 0.0214
1814	90E001	90E001	[] N 53 44 17.183182(0.0082M) W114 22 26.065663(0.0062M) 723.1898(.0161725M.045110 0.0173 0.0228
1815	90E023	90E023	[] N 53 23 29.966348(0.0083M) W110 32 43.351344(0.0066M) 587.2531(.0187609M.052672 0.0176 0.0228
1816	90E037	90E037	[] N 52 48 49.931712(0.0106M) W112 7 55.920208(0.0068M) 685.1665(.0183549M.051310 0.0189 0.0293
1817	90E038	90E038	[] N 53 7 48.847156(0.0089M) W111 54 6.632316(0.0062M) 665.0056(.0173231M.048352 0.0171 0.0248
1818	90E044	90E044	[] N 53 31 48.723559(0.0109M) W116 51 5.796426(0.0071M) 980.3970(.0205394M.057281 0.0192 0.0307
1819	90E045	90E045	[] N 53 32 34.397985(0.0081M) W117 15 13.141745(0.0053M) 1092.0623(.0171992M.047975 0.0148 0.0225
1820	90E046	90E046	[] N 52 28 12.660581(0.0076M) W115 41 45.757348(0.0050M) 1280.1792(.0180431M.050344 0.0138 0.0214
1821	90E047	90E047	[] N 50 20 54.429141(0.0115M) W114 25 4.928236(0.0082M) 921.0194(.0221258M.061937 0.0224 0.0318
1822	90E048	90E048	[] N 52 18 30.957500(0.0090M) W112 31 28.307262(0.0066M) 788.1980(.0179742M.050190 0.0183 0.0251
1823	A20966	A20966	[] N 49 10 26.226527(0.0097M) W113 17 25.176250(0.0077M) 1170.1599(.0196292M.054799 0.0214 0.0269
1824	A483537	A483537	[] N 49 52 22.765601(0.0077M) W113 3 37.760614(0.0052M) 978.8211(.0146227M.040787 0.0144 0.0214
1825	23601 ROSS		[] N 49 10 17.178217(0.0034M) W112 54 54.839365(0.0020M) 1363.4016(.0144401M.040269 0.0055 0.0097
1826	23604 MEERS		[] N 49 12 21.432145(0.0034M) W112 21 52.201993(0.0020M) 1252.5100(.0144055M.040173 0.0053 0.0095
1827	646005 WEST		[] N 49 41 2.153810(0.0026M) W112 54 51.811276(0.0020M) 926.0349(.0142200M.039655 0.0056 0.0074
1828	78X000 937 56.14		[] N 53 34 14.444706(0.0013M) W113 11 44.823546(0.0011M) 670.6209(.0059500M.016593 0.0031 0.0037
1829	89X001 PIER A		[] N 53 34 7.750874(0.0021M) W113 2 48.322564(0.0018M) 715.6997(.0069124M.019278 0.0050 0.0057
1830	89X002 PIER B		[] N 53 39 27.233488(0.0019M) W113 13 35.578178(0.0015M) 620.1359(.0064550M.018002 0.0042 0.0052
1831	89X011 PIER 17		[] N 53 34 14.413629(0.0014M) W113 10 57.285183(0.0012M) 669.8261(.0068658M.019147 0.0033 0.0039
1832	90X006 PIER G		[] N 53 33 40.217367(0.0014M) W113 11 50.127356(0.0012M) 670.8134(.0064972M.018119 0.0034 0.0040
1833	786561 HAY		[] N 53 14 39.819033(0.0042M) W112 59 22.201571(0.0039M) 777.2166(.0105236M.029387 0.0106 0.0119
1834	30509 PRESTFOSS		[] N 53 2 3.505121(0.0039M) W104 57 18.481197(0.0038M) 426.0147(.0251643M.070177 0.0096 0.0119
1835	30513 RED DEER HILL		[] N 53 3 23.161350(0.0039M) W105 50 30.565688(0.0025M) 508.3195(.0246339M.068697 0.0069 0.0109
1836	30516 ROUND LAKE		[] N 53 17 49.082310(0.0042M) W106 0 13.459663(0.0027M) 468.9609(.0266562M.074337 0.0075 0.0117
1837	575978E 978E		[] N 53 20 7.861504(0.0040M) W105 45 27.608279(0.0025M) 444.1677(.0252787M.070497 0.0071 0.0112
1838	795073 79S073		[] N 53 2 42.645595(0.0037M) W105 57 31.873286(0.0023M) 440.3778(.0231661M.064605 0.0064 0.0102
1839	86S107 86S107		[] N 52 59 15.467904(0.0040M) W105 16 15.711248(0.0031M) 433.2098(.0250770M.069932 0.0083 0.0115
1840	88V901 PRINCE ALB GPS		[] N 53 12 59.161823(0.0039M) W105 39 37.145041(0.0028M) 401.9341(.0257551M.071824 0.0077 0.0109
1841	925000Z 925000 AZ		[] N 53 13 14.647045(0.0039M) W105 55 45.215552(0.0025M) 439.6515(.0259133M.072267 0.0070 0.0110
1842	625016 S 16		[] N 50 31 58.631749(0.0031M) W104 45 19.372297(0.0024M) 587.3375(.0105390M.029390 0.0063 0.0090
1843	765013 SINTALUTA		[] N 50 30 49.825817(0.0036M) W103 25 37.823209(0.0026M) 567.6149(.0103359M.028824 0.0073 0.0100
1844	90V100 PIER 1		[] N 50 21 17.714694(0.0024M) W104 9 33.706136(0.0019M) 639.4867(.0072389M.020188 0.0053 0.0068
1845	90V101 PIER 2		[] N 50 20 26.210646(0.0024M) W104 9 33.431676(0.0019M) 616.6757(.0071956M.020067 0.0052 0.0068
1846	90V103 PIER 4		[] N 50 19 39.457644(0.0024M) W104 9 33.191611(0.0019M) 608.2568(.0072402M.020192 0.0053 0.0068
1847	90V106 PIER 7		[] N 50 15 31.040952(0.0025M) W104 9 32.590877(0.0019M) 578.8153(.0081057M.022605 0.0053 0.0069
1848	90V108 PIER 9		[] N 50 18 33.951265(0.0031M) W104 5 54.612961(0.0024M) 618.1249(.0084089M.023464 0.0066 0.0086
1849	90V109 PIER 10		[] N 50 25 33.070019(0.0024M) W104 13 1.025197(0.0020M) 639.2279(.0081064M.022607 0.0055 0.0068
1850	90V110 PIER 11		[] N 50 23 48.461066(0.0027M) W104 5 28.041019(0.0022M) 653.8971(.0081070M.022615 0.0060 0.0076
1851	90V111 PIER 12		[] N 49 47 57.766632(0.0029M) W104 15 52.973346(0.0035M) 561.9029(.0248703M.069357 0.0081 0.0097
1852	90V112 PIER 13		[] N 50 19 52.791063(0.0031M) W103 55 49.889563(0.0023M) 651.6087(.0083785M.023367 0.0063 0.0087
1853	90V113 PIER 14		[] N 50 20 18.714592(0.0034M) W103 36 45.882422(0.0022M) 653.9831(.0093624M.026109 0.0060 0.0096
1854	664002 DAK		[] N 58 45 33.207666(0.0024M) W9 59 59 24.298388(0.0019M) -12.9413(.0182797M.050980 0.0053 0.0068
1855	604356 TWIN LAKES		[] N 58 37 1.337758(0.0029M) W9 43 51 56.066080(0.0023M) -12.0069(.0178882M.049887 0.0055 0.0088
1856	6640000 CHURCHILL		[] N 58 46 59.890158(0.0024M) W9 44 11 59.754655(0.0019M) -29.5101(.0181058M.050495 0.0053 0.0068
1857	774030 GEOS III		[] N 58 45 32.923351(0.0024M) W9 4 5 18.052320(0.0018M) -16.3695(.0176543M.049237 0.0049 0.0066
1858	85M108 86M108		[] N 58 43 4.698958(0.0025M) W9 4 7 27.057007(0.0018M) -39.6733(.0178632M.049819 0.0050 0.0069
1859	89M308 89M308		[] N 58 45 51.612523(0.0024M) W9 4 8 34.460220(0.0018M) -33.6475(.0177382M.0494970 0.0050 0.0066
1860	934020 WADGPS		[] N 49 54 2.062256(0.0023M) W9 7 15 34.389529(0.0019M) 220.9058(.0162254M.045255 0.0051 0.0065
1861	9343001 309		[] N 49 53 39.356354(0.0030M) W9 7 13 45.054110(0.0023M) 207.0178(.0199366M.055615 0.0063 0.0083
1862	9343000 103		[] N 49 55 0.786253(0.0030M) W9 7 15 37.613002(0.0021M) 210.7973(.0193881M.054075 0.0059 0.0083
1863	63M312EX		[] N 49 53 7.855077(0.0028M) W9 7 15 30.742557(0.0022M) 209.6232(.0195690M.054583 0.0060 0.0077
1864	924000Z ACP AZIMUTH		[] N 50 15 29.284807(0.0043M) W9 5 52 5.011280(0.0030M) 245.0207(.0247659M.069067 0.0084 0.0120
1865	22M19K 19-K		[] N 50 17 58.689359(0.0043M) W9 5 33 4.224956(0.0030M) 272.7614(.0248268M.069237 0.0084 0.0120
1866	57403 CABIN		[] N 49 58 57.241044(0.0042M) W9 5 34 58.111341(0.0030M) 300.5139(.0243751M.067978 0.0083 0.0118
1867	59413 CLOVERLEAF		[] N 49 59 17.936828(0.0043M) W9 6 34 3.315477(0.0030M) 225.0311(.0248216M.069221 0.0084 0.0120
1868	75RA42 23		[] N 50 44 50 44 59.799484(0.0038M) W9 6 8 37.536752(0.0027M) 218.6338(.0216284M.060318 0.0074 0.0106
1869	63M035 1461C		[] N 50 3 42.354500(0.0043M) W9 6 38 5.032828(0.0030M) 212.9599(.0248514M.069304 0.0084 0.0121
1870	59414 LOUIS		[] N 50 3 41.665653(0.0032M) W9 6 33 59.986670(0.0029M) 217.5373(.0109391M.030522 0.0077 0.0092
1871	60400 WOODLANDS		[] N 50 10 0.142055(0.0034M) W9 7 51 24.463456(0.0029M) 234.0292(.0110617M.030872 0.0080 0.0094
1872	913010 913010		[] N 48 24 24.386648(0.0028M) W9 8 13 23.348815(0.0038M) 150.4686(.0165563M.046285 0.0076 0.0103
1873	913014 913014		[] N 47 41 2.500833(0.0026M) W9 8 48 49.566449(0.0022M) 346.4526(.0174470M.048655 0.0061 0.0073
1874	700433		[] N 46 18 47.932415(0.004

The GPS Height Transformation (v2.0)

1886	68K2073	BEAUVOIR	[]N 45 27 17.099301(0.0086M) W 71 53 53.738812(0.0087M) 280.1381(.0781954M.218075 0.0227 0.0254
1887	882011	882011	[]N 45 50 30.646823(0.0078M) W 72 0 8.388549(0.0078M) 109.8945(.0180004M.051797 0.0177 0.0216
1888	80L065	80L065	[]N 45 39 57.334777(0.0073M) W 72 8 51.203244(0.0072M) 100.0443(.0687605M.191754 0.0188 0.0215
1889	80L081	80L081	[]N 45 38 52.474443(0.0084M) W 72 33 53.712648(0.0078M) 65.5063(.0817827M.228071 0.0211 0.0239
1890	80L093	80L093	[]N 45 38 29.445923(0.0084M) W 72 54 14.800246(0.0077M) 3.6599(.0812035M.226457 0.0206 0.0241
1891	69L042	69L042	[]N 45 40 58.925265(0.0084M) W 73 26 33.764135(0.0077M) -17.5180(.0812808M.226676 0.0205 0.0241
1892	77KT002	T.F. 5968	[]N 45 36 54.916691(0.0094M) W 73 49 11.201100(0.0083M) 0.1206(.0950059M.264952 0.0223 0.0269
1893	81L062	81L062	[]N 45 31 31.079528(0.0058M) W 74 12 29.388341(0.0042M) 0.2514(.0141845M.039752 0.0115 0.0158
1894	08205	COTEAU WB	[]N 45 13 32.083736(0.0095M) W 74 19 57.413179(0.0085M) 27.0313(.0947482M.264238 0.0227 0.0272
1895	180876	876	[]N 45 21 56.509594(0.0044M) W 74 29 56.075755(0.0032M) 45.7495(.0104492M.029181 0.0088 0.0121
1896	883002	O'BRIEN	[]N 45 13 10.153771(0.0099M) W 74 46 7.017748(0.0092M) 65.2407(.0963612M.268736 0.0245 0.0283
1897	883003	883003	[]N 45 8 1.799901(0.0161M) W 75 6 36.121420(0.0204M) 47.7480(.1541732M.429966 0.0425 0.0584
1898	81D8348	818348	[]N 45 7 1.454727(0.0160M) W 75 24 3.783509(0.0204M) 41.4765(.1539448M.429330 0.0422 0.0584
1899	653003	MANOTICK	[]N 45 14 51.618905(0.0144M) W 75 42 47.456347(0.0140M) 73.8489(.1503510M.419285 0.0358 0.0430
1900	680087	680087	[]N 45 25 21.242165(0.0051M) W 76 18 16.531085(0.0048M) 66.4404(.0116114M.033280 0.0111 0.0140
1901	67D8420	420-67	[]N 45 28 1.224635(0.0098M) W 76 37 31.209346(0.0093M) 109.0530(.0856479M.238915 0.0219 0.0301
1902	24304	RENFREW	[]N 45 29 31.306779(0.0098M) W 76 42 31.162031(0.0093M) 188.8506(.0850414M.237221 0.0218 0.0301
1903	67D8440	440-67	[]N 45 37 12.730917(0.0098M) W 76 52 8.400805(0.0093M) 104.8182(.0850102M.237137 0.0217 0.0302
1904	883025	883025	[]N 46 22 7.391605(0.0092M) W 79 46 19.100905(0.0097M) 166.6476(.0569747M.158895 0.0197 0.0316
1905	21U118E	118E	[]N 46 25 22.162564(0.0080M) W 80 10 30.600898(0.0074M) 172.1635(.0502951M.140290 0.0161 0.0256
1906	70U381	70U381	[]N 46 30 42.298942(0.0079M) W 80 36 37.965609(0.0074M) 200.7742(.0506609M.141329 0.0157 0.0255
1907	29316	N SUDBURY	[]N 46 30 16.048788(0.0078M) W 80 58 4.371963(0.0071M) 312.4207(.0494909M.138043 0.0154 0.0248
1908	70U353	70U353	[]N 46 23 49.929049(0.0080M) W 81 12 37.786762(0.0071M) 205.7350(.0496987M.138653 0.0146 0.0257
1909	70U340	70U340	[]N 46 19 31.688232(0.0082M) W 81 32 29.462262(0.0072M) 173.2214(.0494511M.137959 0.0148 0.0263
1910	70U326	70U326	[]N 46 14 55.558123(0.0083M) W 81 55 38.782578(0.0074M) 161.9171(.0495556M.138259 0.0150 0.0268
1911	D10156	70T30	[]N 46 12 18.547075(0.0089M) W 82 16 0.709630(0.0077M) 186.4771(.0554040M.154564 0.0156 0.0286
1912	70U303	70U303	[]N 46 12 38.946600(0.0096M) W 82 36 20.259489(0.0086M) 146.3440(.0566004M.157896 0.0170 0.0315
1913	913031	913031	[]N 46 12 25.838462(0.0095M) W 83 3 39.407545(0.0085M) 150.3402(.0563367M.157164 0.0167 0.0313
1914	70U271	70U271	[]N 46 16 18.620229(0.0099M) W 83 26 26.477847(0.0098M) 177.4234(.0575278M.160472 0.0205 0.0328
1915	9132900	9132900	[]N 46 18 0.664112(0.0087M) W 83 47 29.848810(0.0073M) 141.8440(.0562357M.156868 0.0166 0.0267
1916	70U257	70U257	[]N 46 27 52.466424(0.0085M) W 84 4 5.034213(0.0071M) 151.4143(.0559161M.155974 0.0154 0.0265
1917	913009	913009	[]N 46 38 8.521999(0.0082M) W 84 18 16.261016(0.0069M) 292.6469(.0551510M.153839 0.0145 0.0258
1918	703315	REPAIR	[]N 46 32 12.467774(0.0085M) W 84 18 57.367467(0.0070M) 210.4255(.0563597M.157213 0.0148 0.0268
1919	913016	913016	[]N 46 55 41.931788(0.0077M) W 84 25 35.421565(0.0065M) 155.1432(.0523435M.145998 0.0136 0.0244
1920	47300	WAWA	[]N 48 1 35.082912(0.0086M) W 84 44 6.753969(0.0079M) 490.5751(.0515066M.143662 0.0163 0.0282
1921	913008	913008	[]N 46 58 51.960004(0.0078M) W 84 46 38.751411(0.0067M) 165.2944(.0535222M.149289 0.0141 0.0249
1922	69U333	69U333	[]N 47 28 17.141500(0.0084M) W 84 47 16.785743(0.0069M) 152.8959(.0532447M.148529 0.0144 0.0264
1923	913013	913013	[]N 48 2 37.588153(0.0090M) W 84 50 1.669931(0.0084M) 280.9376(.0524572M.146309 0.0178 0.0295
1924	913012	913012	[]N 48 15 27.619306(0.0088M) W 84 52 56.624154(0.0079M) 407.2958(.0521039M.145327 0.0169 0.0283
1925	913006	913006	[]N 48 28 29.412238(0.0097M) W 85 7 21.777287(0.0079M) 360.2553(.0531100M.148129 0.0162 0.0309
1926	913005	913005	[]N 48 42 43.070720(0.0091M) W 85 49 18.067442(0.0077M) 303.7879(.0525297M.146510 0.0152 0.0296
1927	69U230	69-U-230	[]N 48 42 19.433100(0.0119M) W 86 15 20.189773(0.0093M) 203.8407(.0540074M.150623 0.0178 0.0379
1928	69U205	69-U-205	[]N 48 48 13.538811(0.0110M) W 86 44 22.292248(0.0086M) 171.3603(.0569398M.158806 0.0179 0.0344
1929	69U190	69-U-190	[]N 48 50 25.795525(0.0110M) W 87 2 48.575958(0.0086M) 181.5125(.0571840M.159492 0.0178 0.0344
1930	50327	SCHREIBER	[]N 48 46 21.996809(0.0109M) W 87 16 33.620694(0.0085M) 404.2556(.0566924M.158116 0.0177 0.0342
1931	69U164	69-U-164	[]N 48 52 55.937271(0.0146M) W 87 33 37.755924(0.0133M) 150.0337(.0713681M.199037 0.0235 0.0457
1932	913011	913011	[]N 48 58 34.513629(0.0147M) W 87 59 53.360490(0.0125M) 165.6445(.0711091M.198320 0.0284 0.0456
1933	69U137	69-U-137	[]N 48 56 40.069658(0.0168M) W 88 21 56.316215(0.0186M) 193.3122(.0727409M.203076 0.0318 0.0614
1934	69U125	69-U-125	[]N 48 44 53.231817(0.0203M) W 88 34 51.950519(0.0178M) 197.9911(.07272083M.215360 0.0375 0.0651
1935	52303	MCKENZIE EB	[]N 48 34 13.275112(0.0174M) W 88 50 3.454471(0.0168M) 214.9469(.0760914M.212218 0.0330 0.0587
1936	913004	913004	[]N 48 33 53.825334(0.0119M) W 88 50 49.301445(0.0085M) 191.2618(.0581356M.162136 0.0183 0.0363
1937	853017	PIER 3	[]N 48 26 29.436648(0.0094M) W 89 22 45.269737(0.0072M) 244.7196(.0483448M.134825 0.0150 0.0294
1938	69U070	69U070	[]N 48 43 50.211532(0.0112M) W 89 53 1.671116(0.0088M) 394.6289(.0564410M.157406 0.0187 0.0348
1939	66D8044	44-66	[]N 48 56 4.442283(0.0123M) W 90 7 33.5520840(0.0093M) 438.9574(.0620820M.173131 0.0189 0.0385
1940	66D8058	58-66 (740523)	[]N 49 2 17.347416(0.0156M) W 90 27 59.717604(0.0128M) 453.3260(.0646201M.180382 0.0219 0.0512
1941	66D8082	82-66	[]N 49 10 45.424569(0.0149M) W 90 50 44.611479(0.0104M) 436.3115(.0794199M.221477 0.0220 0.0456
1942	66D8095	95-66	[]N 49 15 34.277261(0.0148M) W 91 12 15.381395(0.0102M) 444.0438(.0787417M.219587 0.0218 0.0451
1943	913002	913002	[]N 49 21 32.012724(0.0148M) W 91 32 9.471280(0.0101M) 431.1024(.0785094M.218941 0.0216 0.0450
1944	913003	913003	[]N 49 29 6.805229(0.0145M) W 91 57 45.650307(0.0099M) 417.9344(.0775365M.216226 0.0214 0.0440
1945	66D8147	147-66	[]N 49 35 4.022361(0.0079M) W 92 15 50.106988(0.0055M) 371.1894(.0476983M.133016 0.0132 0.0233
1946	66D8189	189-66	[]N 49 48 54.616044(0.0077M) W 92 55 59.938833(0.0053M) 342.8195(.0470578M.131231 0.0128 0.0228
1947	913001	913001	[]N 49 51 29.689681(0.0078M) W 93 23 6.404511(0.0055M) 370.0120(.0465467M.129807 0.0131 0.0233
1948	69U047	69U047	[]N 49 50 21.936214(0.0078M) W 93 48 56.117395(0.0055M) 408.4845(.0461720M.128763 0.0130 0.0231
1949	69U033	69U033	[]N 49 45 37.768665(0.0077M) W 94 10 40.169921(0.0054M) 333.6318(.0461270M.128639 0.0129 0.0229
1950	913000	913000	[]N 49 45 1.395622(0.0082M) W 94 35 50.497817(0.0057M) 324.1027(.0463561M.129280 0.0134 0.0244
1951	69U006	69U006	[]N 49 43 40.181812(0.0105M) W 94 58 28.125990(0.0073M) 350.9043(.0569152M.158721 0.0161 0.0317
1952	83M047	83M047	[]N 49 38 56.837989(0.0107M) W 95 47 35.196773(0.0073M) 276.5003(.0572584M.159678 0.0157 0.0324
1953	914001	914001	[]N 49 39 20.235814(0.0091M) W 96 9 33.235900(0.0058M) 280.8265(.0493481M.137615 0.0136 0.0268
1954	83M016	83M016	[]N 49 39 44.54.589525(0.0091M) W 96 32 52.288740(0.0058M) 249.7762(.0493845M.137718 0.0136 0.0269
1955	69M119	69M119	[]N 49 51 18.426389(0.0096M) W 97 32 29.679783(0.0060M) 212.4320(.0520933M.145271 0.0139 0.0283
1956	914000	914000	[]N 49 56 6.860185(0.0107M) W 97 54 48.419692(0.0072M) 217.5648(.0528302M.147348 0.0148 0.0326
1957	85M380	85M380	[]N 49 58 29.287831(0.0109M) W 98 22 57.281692(0.0072M) 237.3547(.0535899M.149462 0.0151 0.0331
1958	69M106	69M106	[]N 49 58 30.867942(0.0194M) W 98 45 53.470110(0.0131M) 265.5132(.0795573M.222367 0.0274 0.0573
1959	85M365	85M365	[]N 49 54 4.200398(0.0172M) W 99 6 32.720227(0.0110M) 354.4984(.0776689M.216782 0.0245 0.0507
1960	85M354	85M354	[]N 49 54 2.840132(0.0167M) W 99 31 22.360741(0.0104M) 364.4219(.0766250M.213798 0.0245 0.0486
1961	85M329	85M329	[]N 49 49 45.144936(0.0098M) W100 19 32.895358(0.0056M) 402.0316(.0513763M.143272 0.0135 0.0284
1962	69M032	69M032	[]N 49 46 3.236230(0.0097M) W100 41 24.596878(0.0055M) 411.9905(.0510936M.142484 0.0133 0.0281
1963	69M014	69M014	[]N 49 54 37.632035(0.0097M) W101 3 28.860845(0.0054M) 455.5161(.0510031M.142231 0.0132 0.0279
1964	68S273	68S273	[]N 50 12 57.948584(0.0091M) W101 48 47.106325(0.0051M) 549.5605(.0124181M.034630 0.0092 0.0132
1965	68S258	68 S 258	[]N 50 19 7.291668(0.0092M) W102 12 5.790260(0.0052M) 577.8309(.0492157M.137247 0.0130 0.0265
1966	68S223	68 S 223	[]N 50 24 43.314909(0.0028M) W103 7 4.609487(0.0024M) 586.2079(.0100793M.028110 0.0067 0.0080
1967	68S189	67 S 189	[]N 50 31 31.211141(0.0049M) W103 56 50.131544(0.0040M) 652.3780(.0100828M.028118 0.0110 0.0138
1968	68S176	68S176	[]N 50 28 1.830823(0.0045M) W104 18 6.880330(0.0032

The GPS Height Transformation (v2.0)

1981	82A522	82A522	[]N 49 58 35.533283(0.0076M) W110 33 3.717621(0.0040M) 716.0863(.0402912M.112365 0.0111 0.0214
1982	68A165	68-A-165	[]N 50 14 38.016524(0.0081M) W111 13 5.419520(0.0044M) 737.3763(.0435588M.121482 0.0121 0.0228
1983	68A141	68-A-141	[]N 50 24 45.524149(0.0080M) W111 30 29.362019(0.0044M) 727.0541(.0434583M.121200 0.0120 0.0224
1984	906050	906050	[]N 50 33 21.461764(0.0080M) W111 49 59.174055(0.0044M) 735.0014(.0433889M.121009 0.0121 0.0224
1985	68A107	68-A-107	[]N 50 50 4.040297(0.0090M) W112 36 46.345266(0.0047M) 826.6765(.0493396M.137614 0.0130 0.0251
1986	68A096	68A096	[]N 50 52 13.028291(0.0090M) W113 1 44.204190(0.0047M) 875.5381(.0493043M.137518 0.0130 0.0250
1987	68A079	68A079	[]N 51 2 18.253700(0.0082M) W113 26 46.303474(0.0045M) 960.7576(.0459512M.128162 0.0123 0.0229
1988	917012	917012	[]N 51 13 40.382560(0.0056M) W116 2 59.495219(0.0043M) 1631.1002(.0408424M.113902 0.0118 0.0157
1989	917011	917011	[]N 51 19 59.796831(0.0104M) W116 33 8.954325(0.0070M) 1150.4964(.0642465M.179173 0.0196 0.0289
1990	61C028	1593-J	[]N 50 2 27.025143(0.0078M) W120 38 16.257845(0.0059M) 1048.8839(.0543443M.151649 0.0158 0.0214
1991	79D0708	010790708	[]N 50 38 32.503020(0.0035M) W 93 14 25.087491(0.0023M) 340.6015(.0164169M.045782 0.0062 0.0099
1992	573121	ASE 57-F-32	[]N 49 50 35.648076(0.0024M) W 93 26 27.724045(0.0021M) 402.7273(.0130785M.036472 0.0056 0.0067
1993	D31597	010791438	[]N 48 45 33.442347(0.0023M) W 91 35 42.422070(0.0017M) 359.9139(.0127299M.035500 0.0048 0.0065
1994	943013		[]N 45 23 59.977317(0.0010M) W 75 55 8.997437(0.0010M) 46.1120(.0057482M.016030 0.0026 0.0029
1995	943014		[]N 45 24 0.422795(0.0010M) W 75 55 9.645669(0.0010M) 46.3073(.0061036M.017021 0.0027 0.0031
1996	943015		[]N 45 23 59.965221(0.0010M) W 75 55 10.279353(0.0010M) 45.9841(.0057181M.015946 0.0026 0.0029
1997	943016		[]N 45 23 59.506265(0.0010M) W 75 55 9.750779(0.0010M) 45.4511(.0057229M.015959 0.0026 0.0029
1998	943017		[]N 45 23 56.973632(0.0010M) W 75 55 12.877734(0.0010M) 43.5698(.0057717M.016096 0.0026 0.0029
1999	943018		[]N 45 23 56.192699(0.0010M) W 75 55 14.218894(0.0010M) 43.7260(.0061537M.017161 0.0027 0.0030
2000	683101	OTTERPAW	[]N 46 2 26.325943(0.0057M) W 78 8 42.793181(0.0070M) 378.0901(.0158569M.046289 0.0146 0.0154
2001	853011	SKYLARK	[]N 45 51 39.725922(0.0058M) W 78 8 31.052866(0.0069M) 335.5497(.0156526M.045404 0.0149 0.0160
2002	853012	JACKS	[]N 45 57 47.308184(0.0056M) W 77 55 57.431217(0.0069M) 284.7150(.0154113M.044919 0.0146 0.0152
2003	24307	BRONSON	[]N 46 3 27.002956(0.0069M) W 77 47 2.814411(0.0088M) 302.8905(.0197029M.057595 0.0180 0.0188
2004	883162	BOB	[]N 45 57 17.826469(0.0086M) W 78 4 20.743773(0.0097M) 207.3265(.0234151M.068598 0.0194 0.0219
2005	653001	RESERVOIR	[]N 45 22 20.677465(0.0052M) W 75 44 35.712194(0.0036M) 81.1040(.0362507M.101153 0.0101 0.0142
2006	933004	933004	[]N 45 20 9.910214(0.0044M) W 75 41 15.730021(0.0036M) 80.6881(.0319745M.089201 0.0100 0.0122
2007	6530125	NCC 125	[]N 45 19 40.824587(0.0053M) W 75 39 44.606232(0.0038M) 79.0891(.0364538M.101717 0.0104 0.0145
2008	6530101	STA 101	[]N 45 18 33.965469(0.0053M) W 75 38 43.910785(0.0038M) 83.0665(.0363068M.101307 0.0105 0.0145
2009	693053	METCALFE	[]N 45 14 34.155184(0.0048M) W 75 27 30.1116437(0.0038M) 70.2259(.0184169M.051456 0.0102 0.0132
2010	643501	RAY MOORE	[]N 45 24 2.933319(0.0054M) W 75 42 15.707036(0.0038M) 71.5291(.0363442M.101418 0.0104 0.0146
2011	643500	ROOF	[]N 45 24 7.430508(0.0054M) W 75 42 18.349142(0.0037M) 77.0751(.0363259M.101366 0.0103 0.0145
2012	883165	DORIS EMR	[]N 45 23 59.347818(0.0054M) W 75 42 21.271472(0.0037M) 112.5265(.0363256M.101365 0.0103 0.0145
2013	773027	MORRIS	[]N 45 26 34.439223(0.0140M) W 76 15 17.553639(0.0242M) 56.0315(.0381932M.117349 0.0322 0.0513
2014	723112	CATARQUI	[]N 44 15 33.336849(0.0130M) W 76 34 23.730193(0.0215M) 74.5905(.0364761M.110905 0.0305 0.0448
2015	773030	PANMURE	[]N 45 20 18.962563(0.0127M) W 76 11 3.318868(0.0222M) 120.5177(.0370423M.113988 0.0320 0.0416
2016	983001	DORIS BN(1998)	[]N 45 23 59.345399(0.0015M) W 75 42 21.267930(0.0122M) 112.1907(.0085626M.023879 0.0034 0.0041
2017	61311	STEELES	[]N 43 48 4.122800(0.0029M) W 79 25 12.910032(0.0030M) 159.5737(.0185860M.051832 0.0075 0.0089
2018	61315	PARK	[]N 43 38 46.784885(0.0030M) W 79 27 56.414367(0.0027M) 73.7806(.0188156M.052475 0.0070 0.0088
2019	873006	PIER 2 (DOWNSV	[]N 43 43 31.569398(0.0028M) W 79 29 10.590902(0.0026M) 137.8948(.0180964M.050467 0.0072 0.0078
2020	0023010		[]N 46 43 59.576952(0.0026M) W 71 22 13.916879(0.0021M) -21.9311(.0147080M.041017 0.0058 0.0072
2021	60L9005		[]N 45 31 42.948658(0.0031M) W 73 32 32.011915(0.0025M) -17.5620(.0182798M.050986 0.0068 0.0085
2022	60L9009		[]N 46 16 17.763024(0.0022M) W 72 37 7.680659(0.0017M) -23.4786(.0125361M.034961 0.0049 0.0061
2023	622310		[]N 47 6 29.315140(0.0023M) W 70 42 58.903939(0.0023M) -19.6553(.0119114M.033235 0.0057 0.0070
2024	6329011		[]N 46 29 59.096401(0.0017M) W 72 14 46.156924(0.0014M) -22.3438(.0094886M.026462 0.0039 0.0047
2025	63L9008		[]N 46 33 38.466612(0.0026M) W 72 6 21.870493(0.0019M) -23.7997(.0146026M.040727 0.0054 0.0071
2026	6429201		[]N 46 40 9.849803(0.0017M) W 71 47 22.324188(0.0014M) -23.9750(.0094365M.026316 0.0038 0.0047
2027	662384		[]N 45 49 57.728458(0.0023M) W 73 16 59.830185(0.0018M) -22.1389(.0134405M.037483 0.0051 0.0064
2028	7029235		[]N 46 40 51.639249(0.0023M) W 71 52 36.838370(0.0018M) -23.7134(.0133147M.037133 0.0050 0.0064
2029	7029367		[]N 45 37 57.495681(0.0019M) W 73 29 25.430439(0.0016M) -20.1312(.0110560M.030833 0.0044 0.0053
2030	7522900		[]N 46 56 5.778437(0.0023M) W 70 44 7.362684(0.0021M) -22.5743(.0129079M.035997 0.0058 0.0063
2031	75KX073		[]N 45 46 45.511589(0.0034M) W 73 21 26.218083(0.0026M) -23.5664(.0201873M.056299 0.0074 0.0094
2032	771470		[]N 46 2 58.036569(0.0028M) W 73 6 50.637560(0.0022M) -23.0401(.0163748M.045666 0.0061 0.0077
2033	8023040		[]N 46 59 46.896827(0.0018M) W 70 48 30.218622(0.0016M) -22.2636(.0099112M.027640 0.0046 0.0049
2034	80K0116		[]N 46 6 50.182254(0.0028M) W 72 52 56.5457541(0.0022M) -24.3476(.0163261M.045530 0.0061 0.0077
2035	8123010		[]N 46 12 18.696607(0.0035M) W 72 49 49.131976(0.0027M) -15.7313(.0208219M.058066 0.0076 0.0098
2036	8223056		[]N 46 41 47.113157(0.0017M) W 71 34 22.839929(0.0015M) -22.9470(.0098014M.027334 0.0041 0.0048
2037	8223092		[]N 45 41 2.611152(0.0022M) W 73 26 37.100794(0.0018M) -20.9069(.0129701M.036171 0.0050 0.0062
2038	8229128		[]N 46 45 19.717018(0.0023M) W 71 16 19.379154(0.0019M) -24.0205(.0132281M.036891 0.0053 0.0064
2039	8824052		[]N 46 36 41.461392(0.0022M) W 71 57 33.807117(0.0017M) -24.1885(.0123739M.034508 0.0048 0.0060
2040	8824109		[]N 45 57 34.278326(0.0023M) W 73 12 52.703206(0.0018M) -23.6464(.0133438M.037213 0.0051 0.0064
2041	8923001		[]N 46 20 23.904408(0.0017M) W 72 32 23.537201(0.0014M) -22.7746(.0094697M.026409 0.0038 0.0047
2042	9324015		[]N 46 59 25.468275(0.0023M) W 70 33 12.917864(0.0021M) -21.1438(.0131025M.036540 0.0059 0.0064
2043	95K1228		[]N 46 54 57.604089(0.0015M) W 70 53 47.010963(0.0015M) -22.5664(.0083755M.023357 0.0041 0.0043
2044	95L14052		[]N 46 35 13.329370(0.0017M) W 72 2 23.889333(0.0014M) -23.6927(.0095079M.026515 0.0039 0.0047
2045	9624001		[]N 46 48 44.715654(0.0026M) W 71 9 33.348687(0.0020M) -21.1885(.0144643M.040341 0.0056 0.0071
2046	9624002		[]N 46 48 44.681304(0.0023M) W 71 9 33.428694(0.0019M) -9.8011(.0129150M.036020 0.0052 0.0064
2047	9624003		[]N 46 23 48.838982(0.0029M) W 72 27 11.588483(0.0024M) -12.9005(.0169375M.047235 0.0067 0.0082
2048	9624004		[]N 46 23 48.792447(0.0032M) W 72 27 11.655382(0.0027M) -12.9062(.0184454M.051439 0.0075 0.0089
2049	9624005		[]N 45 19 16.791529(0.0024M) W 73 18 37.104847(0.0019M) -15.3740(.0140760M.039257 0.0054 0.0068
2050	9624006		[]N 45 19 16.774177(0.0028M) W 73 18 37.193185(0.0022M) -15.3626(.0161683M.045092 0.0061 0.0077
2051	9624007		[]N 45 30 12.708199(0.0022M) W 73 33 8.731222(0.0018M) -16.6238(.0126155M.035184 0.0049 0.0060
2052	9624014		[]N 46 5 15.256237(0.0022M) W 72 59 41.791925(0.0017M) -14.6873(.0127041M.035430 0.0049 0.0062
2053	9624015		[]N 46 24 17.903946(0.0023M) W 72 22 44.933210(0.0018M) -22.7659(.0132378M.036918 0.0050 0.0064
2054	9624016		[]N 46 26 24.4948160(0.0023M) W 72 20 23.926750(0.0018M) -24.3259(.0132806M.037037 0.0050 0.0064
2055	9624017		[]N 46 11 41.512855(0.0042M) W 72 53 43.927847(0.0032M) -14.9061(.0249356M.069538 0.0088 0.0116
2056	9624020		[]N 46 10 15.129174(0.0019M) W 72 45 2.694165(0.0016M) -16.6814(.0109555M.030552 0.0043 0.0054
2057	XXL9013		[]N 46 49 48.411722(0.0018M) W 71 9 53.390976(0.0015M) -22.4360(.0100284M.027968 0.0043 0.0051
2058	XXL9527		[]N 47 12 2.415419(0.0021M) W 70 38 7.965982(0.0023M) -19.1977(.0116132M.032387 0.0057 0.0067
2059	21203		[]N 50 8 20.723233(0.0051M) W 66 17 14.278210(0.0095M) -190.3566(.0097055M.030280 0.0129 0.0235
2060	23225		[]N 50 15 26.205310(0.0064M) W 63 3 53.941935(0.0090M) -17.3187(.0159665M.045253 0.0160 0.0251
2061	27202		[]N 47 29 6.361920(0.0071M) W 72 56 31.489809(0.0157M) -408.7773(.0153502M.045027 0.0178 0.0424
2062	592764		[]N 50 31 31.750694(0.0072M) W 68 57 26.469808(0.0092M) -695.9267(.0137786M.039578 0.0183 0.0254
2063	641052		[]N 49 35 48.053874(0.0047M) W 68 35 12.463348(0.0108M) -374.1006(.0094353M.030299 0.0127 0.0262
2064	641098		[]N 50 22 31.166292(0.0046M) W 68 49 43.152014(0.0080M) -524.9320(.0098317M.027972 0.0123 0.0219
2065	652014	SERPENT	[]N 47 59 35.446431(0.0065M) W 68 47 25.081608(0.0166M) -365.0785(.0120864M.046736 0.0168 0.0336
2066	691108		[]N 46 23 52.679454(0.0070M) W 72 17 3.035542(0.0124M) -11.5632(.0142664M.044760 0.0158 0.0299
2067	71K4012		[]N 48 30 42.593859(0.0049M) W 71 39 23.448763(0.0104M) -103.3216(.0102706M.029120 0.0130 0.028

The GPS Height Transformation (v2.0)

2076	82K0001	82K0001	[] N 49 45 53.427464(0.0047M) W 74 25 45.902392(0.0035M) 383.2274(.0127086M.035501 0.0097 0.0130
2077	82L363		[] N 47 54 1.698443(0.0074M) W 72 26 12.965771(0.0179M) 378.7123(.0157394M.049916 0.0190 0.0447
2078	85L019		[] N 48 15 11.644811(0.0074M) W 69 37 0.725283(0.0148M) -1.3542(.0134092M.044294 0.0180 0.0353
2079	85L046		[] N 48 24 33.607846(0.0056M) W 69 20 5.830736(0.0099M) 22.9145(.0100331M.031157 0.0133 0.0252
2080	85L074		[] N 48 41 53.217176(0.0043M) W 69 5 7.594904(0.0076M) 59.3096(.0085143M.024429 0.0110 0.0210
2081	85L104		[] N 48 54 30.058930(0.0065M) W 68 45 8.518609(0.0079M) -10.7282(.0114945M.035358 0.0134 0.0201
2082	85L127		[] N 49 4 42.745278(0.0042M) W 68 26 26.733515(0.0072M) -18.6528(.0083350M.023738 0.0110 0.0199
2083	85L199		[] N 49 24 26.589157(0.0021M) W 67 22 24.630277(0.0040M) 54.4913(.0052985M.014833 0.0057 0.0112
2084	85L213		[] N 49 39 29.958922(0.0021M) W 67 11 21.919802(0.0041M) 8.9016(.0052253M.014672 0.0055 0.0116
2085	85L231		[] N 49 54 52.256113(0.0029M) W 67 1 27.948279(0.0092M) 81.3604(.0061204M.026572 0.0068 0.0164
2086	85L274		[] N 50 16 30.198385(0.0050M) W 66 26 29.472458(0.0090M) -0.8380(.0094975M.029293 0.0124 0.0226
2087	85L306		[] N 47 43 40.807076(0.0051M) W 70 0 51.251061(0.0123M) 259.4997(.0097167M.035131 0.0131 0.0265
2088	85L337		[] N 47 21 13.115195(0.0066M) W 70 37 0.896518(0.0167M) 377.9757(.0120602M.048053 0.0166 0.0326
2089	86L023		[] N 46 4 26.237501(0.0095M) W 72 21 20.669991(0.0101M) 48.6961(.0182944M.054761 0.0184 0.0275
2090	88L038	88L038	[] N 49 21 14.633901(0.0032M) W 68 27 9.169055(0.0036M) 277.7928(.0074783M.020882 0.0087 0.0102
2091	88L098		[] N 50 7 41.323741(0.0051M) W 68 49 14.423776(0.0110M) 373.5923(.0105495M.030806 0.0135 0.0296
2092	88L135		[] N 50 38 28.494117(0.0056M) W 68 42 14.316516(0.0106M) 345.4415(.0113590M.034500 0.0143 0.0268
2093	88L341		[] N 48 40 16.853798(0.0049M) W 72 33 16.318381(0.0113M) 125.2028(.0107067M.032232 0.0132 0.0291
2094	88L359		[] N 48 52 26.615433(0.0049M) W 72 57 1.440319(0.0089M) 265.3419(.0108055M.030802 0.0131 0.0245
2095	88L375		[] N 48 59 47.922223(0.0051M) W 73 18 4.016747(0.0122M) 297.9659(.0113320M.035056 0.0139 0.0308
2096	88L383		[] N 49 6 35.000450(0.0057M) W 73 31 55.733350(0.0091M) 345.8557(.0122618M.035252 0.0146 0.0246
2097	88L402		[] N 49 19 24.139880(0.0061M) W 73 55 58.767732(0.0107M) 355.0851(.0134228M.038772 0.0160 0.0287
2098	90L027		[] N 48 12 36.600961(0.0066M) W 70 4 44.603578(0.0131M) 51.1664(.0119609M.039060 0.0165 0.0315
2099	90L045		[] N 48 16 21.019647(0.0053M) W 70 30 45.314482(0.0119M) 268.4885(.0113783M.033438 0.0141 0.0318
2100	90L060		[] N 48 19 55.472202(0.0059M) W 70 49 10.301646(0.0132M) -21.1091(.0122034M.036956 0.0155 0.0343
2101	90L356		[] N 46 41 25.404955(0.0114M) W 72 43 46.556279(0.0105M) 96.0317(.0191650M.059277 0.0189 0.0294
2102	90L381		[] N 46 54 57.899345(0.0122M) W 72 55 32.722550(0.0151M) 142.5414(.0207585M.063095 0.0225 0.0423
2103	90L430		[] N 47 40 4.225527(0.0082M) W 72 34 52.046714(0.0175M) 191.2190(.0170469M.050664 0.0203 0.0468
2104	90L454		[] N 48 10 59.812434(0.0048M) W 72 12 59.703290(0.0129M) 310.7667(.0108672M.036077 0.0131 0.0305
2105	920215		[] N 47 5 21.042223(0.0048M) W 70 49 52.552390(0.0118M) 294.1211(.0096601M.035822 0.0118 0.0239
2106	922016		[] N 46 56 59.616905(0.0033M) W 71 2 42.645663(0.0076M) -21.6903(.0070092M.023553 0.0075 0.0174
2107	922042	922042	[] N 51 29 37.373560(0.0046M) W 68 13 35.984309(0.0034M) 425.3749(.0116879M.032638 0.0095 0.0128
2108	922043		[] N 50 59 29.769531(0.0093M) W 68 32 30.122966(0.0151M) 389.1361(.0161668M.050227 0.0195 0.0289
2109	922044	BCT618	[] N 49 18 12.581029(0.0021M) W 67 44 12.206815(0.0038M) 52.7419(.0052439M.014653 0.0057 0.0105
2110	922049		[] N 50 17 14.303438(0.0052M) W 65 58 15.248240(0.0096M) 4.9579(.0099426M.030693 0.0131 0.0242
2111	922050		[] N 50 17 58.928608(0.0063M) W 65 7 23.546031(0.0077M) 19.0906(.0126832M.037475 0.0137 0.0205
2112	68K1643	KINKORA	[] N 45 59 55.711193(0.0036M) W 74 20 40.463660(0.0026M) 567.1980(.0090139M.025196 0.0071 0.0101
2113	26305	PENSE	[] N 47 46 28.890747(0.0032M) W 79 34 51.271806(0.0025M) 238.7536(.0081115M.022630 0.0067 0.0091
2114	30202	MACARTHUR	[] N 47 28 57.397317(0.0046M) W 75 48 28.299142(0.0033M) 514.4224(.0117706M.032894 0.0091 0.0128
2115	59KX068	341	[] N 51 18 19.602071(0.0039M) W 77 15 7.051391(0.0027M) 265.1484(.0109247M.030469 0.0074 0.0110
2116	62KX001	DRH-745	[] N 49 48 5.371493(0.0045M) W 77 31 33.107896(0.0031M) 431.6472(.0102748M.028681 0.0087 0.0125
2117	79K0448	79K0448	[] N 48 44 56.111278(0.0022M) W 78 59 0.974884(0.0017M) 267.5428(.0063016M.017576 0.0049 0.0062
2118	81K0177	81K0177	[] N 47 37 31.140841(0.0037M) W 79 25 21.860826(0.0027M) 204.1082(.0088335M.024656 0.0075 0.0102
2119	882004	882004	[] N 45 47 29.380602(0.0068M) W 73 56 41.397861(0.0048M) 46.6851(.0157391M.043128 0.0134 0.0185
2120	27L074	1150B	[] N 46 32 50.532148(0.0046M) W 75 28 40.529402(0.0030M) 196.9578(.0097893M.027406 0.0082 0.0127
2121	49L831G	831G	[] N 48 13 25.970511(0.0026M) W 78 28 44.258306(0.0019M) 304.3905(.0071848M.020037 0.0052 0.0073
2122	73L114	73L114	[] N 49 51 59.500376(0.0048M) W 77 15 4.201277(0.0033M) 247.4983(.0106263M.029672 0.0090 0.0133
2123	73L130	73L130	[] N 50 4 48.909830(0.0046M) W 77 7 4.949797(0.0031M) 239.2733(.0103511M.028891 0.0086 0.0128
2124	73L157	73L157	[] N 50 29 50.898342(0.0044M) W 77 24 5.075650(0.0030M) 273.3881(.0102624M.028636 0.0083 0.0122
2125	73L204	73L204	[] N 51 13 44.630218(0.0041M) W 77 25 35.664454(0.0029M) 198.0768(.0108462M.030251 0.0079 0.0116
2126	73L221	73L221	[] N 51 27 50.074369(0.0037M) W 77 26 3.131386(0.0025M) 169.3165(.0107964M.030109 0.0069 0.0102
2127	73L233	73L233	[] N 51 40 20.886693(0.0034M) W 77 23 18.102532(0.0023M) 173.2485(.0108698M.030314 0.0065 0.0096
2128	73L248	73L248	[] N 51 56 49.239929(0.0034M) W 77 20 51.827000(0.0024M) 175.3362(.0116043M.032361 0.0067 0.0094
2129	77L642	77L642	[] N 46 13 5.512729(0.0059M) W 74 41 37.748280(0.0042M) 186.6423(.0138592M.038777 0.0117 0.0162
2130	78K0686	78K0686	[] N 46 26 53.482562(0.0067M) W 74 55 44.505602(0.0048M) 234.1160(.0153855M.043107 0.0132 0.0182
2131	78L240	78L240	[] N 48 31 21.289287(0.0022M) W 79 26 59.767928(0.0015M) 264.1432(.0067216M.018745 0.0043 0.0061
2132	82KZ023	82KZ023	[] N 48 37 2.896308(0.0029M) W 78 16 27.846521(0.0020M) 277.6263(.0082925M.023126 0.0056 0.0082
2133	82L113	82L113	[] N 46 53 33.963907(0.0040M) W 79 14 47.932061(0.0031M) 217.3701(.0100693M.028125 0.0083 0.0113
2134	82L125	82L125	[] N 47 7 49.699820(0.0015M) W 79 22 38.730869(0.0013M) 200.8294(.0073508M.020504 0.0034 0.0042
2135	82L178	82L178	[] N 47 49 38.817076(0.0035M) W 79 16 4.927048(0.0025M) 265.2139(.0081998M.022875 0.0069 0.0098
2136	82L193	82L193	[] N 48 6 10.148241(0.0022M) W 79 15 26.101147(0.0019M) 242.1924(.0082598M.023044 0.0051 0.0063
2137	82L260	82L260	[] N 48 39 7.576814(0.0023M) W 78 38 36.440981(0.0017M) 274.9154(.0066743M.018614 0.0048 0.0064
2138	82L298	82L298	[] N 48 30 14.562507(0.0059M) W 77 49 35.970282(0.0035M) 306.1627(.0119765M.033729 0.0096 0.0159
2139	82U3005	02J8003	[] N 46 42 29.383847(0.0040M) W 79 6 7.387632(0.0031M) 144.8456(.0096041M.026909 0.0083 0.0109
2140	83L315	83L315	[] N 46 5 31.746251(0.0047M) W 76 3 7.812538(0.0033M) 119.0290(.0092893M.026218 0.0092 0.0124
2141	83L339	83L339	[] N 46 22 57.379872(0.0050M) W 75 59 1.188653(0.0032M) 138.0199(.0100306M.028114 0.0088 0.0136
2142	83L367	83L367	[] N 46 37 22.391215(0.0070M) W 75 55 19.132580(0.0049M) 157.5058(.0153350M.042800 0.0136 0.0195
2143	83L394	83L394	[] N 46 49 46.369328(0.0057M) W 76 18 3.380653(0.0039M) 278.3634(.0127342M.035577 0.0108 0.0158
2144	83L426	83L426	[] N 47 15 40.715973(0.0072M) W 76 49 27.469395(0.0046M) 389.4161(.0156651M.044142 0.0127 0.0190
2145	83L460	83L460	[] N 47 46 33.654197(0.0060M) W 77 18 37.039528(0.0042M) 322.5196(.0132199M.037049 0.0114 0.0164
2146	83L496	83L496	[] N 48 6 16.269912(0.0038M) W 77 48 28.477968(0.0024M) 283.4489(.0090733M.025354 0.0067 0.0106
2147	83L498	83L498	[] N 48 7 7.485054(0.0041M) W 77 23 14.301881(0.0027M) 286.0719(.0095833M.026814 0.0074 0.0113
2148	88L461	88L461	[] N 49 46 31.288371(0.0055M) W 74 48 15.114074(0.0038M) 358.3858(.0135885M.037928 0.0105 0.0154
2149	88L481	88L481	[] N 49 49 4.742215(0.0049M) W 75 11 4.908994(0.0032M) 329.6820(.0120711M.033690 0.0090 0.0136
2150	88L499	88L499	[] N 49 49 3.720224(0.0050M) W 75 39 52.281014(0.0033M) 330.8399(.0116021M.032398 0.0091 0.0140
2151	88L519	88L519	[] N 49 38 47.679026(0.0053M) W 76 0 20.301783(0.0035M) 279.5253(.0119920M.033499 0.0097 0.0146
2152	88L536	88L536	[] N 49 26 54.719291(0.0050M) W 76 19 33.511508(0.0032M) 248.0085(.0112976M.031562 0.0089 0.0139
2153	88L548	88L548	[] N 49 21 51.58221(0.0070M) W 76 46 18.354119(0.0043M) 315.1045(.0142641M.039948 0.0119 0.0193
2154	88L566	88L566	[] N 49 7 53.044076(0.0038M) W 76 58 27.560958(0.0030M) 269.4150(.0096135M.026863 0.0080 0.0107
2155	88L587	88L587	[] N 48 51 42.063617(0.0017M) W 77 8 24.526659(0.0013M) 249.9793(.0080540M.022464 0.0037 0.0048
2156	922001	DUPUY	[] N 48 49 56.911872(0.0016M) W 79 22 23.651575(0.0013M) 246.6091(.0056572M.015777 0.0035 0.0046
2157	922002	922002	[] N 48 28 47.234075(0.0017M) W 79 1 29.253759(0.0013M) 296.9924(.0053303M.014867 0.0036 0.0047
2158	922004	922004	[] N 50 22 23.857019(0.0046M) W 77 6 16.949985(0.0031M) 263.2661(.0104579M.029182 0.0085 0.0128
2159	922034	922034	[] N 48 11 47.605189(0.0026M) W 78 7 54.752898(0.0018M) 271.5969(.0081192M.022644 0.0049 0.0073
2160	922035	922035	[] N 48 47 27.636754(

The GPS Height Transformation (v2.0)

2171	923031	923031	[]N 46 33 9.396900(0.0048M) W 79 35 45.919481(0.0038M) 332.8108(.0122199M.034123 0.0099 0.0137
2172	923032	923032	[]N 46 58 0.691998(0.0046M) W 79 46 36.160164(0.0033M) 356.8214(.0104527M.029170 0.0087 0.0130
2173	923033	923033	[]N 47 50 29.163616(0.0029M) W 79 54 19.825847(0.0023M) 163.7181(.0076789M.021421 0.0062 0.0082
2174	92K0260	92K0260	[]N 47 32 49.774016(0.0041M) W 77 8 39.627016(0.0032M) 312.9441(.0107219M.029945 0.0087 0.0113
2175	49202	SQUAW	[]N 54 50 18.227602(0.0054M) W 66 46 43.982897(0.0035M) 582.1686(.0122926M.034284 0.0096 0.0149
2176	48019	PETITE	[]N 53 2 12.174590(0.0064M) W 66 28 32.904860(0.0040M) 746.1434(.0133874M.037338 0.0111 0.0179
2177	53004	TWIN FALLS	[]N 53 27 13.131358(0.0075M) W 64 29 4.367518(0.0047M) 532.4054(.0162626M.045388 0.0130 0.0208
2178	53014	WINO	[]N 53 16 34.212120(0.0070M) W 62 56 16.936902(0.0043M) 562.7023(.0159205M.044399 0.0120 0.0196
2179	58200	ROCK	[]N 53 12 34.280718(0.0083M) W 71 19 59.913737(0.0106M) 596.5885(.0165640M.046480 0.0220 0.0301
2180	58212	LANTAGNAC	[]N 54 18 27.045579(0.0042M) W 69 12 29.863808(0.0028M) 681.4628(.0101197M.028225 0.0079 0.0116
2181	65KP086	GR 499	[]N 53 55 0.025373(0.0068M) W 75 26 19.895990(0.0045M) 252.3024(.0154235M.043035 0.0125 0.0188
2182	682134	EWART	[]N 52 57 29.998138(0.0061M) W 75 36 53.077285(0.0042M) 359.1778(.0142219M.039667 0.0118 0.0169
2183	682146	SHORAN 88	[]N 53 50 2.768043(0.0038M) W 78 59 33.540659(0.0029M) -36.6224(.0120437M.033598 0.0080 0.0106
2184	56F125N	125-N	[]N 53 33 37.327814(0.0061M) W 66 21 11.317667(0.0038M) 486.1555(.0126704M.035341 0.0106 0.0171
2185	56F136N	136-N	[]N 53 52 44.428459(0.0053M) W 66 25 29.003270(0.0034M) 483.0046(.0113353M.031615 0.0094 0.0148
2186	56F153N	153N	[]N 54 23 2.465138(0.0054M) W 66 35 5.212623(0.0034M) 477.2682(.0116839M.032590 0.0095 0.0149
2187	56F162N	162N	[]N 54 37 54.719188(0.0047M) W 66 40 30.566049(0.0031M) 465.4317(.0110384M.030789 0.0085 0.0130
2188	66F0052	66W38	[]N 53 39 24.857139(0.0076M) W 64 41 34.671189(0.0047M) 439.6284(.0158557M.044220 0.0131 0.0212
2189	69F030	69-F-030	[]N 53 35 28.356688(0.0073M) W 64 13 52.044833(0.0046M) 407.8241(.0156567M.043689 0.0127 0.0203
2190	69F049	69-F-049	[]N 53 45 4.894948(0.0081M) W 63 26 47.077469(0.0050M) 470.7377(.0173179M.048298 0.0138 0.0226
2191	69F065	69F065	[]N 53 26 40.971024(0.0068M) W 64 45 54.779705(0.0042M) 460.8022(.0141291M.039405 0.0116 0.0190
2192	69F075	69-F-075	[]N 53 56 46.202284(0.0081M) W 63 0 27.149128(0.0050M) 506.5548(.0176618M.049257 0.0140 0.0227
2193	69F085	69-F-085	[]N 54 10 24.756758(0.0096M) W 63 7 12.629280(0.0059M) 481.6006(.0199095M.055528 0.0164 0.0267
2194	69F098	69F098	[]N 53 47 12.178083(0.0056M) W 65 54 46.092690(0.0036M) 491.2288(.0120105M.033501 0.0100 0.0157
2195	69F107	69-F-107	[]N 53 47 49.828655(0.0067M) W 65 28 58.012125(0.0041M) 478.9695(.0135004M.037653 0.0114 0.0186
2196	69F118	69-F-118	[]N 54 24 9.355102(0.0097M) W 63 10 3.771929(0.0060M) 455.4771(.0203378M.056720 0.0167 0.0270
2197	72F031	72-F-031	[]N 53 29 44.497785(0.0076M) W 63 41 47.609385(0.0048M) 414.1944(.0166611M.046500 0.0133 0.0210
2198	72F045	72-F-045	[]N 53 26 6.794205(0.0070M) W 63 13 50.979342(0.0043M) 320.3655(.0155369M.043329 0.0120 0.0195
2199	72F078	72-F-078	[]N 53 12 39.390187(0.0068M) W 62 17 46.965454(0.0042M) 385.3584(.0161402M.045010 0.0117 0.0190
2200	72F095	72-F-095	[]N 53 4 31.820961(0.0054M) W 61 46 28.950408(0.0035M) 364.4870(.0154082M.042970 0.0097 0.0149
2201	72F111	72-F-111	[]N 53 1 58.814401(0.0055M) W 61 17 50.732962(0.0036M) 106.9676(.0160396M.044733 0.0100 0.0153
2202	73L277	73L277	[]N 52 23 37.824591(0.0038M) W 77 15 8.242114(0.0026M) 125.2844(.0113988M.031788 0.0074 0.0107
2203	73L288	73L288	[]N 52 34 43.160447(0.0038M) W 77 20 56.380716(0.0026M) 172.6569(.0112007M.031235 0.0074 0.0105
2204	73L308	73L308	[]N 52 52 51.436567(0.0047M) W 77 16 23.924939(0.0036M) 181.8029(.0116907M.032606 0.0101 0.0132
2205	73L325	73L325	[]N 53 9 24.238774(0.0043M) W 77 28 10.927404(0.0037M) 168.5802(.0108938M.030395 0.0102 0.0121
2206	73L341	73L341	[]N 53 26 5.678757(0.0045M) W 77 35 33.682997(0.0037M) 130.4258(.0112464M.031382 0.0103 0.0125
2207	73L372	73L372	[]N 53 40 40.812909(0.0040M) W 78 13 50.208612(0.0029M) 63.0452(.0117314M.032742 0.0080 0.0113
2208	74L325	74L325	[]N 53 22 35.288402(0.0050M) W 76 59 57.417304(0.0038M) 164.6432(.0120144M.033512 0.0106 0.0139
2209	74L335	74L335	[]N 53 30 27.427024(0.0079M) W 76 36 34.529316(0.0052M) 164.8776(.0171138M.047758 0.0144 0.0220
2210	74L347	74L347	[]N 53 39 35.502601(0.0073M) W 76 3 32.208124(0.0049M) 209.2961(.0162351M.045286 0.0135 0.0203
2211	74L369	74L369	[]N 53 25 50.942418(0.0068M) W 75 49 45.358139(0.0046M) 224.8069(.0152526M.042551 0.0127 0.0190
2212	76L509	76L509	[]N 54 48 41.345345(0.0053M) W 67 47 20.406310(0.0040M) 524.8675(.0126081M.035267 0.0110 0.0146
2213	76L518	76L518	[]N 54 47 14.850459(0.0050M) W 68 47 26.342788(0.0036M) 518.8159(.0123755M.034554 0.0099 0.0139
2214	76L534	76L534	[]N 54 39 55.848519(0.0043M) W 70 20 22.334000(0.0029M) 526.6999(.0120644M.033652 0.0081 0.0120
2215	76L556	76L556	[]N 53 50 53.889227(0.0058M) W 72 40 38.911555(0.0038M) 405.6783(.0136032M.037935 0.0106 0.0162
2216	76L561	76L561	[]N 53 38 47.232030(0.0065M) W 73 56 13.205782(0.0043M) 299.2229(.0151033M.042130 0.0119 0.0180
2217	76L565	76L565	[]N 53 48 47.693279(0.0065M) W 73 37 36.556652(0.0043M) 320.2502(.0150749M.042053 0.0119 0.0181
2218	76L570	76L570	[]N 54 15 11.450660(0.0044M) W 71 26 6.049760(0.0031M) 439.4927(.0123456M.034435 0.0087 0.0123
2219	76L581	76L581	[]N 54 32 3.591613(0.0046M) W 70 49 19.902501(0.0031M) 481.5718(.0127539M.035569 0.0085 0.0129
2220	76L584	76L584	[]N 53 56 42.874559(0.0053M) W 72 12 35.858560(0.0035M) 485.1611(.0133659M.037274 0.0098 0.0148
2221	76L588	76L588	[]N 54 3 35.374513(0.0054M) W 71 44 43.946120(0.0036M) 432.6258(.0133809M.037315 0.0099 0.0150
2222	76L598	76L598	[]N 53 28 29.928313(0.0068M) W 75 24 43.345894(0.0045M) 277.7295(.0152192M.042461 0.0126 0.0190
2223	76L603	76L603	[]N 53 31 36.494903(0.0074M) W 74 51 59.781763(0.0047M) 244.7739(.0156879M.043782 0.0131 0.0205
2224	76L610	76L610	[]N 53 34 35.3504058(0.0073M) W 74 25 57.474274(0.0046M) 305.6493(.0156350M.043618 0.0129 0.0204
2225	77KF216	L-98	[]N 54 25 25.266069(0.0044M) W 69 45 27.390013(0.0030M) 557.1912(.0120786M.033694 0.0083 0.0122
2226	78L331	78L331	[]N 53 43 41.482422(0.0043M) W 77 41 42.500975(0.0031M) 137.5990(.0118973M.033205 0.0084 0.0120
2227	88F003	88F003	[]N 52 53 42.711550(0.0060M) W 67 2 51.394975(0.0038M) 561.4369(.01229942M.036239 0.0107 0.0169
2228	88L221	88L221	[]N 51 44 53.759203(0.0050M) W 68 2 27.285257(0.0033M) 360.5197(.0122204M.034082 0.0093 0.0139
2229	88L243	88L243	[]N 52 3 32.006972(0.0049M) W 68 5 22.194497(0.0033M) 604.0744(.0119392M.033304 0.0092 0.0137
2230	88L259	88L259	[]N 52 13 35.272645(0.0075M) W 67 45 59.166954(0.0049M) 602.6390(.0160595M.044815 0.0135 0.0208
2231	88L282	88L282	[]N 52 25 29.117657(0.0064M) W 67 23 57.668953(0.0042M) 554.7701(.0142242M.039671 0.0116 0.0178
2232	88L302	88L302	[]N 52 43 28.462782(0.0066M) W 67 24 29.154824(0.0042M) 534.4511(.0142461M.039741 0.0118 0.0183
2233	920026	920026	[]N 53 3 39.928899(0.0060M) W 66 12 25.582743(0.0038M) 520.3287(.0127999M.035697 0.0105 0.0167
2234	920031	920031	[]N 53 50 41.896433(0.0064M) W 65 3 5.8256451(0.0040M) 452.0253(.0133919M.037354 0.0111 0.0178
2235	920032	920032	[]N 53 12 9.213812(0.0055M) W 60 57 15.669009(0.0036M) 59.8775(.0162558M.045337 0.0101 0.0155
2236	920245	920245	[]N 53 47 6.921509(0.0061M) W 73 5 3.463522(0.0039M) 373.1377(.0143163M.039924 0.0110 0.0169
2237	24126		[]N 47 48 7.278081(0.0031M) W 65 12 26.313038(0.0020M) 9.8259(.0070971M.019795 0.0056 0.0086
2238	66K0771		[]N 48 12 56.529974(0.0041M) W 65 52 2.883140(0.0028M) 99.1473(.0098734M.027538 0.0078 0.0114
2239	68K2935		[]N 48 8 3.791031(0.0036M) W 66 6 56.418616(0.0026M) 535.6396(.0094770M.026432 0.0072 0.0101
2240	8924066		[]N 48 2 6.983534(0.0029M) W 65 28 58.171037(0.0019M) -16.6532(.0065425M.018247 0.0054 0.0080
2241	92K236		[]N 48 7 2.038028(0.0052M) W 68 15 45.274012(0.0041M) -17.4762(.0128907M.035992 0.0113 0.0146
2242	92K238Z		[]N 48 10 52.031799(0.0062M) W 66 23 55.206049(0.0048M) 15.2022(.0152955M.042681 0.0133 0.0173
2243	69K4106		[]N 48 17 43.869575(0.0037M) W 64 43 6.321657(0.0024M) 24.5039(.0079515M.022174 0.0067 0.0103
2244	84L9010		[]N 48 4 26.014263(0.0034M) W 65 6 51.049023(0.0022M) -16.9325(.0071089M.019825 0.0062 0.0096
2245	92K2381		[]N 48 11 6.403748(0.0081M) W 66 25 32.453777(0.0065M) 22.0736(.0192424M.053928 0.0174 0.0224
2246	74K0070		[]N 45 4 4.943065(0.0017M) W 73 27 17.862965(0.0014M) 31.2429(.0193818M.054051 0.0039 0.0049
2247	74K0096		[]N 45 0 4.713033(0.0017M) W 74 30 29.308408(0.0014M) 18.5034(.0217169M.060563 0.0039 0.0046
2248	79K0412	79K0412	[]N 48 13 30.919129(0.0017M) W 79 0 53.838153(0.0014M) 283.0474(.0064784M.018068 0.0039 0.0047
2249	85KS299	85KS299	[]N 48 36 12.042002(0.0027M) W 78 47 40.931166(0.0019M) 286.2493(.0070406M.019662 0.0054 0.0076
2250	87KS242	87KS242	[]N 48 14 32.320592(0.0017M) W 79 6 26.090180(0.0014M) 267.2941(.0065856M.018367 0.0039 0.0047
2251	94KS227	94KS227	[]N 48 39 41.035416(0.0024M) W 78 58 2.057799(0.0019M) 258.5572(.0064422M.017976 0.0052 0.0066
2252	95K1146	95K1146	[]N 48 49 6.997908(0.0017M) W 79 12 30.446503(0.0013M) 240.1891(.0056343M.015718 0.0037 0.0048
2253	95K1147	95K1147	[]N 48 47 43.636901(0.0018M) W 79 12 20.604664(0.0013M) 234.9379(.0055899M.015595 0.0037 0.0049
2254	95K1148	95K1148	

The GPS Height Transformation (v2.0)

2266	95K1160	95K1160	[]N 48 38 25.538132(0.0027M) W 78 32 7.370121(0.0020M) 285.0357(.0076227M.021260 0.0057 0.0076
2267	95K1161	95K1161	[]N 48 36 12.336344(0.0022M) W 79 22 37.384021(0.0016M) 258.1852(.0065797M.018358 0.0044 0.0062
2268	95K1162	95K1162	[]N 48 36 9.563347(0.0019M) W 79 17 2.908848(0.0014M) 241.5603(.0057137M.015939 0.0038 0.0052
2269	95K1163	95K1163	[]N 48 30 23.008948(0.0023M) W 79 13 39.276218(0.0016M) 259.5095(.0064960M.018132 0.0046 0.0064
2270	95K1164	95K1164	[]N 48 35 56.384398(0.0017M) W 79 6 58.088794(0.0013M) 243.2104(.0052351M.014604 0.0036 0.0047
2271	95K1165	95K1165	[]N 48 44 54.857324(0.0022M) W 79 25 37.690327(0.0016M) 248.4628(.0066704M.018610 0.0045 0.0062
2272	95K1166	95K1166	[]N 48 45 0.890385(0.0017M) W 79 17 53.074359(0.0013M) 239.9761(.0054603M.015230 0.0035 0.0046
2273	95K1167	95K1167	[]N 48 40 20.405786(0.0024M) W 79 11 54.260718(0.0017M) 236.4924(.0062815M.017544 0.0048 0.0067
2274	95K1168	95K1168	[]N 48 45 0.436380(0.0023M) W 79 8 35.760094(0.0017M) 249.1259(.0061658M.017213 0.0046 0.0063
2275	95K1169	95K1169	[]N 48 46 3.746439(0.0016M) W 79 1 13.905217(0.0013M) 260.5219(.0054117M.015094 0.0035 0.0044
2276	95KR005	NML R	[]N 48 15 44.310578(0.0019M) W 79 1 20.019018(0.0015M) 294.6334(.0064747M.018059 0.0042 0.0052
2277	95KSZ21	95KSZ21	[]N 48 13 17.691651(0.0021M) W 78 42 26.186889(0.0017M) 322.9243(.0065858M.018367 0.0047 0.0059
2278	95KX001		[]N 48 17 4.145650(0.0026M) W 78 26 58.658805(0.0019M) 255.7195(.0071576M.019962 0.0052 0.0073
2279	72K8210	8210	[]N 46 4 17.422655(0.0031M) W 71 20 53.028445(0.0022M) 266.2084(.0115310M.032157 0.0062 0.0088
2280	76K0455	76K0455	[]N 46 13 54.483731(0.0038M) W 71 45 52.755966(0.0028M) 109.8771(.0124603M.034788 0.0078 0.0105
2281	78K0427	78K0427	[]N 46 7 10.710374(0.0026M) W 71 15 41.710936(0.0019M) 320.9768(.0110260M.030748 0.0053 0.0074
2282	86L239	86L239	[]N 46 16 49.163287(0.0027M) W 71 20 23.653890(0.0020M) 276.4881(.0110625M.030850 0.0055 0.0075
2283	87KSL43	87KSL43	[]N 46 24 49.590294(0.0032M) W 71 4 17.409919(0.0022M) 275.5228(.0114938M.032053 0.0062 0.0088
2284	88KSE26	88KSE26	[]N 46 24 47.876102(0.0030M) W 71 14 38.503099(0.0022M) 171.2373(.0113453M.031639 0.0060 0.0085
2285	95K1119	95K1119	[]N 46 6 43.803924(0.0027M) W 71 27 5.792287(0.0019M) 424.2283(.0110822M.030905 0.0054 0.0075
2286	95K1130	95K1130	[]N 46 12 46.508213(0.0030M) W 71 36 36.759940(0.0022M) 247.2171(.0113683M.031703 0.0061 0.0084
2287	95K1205	95K1205	[]N 46 3 45.045089(0.0029M) W 71 17 16.265666(0.0020M) 399.2404(.0112573M.031394 0.0057 0.0080
2288	95K1206	95K1206	[]N 46 6 44.211398(0.0027M) W 71 18 41.802284(0.0020M) 348.8756(.0111074M.030976 0.0055 0.0076
2289	95K1207	95K1207	[]N 46 10 53.880985(0.0031M) W 71 27 35.170441(0.0022M) 233.2456(.0114730M.031996 0.0062 0.0087
2290	95K1208	95K1208	[]N 46 13 2.561498(0.0028M) W 71 22 26.101366(0.0020M) 299.9872(.0110909M.030929 0.0055 0.0077
2291	95K1209	95K1209	[]N 46 9 29.482663(0.0030M) W 71 24 15.109426(0.0022M) 466.0835(.0113577M.031675 0.0060 0.0084
2292	95K1210	95K1210	[]N 46 9 8.886057(0.0031M) W 71 12 2.678146(0.0022M) 339.2687(.0114153M.031836 0.0061 0.0086
2293	95K1211	95K1211	[]N 46 14 23.513572(0.0028M) W 71 12 6.637593(0.0020M) 387.6544(.0110838M.030910 0.0055 0.0078
2294	95K1212	95K1212	[]N 46 19 33.277815(0.0032M) W 71 49 41.173966(0.0024M) 88.1657(.0117753M.032849 0.0066 0.0090
2295	95K1213	95K1213	[]N 46 17 29.272030(0.0033M) W 71 39 34.442815(0.0025M) 120.7318(.0118423M.033036 0.0068 0.0092
2296	95K1214	95K1214	[]N 46 22 13.923008(0.0029M) W 71 36 59.273297(0.0021M) 105.5813(.0112509M.031379 0.0059 0.0080
2297	95K1215	95K1215	[]N 46 14 59.365979(0.0027M) W 71 30 7.422259(0.0020M) 213.8115(.0111106M.030984 0.0056 0.0077
2298	95K1216	95K1216	[]N 46 22 5.621259(0.0029M) W 71 13 6.973894(0.0021M) 270.0993(.0112243M.031301 0.0058 0.0081
2299	95K1217	95K1217	[]N 46 19 29.642475(0.0037M) W 71 31 11.540765(0.0024M) 477.3205(.0118301M.032996 0.0067 0.0102
2300	95K1218	95K1218	[]N 46 22 46.062682(0.0033M) W 71 24 14.632636(0.0025M) 162.1749(.0118628M.033087 0.0069 0.0093
2301	95K1220	95K1220	[]N 46 26 58.547385(0.0035M) W 71 2 6.716021(0.0025M) 117.3279(.0120885M.033712 0.0068 0.0096
2302	95K1221	95K1221	[]N 46 29 48.055351(0.0031M) W 71 4 37.557854(0.0022M) 121.2390(.0114554M.031945 0.0061 0.0087
2303	95K1222	95K1222	[]N 46 25 14.486229(0.0038M) W 70 59 55.307390(0.0027M) 127.0322(.0124930M.034842 0.0075 0.0105
2304	95K1223	95K1223	[]N 46 30 33.315030(0.0035M) W 70 56 5.892140(0.0025M) 320.5053(.0120869M.033707 0.0069 0.0096
2305	652103	65-W-111	[]N 45 49 57.356515(0.0030M) W 71 4 14.613763(0.0022M) 424.4223(.0095688M.026699 0.0060 0.0082
2306	67KP055	E-55	[]N 45 52 7.014765(0.0018M) W 70 51 18.546400(0.0014M) 493.9788(.0075042M.020927 0.0039 0.0049
2307	77KZ164		[]N 45 47 15.861551(0.0026M) W 71 17 37.454098(0.0022M) 277.4768(.0117960M.032896 0.0060 0.0073
2308	78K0363		[]N 45 43 0.223625(0.0022M) W 70 51 9.178379(0.0018M) 439.4606(.0104026M.029009 0.0049 0.0060
2309	78K0397		[]N 45 27 20.211764(0.0037M) W 71 9 9.223533(0.0032M) 1081.8845(.0185679M.051781 0.0089 0.0104
2310	78K0468		[]N 45 52 17.395197(0.0023M) W 70 35 52.500402(0.0019M) 361.4375(.0108307M.030204 0.0053 0.0064
2311	78KH002H	78H3086	[]N 45 55 28.097142(0.0024M) W 71 22 20.176263(0.0020M) 238.5317(.0116856M.032588 0.0057 0.0067
2312	79L1565		[]N 45 55 33.862607(0.0021M) W 70 57 46.109955(0.0016M) 400.4737(.0073765M.020574 0.0046 0.0059
2313	85L419		[]N 45 35 56.232156(0.0026M) W 71 8 16.179708(0.0022M) 499.1361(.0138967M.038753 0.0061 0.0072
2314	88KSE82		[]N 46 0 18.900521(0.0021M) W 71 10 37.819344(0.0017M) 327.0119(.0089403M.024934 0.0048 0.0059
2315	92KS557		[]N 45 39 49.057448(0.0022M) W 70 56 18.310748(0.0018M) 495.8091(.0114036M.031801 0.0050 0.0060
2316	95K1114		[]N 45 54 18.588120(0.0034M) W 71 38 49.261107(0.0030M) 279.4283(.0174302M.048609 0.0084 0.0095
2317	95K1117		[]N 45 59 41.202390(0.0028M) W 71 31 37.069517(0.0025M) 424.1394(.0147770M.041211 0.0069 0.0079
2318	95K1265		[]N 45 17 55.985264(0.0043M) W 71 12 7.247276(0.0038M) 486.5655(.0234618M.065427 0.0105 0.0119
2319	95K1266		[]N 45 24 6.358799(0.0035M) W 71 15 44.827191(0.0032M) 424.5119(.0205327M.057259 0.0088 0.0099
2320	95K1267		[]N 45 23 33.935725(0.0038M) W 71 4 26.794876(0.0033M) 526.2783(.0200099M.055776 0.0092 0.0106
2321	95K1268		[]N 45 29 7.163495(0.0030M) W 71 4 22.184178(0.0026M) 469.7621(.0168425M.046968 0.0072 0.0083
2322	95K1269		[]N 45 23 5.492243(0.0039M) W 70 51 50.898947(0.0034M) 397.2376(.0202254M.056402 0.0094 0.0110
2323	95K1270		[]N 45 29 9.360343(0.0031M) W 70 54 16.972086(0.0026M) 376.1825(.0167266M.046645 0.0073 0.0086
2324	95K1271		[]N 45 35 27.949792(0.0024M) W 70 54 33.185428(0.0020M) 447.1074(.0133718M.037290 0.0057 0.0068
2325	95K1272		[]N 45 34 25.008836(0.0027M) W 70 53 3.304694(0.0022M) 369.9283(.0140954M.039307 0.0062 0.0075
2326	95K1273		[]N 45 34 19.614985(0.0026M) W 70 49 51.957659(0.0022M) 456.5613(.0142541M.039750 0.0061 0.0072
2327	95K1274		[]N 45 39 28.598517(0.0027M) W 70 44 18.309169(0.0022M) 477.9343(.0128585M.035859 0.0061 0.0075
2328	95K1275		[]N 45 44 54.114446(0.0022M) W 70 40 52.561591(0.0019M) 317.0773(.0111180M.031178 0.0052 0.0062
2329	95K1276		[]N 45 36 11.821517(0.0030M) W 71 21 40.501583(0.0026M) 332.0931(.0162452M.045303 0.0074 0.0085
2330	95K1277		[]N 45 41 48.222939(0.0031M) W 71 28 19.383648(0.0027M) 272.6122(.0160845M.044855 0.0076 0.0086
2331	95K1278		[]N 45 42 17.606962(0.0030M) W 71 22 19.577632(0.0026M) 287.0234(.0145095M.040463 0.0072 0.0085
2332	95K1279		[]N 45 38 2.463331(0.0027M) W 71 1 40.655232(0.0021M) 478.9739(.0126013M.035142 0.0059 0.0076
2333	95K1280		[]N 45 42 29.199239(0.0023M) W 71 9 33.934871(0.0019M) 437.3855(.0113816M.031740 0.0053 0.0064
2334	95K1281		[]N 45 51 18.759507(0.0032M) W 71 32 5.290093(0.0028M) 388.8117(.0154192M.043001 0.0076 0.0089
2335	95K1282		[]N 45 56 19.040269(0.0033M) W 71 29 54.944342(0.0028M) 313.4581(.0146725M.040920 0.0077 0.0092
2336	95K1283		[]N 45 45 38.598524(0.0028M) W 71 24 23.959849(0.0024M) 224.9777(.0139108M.038793 0.0067 0.0078
2337	95K1284		[]N 45 50 2.152520(0.0031M) W 71 22 12.045411(0.0025M) 226.5969(.0127352M.035517 0.0069 0.0085
2338	95K1285		[]N 45 46 52.437212(0.0027M) W 71 5 30.032162(0.0021M) 370.9202(.0100884M.028137 0.0059 0.0075
2339	95K1286		[]N 45 54 9.844194(0.0026M) W 71 21 3.799302(0.0022M) 222.9420(.0115824M.032302 0.0060 0.0073
2340	95K1287		[]N 45 57 54.547367(0.0027M) W 71 22 12.318975(0.0022M) 263.1078(.0119083M.033211 0.0061 0.0074
2341	95K1288		[]N 45 53 33.091413(0.0025M) W 71 8 3.169662(0.0019M) 303.7225(.0087906M.024518 0.0053 0.0069
2342	95K1289		[]N 45 47 1.219531(0.0029M) W 70 57 57.282236(0.0022M) 469.4377(.0098087M.027361 0.0062 0.0080
2343	95K1290		[]N 45 45 2.734791(0.0024M) W 70 35 19.489257(0.0020M) 405.2684(.0123957M.034568 0.0056 0.0066
2344	95K1291		[]N 45 50 12.141465(0.0023M) W 70 37 36.357782(0.0019M) 300.1198(.0106980M.029834 0.0053 0.0064
2345	95K1292		[]N 45 52 50.458614(0.0018M) W 70 59 29.752716(0.0014M) 295.4201(.0072983M.020353 0.0040 0.0051
2346	95K1293		[]N 45 57 50.357552(0.0018M) W 70 49 55.373834(0.0014M) 384.5607(.0072958M.020346 0.0038 0.0049
2347	95K1294		[]N 45 59 4.736641(0.0025M) W 70 57 6.792795(0.0019M) 324.3113(.0080592M.022481 0.0054 0.0070
2348	95K1295		[]N 45 57 20.873813(0.0022M) W 70 39 2.950575(0.0017M) 241.3916(.0096084M.026797 0.0047 0.0060
2349	95K1296		[]N 45 56 30.162655(0.0022M) W 70 29 19.222095(0.0019M) 370.7559(.0122959M.034289 0.0053 0.0063
2350			

The GPS Height Transformation (v2.0)

2361	72K8600	[]N 46 52 26.845354(0.0021M) W 71 10 6.649943(0.0016M) 29.7438(.0136180M.037979 0.0045 0.0059
2362	73K0478	[]N 48 44 45.039082(0.0021M) W 69 7 25.311270(0.0017M) 85.3504(.0136153M.037983 0.0048 0.0059
2363	73KP115	[]N 49 1 40.424904(0.0018M) W 72 32 30.735870(0.0013M) 204.2567(.0103718M.028933 0.0035 0.0049
2364	77L262	[]N 47 33 54.204149(0.0020M) W 70 23 33.736064(0.0016M) 396.0691(.0127752M.035629 0.0043 0.0057
2365	78K0167	[]N 46 42 3.023458(0.0015M) W 70 4 32.415716(0.0013M) 470.0370(.0091221M.025441 0.0036 0.0042
2366	82K0272	[]N 47 28 2.222685(0.0021M) W 69 13 53.587347(0.0017M) 208.4284(.0138216M.038551 0.0048 0.0059
2367	83K0149	[]N 46 37 28.342534(0.0015M) W 73 50 18.392015(0.0012M) 408.1679(.0092260M.025735 0.0034 0.0042
2368	83L609	[]N 45 45 17.171795(0.0018M) W 76 34 38.974641(0.0015M) 142.7760(.0112532M.031394 0.0040 0.0050
2369	86KS289	[]N 47 23 42.289708(0.0022M) W 78 43 43.066206(0.0017M) 298.7936(.0132498M.036955 0.0047 0.0062
2370	87K0073	[]N 45 38 37.860568(0.0020M) W 74 44 33.281215(0.0016M) 27.3149(.0129189M.036035 0.0044 0.0056
2371	87KS748	[]N 48 54 24.705900(0.0020M) W 71 48 56.372816(0.0015M) 165.4949(.0126111M.035177 0.0041 0.0057
2372	88K0616	[]N 47 41 59.387392(0.0021M) W 79 25 24.010844(0.0016M) 241.9269(.0123776M.034527 0.0045 0.0058
2373	88KSC11	[]N 48 48 41.041443(0.0018M) W 72 44 34.655254(0.0013M) 217.1511(.0108233M.030191 0.0036 0.0050
2374	88KSE85	[]N 46 56 48.928580(0.0019M) W 69 46 6.844732(0.0016M) 340.3203(.0120151M.033512 0.0043 0.0052
2375	88L333	[]N 48 37 45.241053(0.0016M) W 72 28 36.210347(0.0012M) 81.8096(.0096314M.026863 0.0033 0.0044
2376	88L381	[]N 49 4 50.969117(0.0029M) W 73 28 6.582371(0.0020M) 389.0397(.0173143M.048317 0.0055 0.0080
2377	89KSD41	[]N 48 12 2.043634(0.0015M) W 70 6 7.177245(0.0012M) 119.9139(.0088173M.024589 0.0034 0.0041
2378	90L194	[]N 48 26 46.282526(0.0019M) W 71 41 10.929370(0.0014M) 126.2476(.0113111M.031546 0.0039 0.0052
2379	90L365	[]N 46 48 10.668739(0.0015M) W 72 46 17.448374(0.0012M) 116.1563(.0089171M.024869 0.0033 0.0041
2380	90L533	[]N 47 43 23.733376(0.0013M) W 71 12 30.608394(0.0011M) 741.1509(.0075462M.021047 0.0030 0.0036
2381	92K0628	[]N 48 20 28.953715(0.0022M) W 68 41 35.990845(0.0019M) 138.7926(.0143574M.040060 0.0051 0.0060
2382	93KSY41	[]N 45 55 34.937352(0.0021M) W 77 8 1.652362(0.0017M) 100.1830(.0130915M.036528 0.0045 0.0058
2383	95K1219	[]N 46 50 51.713687(0.0009M) W 71 15 41.228982(0.0009M) 7.7215(.00443362M.012092 0.0024 0.0024
2384	95K1263	[]N 47 25 42.940307(0.0020M) W 69 56 47.714412(0.0016M) -11.3828(.0127152M.035467 0.0045 0.0054
2385	96K1071	[]N 45 35 23.529371(0.0020M) W 75 25 12.708275(0.0015M) 113.0023(.0126076M.035161 0.0043 0.0056
2386	96K1077	[]N 46 11 29.470283(0.0017M) W 77 41 5.123781(0.0014M) 86.3126(.0105166M.029334 0.0038 0.0048
2387	96K1100	[]N 48 8 11.476553(0.0021M) W 78 6 52.434809(0.0016M) 283.1453(.0126312M.035231 0.0044 0.0058
2388	96K1107	[]N 48 45 26.667267(0.0023M) W 78 6 49.837599(0.0017M) 259.4472(.0138345M.038597 0.0048 0.0064
2389	96K1147	[]N 48 21 0.643266(0.0020M) W 69 23 50.322617(0.0016M) -21.6601(.0127184M.035478 0.0045 0.0055
2390	96K1225	[]N 48 7 19.768878(0.0020M) W 72 13 49.087007(0.0015M) 365.6547(.0127806M.035645 0.0042 0.0056
2391	96K1226	[]N 47 59 49.204610(0.0019M) W 70 46 40.965267(0.0015M) 460.5021(.0122064M.034041 0.0041 0.0054
2392	96K1227	[]N 48 24 52.836172(0.0019M) W 70 36 23.345557(0.0014M) 205.1787(.0118138M.032947 0.0040 0.0053
2393	96K1231	[]N 47 55 8.484687(0.0021M) W 68 57 16.737185(0.0017M) 274.8452(.0133641M.037277 0.0048 0.0057
2394	96K1232	[]N 46 14 27.881289(0.0017M) W 74 4 58.817012(0.0013M) 367.5496(.0104001M.029008 0.0037 0.0047
2395	96K1233	[]N 46 22 9.135883(0.0015M) W 74 49 57.972790(0.0012M) 221.4825(.0093108M.025966 0.0034 0.0043
2396	96K1234	[]N 45 53 42.746672(0.0013M) W 75 3 27.640627(0.0011M) 189.7777(.0076329M.021286 0.0030 0.0037
2397	96K1235	[]N 46 3 54.724297(0.0021M) W 76 3 16.733340(0.0017M) 118.1791(.0135099M.037684 0.0045 0.0059
2398	12200 MURRAY	[]N 47 45 23.384987(0.0079M) W 70 2 29.813277(0.0169M) 653.5897(.0162590M.048723 0.0215 0.0438
2399	12204 FOURNIER	[]N 47 7 25.714138(0.0086M) W 70 8 45.402419(0.0170M) 628.5379(.0180674M.051785 0.0237 0.0461
2400	15200 TOURENTTE	[]N 47 9 8.736811(0.0086M) W 70 42 33.09438(0.0170M) 642.6027(.0180873M.051817 0.0237 0.0461
2401	17202 COUDRES	[]N 47 23 54.201614(0.0083M) W 70 24 55.403899(0.0169M) 63.9678(.0172443M.050075 0.0227 0.0453
2402	652011 ST PAUL	[]N 47 25 36.244095(0.0086M) W 70 40 2.902254(0.0170M) 962.2429(.0180698M.051792 0.0237 0.0461
2403	652012 ST PACOME	[]N 47 24 35.791670(0.0080M) W 69 55 8.996109(0.0169M) 230.6989(.0165681M.049073 0.0218 0.0443
2404	652013 ANDREVILLE	[]N 47 39 6.819387(0.0082M) W 69 43 57.517438(0.0169M) 164.2438(.0167756M.049287 0.0223 0.0448
2405	65K0262 PILOTE	[]N 47 52 8.372348(0.0082M) W 69 31 14.244226(0.0169M) 57.9046(.0167824M.049318 0.0223 0.0448
2406	832004 ELGIN	[]N 47 15 2.774179(0.0083M) W 70 9 14.822308(0.0169M) 100.6747(.0172446M.050072 0.0227 0.0453
2407	12202D ST IRENEE ECC	[]N 47 31 47.239177(0.0092M) W 70 17 44.470800(0.0173M) 743.0976(.1014457M.282900 0.0257 0.0481
2408	872001 WINDMILL	[]N 47 31 47.045377(0.0081M) W 70 17 44.227994(0.0169M) 741.4976(.0167714M.049318 0.0221 0.0447
2409	741012 CAPE JOHN 2	[]N 45 48 14.820746(0.0044M) W 63 7 42.259328(0.0049M) -3.5133(.0370796M.103418 0.0115 0.0142
2410	731003 DEAN	[]N 45 10 4.172858(0.0054M) W 62 58 28.768261(0.0042M) 184.0154(.0355179M.099069 0.0102 0.0161
2411	17104 BRIGHT	[]N 46 7 12.084121(0.0034M) W 67 6 31.039752(0.0027M) 369.7138(.0234586M.065433 0.0073 0.0096
2412	24105 HARVEY	[]N 45 45 3.001165(0.0024M) W 66 58 56.973773(0.0018M) 250.5452(.0086209M.024044 0.0049 0.0066
2413	18102 BEECH HILL	[]N 45 57 27.270328(0.0074M) W 64 23 54.060834(0.0064M) 104.3516(.0535299M.149349 0.0176 0.0203
2414	65K0264 65K0264	[]N 47 48 14.072461(0.0052M) W 65 35 26.603557(0.0040M) -21.0097(.0472196M.131691 0.0108 0.0147
2415	661002 THOM	[]N 44 40 42.029710(0.0052M) W 63 34 8.467250(0.0041M) 67.5839(.0443915M.123818 0.0113 0.0144
2416	78K0038 78K0038	[]N 48 24 27.855942(0.0063M) W 64 26 8.230959(0.0046M) 32.2376(.0494127M.137853 0.0122 0.0174
2417	88E21795 WESTVILLE GPS	[]N 45 33 8.538505(0.0031M) W 62 43 5.467064(0.0028M) 71.3018(.0244519M.068207 0.0077 0.0087
2418	73N323 N.S. 3678	[]N 45 33 58.488320(0.0041M) W 62 37 15.147053(0.0034M) 15.9638(.0330551M.092231 0.0093 0.0113
2419	88E27891UNB GPS	[]N 45 57 0.948489(0.0022M) W 66 38 32.235903(0.0018M) 19.5406(.0160213M.044687 0.0051 0.0062
2420	68B301 N.B. 458	[]N 45 56 30.895485(0.0029M) W 66 40 16.845614(0.0022M) 97.0095(.0223087M.062248 0.0059 0.0080
2421	4719066 NEEDHAM (368)	[]N 44 39 55.550436(0.0021M) W 63 36 2.758456(0.0016M) 48.8381(.0123916M.034557 0.0046 0.0058
2422	53B056 1115G	[]N 47 5 46.673596(0.0104M) W 65 28 5.033287(0.0073M) 64.7324(.0686412M.191432 0.0193 0.0296
2423	53N004 140-B-3	[]N 45 47 50.200511(0.0054M) W 63 37 40.612962(0.0045M) -10.0204(.0472792M.131851 0.0125 0.0152
2424	67B002 67B002	[]N 47 38 55.537255(0.0065M) W 65 34 28.549815(0.0049M) -6.7758(.0506859M.141373 0.0135 0.0181
2425	70N001 70N001	[]N 45 51 3.038941(0.0069M) W 64 15 21.825104(0.0061M) -0.1751(.0525167M.146500 0.0170 0.0191
2426	71B005 71B005	[]N 45 57 8.070312(0.0070M) W 64 32 2.316081(0.0064M) -5.6973(.0522929M.145873 0.0174 0.0194
2427	71L9001 2260-2-1971	[]N 48 17 2.724930(0.0061M) W 64 43 6.181579(0.0044M) -15.6033(.0495662M.138279 0.0116 0.0168
2428	73L1103 DOT-106-1973	[]N 48 36 10.001143(0.0058M) W 68 11 37.383903(0.0042M) 34.3195(.0405096M.113016 0.0113 0.0161
2429	74L1013 74L103	[]N 49 6 33.456322(0.0062M) W 66 37 12.222254(0.0044M) -18.1090(.0449102M.125278 0.0119 0.0172
2430	74L161 74L161	[]N 49 14 49.388715(0.0069M) W 65 23 45.473143(0.0048M) 65.1752(.0535074M.149252 0.0132 0.0192
2431	74L196 74L196	[]N 49 5 17.865261(0.0086M) W 64 35 50.160186(0.0059M) 64.7563(.0683628M.190751 0.0158 0.0235
2432	74L1242 74L1242	[]N 48 45 53.005817(0.0067M) W 64 27 48.412681(0.0047M) -7.8454(.0518063M.144524 0.0127 0.0186
2433	77B254 77B254	[]N 46 14 0.113245(0.0078M) W 64 30 59.030273(0.0066M) -16.0679(.0534322M.149082 0.0178 0.0218
2434	78B463 78B463	[]N 46 40 48.038126(0.0111M) W 64 51 46.330887(0.0083M) -16.0578(.0694623M.193772 0.0230 0.0306
2435	78L530 78L530	[]N 48 23 54.576804(0.0064M) W 67 16 25.665332(0.0044M) 128.0626(.0487204M.135914 0.0120 0.0177
2436	83L103 83L103	[]N 47 35 23.349330(0.0046M) W 69 48 46.748311(0.0047M) -23.6421(.0276154M.077012 0.0125 0.0132
2437	83L116 83L116	[]N 48 0 44.103074(0.0056M) W 69 20 23.990167(0.0043M) -18.3285(.0517007M.144197 0.0115 0.0157
2438	83L124 83L124	[]N 48 10 22.236136(0.0050M) W 69 6 27.665986(0.0033M) 9.999(.0414506M.115617 0.0089 0.0139
2439	83L131 83L131	[]N 48 20 2.487625(0.0050M) W 68 46 50.505938(0.0033M) 51.5165(.0408296M.113887 0.0088 0.0139
2440	83L205 83L205	[]N 47 22 14.730362(0.0046M) W 70 2 43.264216(0.0047M) -20.2393(.0278210M.077585 0.0127 0.0133
2441	85B211 85B211	[]N 47 52 23.084876(0.0068M) W 65 47 38.582142(0.0053M) -7.3295(.0541300M.151004 0.0145 0.0188
2442	86KM502 VLB004	[]N 48 32 13.282617(0.0048M) W 67 33 27.784374(0.0034M) 143.1878(.0344606M.096139 0.0093 0.0133
2443	91001 911001	[]N 45 33 4.722790(0.0052M) W 63 33 0.275640(0.0041M) 177.0928(.0422122M.117719 0.0115 0.0145
2444	910101 911011	[]N 47 20 52.822294(0.0065M) W 65 25 56.757926(0.0046M) 59.1643(.0495844M.138331 0.0125 0.0178
2445	911013 911013	[]N 46 28 1.414618(0.0095M) W 64 43 44.394995(0.0078M) -4.0002(.0658155M.183577 0.0215 0.0265
2446	912000 912000	[]N 49 13 22.172974(0.0074M) W 65 48 45.895243(0.0053M) -15.5374(.0562714M.145956 0.0145 0.0206
2447	912001 912001	[]N 49 12 27.670425(0.0069M) W 64 56 59.216839(0.0049M) 15.7453(.0528803M.147509 0.0132 0.0191
2448	912002 912002	[]N 48 34 57.191667(0.0064M) W 64 17 33.764683(0.0047M) -14.2874(.0502966M.140316 0.012

The GPS Height Transformation (v2.0)

2456	912018	912018	[]N 48 4 9.092602(0.0058M) W 66 33 41.848653(0.0042M) 16.2606(.0477418M.133184 0.0113 0.0160
2457	912019	912019	[]N 48 8 23.060947(0.0062M) W 67 8 58.569945(0.0043M) 59.8887(.0478819M.133586 0.0117 0.0172
2458	NB25669	25669	[]N 46 52 0.471044(0.0112M) W 65 8 29.078183(0.0089M) 43.1770(.0709637M.197930 0.0246 0.0311
2459	NS11254	NS11254	[]N 45 2 31.820831(0.0051M) W 63 22 28.392686(0.0042M) 2.7330(.0451621M.125960 0.0114 0.0143
2460	NS13321	911000	[]N 45 58 43.723103(0.0049M) W 63 54 44.207333(0.0040M) 3.0396(.0393427M.109729 0.0110 0.0136
2461	NS9565	NS9565	[]N 45 18 18.847072(0.0048M) W 63 17 35.187712(0.0038M) 27.3475(.0391397M.109168 0.0103 0.0134
2462	631103	RED (4903)	[]N 43 57 42.792004(0.0218M) W 59 47 11.340841(0.0247M) 1.3318(.0417183M.116525 0.0476 0.0781
2463	711001	MILLS	[]N 45 0 42.768774(0.0157M) W 62 4 55.774871(0.0175M) 56.2911(.0422532M.117902 0.0435 0.0489
2464	911021	SHEROD	[]N 43 55 58.326011(0.0220M) W 60 0 19.494010(0.0236M) -11.2807(.0416697M.116402 0.0483 0.0755
2465	NS28961		[]N 43 56 4.804597(0.0264M) W 60 2 55.045853(0.0289M) 4.5932(.0692632M.193994 0.0643 0.0863
2466	NS28960		[]N 43 57 28.284698(0.0263M) W 60 7 36.442067(0.0286M) -9.8574(.0693301M.194164 0.0644 0.0852
2467	NS28966	WALLACE	[]N 43 56 6.382405(0.0265M) W 59 59 12.917559(0.0282M) -0.5345(.0663409M.185246 0.0633 0.0868
2468	NS28962	WESTLIGHT	[]N 43 55 55.161275(0.0265M) W 60 1 22.323785(0.0281M) 17.5434(.0663308M.185218 0.0634 0.0864
2469	NS28967	LOCKOS	[]N 43 57 32.811459(0.0261M) W 59 46 47.264467(0.0264M) 1.8449(.0590535M.165522 0.0573 0.0844
2470	NS28963		[]N 44 0 50.939092(0.0257M) W 59 42 19.455902(0.0267M) -9.6787(.0589948M.165331 0.0571 0.0844
2471	9715001		[]N 44 58 44.562550(0.0024M) W 64 55 8.370150(0.0069M) 5.1731(.0135542M.037804 0.0067 0.0194
2472	75N749		[]N 44 58 27.358730(0.0024M) W 64 54 4.052807(0.0069M) 5.3993(.0135634M.037832 0.0067 0.0194
2473	9813001	PUG B NAIL	[]N 45 16 2.640134(0.0031M) W 66 3 43.403111(0.0027M) -16.0631(.0182194M.050808 0.0074 0.0087
2474	XXN9007	YAR-3 CHS BM	[]N 43 49 52.443730(0.0026M) W 66 7 20.338907(0.0024M) -18.2529(.0148660M.041461 0.0066 0.0072
2475	63P9500	CHTN 1-1963	[]N 46 13 48.658648(0.0029M) W 63 7 20.042734(0.0028M) -14.9075(.0167521M.046718 0.0077 0.0082
2476	9813002	NAILBY89N9000	[]N 46 12 33.150031(0.0046M) W 60 14 45.669787(0.0045M) -9.6723(.0251626M.070234 0.0104 0.0142
2477	97B9000	ESCUMINAS NB	[]N 47 4 47.849980(0.0044M) W 64 53 7.434911(0.0034M) -17.1699(.0240069M.066957 0.0096 0.0123
2478	9813003	1-NAIL DALHOUSIE	[]N 48 27 18.387858(0.0032M) W 66 22 39.437902(0.0027M) -17.8283(.0181937M.050744 0.0075 0.0091
2479	83B9502	1-1983 CHS BM	[]N 46 14 20.111397(0.0029M) W 64 31 26.636731(0.0027M) -15.9202(.0177232M.049428 0.0074 0.0081
2480	NB1195	HAMPTON	[]N 45 30 2.235090(0.0028M) W 65 53 27.475321(0.0025M) 41.8710(.0165415M.046130 0.0071 0.0078
2481	9813004	PIN 0490 201H	[]N 44 39 39.111998(0.0041M) W 63 35 11.146207(0.0034M) -18.4492(.0249812M.069699 0.0093 0.0113
2482	650000	ST JOHNS SATEL	[]N 47 36 30.840504(0.0037M) W 52 44 25.999562(0.0029M) 153.8899(.0190235M.053059 0.0077 0.0106
2483	38021	DONOVAN SB	[]N 47 29 8.232198(0.0029M) W 52 51 5.398546(0.0022M) 254.3567(.0145010M.040446 0.0060 0.0080
2484	71GT057	026295	[]N 47 34 12.072150(0.0037M) W 52 43 55.973633(0.0028M) 70.5514(.0191162M.053321 0.0076 0.0104
2485	71GT066	029346	[]N 47 35 56.695008(0.0037M) W 52 41 5.955363(0.0029M) 104.4318(.0190025M.053001 0.0077 0.0106
2486	76F703	76-F-703	[]N 47 30 42.255336(0.0033M) W 52 45 51.784153(0.0025M) 96.5378(.0168330M.046950 0.0068 0.0092
2487	76F726	76-F-726	[]N 47 34 15.835682(0.0033M) W 52 41 11.897713(0.0026M) 109.6890(.0167052M.046592 0.0069 0.0093
2488	920036		[]N 47 35 17.171321(0.0041M) W 52 43 46.505723(0.0033M) 102.6586(.0208256M.058085 0.0087 0.0118
2489	38018	PARTRIDGE	[]N 47 49 18.022584(0.0030M) W 53 18 43.462718(0.0024M) 291.9581(.0114469M.031934 0.0065 0.0085
2490	36005	ROBINSONS	[]N 48 15 32.555059(0.0108M) W 58 47 57.273502(0.0088M) 88.7596(.0226521M.063362 0.0231 0.0309
2491	37022	LAWRENCE	[]N 49 11 28.555576(0.0091M) W 55 14 16.960005(0.0069M) 173.6045(.0208569M.058193 0.0190 0.0256
2492	38004	ALEX	[]N 48 40 35.087081(0.0124M) W 54 21 21.176650(0.0106M) 218.2734(.0260828M.072950 0.0284 0.0351
2493	39006	COW HEAD	[]N 49 55 13.080958(0.0118M) W 57 49 12.760586(0.0095M) 61.9165(.0246520M.068914 0.0253 0.0334
2494	44000	SAVAGE	[]N 51 19 13.589281(0.0126M) W 56 42 2.803527(0.0103M) 18.3081(.0251431M.070646 0.0272 0.0353
2495	510632	GRAND BANK AZ	[]N 47 4 5.2858529(0.0077M) W 55 50 47.609310(0.0063M) 95.0502(.0188670M.052752 0.0174 0.0214
2496	71GT010		[]N 48 32 35.448168(0.0095M) W 58 32 9.390318(0.0075M) 11.1133(.0202566M.056525 0.0203 0.0269
2497	72GT016		[]N 48 23 46.565977(0.0099M) W 54 11 47.580731(0.0082M) 30.0689(.0213424M.059806 0.0223 0.0274
2498	72GT030		[]N 47 55 19.325516(0.0093M) W 54 16 31.343632(0.0077M) 15.0018(.0197870M.055404 0.0210 0.0258
2499	76F068		[]N 49 1 2.522816(0.0094M) W 57 35 36.945302(0.0072M) 32.8288(.0202404M.056729 0.0196 0.0259
2500	76F100		[]N 49 15 51.806627(0.0117M) W 57 5 18.555221(0.0102M) 151.5203(.0238228M.066994 0.0266 0.0330
2501	76F124		[]N 49 19 48.373015(0.0127M) W 56 41 40.065296(0.0105M) 120.2025(.0251996M.070575 0.0281 0.0357
2502	76F154		[]N 49 30 35.824886(0.0123M) W 56 52 41.179919(0.0099M) 53.2044(.0248392M.069538 0.0265 0.0346
2503	76F170		[]N 49 27 31.965830(0.0123M) W 56 10 40.524765(0.0099M) 100.1506(.0235462M.065903 0.0268 0.0345
2504	76F191		[]N 49 9 17.615298(0.0116M) W 56 6 11.874139(0.0106M) 197.9242(.0232688M.065013 0.0282 0.0333
2505	76F216		[]N 48 56 59.559237(0.0091M) W 55 51 4.825875(0.0087M) 84.7834(.0187857M.052447 0.0217 0.0276
2506	76F275		[]N 48 43 0.100094(0.0080M) W 55 51 51.715825(0.0069M) 134.2823(.0175458M.049072 0.0183 0.0228
2507	76F289		[]N 48 28 35.543328(0.0095M) W 55 27 41.030300(0.0079M) 154.0843(.0201257M.056177 0.0214 0.0271
2508	76F302		[]N 48 13 17.773016(0.0093M) W 55 29 48.125882(0.0076M) 199.2846(.0197694M.055234 0.0205 0.0262
2509	76F334		[]N 47 41 59.707288(0.0083M) W 55 34 34.233807(0.0070M) 153.9683(.0179717M.050285 0.0186 0.0235
2510	76F357		[]N 47 28 49.531710(0.0095M) W 55 48 19.260191(0.0079M) 4.8868(.0206074M.057650 0.0209 0.0270
2511	76F383		[]N 49 6 55.351041(0.0084M) W 55 4 17.836037(0.0066M) 94.7243(.0194788M.054351 0.0183 0.0234
2512	76F409		[]N 47 56 27.682280(0.0094M) W 55 40 42.202804(0.0077M) 126.0317(.0198513M.055469 0.0205 0.0266
2513	76F433		[]N 48 50 18.130453(0.0116M) W 54 20 45.743373(0.0096M) 135.8273(.0245640M.068772 0.0259 0.0324
2514	76F481		[]N 48 11 47.580202(0.0114M) W 54 1 39.671994(0.0096M) 71.9910(.0247425M.069325 0.0264 0.0312
2515	76F513		[]N 48 41 24.344694(0.0117M) W 53 39 15.962924(0.0101M) 13.6755(.0242345M.067818 0.0270 0.0331
2516	76F530		[]N 47 56 48.581260(0.0103M) W 53 57 15.698183(0.0082M) 76.9234(.0218807M.061314 0.0222 0.0284
2517	76F569		[]N 47 37 51.759205(0.0098M) W 53 50 24.175884(0.0075M) 146.3288(.0208928M.058493 0.0207 0.0271
2518	76F593		[]N 47 27 4.644278(0.0064M) W 53 33 41.046507(0.0054M) 65.2045(.0142769M.039989 0.0144 0.0180
2519	76F602		[]N 47 13 47.554792(0.0074M) W 53 41 31.073881(0.0060M) 173.9712(.0162853M.045628 0.0162 0.0208
2520	76F617		[]N 47 16 38.699816(0.0103M) W 53 59 37.999214(0.0075M) 27.5694(.0226111M.063204 0.0207 0.0285
2521	76F648		[]N 47 23 24.379231(0.0069M) W 53 9 35.704926(0.0058M) 30.1531(.0153445M.042981 0.0159 0.0191
2522	76F731		[]N 49 12 27.184097(0.0089M) W 57 26 51.339745(0.0068M) 45.9892(.0186495M.052257 0.0186 0.0246
2523	76F855		[]N 48 22 47.038562(0.0088M) W 58 28 21.824764(0.0071M) 52.5847(.0186546M.052115 0.0191 0.0251
2524	76F898		[]N 48 38 0.186945(0.0079M) W 58 12 45.293361(0.0065M) 167.7297(.0175504M.048984 0.0173 0.0226
2525	76F926		[]N 49 36 39.161545(0.0120M) W 57 56 59.980622(0.0096M) 20.7094(.0250582M.070017 0.0259 0.0338
2526	76F936		[]N 49 46 5.717490(0.0122M) W 57 54 18.373583(0.0098M) 15.7735(.0256681M.071744 0.0263 0.0346
2527	76G0032	BM 76G0032	[]N 50 7 3.725367(0.0130M) W 56 7 26.163712(0.0115M) 13.0865(.0263414M.074002 0.0302 0.0368
2528	76G0049		[]N 48 51 45.906137(0.0115M) W 53 59 41.700350(0.0097M) 19.5765(.0241658M.067641 0.0262 0.0323
2529	76G0205		[]N 49 39 7.919074(0.0145M) W 54 46 19.142993(0.0107M) 13.8497(.0286337M.080288 0.0290 0.0403
2530	76G0408		[]N 49 57 28.646701(0.0133M) W 55 36 3.485294(0.0107M) 18.6824(.0266456M.074727 0.0290 0.0369
2531	77F021		[]N 49 27 45.150013(0.0118M) W 57 54 34.946076(0.0095M) 24.2434(.0249042M.069537 0.0257 0.0335
2532	77G0009		[]N 48 45 41.651937(0.0122M) W 58 47 58.816298(0.0113M) 9.5598(.0254212M.071136 0.0277 0.0366
2533	79GT001	ASARCO	[]N 48 49 53.754110(0.0125M) W 56 51 33.194653(0.0131M) 299.7021(.0247498M.069531 0.0298 0.0398
2534	81F9503		[]N 51 36 9.516662(0.0121M) W 55 37 32.572231(0.0105M) 8.6607(.0242587M.067746 0.0261 0.0361
2535	81G2142		[]N 47 36 53.069434(0.0056M) W 53 16 34.523989(0.0051M) 15.0819(.0131455M.036787 0.0135 0.0162
2536	83G3404		[]N 47 2 37.891796(0.0030M) W 52 53 28.293025(0.0022M) 67.0091(.0109760M.030619 0.0060 0.0083
2537	84G4073		[]N 48 5 42.907073(0.0111M) W 52 54 5.331754(0.0074M) 121.1830(.0211975M.059520 0.0208 0.0302
2538	89F015		[]N 47 18 51.595481(0.0077M) W 52 49 2.231152(0.0063M) 55.5488(.017306M.048464 0.0172 0.0213
2539	89F108		[]N 46 42 32.007891(0.0100M) W 53 29 18.496529(0.0086M) 149.2438(.0231438M.064647 0.0235 0.0281
2540	89F130		[]N 46 58 2.038203(0.0084M) W 53 31 9.259948(0.0071M) 26.8106(.0185761M.052042 0.0188 0.0236
2541	89F155		[]N 47 12 16.900137(0.0102M) W 53 22 16.172701(0.0088M) 23.2668(.0217023M.067019 0.0244

The GPS Height Transformation (v2.0)

2551	89F370	[]N 50 44 23.085100(0.0126M) W 56 6 5.311251(0.0112M) 43.3041(.0239081M.067020 0.0270 0.0380
2552	89F409	[]N 51 24 3.947150(0.0132M) W 56 19 12.197554(0.0104M) 48.4273(.0257669M.072575 0.0262 0.0374
2553	89F455	[]N 51 21 25.083234(0.0115M) W 55 33 35.977222(0.0082M) 21.9853(.0242424M.067753 0.0217 0.0326
2554	89F9091	[]N 49 42 49.135148(0.0128M) W 54 17 18.588466(0.0101M) 17.3296(.0270887M.075816 0.0273 0.0357
2555	90F025	[]N 48 57 23.448980(0.0113M) W 54 44 17.141005(0.0095M) 94.0942(.0247022M.069037 0.0256 0.0320
2556	90F057	[]N 49 3 31.110924(0.0131M) W 53 50 59.419303(0.0108M) 91.1579(.0276753M.077401 0.0292 0.0366
2557	90F075	[]N 49 12 9.501067(0.0136M) W 53 32 31.974754(0.0110M) 20.0633(.0288731M.080817 0.0293 0.0383
2558	90F093	[]N 49 23 39.338561(0.0137M) W 53 48 16.411753(0.0108M) 16.7189(.0288497M.080710 0.0293 0.0383
2559	90F109	[]N 49 21 26.333648(0.0114M) W 54 12 57.212528(0.0092M) 87.2806(.0241568M.067591 0.0248 0.0321
2560	90F144	[]N 49 21 33.566015(0.0128M) W 54 42 32.874215(0.0093M) 42.0961(.0255002M.071382 0.0254 0.0356
2561	90F193	[]N 49 29 12.408928(0.0121M) W 58 5 13.622963(0.0098M) 200.5239(.0253474M.070839 0.0264 0.0340
2562	91G7018	[]N 49 30 52.970751(0.0120M) W 55 13 30.415171(0.0090M) 14.7770(.0239767M.067107 0.0246 0.0335
2563	91G7056	[]N 49 31 55.238726(0.0116M) W 55 36 39.810886(0.0094M) 24.4866(.0228437M.063969 0.0251 0.0327
2564	920001	[]N 48 23 16.525174(0.0108M) W 53 38 45.539745(0.0088M) 38.5055(.0226589M.063453 0.0238 0.0301
2565	920003	[]N 47 0 50.583295(0.0087M) W 55 15 8.414151(0.0065M) 88.0961(.0205976M.057729 0.0189 0.0236
2566	920004	[]N 49 11 23.565751(0.0112M) W 54 29 8.459352(0.0088M) 84.7924(.0232651M.065060 0.0237 0.0315
2567	920005	[]N 49 0 32.490590(0.0109M) W 56 19 50.096258(0.0113M) 224.3546(.0215703M.060470 0.0276 0.0335
2568	920006	[]N 49 38 8.879590(0.0129M) W 56 25 26.438070(0.0102M) 249.5432(.0252304M.070714 0.0271 0.0363
2569	920007	[]N 49 50 24.051366(0.0122M) W 56 17 26.889158(0.0099M) 205.3765(.0242598M.068059 0.0261 0.0343
2570	920008	[]N 49 0 25.266448(0.0088M) W 58 7 33.303880(0.0074M) -1.2226(.0203738M.056856 0.0200 0.0250
2571	920009	[]N 49 6 5.133418(0.0100M) W 58 22 56.021320(0.0084M) 1.8250(.0225907M.063108 0.0225 0.0285
2572	920010	[]N 48 28 6.948451(0.0115M) W 57 54 50.173341(0.0094M) 166.6689(.0230435M.064476 0.0245 0.0330
2573	920011	[]N 48 18 16.759586(0.0108M) W 57 42 22.606290(0.0094M) 288.1784(.0212662M.059700 0.0242 0.0310
2574	920012	[]N 48 6 44.603696(0.0117M) W 57 42 12.879917(0.0104M) 423.7004(.0225787M.063340 0.0267 0.0337
2575	920013	[]N 47 50 30.970956(0.0121M) W 57 40 10.135516(0.0108M) 367.1233(.0237103M.066480 0.0278 0.0349
2576	920014	[]N 47 36 58.151082(0.0108M) W 57 37 22.280744(0.0108M) 9.9704(.0217464M.061433 0.0263 0.0322
2577	920015	[]N 48 3 24.548429(0.0110M) W 58 54 12.865325(0.0089M) 151.9774(.0229811M.064277 0.0235 0.0313
2578	920016	[]N 47 46 35.155102(0.0115M) W 59 14 39.868498(0.0085M) 3.2404(.0240254M.067148 0.0219 0.0330
2579	G124503	[]N 47 9 53.124780(0.0077M) W 55 27 37.240895(0.0058M) 34.5988(.0189136M.052992 0.0162 0.0210
2580	G224505	[]N 47 16 51.070252(0.0072M) W 55 2 48.515422(0.0057M) 159.4850(.0175874M.049172 0.0157 0.0200
2581	G227508	[]N 47 28 59.132894(0.0074M) W 54 48 50.186396(0.0060M) 155.1993(.0175872M.049155 0.0164 0.0207
2582	G330506	[]N 47 42 57.706184(0.0075M) W 54 35 16.801021(0.0059M) 169.5975(.0171391M.047927 0.0162 0.0209
2583	G620024	[]N 47 50 36.563911(0.0028M) W 53 5 33.288126(0.0199M) 36.5320(.0090245M.025167 0.0054 0.0078
2584	G834017	[]N 48 24 1.401308(0.0113M) W 53 22 4.252111(0.0094M) 32.7120(.0238585M.066926 0.0256 0.0313
2585	G937051	[]N 48 42 2.865571(0.0144M) W 53 5 10.931387(0.0132M) 45.7846(.0298964M.084010 0.0354 0.0401
2586	84G4200	[]N 48 56 47.164193(0.0135M) W 54 33 58.237865(0.0105M) 154.3929(.0711957M.198542 0.0288 0.0379
2587	83F4008	[]N 48 55 38.831577(0.0137M) W 54 34 7.160834(0.0107M) 139.1145(.0739870M.206326 0.0293 0.0386
2588	73GT044	[]N 47 15 3.454370(0.0044M) W 53 58 17.778785(0.0039M) 10.9223(.0247870M.069131 0.0102 0.0129
2589	76G2357	[]N 49 38 59.040697(0.0054M) W 54 46 31.869378(0.0049M) 66.5719(.0294436M.082143 0.0134 0.0152
2590	76G2453	[]N 48 57 11.923552(0.0065M) W 57 57 48.861676(0.0050M) 171.7224(.0338550M.094440 0.0131 0.0188
2591	78G2015	[]N 48 9 54.814743(0.0055M) W 53 57 32.977944(0.0040M) 16.1497(.0265315M.074019 0.0102 0.0158
2592	81G2336	[]N 50 52 9.449904(0.0062M) W 56 7 31.938508(0.0048M) 19.7115(.0334018M.093190 0.0131 0.0173
2593	82G3064	[]N 47 51 19.980544(0.0073M) W 53 54 19.486700(0.0059M) 36.6439(.0402795M.112488 0.0155 0.0204
2594	86G6050	[]N 48 23 1.879746(0.0095M) W 53 54 31.088726(0.0104M) 25.8755(.0456228M.127533 0.0251 0.0291
2595	86G7008	[]N 49 41 2.321322(0.0064M) W 57 57 47.668457(0.0060M) 10.3891(.0363499M.101379 0.0167 0.0179
2596	87G3109	[]N 50 43 1.307824(0.0067M) W 57 22 15.714973(0.0050M) 8.8551(.0354724M.098977 0.0130 0.0191
2597	88G5017	[]N 49 27 20.720767(0.0053M) W 53 56 27.607896(0.0050M) 18.2463(.0309281M.086251 0.0133 0.0154
2598	89G6156	[]N 47 36 48.823486(0.0065M) W 57 37 44.649583(0.0055M) 34.5348(.0383609M.107023 0.0144 0.0184
2599	91G7043	[]N 48 49 42.366209(0.0047M) W 56 51 54.234563(0.0036M) 325.8885(.0276185M.077021 0.0099 0.0131
2600	91G7122	[]N 49 36 41.098389(0.0049M) W 56 10 42.878756(0.0039M) 60.0197(.0281194M.078446 0.0107 0.0134
2601	92G1051	[]N 49 56 25.512333(0.0066M) W 56 11 38.473226(0.0052M) 59.0742(.0320872M.089725 0.0122 0.0188
2602	92G1086	[]N 49 57 51.244739(0.0055M) W 55 36 5.548502(0.0040M) 40.6391(.0325543M.090795 0.0109 0.0156
2603	92G1090	[]N 49 51 52.608822(0.0064M) W 56 47 10.278580(0.0056M) 38.8677(.0356843M.099520 0.0157 0.0179
2604	92G1106	[]N 49 32 37.172163(0.0062M) W 56 51 35.4516355(0.0049M) 56.4979(.0350078M.097694 0.0129 0.0173
2605	95G5115	[]N 48 58 39.312771(0.0049M) W 54 36 45.313630(0.0045M) 124.1967(.0289374M.080703 0.0125 0.0137
2606	95G5156	[]N 48 56 35.946774(0.0050M) W 55 39 37.685455(0.0040M) 92.4868(.0297038M.082859 0.0110 0.0139
2607	G167020	[]N 51 21 15.592141(0.0074M) W 55 33 55.612863(0.0049M) 134.1481(.0391925M.109368 0.0132 0.0204
2608	G619030	[]N 46 58 27.303642(0.0075M) W 54 9 12.300860(0.0063M) 140.4330(.0426617M.119047 0.0169 0.0208
2609	G816026	[]N 46 37 40.951306(0.0078M) W 53 31 13.568915(0.0057M) 104.2677(.0439478M.122593 0.0158 0.0217
2610	G926040	[]N 47 20 31.002474(0.0044M) W 53 4 45.958882(0.0033M) 251.4506(.0254925M.071107 0.0090 0.0122
2611	91F9152	[]N 56 32 37.734282(0.0022M) W 61 41 13.412914(0.0017M) -7.2101(.0107751M.030050 0.0045 0.0062
2612	93F9151	[]N 55 56 40.797952(0.0020M) W 61 5 37.741002(0.0016M) -6.0420(.0106081M.029585 0.0043 0.0057
2613	58F9506	[]N 55 4 58.592692(0.0027M) W 59 10 12.365033(0.0023M) -1.9841(.0136889M.038176 0.0061 0.0077
2614	97F0153	[]N 54 54 25.587195(0.0019M) W 59 45 59.882926(0.0188M) -3.7619(.0105173M.029332 0.0046 0.0055
2615	96F2900 BM1-1996	[]N 56 26 14.197208(0.0034M) W 62 40 30.043231(0.0025M) -7.6461(.0143567M.040078 0.0069 0.0093
2616	97F9166	[]N 47 51 42.271940(0.0051M) W 55 50 12.245907(0.0056M) 4.5523(.0304027M.085036 0.0127 0.0156
2617	97F0159	[]N 56 32 37.734280(0.0029M) W 55 45 56.222204(0.0057M) -7.2101(.0107751M.030050 0.0045 0.0062
2618	9703000 GAUL	[]N 47 36 26.159124(0.0027M) W 55 54 13.765393(0.0025M) 5.3733(.0164853M.045979 0.0068 0.0076
2619	9609007 ALAC	[]N 47 35 57.092013(0.0017M) W 58 53 15.537007(0.0016M) -6.6340(.0091950M.025647 0.0044 0.0047
2620	9702900 ROSE	[]N 47 36 53.813050(0.0025M) W 58 42 1.218586(0.0023M) -5.7014(.0142347M.039698 0.0064 0.0069
2621	9703001 BURG	[]N 47 37 1.049682(0.0019M) W 57 37 13.973510(0.0018M) -1.9292(.0109881M.030647 0.0048 0.0053
2622	8209129 SHIP (6797)	[]N 47 31 16.719859(0.0017M) W 57 23 6.504341(0.0016M) -0.9016(.0097559M.027208 0.0045 0.0048
2623	90F9004 BM PORT-AUX-BA	[]N 47 34 48.479153(0.0027M) W 59 8 20.801151(0.0023M) -6.9273(.0158012M.044068 0.0063 0.0076
2624	9813005 PEI S.BM WSC3	[]N 46 27 18.416533(0.0059M) W 63 17 30.244334(0.0123M) -14.1026(.0349489M.097526 0.0164 0.0342
2625	9803001 LARK HB 76F032	[]N 49 6 6.392767(0.0031M) W 58 21 50.625558(0.0031M) -3.1576(.0182387M.050864 0.0082 0.0092
2626	9803002 SAV.CO 98F9001	[]N 51 19 58.5524794(0.0049M) W 56 42 0.137090(0.0086M) -2.0261(.0242699M.067703 0.0135 0.0240
2627	9803003 ANCHOR PT#2637	[]N 51 14 2.065863(0.0046M) W 56 47 50.050359(0.0085M) -1.3011(.0221556M.061809 0.0126 0.0238
2628	F989002 W.S.T.MOD.LAB.	[]N 51 35 40.371870(0.0037M) W 58 42 20.250019(0.0082M) -14.3202(.0193925M.054093 0.0103 0.0230
2629	9803004 ARGENTIA#0835	[]N 47 17 23.941014(0.0049M) W 53 50 30.580381(0.0060M) -11.3334(.0266671M.074378 0.0135 0.0167
2630	9803005 ST JOHNS#0905	[]N 47 34 2.034627(0.0063M) W 52 42 7.836827(0.0046M) -13.1181(.0306631M.085513 0.0119 0.0183
2631	078010 IBM 126G	[]N 64 5 11.324355(0.0487M) W 141 0 4.712865(0.0489M) -1303.9359(.1615035M.451250 0.1255 0.1431
2632	828016 CARMACKS	[]N 62 5 37.676899(0.0207M) W 136 16 52.498227(0.0215M) -543.0913(.0625404M.174741 0.0489 0.0666
2633	088009 MOOSEHORN	[]N 63 4 4.114282(0.0466M) W 140 56 49.383256(0.0450M) -1318.3920(.145535M.406492 0.1170 0.1357
2634	43874 DESTRUCTION	[]N 61 13 0.894521(0.0339M) W 138 43 18.681296(0.0429M) -857.9053(.0883656M.246733 0.0898 0.1225
2635	578032 BIG	[]N 62 44 9.249599(0.0358M) W 138 55 11.818593(0.0367M) -1674.4871(.1110371M.310092 0.0916 0.1084
2636	678570 67A40	[]N 62 55 41.731117(0.0297M) W 134 3 26.836762(0.0297M) -1485.6681(.0525736M.151088 0.0742 0.0830
2637	768024 768024	[]N 63 2 35.790547(0.0123M) W 132 25 28.692114(0.0110M) -1792.3149(.0295174M.083032 0.0303 0.0330
2638	768035 768035	[]N 64 0 7.759797(0.0170M) W 132 32 5.270634(0.0142M) -1887.2157(.0489336M.136935 0.0374 0.0478
2639	769038 769038	[]N 63 57 57.883662(0.0194M) W 130 31 55.235189(0.0332M) -2070.6044(.0296048M.095020 0.0516 0.0813
2640	7880	

The GPS Height Transformation (v2.0)

2646	72Y237	72Y237	(848029)	[]N 62 9 48.263646(0.0112M) W133 15 20.471032(0.0476M) 736.6562(.0288926M.132994	0.0311 0.0803
2647	888003			[]N 63 28 48.273457(0.0388M) W139 2 25.074504(0.0404M) 1266.5928(.1245348M.347862	0.1018 0.1168
2648	9185001			[]N 61 22 21.255318(0.0394M) W134 22 10.618024(0.0538M) 813.2422(.0351332M.179298	0.0625 0.0902
2649	9185003			[]N 60 44 35.578511(0.0330M) W137 29 16.472719(0.0456M) 618.1613(.0635880M.179882	0.0728 0.1357
2650	9185004			[]N 62 50 20.275522(0.0242M) W136 31 53.371847(0.0283M) 577.9778(.0784101M.218976	0.0635 0.0813
2651	9185005			[]N 62 2 17.939911(0.0363M) W138 40 58.271091(0.0424M) 1729.5080(.0993721M.277849	0.0981 0.1190
2652	9185008			[]N 61 35 35.667722(0.0357M) W139 26 54.825087(0.0422M) 762.3337(.1034999M.288883	0.0951 0.1207
2653	9185009			[]N 61 35 59.253921(0.0728M) W141 0 7.095436(0.0673M) 1699.8170(.1311878M.368206	0.1436 0.2325
2654	9185010			[]N 62 24 28.225691(0.0411M) W140 51 45.058692(0.0456M) 662.1533(.1352348M.377498	0.1103 0.1297
2655	9185011			[]N 64 2 43.988325(0.0416M) W139 7 28.767833(0.0420M) 378.5932(.1345580M.375933	0.1077 0.1227
2656	9185012			[]N 64 0 22.874610(0.0443M) W136 51 31.672166(0.0392M) 1311.9323(.1049627M.293792	0.1012 0.1276
2657	9185013			[]N 63 36 55.808349(0.0328M) W135 52 45.10886(0.0360M) 510.0976(.0843787M.236033	0.0859 0.1036
2658	48806 MEISTER			[]N 60 19 30.220847(0.0498M) W130 12 10.719384(0.0339M) 1439.8960(.0610858M.185638	0.0859 0.1241
2659	608034 60A13			[]N 60 36 19.770260(0.0115M) W130 57 17.555633(0.0168M) 2037.3652(.0198191M.055724	0.0312 0.0468
2660	608288 60A76			[]N 60 27 42.179300(0.0204M) W125 13 8.510287(0.0228M) 1343.0491(.0312160M.090882	0.0529 0.0615
2661	609292 60A37			[]N 62 8 2.690814(0.0138M) W128 50 8.130583(0.0183M) 2016.3544(.0202346M.058265	0.0356 0.0510
2662	609379 60A64			[]N 61 13 54.873993(0.0184M) W127 2 25.496499(0.0218M) 1760.7502(.0269090M.077440	0.0470 0.0612
2663	639828 63A158			[]N 62 10 23.397293(0.0318M) W123 46 38.034640(0.0349M) 1294.3064(.0449812M.129850	0.0789 0.0999
2664	639850 63A74			[]N 62 11 8.576390(0.0254M) W125 30 18.923864(0.0303M) 1674.4780(.0351840M.102165	0.0627 0.0860
2665	639889 63-A-35			[]N 63 56 5.557873(0.0216M) W126 57 57.584987(0.0351M) 2002.2688(.0368380M.113271	0.0531 0.0900
2666	6785003 67A16			[]N 61 28 45.729760(0.0114M) W131 9 3.485110(0.0158M) 1992.0279(.0165228M.046931	0.0307 0.0439
2667	699002 63A125			[]N 63 24 6.054223(0.0304M) W124 52 48.827025(0.0383M) 1087.7621(.0467364M.136193	0.0747 0.1069
2668	72Y095 72Y095			[]N 61 29 7.395790(0.0325M) W128 44 36.776626(0.0494M) 852.4108(.0471681M.139196	0.0858 0.1332
2669	72Y200 72Y200	(848143)		[]N 61 45 56.823008(0.0152M) W131 51 0.930145(0.0254M) 888.0004(.0206722M.071721	0.0405 0.0581
2670	768004 768004			[]N 61 20 54.830212(0.0182M) W128 58 29.477096(0.0234M) 1662.5016(.0273958M.078593	0.0478 0.0648
2671	769012 769012			[]N 60 22 24.080373(0.0251M) W123 54 47.998090(0.0262M) 1397.1122(.0350611M.105470	0.0618 0.0695
2672	769016 769016			[]N 61 26 39.808251(0.0254M) W123 59 45.436778(0.0247M) 1022.4017(.0350872M.103272	0.0595 0.0714
2673	769031 769031			[]N 63 1 7.492659(0.0200M) W126 55 26.055677(0.0322M) 2276.2641(.0305625M.100038	0.0484 0.0779
2674	769033 769033			[]N 62 58 29.735217(0.0175M) W128 53 53.763124(0.0321M) 1982.8460(.0260844M.094972	0.0438 0.0688
2675	848122 848122			[]N 62 47 4.622235(0.0390M) W131 0 7.040906(0.0246M) 1259.3098(.0494429M.142737	0.0603 0.1074
2676	849024 JOHNSON			[]N 63 38 44.155375(0.0513M) W123 48 5.583563(0.0441M) 100.9584(.0668615M.186736	0.1098 0.1532
2677	80T034 T034			[]N 63 52 47.991608(0.0238M) W128 46 41.535870(0.0567M) 1092.0795(.0363048M.164170	0.0569 0.0973
2678	829118x PETITOT			[]N 60 14 15.606135(0.0395M) W123 27 45.450114(0.0266M) 112.0116	0.0285
2679	9275011 C270			[U]N 59 32 10.367660(0.7658M) W126 23 38.213619(0.3846M) 471.7839(.8371181M.2.4369	0.8879 2.1056
2680	9285000 5000			[]N 60 14 31.609854(0.0165M) W123 33 29.296840(0.0239M) 1313.0504(.0311609M.087932	0.0451 0.0659
2681	9285004 CROS			[]N 60 28 54.680927(0.0547M) W133 18 26.601970(0.0370M) 701.6528(.0503153M.160939	0.0868 0.1418
2682	9295000 ARON			[]N 61 19 59.098010(0.0208M) W125 22 39.620546(0.0218M) 1514.3872(.0290573M.085383	0.0503 0.0616
2683	9295001 5001			[]N 62 4 26.771833(0.0182M) W127 18 7.302940(0.0228M) 1803.3543(.0253434M.074242	0.0448 0.0639
2684	9295002 TUNG			[]N 61 57 40.551501(0.0231M) W128 12 37.982408(0.0356M) 1111.9876(.0317655M.100763	0.0603 0.0900
2685	9295003 WRIG			[]N 63 12 38.288044(0.0435M) W123 26 5.376400(0.0398M) 138.2622(.0575859M.166843	0.1055 0.1178
2686	9295004 5004			[]N 63 57 13.390157(0.0427M) W124 12 9.670876(0.0655M) 83.7825(.0726453M.220582	0.1117 0.1655
2687	899016 PIER C			[]N 62 33 2.910714(0.0010M) W114 21 46.009205(0.0008M) 175.4980(.0042203M.011772	0.0022 0.0028
2688	909012C REF C			[]N 62 28 48.638408(0.0009M) W114 28 49.389078(0.0007M) 179.4491(.0057465M.016025	0.0021 0.0025
2689	W1048811 1048811			[]N 62 25 3.4383614(0.0010M) W114 18 22.351255(0.0009M) 141.6243(.0058942M.016437	0.0023 0.0029
2690	829101 GOLF			[]N 62 28 32.481237(0.0009M) W114 28 10.390910(0.0008M) 183.8063(.0041118M.011469	0.0019 0.0028
2691	58905 RAPIDS			[]N 60 25 33.654529(0.0131M) W116 21 10.522313(0.0110M) 263.1953(.0168232M.046914	0.0276 0.0390
2692	58908 MCNALLIE			[]N 60 48 0.757939(0.0391M) W116 35 31.811315(0.0366M) 244.0479(.0347109M.112834	0.0956 0.0989
2693	58915 MELLOR			[]N 60 42 32.870447(0.0995M) W115 0 19.633626(0.1318M) 215.4833(.0996450M.369188	0.2748 0.2782
2694	66T022 66T022			[]N 62 32 38.561662(0.0132M) W114 59 25.282620(0.0164M) 140.6412(.0145318M.048015	0.0335 0.0405
2695	66T027 66T027			[]N 62 35 33.397954(0.0183M) W115 11 13.111579(0.0221M) 141.4409(.0193821M.065282	0.0459 0.0541
2696	66T031 66T031			[]N 62 39 35.957493(0.0183M) W115 17 43.340751(0.0222M) 151.8929(.0199161M.065494	0.0463 0.0556
2697	66T035 66T035			[]N 62 41 10.347173(0.0183M) W115 27 52.771118(0.0223M) 147.7321(.0212698M.065685	0.0466 0.0593
2698	66T038 66T038			[]N 62 42 33.785566(0.0183M) W115 35 20.166838(0.0223M) 146.5347(.0222880M.065632	0.0466 0.0622
2699	66T050 66T050			[]N 62 47 4.117912(0.0250M) W115 59 35.102827(0.0307M) 139.4577(.0305644M.089576	0.0644 0.0853
2700	66T059 66T059			[]N 62 38 27.233811(0.0299M) W116 15 25.478638(0.0343M) 209.6098(.0372972M.104071	0.0821 0.0968
2701	66T064 66T064			[]N 62 33 22.247726(0.0346M) W116 24 34.005459(0.0375M) 232.3837(.0421713M.117663	0.0964 0.1046
2702	66T070 66T072			[]N 62 22 54.087364(0.1421M) W116 29 48.505493(0.1122M) 249.9424(.1137052M.410122	0.2915 0.3170
2703	66T076 66T076			[]N 62 18 6.730318(0.0568M) W116 25 44.309464(0.0484M) 220.4691(.0550010M.159667	0.1336 0.1533
2704	66T081 66T081			[]N 62 12 13.247892(0.0315M) W116 18 59.664496(0.0266M) 205.4068(.0426789M.119098	0.0723 0.0893
2705	66T086 66T086			[]N 62 6 32.544699(0.0265M) W116 17 44.393039(0.0238M) 190.0780(.0417462M.116483	0.0615 0.0778
2706	66T090 66T090			[]N 62 1 27.474943(0.0175M) W116 18 45.507371(0.0194M) 187.1779(.0404406M.112823	0.0409 0.0601
2707	66T094 66T094			[]N 61 58 45.865968(0.0167M) W116 26 14.405010(0.0183M) 195.3563(.0427541M.119276	0.0390 0.0570
2708	66T102 66T102			[]N 61 50 11.739693(0.0076M) W116 40 14.318509(0.0119M) 202.9354(.0471454M.131524	0.0183 0.0348
2709	66T105 66T105			[]N 61 46 50.179811(0.0077M) W116 46 17.752702(0.019M) 200.5005(.0496906M.138623	0.0189 0.0346
2710	66T108 66T108			[]N 61 43 52.334310(0.0079M) W116 51 39.391474(0.0119M) 207.9046(.0519377M.144891	0.0194 0.0345
2711	66T109 66T109			[]N 61 42 38.883869(0.0120M) W116 53 50.692733(0.0148M) 196.1439(.0534449M.149082	0.0300 0.0437
2712	66T112 BM 66T112			[]N 61 40 36.761631(0.0074M) W117 1 29.211612(0.0094M) 189.2461(.0553398M.154375	0.0190 0.0272
2713	66T116 66T116			[]N 61 36 4.558431(0.0159M) W117 8 27.060601(0.0160M) 174.7269(.0594323M.165786	0.0369 0.0506
2714	66T120 66T120			[]N 61 30 49.739528(0.1053M) W117 14 45.241222(0.0958M) 153.5953(.0995503M.317066	0.2453 0.2721
2715	66T124 66T124			[]N 61 25 40.743024(0.1052M) W117 23 55.358714(0.0954M) 137.8836(.1008872M.315554	0.2461 0.2756
2716	66T127 66T127			[]N 61 21 57.825831(0.1052M) W117 30 5.103148(0.0952M) 135.2574(.1019379M.315204	0.2465 0.2780
2717	66T140 66T140			[]N 61 5 40.422422(0.0866M) W117 29 59.562068(0.0853M) 173.2840(.0829659M.243828	0.2284 0.2384
2718	66T158 66T158			[]N 60 52 12.959020(0.0404M) W116 43 52.561615(0.0380M) 205.6508(.0359994M.115272	0.0997 0.1039
2719	66T167 66T167			[]N 60 42 59.509265(0.0332M) W116 28 20.036003(0.0315M) 230.9117(.0306271M.103110	0.0750 0.0857
2720	66T171 66T171						

The GPS Height Transformation (v2.0)

2741	699100	SLAVE	[]N 62 43 39.941753(0.0272M)	W116 5 50.823923(0.0324M)	237.4842(.0333668M.093264	0.0730 0.0926
2742	786257	60112.257	[]N 60 0 16.375347(0.0102M)	W112 26 14.626091(0.0144M)	197.2791(.0166071M.046339	0.0283 0.0400
2743	809209	TOWER	[]N 60 27 21.289381(0.0476M)	W114 19 30.657940(0.0512M)	228.8934(.0494625M.142928	0.1326 0.1380
2744	809216	BURROW	[]N 60 17 0.394493(0.0489M)	W114 2 41.280411(0.0507M)	244.9062(.0487182M.143715	0.1338 0.1359
2745	829112	DALY	[]N 61 11 5.616013(0.0028M)	W113 41 56.727022(0.0057M)	131.1482(.0086905M.024290	0.0069 0.0162
2746	829113	PROVIDENCE DOP	[]N 61 18 47.207415(0.1052M)	W117 35 59.798721(0.0952M)	137.3886(.1030512M.315147	0.2471 0.2805
2747	82T010	82T010	[]N 60 6 20.563547(0.0321M)	W116 45 29.685062(0.0324M)	268.4822(.0310328M.103290	0.0740 0.0867
2748	82T015	82T015	[]N 60 10 23.721092(0.0199M)	W116 41 31.624860(0.0178M)	266.5253(.0202476M.060673	0.0430 0.0565
2749	82T021	82T021	[]N 60 15 48.573467(0.0186M)	W116 34 35.108294(0.0168M)	268.5037(.0198630M.056971	0.0405 0.0554
2750	82T042	82T042	[]N 60 37 30.441265(0.0330M)	W116 3 40.313165(0.0312M)	189.6862(.0302902M.102307	0.0744 0.0847
2751	82T044	82T044	[]N 60 41 3.571562(0.0355M)	W115 55 58.314476(0.0340M)	169.4533(.0331124M.110856	0.0805 0.0926
2752	82T054	82T054	[]N 60 44 18.706044(0.0542M)	W115 31 3.979621(0.0505M)	164.7903(.0473417M.162164	0.1277 0.1322
2753	82T057	82T057	[]N 60 43 29.414623(0.0879M)	W115 21 16.620267(0.1164M)	166.4204(.0872000M.324560	0.2421 0.2461
2754	82T065	82T065	[]N 60 44 24.158909(0.0445M)	W114 49 15.283928(0.0497M)	203.1517(.0498233M.141021	0.1212 0.1389
2755	82T069	82T069	[]N 60 48 13.090194(0.0288M)	W114 32 7.071228(0.0310M)	205.7632(.0348876M.097369	0.0737 0.0919
2756	82T097	82T097	[]N 61 2 18.821805(0.0182M)	W113 41 15.900887(0.0151M)	134.6670(.0169793M.050648	0.0420 0.0475
2757	82T111	82T111	[]N 60 50 16.028277(0.0518M)	W115 46 48.904667(0.0462M)	137.8776(.0441521M.156024	0.1147 0.1232
2758	869217	869217	[]N 60 2 44.188247(0.0136M)	W113 15 19.619371(0.0191M)	241.7435(.0205247M.057255	0.0380 0.0533
2759	869218	869218	[]N 60 19 43.773149(0.0491M)	W114 8 56.686041(0.0510M)	240.2154(.0494439M.144662	0.1344 0.1379
2760	869219	869219	[]N 60 40 11.347431(0.0447M)	W114 35 46.335555(0.0499M)	230.9641(.0484300M.141115	0.1224 0.1350
2761	869220	869220	[]N 60 41 54.343549(0.0446M)	W114 44 37.318202(0.0498M)	228.9198(.0495055M.141059	0.1219 0.1380
2762	869221	869221	[]N 60 49 28.864583(0.0281M)	W114 22 16.353279(0.0296M)	188.9220(.0322275M.090109	0.0713 0.0885
2763	869222	869222	[]N 60 51 55.312039(0.0273M)	W114 28 40.204208(0.0285M)	178.0872(.0298553M.085601	0.0692 0.0832
2764	869223	869223	[]N 60 55 42.519854(0.0262M)	W114 7 1.416673(0.0275M)	164.1241(.0274507M.081882	0.0671 0.0765
2765	869224	869224	[]N 60 59 9.182619(0.0214M)	W113 49 10.391779(0.0193M)	138.4839(.0204353M.061800	0.0514 0.0571
2766	869225	869225	[]N 61 7 55.479260(0.0138M)	W113 37 48.678316(0.0127M)	130.7872(.0140894M.040943	0.0329 0.0390
2767	869226	869226	[]N 60 57 53.284872(0.0242M)	W113 57 16.674839(0.0246M)	136.0557(.0242407M.073683	0.0621 0.0676
2768	869227	869227	[]N 60 43 52.365260(0.0980M)	W115 9 23.200610(0.1323M)	177.4768(.0980194M.369147	0.2715 0.2749
2769	869228	869228	[]N 60 44 32.750549(0.0532M)	W115 44 22.691113(0.0477M)	150.6795(.0451849M.159223	0.1198 0.1261
2770	869229	869229	[]N 60 45 56.791515(0.0528M)	W115 51 7.312521(0.0471M)	148.0950(.0445386M.158737	0.1171 0.1243
2771	869230	869230	[]N 60 33 30.795695(0.0331M)	W116 8 23.726014(0.0316M)	236.1562(.0304318M.103063	0.0750 0.0851
2772	869231	869231	[]N 60 0 3.117043(0.0132M)	W116 58 56.624487(0.0141M)	275.3020(.0197365M.055073	0.0315 0.0438
2773	869232	869232	[]N 60 59 5.612978(0.0759M)	W117 14 50.263018(0.0863M)	170.8764(.0733156M.247909	0.1985 0.2089
2774	86T016	86T016	[]N 60 55 51.605925(0.0432M)	W116 55 5.228595(0.0421M)	225.6140(.0391046M.121432	0.1087 0.1167
2775	86T020	86T020	[]N 60 56 7.892232(0.0441M)	W117 4 2.031659(0.0441M)	213.3554(.0411762M.124817	0.1141 0.1218
2776	86T028	86T028	[]N 61 2 53.591660(0.0848M)	W117 24 1.878274(0.0871M)	186.9035(.0806344M.253451	0.2201 0.2297
2777	86T034	86T034	[]N 61 10 24.078342(0.1135M)	W117 31 52.511167(0.0982M)	151.4917(.1009873M.317316	0.2708 0.2837
2778	86T039	86T039	[]N 61 15 17.716367(0.1077M)	W117 31 37.872899(0.0951M)	134.0905(.0980701M.303283	0.2608 0.2746
2779	899022	749151B	[]N 69 26 16.465912(0.0027M)	W133 1 59.825282(0.0031M)	-3.1051(.0092230M.025813	0.0072 0.0087
2780	65T9503	BM 1,1965	[]N 70 9 1.247763(0.0042M)	W124 40 22.461985(0.0048M)	-9.8631(.0135771M.038018	0.0111 0.0135
2781	659624X	65A224X	[]N 69 0 46.937533(0.0342M)	W115 55 23.989916(0.0450M)	-10.1588(.8655802M.2.8031	0.7795 1.2286
2782	77T9515	BM09,1977	[]N 68 47 6.5056370(0.0025M)	W114 45 33.021998(0.0034M)	-15.1320(.0083229M.023287	0.0067 0.0095
2783	77T9513	BM12,1977	[]N 69 6 54.422524(0.0026M)	W105 3 24.592635(0.0042M)	-24.8037(.00959415M.026859	0.0067 0.0115
2784	79T9511	BM18,1979	[]N 68 39 15.150666(0.0019M)	W101 45 10.826123(0.0028M)	-25.1969(.0066973M.018797	0.0049 0.0078
2785	689525	68B 25	[]N 82 30 14.842701(0.0054M)	W 62 23 28.465351(0.0062M)	99.1278(.0415171M.115935	0.0114 0.0192
2786	749167	EUREKA DOP	[]N 79 59 38.463841(0.0110M)	W 85 49 58.522472(0.0041M)	85.5499(.0345135M.096300	0.0112 0.0308
2787	749167A	EUREKA REF A	[]N 79 59 37.946852(0.0047M)	W 85 49 58.579170(0.0034M)	84.9899(.0344554M.096136	0.0087 0.0132
2788	749172	VALLEY	[]N 76 24 59.924229(0.0035M)	W 82 53 16.061368(0.0036M)	9.7975(.0295932M.082551	0.0088 0.0107
2789	689507	68B 5	[]N 82 29 30.603486(0.0059M)	W 62 22 26.324883(0.0066M)	73.4033(.0421987M.117819	0.0129 0.0204
2790	689524	68B 24	[]N 82 30 33.584569(0.0066M)	W 62 21 55.115972(0.0072M)	76.7264(.0435764M.121659	0.0152 0.0218
2791	8695042	8695042	[]N 82 28 35.073897(0.0063M)	W 62 26 32.704487(0.0069M)	147.5484(.0428441M.119602	0.0141 0.0212
2792	HILT	HILT	[]N 82 30 41.512859(0.0058M)	W 62 19 36.303641(0.0065M)	56.1591(.0420229M.117338	0.0124 0.0200
2793	60T9500	60T9500	[]N 82 29 30.502436(0.0067M)	W 62 19 2.266204(0.0079M)	20.8947(.0436688M.121908	0.0157 0.0235
2794	62T9501	62T9501	[]N 82 29 29.311481(0.0072M)	W 62 19 25.466339(0.0075M)	29.3672(.0453618M.126677	0.0162 0.0231
2795	898001	PIER 89-A	[]N 60 39 40.940478(0.0056M)	W134 53 21.765462(0.0046M)	1425.2002(.0267484M.074595	0.0129 0.0157
2796	898004	PIER 89-D	[]N 60 48 27.945330(0.0055M)	W135 58 22.965266(0.0045M)	715.4267(.0265758M.074122	0.0126 0.0152
2797	898006	PIER 89-1	[]N 60 40 22.570923(0.0055M)	W135 7 14.830065(0.0045M)	836.8390(.0265914M.074158	0.0126 0.0152
2798	898005	PIER 89-E	[]N 61 4 38.826696(0.0055M)	W135 12 27.193297(0.0046M)	678.4198(.0266557M.074350	0.0128 0.0154
2799	898002	PIER 89-B	[]N 60 38 13.982782(0.0055M)	W135 9 48.078347(0.0045M)	1383.2079(.0266081M.074205	0.0126 0.0153
2800	898003	PIER 89-C	[]N 60 39 25.323781(0.0056M)	W134 53 21.765462(0.0046M)	1425.2002(.0267484M.074595	0.0129 0.0157
2801	749041	PIER A	[]N 62 32 12.473881(0.0022M)	W114 8 38.626779(0.0020M)	159.0088(.0054280M.015208	0.0053 0.0061
2802	749042	PIER B	[]N 62 31 50.766795(0.0019M)	W114 9 46.859316(0.0018M)	186.8277(.0048840M.013703	0.0047 0.0054
2803	869501	PIER 1	[]N 62 27 44.775805(0.0021M)	W114 24 25.683490(0.0020M)	180.2338(.0051353M.014482	0.0053 0.0058
2804	899017	PIER D	[]N 62 38 33.841503(0.0016M)	W115 15 7.725352(0.0161M)	152.6569(.0042454M.011906	0.0041 0.0046
2805	899018	PIER E	[]N 62 49 40.284146(0.0021M)	W116 0 37.705894(0.0021M)	142.2589(.0051500M.014501	0.0052 0.0060
2806	899019	PIER G	[]N 62 25 50.087373(0.0023M)	W116 29 28.857751(0.0022M)	247.6716(.0055728M.015686	0.0057 0.0065
2807	899020	PIER	[]N 62 7 49.797220(0.0020M)	W116 15 16.191462(0.0020M)	204.6598(.0050854M.014313	0.0051 0.0058
2808	65T082	BM 66T082	[]N 62 10 48.383051(0.0023M)	W116 17 34.221334(0.0023M)	202.2505(.0057672M.016217	0.0060 0.0066
2809	699078	699078	[]N 62 38 33.947394(0.0040M)	W115 15 8.406817(0.0039M)	150.6209(.0099073M.027875	0.0106 0.0109
2810	97L9200	BM 97L9200	[]N 62 8 40.193101(0.0020M)	W 74 41 41.606208(0.0030M)	-17.4352(.0089199M.024918	0.0054 0.0084
2811	60L9507	BM1-1960	[]N 62 8 49.604944(0.0024M)	W 74 45 6.112433(0.0039M)	-19.9552(.0100955M.028182	0.0067 0.0108
2812	XXT9512	BM 1353	[]N 63 20 10.871763(0.0019M)	W 90 41 10.155371(0.0027M)	-38.5135(.0082373M.023014	0.0050 0.0076
2813	XXT9520	BM 9106	[]N 63 59 39.055700(0.0				

The GPS Height Transformation (v2.0)

Appendix B

List of rejected stations for the determination of the CGG2000 corrector surface

GPS Supernet (v3.1a) Adjusted NAD83(CSRS98) Coordinates

LIST OF STATION CONFIDENCE ELLIPSOIDS										CONFIDENCE LEVEL 95.00 %				
STATION NAME	ORDER	ADJUSTED GEODETIC COORDINATES			S.D. (METERS)	ELLIPSOID HEIGHT (METERS)	S.D. (METERS)	CONFIDENCE MAJOR MINOR MID	(1.94 2.44 2.79)					
		LATITUDE DD MM SECS	S.D. (METERS)	LONGITUDE DD MM SECS										
Stations not tie to the primary levelling network														
576	86KS004	[]N 55 16 42.195048(0.0025M)	W 77 44 46.994811(0.0021M)	-4.3750(0.0147763M.	0.01208	0.0060	0.0070				
581	89L310	[]N 55 16 42.038490(0.0017M)	W 77 44 49.402567(0.0018M)	-8.0207(0.0088430M.	0.024664	0.0046	0.0051				
582	89L314	[]N 55 16 7.984608(0.0018M)	W 77 46 46.166509(0.0017M)	-40.7133(0.0099179M.	0.027658	0.0047	0.0051				
2462	631103 RED (4903)	[]N 43 57 42.792004(0.0218M)	W 59 47 11.340841(0.0247M)	1.3318(0.0417183M.	0.116525	0.0476	0.0781				
2785	689525 68B 25	[]N 82 30 14.824701(0.0054M)	W 62 23 28.465351(0.0062M)	99.1278(0.0415171M.	0.115935	0.0114	0.0192				
2789	689507 68B 5	[]N 82 29 30.603486(0.0059M)	W 62 22 26.324883(0.0066M)	73.4033(0.0421987M.	0.117819	0.0129	0.0204				
2790	689524 68B 24	[]N 82 30 33.584569(0.0066M)	W 62 21 55.115972(0.0072M)	76.7264(0.0435764M.	0.121659	0.0152	0.0218				
Stations with large standard deviation for the ellipsoidal heights and large discrepancies (ΔH) in relation to its neighbouring stations														
1089	98C9105	[]N 49 17 13.401959(0.0146M)	W123 6 35.771033(0.0086M)	-14.1374(0.0738487M.	0.205960	0.0226	0.0413				
1238	79C438	[]N 49 0 33.325130(0.0233M)	W119 24 40.054984(0.0298M)	553.7269(0.0571192M.	0.162178	0.0590	0.0820				
1386	897035	[]N 53 5 25.620053(0.0187M)	W119 42 22.405375(0.0186M)	733.6680(0.0421466M.	0.119314	0.0403	0.0578				
1380	77A147	[]N 52 52 58.559847(0.1533M)	W118 22 38.766899(0.1218M)	1110.3374(0.2949067M.	0.919163	0.1809	0.3111				
1388	897036	[]N 53 15 4.229087(0.0341M)	W120 1 46.481707(0.0338M)	708.2942(0.0772645M.	0.224800	0.0615	0.1002				
1397	54C022	[]N 53 48 2.095141(0.0538M)	W122 39 23.604211(0.0634M)	644.6948(0.1251375M.	0.349969	0.1408	0.1824				
1400	897090	[]N 53 53 31.472177(0.0639M)	W123 32 17.452015(0.0646M)	765.5939(0.1560286M.	0.437753	0.1483	0.1998				
1401	62C126	[]N 53 57 31.740656(0.0514M)	W123 57 57.800281(0.0574M)	732.1288(0.1220677M.	0.342222	0.1380	0.1609				
1445	50C452E	[]N 55 45 8.287644(0.0668M)	W120 27 28.279889(0.0717M)	821.4687(0.1418350M.	0.404825	0.1532	0.2094				
1453	80C006	[]N 56 13 9.956625(0.0323M)	W120 47 37.708357(0.0359M)	642.7408(0.0805347M.	0.226356	0.0826	0.1023				
1546	48C508F	[]N 59 27 1.375606(0.0534M)	W136 21 45.126734(0.0543M)	257.0577(0.1445452M.	0.404883	0.1367	0.1582				
1550	48C497F	[]N 59 43 14.119607(0.0508M)	W136 38 29.892228(0.0514M)	1016.3024(0.1375859M.	0.385636	0.1282	0.1506				
1556	48C489F 489-F	[]N 59 58 21.709587(0.1167M)	W136 49 8.086161(0.1259M)	925.1157(0.2690531M.	0.760068	0.3039	0.3494				
1563	47Y480F	[]N 60 11 54.297652(0.0547M)	W136 59 12.210989(0.0547M)	731.1193(0.1436177M.	0.403673	0.1383	0.1575				
1897	883003 883003	[]N 45 8 1.799901(0.0161M)	W 75 6 36.121420(0.0204M)	47.7480(0.1541732M.	0.429966	0.0425	0.0584				
2684	9295002 TUNG	[]N 61 57 40.551501(0.0231M)	W128 12 37.982408(0.0356M)	1111.9876(0.0317655M.	0.100763	0.0603	0.0900				
2685	9295003 WRIG	[]N 63 12 38.288044(0.0435M)	W123 26 5.376400(0.0398M)	138.2622(0.0575859M.	0.166843	0.1055	0.1178				
2686	9295004 5004	[]N 63 57 13.390157(0.0427M)	W124 12 9.670876(0.0655M)	83.7825(0.0726453M.	0.220582	0.1117	0.1655				
Stations with large discrepancies (ΔH) in relation to its neighbouring stations														
356	22S660C	[]N 52 17 18.867669(0.0020M)	W109 52 52.465526(0.0016M)	655.5852(0.0116160M.	0.032393	0.0043	0.0056				
455	86C090 86C090	[]N 54 0 46.837427(0.0029M)	W124 7 17.284537(0.0022M)	643.8960(0.0170046M.	0.047421	0.0060	0.0082				
670	78Y070	[]N 65 35 44.995556(0.0015M)	W138 9 57.703014(0.0011M)	529.6479(0.0062004M.	0.017294	0.0031	0.0041				
673	78Y130 BM78Y130	[]N 66 33 54.264625(0.0021M)	W136 18 27.739588(0.0015M)	709.6259(0.0089075M.	0.024850	0.0042	0.0058				
823	48511	[]N 49 51 46.477336(0.0045M)	W105 25 17.295486(0.0033M)	858.2765(0.0264676M.	0.073823	0.0089	0.0126				
889	85X242	[]N 53 19 51.175862(0.0017M)	W117 45 16.543471(0.0013M)	1200.5296(0.0096355M.	0.026871	0.0037	0.0048				
915	A240465	[]N 53 55 41.876437(0.0040M)	W118 57 28.305712(0.0031M)	1096.1942(0.0220196M.	0.061413	0.0084	0.0112				
917	A24125	[]N 56 45 5.325290(0.0047M)	W111 28 16.359428(0.0033M)	336.0976(0.0259779M.	0.072450	0.0093	0.0132				
1078	77C006	[]N 49 13 1.444950(0.0037M)	W123 12 7.317178(0.0029M)	-15.8581(0.0216199M.	0.060293	0.0081	0.0103				
1498	677014 UBC	[]N 49 15 53.352611(0.0088M)	W123 15 14.189587(0.0058M)	97.9813(0.0132334M.	0.037340	0.0114	0.0263				
1713	906008	[]N 55 1 52.287676(0.0082M)	W117 18 52.506048(0.0170M)	714.7637(0.0142112M.	0.054203	0.0211	0.0309				
1759	60A031 60A031	[]N 54 20 24.565436(0.0084M)	W110 25 47.637016(0.0060M)	516.0142(0.0191100M.	0.053329	0.0168	0.0235				
2537	84G4073	[]N 48 5 42.907073(0.0111M)	W 52 54 5.331754(0.0074M)	121.1830(0.0211975M.	0.059520	0.0208	0.0302				
2175	49202 SQUAW	[]N 54 50 18.227602(0.0054M)	W 66 46 43.982897(0.0035M)	582.1686(0.0122926M.	0.034284	0.0096	0.0149				
2309	78K0397	[]N 45 27 20.211764(0.0037M)	W 71 9 9.223533(0.0032M)	1081.8845(0.0185679M.	0.051781	0.0089	0.0104				
2247	74K0096	[]N 45 0 4.713303(0.0017M)	W 74 30 29.308408(0.0014M)	18.5034(0.0217169M.	0.060563	0.0039	0.0046				

41 stations rejected out of 1967 stations with CGVD28 heights

The GPS Height Transformation (v2.0)

The GPS Height Transformation (v2.0)

Appendix C

List of rejected stations for the analysis of the CGG2000 geoid model against geoid heights derived from GPS ellipsoidal heights and Jan01d orthometric heights

GPS Supernet (v3.1a) Adjusted NAD83(CSRS98) Coordinates

LIST OF STATION CONFIDENCE ELLIPSOIDS										CONFIDENCE LEVEL 95.00 %				
STATION NAME	ORDER	ADJUSTED GEODETIC COORDINATES			S.D. (METERS)	ELLIPSOID HEIGHT (METERS)	S.D. (METERS)	CONFIDENCE ELLIPSOIDS	(1.94 2.44 2.79)			MAJOR	MINOR	MID
		LATITUDE DD MM SECS	LONGITUDE DD MM SECS	S.D. (METERS)										
Stations with large standard deviation for the ellipsoidal heights and large discrepancies (ΔH) in relation to its neighbouring stations														
1380	77A147	[]N 52 52 58.559847(-0.1533M)	W118 22 38.766899(0.1218M)	1110.3374(.2949067M.919163	0.1809	0.3111								
1397	54C022	[]N 53 48 2.095141(0.0538M)	W122 39 23.604211(0.0634M)	644.6948(.1251375M.349969	0.1408	0.1824								
1401	62C126	[]N 53 57 31.740656(0.0514M)	W123 57 57.800281(0.0574M)	732.1288(.1220677M.342222	0.1380	0.1609								
1453	80C006	[]N 56 13 9.956625(0.0323M)	W120 47 37.708357(0.0359M)	642.7408(.0805347M.226356	0.0826	0.1023								
1897	883003	[]N 45 8 1.799901(0.0161M)	W 75 6 36.121420(0.0204M)	47.7480(.1541732M.429966	0.0425	0.0584								
Stations with large discrepancies (ΔH) in relation to its neighbouring stations														
455	86C090	[]N 54 0 46.837427(0.0029M)	W124 7 17.284537(0.0022M)	643.8960(.0170046M.047421	0.0060	0.0082								
670	78Y070	[]N 65 35 44.995556(0.0015M)	W138 9 57.703014(0.0011M)	529.6479(.0062004M.017294	0.0031	0.0041								
673	78Y130	BM78Y130	[]N 66 33 54.264625(0.0021M)	W136 18 27.739588(0.0015M)	709.6259(.0089075M.024850	0.0042	0.0058							
1078	77C006	[]N 49 13 1.444950(0.0037M)	W123 12 7.317178(0.0029M)	-15.8581(.0216199M.060293	0.0081	0.0103								
1238	79C438	[]N 49 0 33.325130(0.0233M)	W119 24 40.054984(0.0298M)	553.7269(.0571192M.162178	0.0590	0.0820								
1682	776382	55114.222	[]N 55 20 15.479633(0.0054M)	W115 45 58.216625(0.0092M)	567.1484(.0138106M.039819	0.0140	0.0243							
2537	84G4073	[]N 48 5 42.907073(0.0111M)	W 52 54 5.331754(0.0074M)	121.1830(.0211975M.059520	0.0208	0.0302								

12 stations rejected out of 1102 stations with Jan01d heights

The GPS Height Transformation (v2.0)

The GPS Height Transformation (v2.0)

Appendix D

Output of program Rndm4

Average of the reconciliation discrepancies found within a 10 arcmin. x 10 arcmin. cell

Mean Lat (deg.)	Mean Long (deg.)	Mean (m)	Min. (m)	Max. (m)	Range (m)	#	Mean Lat (deg.)	Mean Long (deg.)	Mean (m)	Min. (m)	Max. (m)	Range (m)	#
43.062152	-79.212580	-0.554	-0.561	-0.547	0.014	2	48.445864	-123.419059	-0.137	-0.151	-0.104	0.047	31
44.229137	-78.374039	-0.526	-0.530	-0.522	0.008	2	48.454483	-123.307635	-0.141	-0.153	-0.103	0.050	12
44.693250	-63.605902	-0.618	-0.627	-0.607	0.020	3	48.426266	-89.220934	-0.662	-0.691	-0.642	0.049	3
44.860417	-63.559000	-0.631	-0.646	-0.597	0.049	7	48.420056	-79.015817	-0.080	-0.095	-0.064	0.031	2
45.086580	-75.430101	-0.338	-0.370	-0.305	0.065	2	48.411946	-78.919128	-0.078	-0.086	-0.070	0.016	2
45.318730	-75.653963	-0.388	-0.437	-0.339	0.098	2	48.547035	-123.532723	-0.119	-0.152	-0.103	0.049	8
45.351292	-80.029540	-0.480	-0.500	-0.459	0.041	2	48.577935	-123.428504	-0.142	-0.179	-0.103	0.076	40
45.424210	-76.598880	-0.380	-0.414	-0.347	0.067	2	48.567661	-88.840667	-0.588	-0.620	-0.555	0.065	2
45.401365	-76.247910	-0.420	-0.451	-0.389	0.062	3	48.646276	-78.589421	-0.045	-0.046	-0.044	0.002	2
45.397796	-75.922984	-0.419	-0.433	-0.413	0.020	8	48.824787	-125.126430	-0.076	-0.083	-0.069	0.014	2
45.408290	-73.344011	-0.471	-0.475	-0.467	0.008	2	48.802309	-123.707647	-0.121	-0.122	-0.121	0.001	2
45.435406	-70.884427	-0.627	-0.652	-0.603	0.049	2	48.681607	-123.439786	-0.140	-0.146	-0.131	0.015	5
45.589608	-73.7778501	-0.476	-0.482	-0.471	0.011	2	48.762143	-79.204199	-0.067	-0.082	-0.057	0.025	3
45.516073	-73.547327	-0.502	-0.509	-0.494	0.015	2	48.774425	-79.091252	-0.046	-0.055	-0.038	0.017	2
45.651684	-72.895789	-0.467	-0.475	-0.459	0.016	2	48.739333	-78.920456	-0.046	-0.052	-0.040	0.012	2
45.616495	-71.082980	-0.548	-0.558	-0.538	0.020	2	48.932586	-125.543621	-0.093	-0.098	-0.089	0.009	2
45.590192	-70.924155	-0.610	-0.642	-0.593	0.049	3	48.936674	-90.137901	-0.535	-0.539	-0.531	0.008	2
45.615038	-70.784760	-0.590	-0.595	-0.585	0.010	2	48.859304	-87.540977	-0.570	-0.582	-0.558	0.024	2
45.764126	-73.966498	-0.436	-0.479	-0.394	0.085	2	48.915908	-57.934918	-0.286	-0.319	-0.253	0.066	2
45.715477	-73.414546	-0.497	-0.525	-0.456	0.069	3	49.084370	-122.954230	-0.192	-0.201	-0.183	0.018	2
45.812315	-73.280629	-0.485	-0.504	-0.466	0.038	2	49.048958	-122.726546	-0.181	-0.214	-0.165	0.049	6
45.728735	-71.439354	-0.545	-0.550	-0.540	0.010	2	49.061975	-122.437778	-0.140	-0.178	-0.103	0.075	2
45.773990	-71.107277	-0.554	-0.599	-0.527	0.072	3	49.097734	-122.278674	-0.121	-0.131	-0.110	0.021	3
45.923935	-78.095253	-0.419	-0.426	-0.416	0.010	3	49.084289	-119.677697	0.019	-0.045	0.059	0.104	3
45.918394	-71.569596	-0.487	-0.503	-0.475	0.028	3	49.088937	-119.595313	-0.036	-0.078	0.007	0.085	5
45.912992	-71.392405	-0.524	-0.537	-0.484	0.053	5	49.017782	-119.476651	-0.081	-0.100	-0.061	0.039	2
45.915014	-70.940362	-0.542	-0.589	-0.518	0.071	4	49.006003	-107.819682	-0.552	-0.571	-0.533	0.038	2
45.888010	-70.625168	-0.588	-0.603	-0.570	0.033	3	49.115913	-66.579042	-0.445	-0.464	-0.426	0.038	2
46.100764	-72.938660	-0.511	-0.522	-0.500	0.022	2	49.101611	-58.373142	-0.288	-0.300	-0.277	0.023	2
46.056744	-71.356618	-0.494	-0.503	-0.486	0.017	2	49.282937	-124.119735	-0.102	-0.109	-0.089	0.020	3
46.135655	-71.255305	-0.530	-0.548	-0.517	0.031	4	49.264147	-123.098464	-0.142	-0.172	-0.114	0.058	3
46.313142	-79.445913	-0.482	-0.490	-0.474	0.016	2	49.283661	-122.926318	-0.107	-0.139	-0.085	0.054	3
46.188040	-72.790533	-0.520	-0.542	-0.497	0.045	2	49.183053	-122.762999	-0.147	-0.199	-0.126	0.073	4
46.293186	-72.597442	-0.478	-0.496	-0.460	0.036	2	49.318434	-119.620098	-0.015	-0.020	-0.010	0.010	3
46.278865	-71.796380	-0.464	-0.468	-0.460	0.008	2	49.342173	-123.252541	-0.080	-0.093	-0.069	0.024	3
46.248860	-71.356911	-0.514	-0.528	-0.500	0.028	2	49.353517	-123.070909	-0.086	-0.097	-0.076	0.021	2
46.236151	-64.520230	-0.697	-0.708	-0.686	0.022	2	49.366349	-121.482917	-0.082	-0.110	-0.053	0.057	2
46.423361	-81.202610	-0.471	-0.479	-0.463	0.016	2	49.606994	-115.727818	-0.105	-0.110	-0.100	0.010	2
46.422566	-72.359565	-0.433	-0.456	-0.411	0.045	2	49.630275	-114.477890	-0.167	-0.173	-0.161	0.012	2
46.448867	-72.265167	-0.459	-0.482	-0.436	0.046	2	49.588408	-114.163826	-0.169	-0.184	-0.154	0.030	2
46.370539	-71.614291	-0.478	-0.496	-0.460	0.036	2	49.789218	-123.144558	-0.060	-0.061	-0.060	0.001	2
46.390772	-71.231692	-0.491	-0.504	-0.478	0.026	2	49.680291	-112.914550	-0.154	-0.180	-0.129	0.051	2
46.473149	-71.056150	-0.512	-0.529	-0.495	0.034	2	49.872293	-104.601645	-0.540	-0.544	-0.537	0.007	2
46.528810	-84.585263	-0.607	-0.612	-0.603	0.009	2	49.863888	-99.943931	-0.525	-0.539	-0.511	0.028	2
46.586257	-84.310232	-0.585	-0.586	-0.584	0.002	2	49.969856	-98.774804	-0.545	-0.581	-0.509	0.072	2
46.508233	-80.594552	-0.408	-0.421	-0.395	0.026	2	49.889897	-97.249492	-0.575	-0.605	-0.558	0.047	3
46.573870	-72.073023	-0.424	-0.453	-0.396	0.057	2	50.072042	-125.370402	-0.098	-0.128	-0.068	0.060	2
46.634608	-71.944808	-0.413	-0.441	-0.386	0.055	2	50.047187	-125.286840	-0.054	-0.057	-0.051	0.006	2
46.596954	-71.543577	-0.450	-0.472	-0.427	0.045	2	50.101501	-110.766683	-0.300	-0.314	-0.287	0.027	2
46.556344	-71.441066	-0.434	-0.439	-0.430	0.009	2	50.061678	-96.600707	-0.612	-0.647	-0.577	0.070	2
46.750732	-79.805042	-0.427	-0.434	-0.420	0.014	2	50.206878	-119.288680	-0.004	-0.010	0.005	0.015	4
46.712530	-79.096440	-0.389	-0.399	-0.378	0.021	2	50.212380	-118.588000	0.048	0.018	0.077	0.059	2
46.746686	-72.750557	-0.323	-0.325	-0.321	0.004	2	50.268539	-107.793012	-0.440	-0.466	-0.414	0.052	2
46.721673	-71.570801	-0.404	-0.429	-0.391	0.038	3	50.298568	-104.138937	-0.495	-0.500	-0.488	0.012	3
46.747433	-71.418177	-0.440	-0.472	-0.408	0.064	2	50.201840	-97.281527	-0.598	-0.602	-0.591	0.011	3
46.768692	-71.277967	-0.444	-0.455	-0.432	0.023	2	50.258476	-95.867123	-0.482	-0.538	-0.425	0.113	2
46.783365	-71.132698	-0.461	-0.493	-0.439	0.054	3	50.373808	-119.233136	0.045	0.035	0.056	0.021	2
46.938140	-70.784461	-0.432	-0.438	-0.421	0.017	3	50.446522	-104.259443	-0.487	-0.490	-0.485	0.005	2
46.984558	-70.550901	-0.419	-0.448	-0.401	0.047	3	50.364117	-104.136602	-0.490	-0.493	-0.486	0.007	3
47.098670	-70.773814	-0.389	-0.412	-0.366	0.046	2	50.591791	-128.082797	-0.232	-0.254	-0.210	0.044	2
47.283710	-53.992853	-0.408	-0.433	-0.383	0.050	2	50.775543	-115.962477	0.114	0.106	0.123	0.017	2
47.580595	-70.387303	-0.358	-0.368	-0.348	0.020	2	50.940993	-120.237604	0.035	0.007	0.062	0.055	2
47.571459	-52.709924	-0.331	-0.345	-0.309	0.036	7	50.871370	-114.293505	-0.177	-0.180	-0.174	0.006	2
48.115196	-66.231754	-0.508	-0.533	-0.483	0.050	2	50.863076	-114.047210	-0.169	-0.176	-0.162	0.014	2
48.083361	-65.098050	-0.516	-0.555	-0.478	0.077	2	51.088461	-114.376345	-0.152	-0.159	-0.149	0.010	9
48.243301	-79.048147	-0.125	-0.138	-0.119	0.019	3	51.110622	-113.931269	-0.153	-0.160	-0.147	0.013	2
48.222805	-78.432906	-0.117	-0.126	-0.108	0.018	2	51.196196	-113.760665	-0.216	-0.223	-0.210	0.013	2
48.289815	-64.718401	-0.528	-0.538	-0.519	0.019	2	51.326693	-56.700405	-0.242	-0.265	-0.219	0.046	2
48.384220	-123.937263	-0.126	-0.157	-0.100	0.057	3	51.600599	-98.720738	-0.514	-0.529	-0.498	0.031	2
48.448675	-123.523107	-0.122	-0.133	-0.107	0.026	11	51.730964	-118.637855	0.133	0.111	0.154	0	

The GPS Height Transformation (v2.0)

Mean Lat (deg.)	Mean Long (deg.)	Mean (m)	Min. (m)	Max. (m)	Range (m)	#
52.109377	-113.881961	-0.199	-0.234	-0.163	0.071	2
52.220042	-122.190096	0.014	0.010	0.019	0.009	3
52.479390	-116.096757	-0.065	-0.068	-0.061	0.007	2
52.385586	-114.850729	-0.175	-0.177	-0.173	0.004	2
53.289754	-117.742204	0.008	-0.000	0.016	0.016	2
53.216796	-105.930106	-0.347	-0.362	-0.331	0.031	2
53.228488	-99.307754	-0.469	-0.488	-0.450	0.038	2
53.296082	-60.391701	0.240	0.208	0.289	0.081	3
53.391245	-117.600679	-0.009	-0.017	-0.003	0.014	3
53.586157	-113.188539	-0.327	-0.337	-0.321	0.016	5
53.605018	-112.449967	-0.371	-0.400	-0.342	0.058	2
54.074824	-113.107464	-0.346	-0.348	-0.342	0.006	3
54.424184	-126.605900	0.027	0.019	0.035	0.016	2
54.822222	-127.190106	0.017	0.013	0.022	0.009	2
54.683605	-99.083825	-0.381	-0.387	-0.374	0.013	2
55.190720	-118.870467	-0.251	-0.258	-0.243	0.015	2
55.541394	-114.862673	-0.328	-0.333	-0.322	0.011	2
55.743624	-120.034916	-0.357	-0.378	-0.335	0.043	2
56.712340	-111.361932	-0.441	-0.463	-0.427	0.036	3
56.861792	-101.066937	-0.285	-0.285	-0.285	0.000	2
58.109831	-68.412214	-0.321	-0.322	-0.319	0.003	2
58.515197	-116.151735	-0.371	-0.375	-0.367	0.008	2
58.747161	-94.118491	-0.141	-0.148	-0.129	0.019	3
58.841491	-122.576569	-0.378	-0.380	-0.375	0.005	2
59.999168	-111.838610	-0.267	-0.271	-0.263	0.008	2
60.019400	-116.932542	-0.461	-0.480	-0.441	0.039	2
60.306142	-114.096957	-0.563	-0.577	-0.549	0.028	2
60.398512	-133.743330	-0.214	-0.243	-0.185	0.058	2
60.485709	-133.300273	-0.242	-0.282	-0.222	0.060	3
60.384657	-116.399017	-0.481	-0.498	-0.463	0.035	2
60.431631	-114.296081	-0.631	-0.634	-0.628	0.006	2
60.641475	-116.353918	-0.488	-0.498	-0.479	0.019	2
60.591845	-116.100580	-0.443	-0.483	-0.402	0.081	2
60.573562	-114.440382	-0.685	-0.701	-0.670	0.031	2
60.725573	-135.090408	-0.125	-0.130	-0.117	0.013	3
60.725057	-115.892467	-0.440	-0.487	-0.393	0.094	2
60.720179	-115.080967	-0.526	-0.539	-0.512	0.027	2
60.719244	-114.782325	-0.609	-0.617	-0.602	0.015	2
60.752417	-114.596584	-0.638	-0.712	-0.597	0.115	3
61.071398	-117.450220	-0.577	-0.597	-0.556	0.041	2
61.247137	-117.552814	-0.550	-0.574	-0.503	0.071	3
61.472537	-135.776108	-0.233	-0.237	-0.229	0.008	2
61.721010	-116.879267	-0.475	-0.531	-0.419	0.112	2
62.087953	-116.287620	-0.523	-0.557	-0.500	0.057	3
62.191900	-116.304726	-0.540	-0.541	-0.539	0.002	2
62.406143	-116.494098	-0.573	-0.602	-0.543	0.059	2
62.473449	-114.442388	-0.615	-0.635	-0.596	0.039	6
62.634534	-115.246727	-0.588	-0.618	-0.556	0.062	4
62.531527	-114.944814	-0.587	-0.591	-0.582	0.009	2

The GPS Height Transformation (v2.0)

Appendix E

The reconciliation discrepancies used for the determination of the CGG2000 corrector surface

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
42.061126	-83.103374	-0.672	45.086810	-76.450748	-0.408	45.797287	-63.627946	-0.677
42.038651	-82.731534	-0.657	45.086580	-75.430101	-0.338	45.898907	-80.159832	-0.438
42.249878	-83.020282	-0.694	45.057395	-74.565487	-0.431	45.923935	-78.095253	-0.419
42.288812	-82.711899	-0.685	45.109505	-73.880768	-0.470	45.963150	-77.932623	-0.381
42.247119	-82.099600	-0.641	45.068049	-73.454963	-0.554	45.957847	-77.361505	-0.378
42.396717	-82.192866	-0.669	45.042182	-63.374552	-0.683	45.836628	-77.245081	-0.381
42.658632	-81.213449	-0.598	45.224130	-81.635524	-0.548	45.959531	-73.214641	-0.474
42.729484	-82.477091	-0.675	45.328757	-75.867004	-0.417	45.887946	-72.541726	-0.486
42.741724	-81.714921	-0.580	45.247681	-75.713185	-0.392	45.918394	-71.569596	-0.487
42.784923	-80.611339	-0.563	45.318730	-75.653963	-0.388	45.912992	-71.392405	-0.524
42.990613	-82.421196	-0.692	45.242830	-75.458368	-0.418	45.915014	-70.940362	-0.542
42.961850	-81.612760	-0.634	45.219496	-74.768618	-0.389	45.963997	-70.832049	-0.488
42.882774	-81.251008	-0.639	45.225588	-74.332617	-0.440	45.888010	-70.625168	-0.588
42.922805	-79.239684	-0.560	45.270153	-74.115570	-0.439	45.941925	-66.671345	-0.654
43.138800	-80.700011	-0.599	45.255353	-71.571306	-0.534	45.933452	-66.659612	-0.694
43.062152	-79.212580	-0.554	45.308142	-67.248122	-0.675	45.952251	-64.533975	-0.761
43.296962	-79.801632	-0.576	45.295329	-66.111740	-0.664	45.850866	-64.256061	-0.768
43.431357	-81.501541	-0.581	45.305245	-63.293106	-0.641	45.978821	-63.912278	-0.723
43.340190	-81.008944	-0.507	45.351292	-80.029540	-0.480	46.091834	-81.137697	-0.506
43.441554	-80.211750	-0.588	45.492039	-76.708659	-0.374	46.028436	-79.339279	-0.445
43.542460	-80.518186	-0.567	45.424210	-76.598880	-0.380	46.040655	-78.145223	-0.388
43.583691	-80.455290	-0.579	45.401365	-76.247910	-0.420	46.073579	-77.476403	-0.396
43.630612	-80.069299	-0.549	45.407191	-76.051244	-0.418	46.092161	-76.052173	-0.310
43.631065	-79.402263	-0.556	45.397796	-75.922984	-0.419	46.114781	-74.585846	-0.413
43.687754	-81.706683	-0.628	45.372419	-75.743256	-0.434	46.072538	-73.881331	-0.399
43.817404	-81.163988	-0.554	45.392626	-75.391768	-0.396	46.049464	-73.114067	-0.507
43.726638	-79.609623	-0.562	45.390247	-74.702474	-0.463	46.100764	-72.938660	-0.511
43.831243	-66.122315	-0.528	45.365706	-74.498912	-0.426	46.073964	-72.355743	-0.444
43.864043	-80.064615	-0.563	45.408290	-73.344011	-0.471	46.139744	-71.892642	-0.459
43.852060	-79.054451	-0.475	45.339521	-72.704759	-0.522	46.056744	-71.356618	-0.494
43.956295	-78.164389	-0.538	45.408320	-71.986173	-0.498	46.135655	-71.255305	-0.530
43.846359	-77.160015	-0.512	45.401775	-71.262453	-0.612	46.019178	-70.744760	-0.539
43.869918	-65.963061	-0.553	45.392769	-71.074110	-0.574	46.120033	-67.108638	-0.661
44.066316	-80.793892	-0.517	45.435406	-70.884427	-0.627	46.040946	-66.490045	-0.615
44.116620	-80.286740	-0.437	45.487344	-62.732920	-0.621	46.131976	-64.959078	-0.729
44.092238	-79.664520	-0.541	45.551523	-79.341639	-0.333	46.106079	-64.829941	-0.726
44.117170	-79.316971	-0.551	45.501461	-78.171348	-0.385	46.096707	-63.966795	-0.567
44.106069	-78.994980	-0.521	45.500218	-77.138401	-0.372	46.113464	-60.775350	-0.638
44.333057	-81.463400	-0.547	45.620212	-76.869003	-0.366	46.254065	-83.552960	-0.688
44.305486	-80.855069	-0.514	45.585020	-75.807326	-0.374	46.271848	-83.440693	-0.697
44.272550	-79.676543	-0.534	45.559926	-75.067453	-0.380	46.207186	-83.060951	-0.697
44.229137	-78.374039	-0.526	45.573962	-74.381963	-0.452	46.210827	-82.605632	-0.687
44.310780	-78.302905	-0.509	45.525309	-74.208165	-0.428	46.205161	-82.266868	-0.648
44.227514	-77.188254	-0.510	45.599017	-73.862377	-0.473	46.248775	-81.927444	-0.572
44.244538	-76.420565	-0.466	45.589608	-73.778501	-0.476	46.289033	-81.738913	-0.563
44.444879	-81.396579	-0.568	45.516073	-73.547327	-0.502	46.325478	-81.541522	-0.493
44.486838	-79.149140	-0.502	45.632647	-73.490399	-0.480	46.313142	-79.445913	-0.482
44.336323	-78.777679	-0.528	45.651684	-72.895789	-0.467	46.269472	-79.044446	-0.428
44.345978	-76.170655	-0.479	45.647919	-72.564921	-0.478	46.313324	-78.680384	-0.407
44.472140	-75.868204	-0.456	45.665935	-72.147558	-0.472	46.258395	-78.230795	-0.473
44.508378	-80.220008	-0.558	45.603293	-71.361251	-0.593	46.188641	-77.872453	-0.355
44.562739	-78.212503	-0.498	45.525897	-71.274446	-0.590	46.218207	-74.693821	-0.408
44.526742	-77.488022	-0.469	45.616495	-71.082980	-0.548	46.270347	-73.778145	-0.362
44.522453	-76.694455	-0.458	45.590192	-70.924155	-0.610	46.194874	-72.895537	-0.511
44.586767	-75.681729	-0.433	45.615038	-70.784760	-0.590	46.188040	-72.790533	-0.520
44.527583	-63.859054	-0.623	45.551321	-63.5550075	-0.661	46.293186	-72.597442	-0.478
44.665440	-63.600764	-0.654	45.566356	-62.620872	-0.642	46.316448	-71.939828	-0.442
44.765766	-81.142449	-0.518	45.828291	-77.117367	-0.369	46.278865	-71.796380	-0.464
44.731072	-78.337089	-0.458	45.754779	-76.577496	-0.369	46.291474	-71.659568	-0.474
44.798523	-76.679259	-0.422	45.804420	-75.980391	-0.349	46.248860	-71.356911	-0.514
44.825312	-75.317625	-0.439	45.764126	-73.966498	-0.436	46.239874	-71.201845	-0.507
44.693250	-63.605902	-0.618	45.714659	-73.708289	-0.444	46.236151	-64.520230	-0.697
44.890996	-79.755260	-0.503	45.715477	-73.414546	-0.497	46.230192	-63.122232	-0.395
44.993980	-79.306508	-0.465	45.812315	-73.280629	-0.485	46.464583	-84.068070	-0.667
44.901779	-78.729577	-0.438	45.683009	-72.151747	-0.476	46.423361	-81.202610	-0.471
44.872582	-77.701887	-0.417	45.728735	-71.439354	-0.545	46.475942	-80.993635	-0.425
44.974276	-64.901124	-0.761	45.787749	-71.293738	-0.518	46.422832	-80.175171	-0.450
44.860417	-63.559000	-0.631	45.773990	-71.107277	-0.554	46.406916	-80.070662	-0.480
45.129471	-79.742989	-0.478	45.716738	-70.852550	-0.623	46.368729	-79.771976	-0.511
45.043688	-77.889096	-0.444	45.748374	-70.681268	-0.603	46.496883	-79.159457	-0.434
45.138233	-77.273906	-0.390	45.750769	-70.588748	-0.622	46.382615	-75.983666	-0.273

The GPS Height Transformation (v2.0)

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
46.448199	-74.929031	-0.335	47.418928	-72.789762	-0.216	48.445690	-124.125520	-0.066
46.339983	-72.539873	-0.462	47.353653	-70.616916	-0.283	48.384220	-123.937263	-0.126
46.422566	-72.359565	-0.433	47.398399	-70.415392	-0.365	48.359370	-123.741196	-0.136
46.448867	-72.265167	-0.459	47.370768	-70.045352	-0.454	48.448675	-123.523107	-0.122
46.370539	-71.614291	-0.478	47.401138	-68.363967	-0.584	48.445864	-123.419059	-0.137
46.379471	-71.404065	-0.501	47.348016	-65.432432	-0.644	48.454483	-123.307635	-0.141
46.390772	-71.231692	-0.491	47.409221	-61.823160	-0.542	48.441519	-89.379249	-0.693
46.473149	-71.056150	-0.512	47.480435	-55.805345	-0.405	48.426266	-89.220934	-0.662
46.420700	-70.998697	-0.512	47.483102	-54.813936	-0.409	48.474846	-85.122722	-0.426
46.374079	-70.296728	-0.542	47.451300	-53.561396	-0.385	48.420056	-79.015817	-0.080
46.467069	-64.728997	-0.705	47.390115	-53.159913	-0.370	48.411946	-78.919128	-0.078
46.442783	-63.806823	-0.391	47.625326	-79.422743	-0.241	48.446199	-71.686370	-0.320
46.455125	-63.291733	-0.390	47.547169	-77.144344	-0.220	48.480194	-71.198935	-0.385
46.376961	-62.135767	-0.359	47.580595	-70.387303	-0.358	48.409345	-69.334953	-0.471
46.528810	-84.585263	-0.607	47.589829	-69.812986	-0.471	48.334034	-68.780696	-0.275
46.586257	-84.310232	-0.585	47.621833	-65.784132	-0.620	48.477714	-68.510801	-0.364
46.508233	-80.594552	-0.408	47.648770	-65.574596	-0.658	48.398503	-67.273801	-0.512
46.552619	-79.596092	-0.447	47.531200	-61.712034	-0.473	48.381737	-64.561363	-0.492
46.622896	-75.921984	-0.246	47.573685	-59.141786	-0.349	48.407748	-64.435618	-0.482
46.547379	-75.477927	-0.290	47.631054	-53.840044	-0.418	48.379743	-58.472726	-0.275
46.573870	-72.073023	-0.424	47.571459	-52.709924	-0.331	48.476550	-55.461393	-0.262
46.634608	-71.944808	-0.413	47.684037	-84.813779	-0.448	48.396278	-54.196545	-0.345
46.596954	-71.543577	-0.450	47.750131	-83.388282	-0.305	48.387934	-53.645978	-0.402
46.556344	-71.441066	-0.434	47.710591	-81.754571	-0.285	48.556272	-124.400481	-0.108
46.535531	-70.838650	-0.536	47.827458	-79.268039	-0.213	48.513929	-124.288381	-0.063
46.515694	-66.482689	-0.695	47.776024	-77.310292	-0.284	48.658781	-123.698925	-0.119
46.581630	-64.915330	-0.668	47.667850	-72.581125	-0.224	48.547035	-123.532723	-0.119
46.750732	-79.805042	-0.427	47.723269	-71.208503	-0.365	48.577935	-123.428504	-0.142
46.712530	-79.096440	-0.389	47.728012	-70.014237	-0.321	48.604839	-93.472714	-0.614
46.829556	-76.300942	-0.195	47.803919	-69.590724	-0.455	48.533232	-89.550603	-0.573
46.671803	-75.987307	-0.250	47.802031	-65.207308	-0.634	48.567661	-88.840667	-0.588
46.746686	-72.750557	-0.323	47.776442	-59.244405	-0.320	48.652632	-85.445965	-0.385
46.681020	-71.876901	-0.395	47.699929	-55.576171	-0.277	48.522979	-81.539986	-0.174
46.669412	-71.789536	-0.405	47.716039	-54.587995	-0.414	48.565741	-81.370922	-0.169
46.721673	-71.570801	-0.404	47.961591	-84.902610	-0.494	48.522590	-79.449939	-0.090
46.747433	-71.418177	-0.440	47.841444	-79.905511	-0.216	48.506401	-79.227580	-0.105
46.768692	-71.277967	-0.444	47.922434	-74.623745	-0.115	48.603354	-78.794707	-0.038
46.783365	-71.132698	-0.461	47.900481	-72.436936	-0.245	48.646276	-78.589421	-0.045
46.680020	-64.862868	-0.671	47.905250	-69.477328	-0.406	48.630611	-78.363807	-0.026
46.751240	-64.190651	-0.397	47.983122	-66.924444	-0.521	48.617481	-78.274405	-0.035
46.708901	-53.488466	-0.293	47.873089	-65.794050	-0.576	48.504055	-77.826662	-0.033
46.796503	-53.065906	-0.286	47.941033	-55.678387	-0.239	48.648175	-77.098300	-0.037
46.981109	-84.777436	-0.517	47.922045	-54.275368	-0.403	48.629243	-72.376726	-0.384
46.928323	-84.426511	-0.559	47.946838	-53.954355	-0.438	48.511841	-71.656515	-0.318
46.905794	-83.253972	-0.521	47.843500	-53.092575	-0.430	48.602788	-68.193844	-0.407
46.966868	-79.776715	-0.412	48.043783	-84.833803	-0.457	48.521396	-67.984275	-0.426
46.892777	-79.246651	-0.356	48.074286	-84.764505	-0.467	48.537033	-67.557718	-0.429
46.916092	-72.925758	-0.323	48.166606	-82.268604	-0.195	48.582563	-64.292711	-0.496
46.907849	-71.806522	-0.429	48.102828	-79.257254	-0.147	48.543190	-58.535938	-0.305
46.949903	-71.045180	-0.459	48.104537	-77.807914	-0.119	48.633395	-58.212578	-0.242
46.916011	-70.896393	-0.451	48.097057	-77.564164	-0.115	48.824787	-125.126430	-0.076
46.938140	-70.784461	-0.432	48.118755	-77.387309	-0.125	48.802309	-123.707647	-0.121
46.984558	-70.550901	-0.419	48.012260	-69.339998	-0.391	48.681607	-123.439786	-0.140
46.866807	-65.141409	-0.719	48.139749	-67.149602	-0.468	48.720342	-94.587566	-0.612
46.875474	-55.706530	-0.369	48.069202	-66.561624	-0.512	48.722744	-94.350723	-0.585
46.910090	-55.368562	-0.413	48.115196	-66.231754	-0.508	48.718990	-93.062956	-0.574
46.967243	-53.519234	-0.349	48.134396	-66.115671	-0.489	48.795273	-91.562605	-0.561
47.130481	-79.377429	-0.397	48.139947	-65.836119	-0.487	48.730623	-89.883805	-0.542
47.035292	-76.535937	-0.194	48.019888	-65.463788	-0.542	48.748129	-88.581104	-0.657
47.034822	-70.901728	-0.461	48.083361	-65.098050	-0.516	48.803770	-86.739532	-0.524
47.098670	-70.773814	-0.389	48.056829	-58.903570	-0.342	48.705407	-86.255614	-0.549
47.023624	-67.658668	-0.650	48.315929	-123.650834	-0.124	48.711973	-85.821691	-0.407
47.096308	-65.468064	-0.566	48.257681	-84.882401	-0.374	48.712952	-80.781865	-0.066
47.164767	-55.460340	-0.404	48.196884	-79.255943	-0.185	48.832485	-79.373240	-0.035
47.014061	-55.252333	-0.371	48.243301	-79.048147	-0.125	48.762143	-79.204199	-0.067
47.043869	-52.891187	-0.295	48.221590	-78.707278	-0.130	48.774425	-79.091252	-0.046
47.238337	-84.644881	-0.509	48.222805	-78.432906	-0.117	48.739333	-78.920456	-0.046
47.188992	-79.731601	-0.378	48.196566	-78.131879	-0.104	48.675087	-78.700316	-0.075
47.261319	-76.824300	-0.198	48.183291	-72.216586	-0.286	48.791020	-78.012875	0.002
47.208950	-72.893560	-0.234	48.332085	-70.819529	-0.403	48.671358	-72.554534	-0.361
47.200680	-70.635547	-0.392	48.272515	-70.512588	-0.361	48.698126	-69.085443	-0.457
47.214892	-70.273011	-0.434	48.210177	-70.079057	-0.370	48.753983	-67.816246	-0.383
47.280863	-55.046805	-0.409	48.253244	-69.616869	-0.409	48.764734	-64.463447	-0.562
47.283710	-53.992853	-0.408	48.172853	-69.107685	-0.302	48.716704	-55.531028	-0.210
47.229886	-53.691960	-0.363	48.215713	-65.867467	-0.483	48.690106	-53.654429	-0.474
47.204704	-53.371154	-0.329	48.289815	-64.718401	-0.528	48.700806	-53.086364	-0.416
47.314342	-52.817281	-0.335	48.259052	-58.799239	-0.469	48.932586	-125.543621	-0.093
47.471437	-84.788001	-0.547	48.221614	-55.496697	-0.181	48.932036	-124.785740	-0.060
47.481760	-79.667961	-0.325	48.196560	-54.027681	-0.350	48.992036	-116.494489	-0.070

The GPS Height Transformation (v2.0)

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
48.998691	-100.052372	-0.607	49.222672	-122.534795	-0.083	49.591571	-112.601037	-0.191
48.936674	-90.137901	-0.535	49.281111	-121.781034	-0.127	49.515977	-112.113397	-0.185
48.944473	-88.365650	-0.592	49.245764	-120.582689	0.036	49.632845	-106.026573	-0.519
48.976263	-87.998162	-0.546	49.214979	-119.909950	-0.022	49.523052	-105.616035	-0.473
48.859304	-87.540977	-0.570	49.312342	-119.770813	0.024	49.639789	-102.276390	-0.562
48.840508	-87.046834	-0.568	49.318434	-119.620098	-0.015	49.562683	-100.961617	-0.497
48.960578	-77.954742	-0.003	49.291215	-119.028605	-0.096	49.662394	-96.547867	-0.552
48.861694	-77.140149	-0.064	49.299002	-117.223612	0.094	49.655629	-96.159241	-0.553
48.996655	-73.301117	-0.275	49.187755	-116.626903	-0.052	49.649130	-95.793119	-0.550
48.874069	-72.950402	-0.300	49.280871	-115.832722	-0.035	49.584459	-92.263927	-0.411
48.908359	-68.752366	-0.478	49.293522	-115.124634	-0.271	49.540596	-85.803962	-0.268
48.856090	-67.479110	-0.385	49.173958	-113.290340	-0.176	49.554270	-83.009715	-0.026
48.966380	-67.077274	-0.406	49.124601	-110.252979	-0.189	49.646587	-76.005642	-0.095
48.915908	-57.934918	-0.286	49.239821	-98.676770	-0.510	49.504181	-74.383545	-0.183
48.949888	-55.851336	-0.216	49.248182	-94.028756	-0.521	49.596692	-68.586795	-0.316
48.928917	-55.671169	-0.323	49.291556	-91.458972	-0.471	49.658332	-67.189422	-0.497
48.956524	-54.738090	-0.423	49.259530	-91.204280	-0.470	49.610888	-57.949991	-0.174
48.838380	-54.346035	-0.428	49.179293	-90.845733	-0.511	49.509961	-56.878101	-0.227
48.862762	-53.994912	-0.398	49.212184	-84.783200	-0.197	49.652210	-54.771979	-0.452
49.084060	-125.841318	-0.083	49.276066	-81.668011	-0.006	49.679184	-126.117481	-0.122
49.070357	-123.880723	-0.118	49.190530	-78.006896	0.104	49.696820	-124.866551	-0.150
49.129098	-123.195525	-0.214	49.323382	-73.932993	-0.266	49.789218	-123.144558	-0.060
49.046668	-123.079690	-0.172	49.265421	-68.157288	-0.454	49.724423	-120.612731	-0.073
49.084370	-122.954230	-0.192	49.303505	-67.736724	-0.441	49.756488	-119.126959	0.058
49.048958	-122.726546	-0.181	49.196228	-66.235441	-0.444	49.768249	-117.473302	0.007
49.061975	-122.437778	-0.140	49.222836	-65.812748	-0.442	49.774297	-116.904075	-0.103
49.097734	-122.278674	-0.121	49.247062	-65.395964	-0.512	49.769723	-115.739522	-0.057
49.096680	-122.06915	-0.167	49.207696	-64.949781	-0.468	49.730568	-114.853733	-0.105
49.105112	-121.138348	0.141	49.328626	-57.531474	-0.179	49.807333	-114.445091	-0.153
49.064967	-120.786698	0.093	49.207561	-57.447590	-0.211	49.702477	-113.475826	-0.216
49.084289	-119.677697	0.019	49.264401	-57.088483	-0.149	49.680291	-112.914550	-0.154
49.088937	-119.595313	-0.036	49.330114	-56.694458	-0.222	49.703371	-112.767356	-0.201
49.017782	-119.476651	-0.081	49.202649	-53.542210	-0.391	49.756709	-112.330545	-0.247
49.069426	-119.002401	-0.066	49.450871	-124.716988	-0.109	49.814855	-111.923360	-0.245
49.126972	-118.641646	0.017	49.342173	-123.252541	-0.080	49.829852	-111.494292	-0.294
49.007910	-118.298326	-0.003	49.353517	-123.070909	-0.086	49.727000	-108.158233	-0.394
49.044657	-117.873859	0.171	49.366349	-121.482917	-0.082	49.668796	-106.929950	-0.510
49.135769	-117.515366	0.010	49.473960	-120.503564	-0.118	49.799387	-104.264726	-0.588
49.069977	-117.276501	-0.007	49.400995	-120.235829	-0.061	49.678713	-102.977292	-0.544
49.097276	-116.989211	-0.146	49.494334	-119.121578	0.052	49.767574	-100.690176	-0.544
49.122900	-116.609564	-0.035	49.436524	-113.927490	-0.099	49.724292	-100.463182	-0.545
49.000562	-116.181032	0.002	49.451726	-113.310650	-0.148	49.829215	-100.325815	-0.514
49.054404	-115.064487	-0.171	49.347633	-112.987023	-0.156	49.782307	-97.323215	-0.558
49.132208	-113.853192	-0.085	49.464818	-112.609934	-0.178	49.684510	-95.355278	-0.573
49.130993	-113.705175	-0.127	49.348668	-112.291733	-0.189	49.727837	-94.974488	-0.574
49.094529	-113.464643	-0.105	49.499503	-111.710077	-0.229	49.715745	-94.756315	-0.554
49.028368	-112.943172	-0.130	49.479586	-111.237439	-0.267	49.750396	-94.597369	-0.555
49.086462	-112.477637	-0.041	49.421273	-110.813530	-0.255	49.760500	-94.177834	-0.498
49.115745	-112.143011	-0.199	49.378381	-109.235667	-0.259	49.815180	-92.933325	-0.467
49.006003	-107.819682	-0.552	49.485232	-91.962689	-0.427	49.703466	-92.577169	-0.426
49.131821	-102.836897	-0.620	49.358901	-91.535972	-0.462	49.685850	-87.539647	-0.277
49.000892	-101.627733	-0.518	49.338181	-89.379449	-0.456	49.779609	-86.517130	-0.226
49.000766	-97.209614	-0.621	49.449452	-82.554541	-0.016	49.778499	-86.431577	-0.182
49.018813	-95.440306	-0.600	49.449304	-78.121738	0.064	49.759306	-85.094584	-0.166
49.038161	-90.466596	-0.562	49.364323	-76.771768	-0.056	49.704670	-83.765518	-0.086
49.014188	-88.204253	-0.481	49.448543	-76.325978	-0.096	49.667445	-83.511043	-0.080
49.116264	-85.908646	-0.341	49.354075	-68.452547	-0.400	49.817710	-75.664525	-0.163
49.131411	-76.974326	-0.100	49.407396	-67.373508	-0.470	49.817994	-75.184699	-0.161
49.109732	-73.532150	-0.277	49.486790	-58.087114	-0.113	49.775368	-74.804201	-0.134
49.080834	-73.468497	-0.298	49.462552	-57.909703	-0.174	49.764851	-74.429420	-0.206
49.078550	-68.440759	-0.434	49.461423	-57.672821	-0.186	49.829087	-68.737106	-0.277
49.115913	-66.579042	-0.445	49.458889	-56.177919	-0.283	49.768265	-57.905100	-0.152
49.088306	-64.597265	-0.507	49.359334	-54.709127	-0.398	49.979660	-126.845228	-0.280
49.101611	-58.373142	-0.288	49.357325	-54.215887	-0.396	49.882807	-125.697982	0.000
49.007028	-58.125914	-0.317	49.394271	-53.804554	-0.416	49.895551	-125.147404	-0.139
49.017377	-57.593592	-0.244	49.559396	-123.233647	-0.020	49.896332	-121.448088	-0.152
49.009035	-56.330578	-0.202	49.666537	-121.420005	-0.166	49.897949	-120.902810	-0.055
49.154903	-56.103294	-0.212	49.505812	-121.199589	-0.096	49.859810	-119.590272	-0.135
49.009695	-55.455926	-0.329	49.598903	-119.656956	-0.176	49.888741	-119.343241	-0.012
49.115385	-55.071616	-0.353	49.508524	-117.281102	-0.018	49.873832	-118.097469	0.025
49.058652	-53.849833	-0.401	49.654764	-116.929715	-0.230	49.872997	-113.060503	-0.226
49.260701	-125.370518	-0.022	49.629452	-116.056686	-0.203	49.873599	-111.094755	-0.286
49.295987	-124.925723	-0.108	49.606994	-115.727818	-0.105	49.977558	-110.762864	-0.293
49.303749	-124.461092	-0.096	49.522783	-115.059434	-0.172	49.976544	-110.551046	-0.289
49.270576	-124.192371	-0.096	49.625450	-114.626200	-0.130	49.939544	-110.140872	-0.282
49.282937	-124.119735	-0.102	49.630275	-114.477890	-0.167	49.959486	-109.918642	-0.303
49.264147	-123.098464	-0.142	49.562159	-114.278864	-0.163	49.975412	-109.622371	-0.292
49.283661	-122.926318	-0.107	49.588408	-114.163826	-0.169	49.989759	-109.468326	-0.327
49.183053	-122.762999	-0.147	49.544069	-113.829213	-0.200	49.930967	-108.016481	-0.342

The GPS Height Transformation (v2.0)

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
49.872293	-104.601645	-0.540	50.303078	-63.825539	-0.557	50.998309	-121.530824	-0.088
49.966384	-103.598958	-0.526	50.245388	-63.611633	-0.568	50.940993	-120.237604	0.035
49.910461	-101.058028	-0.542	50.499960	-126.992004	-0.157	50.872818	-118.925476	0.057
49.863888	-99.943931	-0.525	50.336244	-125.912518	-0.110	50.943848	-118.485934	0.127
49.900797	-99.522888	-0.514	50.398400	-121.666416	-0.180	50.871370	-114.293505	-0.177
49.901175	-99.109099	-0.495	50.417183	-121.356070	-0.166	50.863076	-114.047210	-0.169
49.969856	-98.774804	-0.545	50.472551	-120.262282	0.027	50.922899	-113.923557	-0.173
49.974810	-98.382588	-0.532	50.488214	-119.602989	0.149	50.870292	-113.028960	-0.185
49.935247	-97.913460	-0.554	50.373808	-119.233136	0.045	50.834462	-112.612888	-0.281
49.855127	-97.541587	-0.567	50.342753	-117.879697	0.079	50.833656	-111.643550	-0.248
49.854256	-97.478259	-0.563	50.440871	-117.159558	0.001	50.920713	-110.148708	-0.286
49.898897	-97.249492	-0.575	50.433774	-115.936066	0.044	50.965746	-107.400070	-0.417
49.988324	-96.567597	-0.538	50.357483	-114.634462	-0.016	50.906354	-104.870100	-0.470
49.839435	-93.815597	-0.449	50.486546	-113.864545	-0.163	50.846228	-103.831549	-0.473
49.858256	-93.385121	-0.444	50.384549	-113.1242001	-0.140	50.934568	-102.823468	-0.460
49.866537	-77.251170	0.028	50.397351	-112.408887	-0.259	50.904238	-98.867147	-0.404
49.912465	-74.389823	-0.142	50.412653	-111.508170	-0.268	50.949260	-97.038646	-0.464
49.914526	-67.024430	-0.482	50.397077	-110.096138	-0.282	50.900310	-93.655135	-0.423
50.072042	-125.370402	-0.098	50.390494	-107.435692	-0.401	50.991613	-68.541701	0.008
50.047187	-125.286840	-0.054	50.412708	-107.028756	-0.456	50.976974	-56.458799	-0.220
50.107217	-122.987714	0.193	50.465795	-106.737041	-0.485	51.015248	-118.086989	0.164
50.133259	-121.567874	-0.135	50.462913	-106.371981	-0.487	51.092130	-116.684966	0.045
50.078008	-120.671471	0.016	50.470787	-105.970653	-0.497	51.025881	-115.982606	0.217
50.040846	-120.637865	0.088	50.426326	-105.603677	-0.425	51.127795	-115.395237	0.021
50.065783	-119.378888	-0.022	50.395182	-105.145854	-0.472	51.033519	-115.040724	-0.041
50.008027	-118.351800	0.085	50.447579	-104.686809	-0.517	51.146767	-114.732182	-0.086
50.100533	-117.906566	0.050	50.446522	-104.259443	-0.487	51.088461	-114.376345	-0.152
50.005784	-117.379050	0.022	50.364117	-104.136602	-0.490	51.110622	-113.931269	-0.153
50.146544	-116.952305	-0.087	50.338540	-103.612757	-0.460	51.038411	-113.446209	-0.219
50.000799	-115.758766	-0.020	50.412040	-103.117958	-0.517	51.066950	-111.586899	-0.240
50.118040	-114.430786	-0.103	50.382288	-102.671662	-0.508	51.154616	-110.214995	-0.294
50.165236	-113.646910	-0.179	50.477058	-100.761268	-0.518	51.102309	-105.868940	-0.488
50.126499	-113.110133	-0.224	50.497481	-77.401413	-0.068	51.081053	-99.997133	-0.403
50.129401	-110.892199	-0.283	50.375334	-68.828654	-0.179	51.064565	-96.296908	-0.524
50.101501	-110.766683	-0.300	50.353857	-57.527738	-0.132	51.013516	-93.765738	-0.439
50.018147	-109.068422	-0.310	50.591791	-128.082797	-0.232	51.012590	-90.371187	-0.350
50.069653	-108.622038	-0.306	50.661719	-127.371360	-0.222	51.006556	-77.618216	-0.100
50.163979	-108.266033	-0.328	50.547349	-122.489614	-0.134	51.063639	-56.848434	-0.221
50.056572	-101.446967	-0.525	50.654274	-120.067549	-0.061	51.308133	-121.374941	-0.002
50.062810	-96.885642	-0.479	50.601722	-119.152338	0.082	51.169763	-120.130505	0.106
50.061678	-96.600707	-0.612	50.646345	-117.541849	0.081	51.318982	-118.310483	0.166
50.089346	-92.000459	-0.472	50.533535	-116.006520	0.126	51.244084	-117.640313	0.247
50.163822	-90.779607	-0.355	50.550192	-114.957198	0.109	51.300522	-116.984257	0.137
50.165657	-86.672502	-0.173	50.664691	-112.117380	-0.251	51.333283	-116.552502	0.132
50.080262	-77.118045	-0.034	50.599891	-111.913298	-0.261	51.227891	-116.049874	0.258
50.128155	-68.820673	-0.261	50.555969	-111.833117	-0.227	51.188469	-115.753025	0.138
50.050219	-66.778059	-0.551	50.644754	-110.097730	-0.230	51.196196	-113.760665	-0.216
50.150356	-57.632268	-0.159	50.532961	-104.755393	-0.497	51.300192	-111.669395	-0.230
50.254086	-126.773830	-0.121	50.525344	-103.947270	-0.467	51.241459	-108.027790	-0.443
50.293959	-126.305720	-0.041	50.508292	-103.541805	-0.500	51.227286	-106.612063	-0.480
50.221359	-125.548432	-0.089	50.527066	-99.952750	-0.447	51.270149	-103.961315	-0.344
50.191678	-121.572783	-0.135	50.521243	-98.025944	-0.453	51.189286	-102.516744	-0.439
50.228130	-121.093477	-0.190	50.506637	-97.044731	-0.496	51.219202	-102.404307	-0.463
50.262764	-120.432062	0.010	50.626878	-94.272619	-0.393	51.217462	-101.607776	-0.456
50.206878	-119.288680	-0.004	50.660041	-91.917409	-0.423	51.214824	-97.462007	-0.394
50.239986	-119.040013	0.000	50.641258	-68.703977	-0.140	51.229074	-77.426577	-0.175
50.212380	-118.588000	0.048	50.575995	-57.241853	-0.207	51.220808	-68.238842	-0.038
50.216480	-115.868275	0.048	50.701989	-127.738538	-0.191	51.326693	-56.700405	-0.242
50.243900	-111.218185	-0.261	50.727810	-122.203634	-0.168	51.170440	-56.002980	-0.268
50.177579	-110.319944	-0.279	50.691547	-121.936950	-0.212	51.478119	-120.561944	0.111
50.268539	-107.793012	-0.440	50.713640	-121.297466	-0.111	51.423264	-120.208335	0.023
50.309431	-104.205651	-0.495	50.757962	-120.819901	-0.105	51.383764	-117.449640	0.180
50.298568	-104.138937	-0.495	50.678152	-120.334733	-0.046	51.454190	-117.104396	0.154
50.331339	-103.930536	-0.470	50.774833	-119.720616	0.010	51.461673	-116.224300	0.195
50.318700	-102.201620	-0.431	50.830847	-119.329616	0.094	51.480806	-115.075986	0.003
50.216105	-101.813096	-0.468	50.759588	-118.038442	0.163	51.351087	-114.002365	-0.142
50.201840	-97.281527	-0.598	50.775543	-115.962477	0.114	51.463884	-112.744992	-0.191
50.241330	-97.139530	-0.636	50.806246	-115.163984	0.122	51.467925	-110.973565	-0.259
50.258476	-95.867123	-0.482	50.687809	-113.882168	-0.177	51.387887	-110.474280	-0.303
50.299644	-95.551183	-0.416	50.706586	-112.238767	-0.274	51.385922	-110.075016	-0.315
50.308060	-93.184481	-0.446	50.674986	-110.097719	-0.274	51.486298	-109.987703	-0.236
50.289503	-89.050883	-0.308	50.752274	-102.146349	-0.371	51.459878	-103.846313	-0.416
50.275065	-66.441519	-0.494	50.766495	-98.018081	-0.429	51.361624	-100.018965	-0.421
50.287317	-65.970901	-0.511	50.747453	-96.149278	-0.588	51.463919	-77.434207	-0.167
50.281940	-65.516140	-0.542	50.703714	-90.561994	-0.383	51.493725	-68.226662	-0.025
50.299713	-65.123206	-0.534	50.720791	-77.692798	-0.115	51.401107	-56.320051	-0.269
50.272152	-64.733905	-0.544	50.797040	-57.072440	-0.213	51.381596	-55.933294	-0.245
50.291304	-64.334025	-0.543	50.739756	-56.101471	-0.224	51.356978	-55.559989	-0.289
50.302856	-63.923345	-0.544	50.889583	-121.757685	-0.075	51.549137	-121.366178	0.024

The GPS Height Transformation (v2.0)

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
51.534995	-120.880298	0.037	52.415945	-117.396758	0.222	53.228488	-99.307754	-0.469
51.619670	-119.937763	0.116	52.348791	-116.322098	-0.010	53.210952	-62.296377	0.259
51.620513	-114.095723	-0.155	52.479390	-116.096757	-0.065	53.220264	-60.954350	0.262
51.503402	-111.668500	-0.249	52.470190	-115.696059	-0.067	53.296082	-60.391701	0.240
51.559107	-111.341552	-0.257	52.494659	-115.517588	-0.082	53.362823	-120.332859	0.147
51.503980	-109.163474	-0.324	52.420421	-115.237743	-0.137	53.419405	-117.743816	0.055
51.600599	-98.720738	-0.514	52.385586	-114.850729	-0.175	53.391245	-117.600679	-0.009
51.649039	-89.887952	-0.297	52.348459	-114.418050	-0.200	53.386190	-112.754338	-0.311
51.805738	-121.439428	0.033	52.370050	-113.795132	-0.225	53.428801	-111.754907	-0.342
51.674497	-119.546251	0.077	52.463009	-113.348783	-0.241	53.335597	-111.170785	-0.363
51.730964	-118.637855	0.133	52.396964	-107.218039	-0.426	53.338952	-110.859107	-0.371
51.667910	-116.446029	0.312	52.398794	-101.103201	-0.403	53.391665	-110.545389	-0.376
51.822252	-115.185532	-0.008	52.374329	-98.901690	-0.502	53.335048	-108.872394	-0.367
51.678218	-110.500370	-0.292	52.393850	-77.252293	-0.132	53.366092	-107.922342	-0.330
51.721248	-107.603844	-0.388	52.424765	-67.399353	-0.114	53.335525	-105.757682	-0.355
51.696404	-105.547312	-0.447	52.531323	-125.813902	0.194	53.417317	-104.486382	-0.358
51.749779	-104.509727	-0.438	52.522996	-125.438725	0.046	53.446564	-103.995975	-0.445
51.730391	-102.874324	-0.435	52.612685	-117.841150	0.175	53.353135	-101.056656	-0.398
51.728267	-96.905119	-0.471	52.538970	-117.643152	0.191	53.434921	-77.592694	-0.210
51.672478	-77.388365	-0.173	52.581418	-115.354539	-0.140	53.376479	-76.999286	-0.198
51.748277	-68.040913	-0.103	52.554963	-113.663639	-0.242	53.430828	-75.829269	-0.267
51.905305	-124.597661	-0.078	52.579119	-110.820359	-0.371	53.474990	-75.412044	-0.227
51.926983	-122.845170	0.000	52.624169	-96.183244	-0.411	53.444725	-64.765216	0.203
51.961184	-122.370452	-0.039	52.578666	-77.348998	-0.185	53.495704	-63.696557	0.146
51.939152	-121.770513	-0.017	52.695180	-122.453357	0.018	53.435231	-63.230826	0.192
51.913102	-119.321641	0.138	52.703895	-119.255320	0.257	53.523542	-122.644465	0.133
51.973011	-116.741289	0.154	52.816520	-118.051123	0.093	53.508269	-120.649788	0.227
51.856654	-116.647768	0.261	52.698881	-116.316810	-0.034	53.557736	-118.013937	0.094
51.853663	-114.055384	-0.178	52.819765	-113.454131	-0.287	53.543056	-117.253666	-0.052
51.881533	-111.847867	-0.276	52.691855	-113.245297	-0.264	53.530208	-116.851626	-0.095
51.852361	-111.351768	-0.248	52.813877	-112.132214	-0.292	53.582080	-116.335895	-0.147
51.997669	-110.885404	-0.317	52.741336	-108.422956	-0.422	53.606843	-115.883339	-0.189
51.990097	-110.529393	-0.299	52.741166	-108.229834	-0.427	53.614926	-115.374975	-0.253
51.876425	-110.051402	-0.313	52.705658	-106.295627	-0.401	53.589198	-114.980250	-0.297
51.881175	-101.720399	-0.419	52.784162	-104.035334	-0.388	53.599355	-114.720479	-0.319
51.997708	-100.230498	-0.336	52.724583	-67.408098	-0.119	53.585006	-114.630583	-0.328
51.947021	-77.347734	-0.148	52.966565	-119.425104	0.147	53.556627	-114.139372	-0.310
52.111895	-125.027550	0.024	52.920024	-118.802445	0.138	53.561610	-113.664702	-0.315
52.113224	-124.063139	-0.059	52.910445	-115.404024	-0.173	53.586157	-113.188539	-0.327
52.130002	-123.693974	-0.069	52.971046	-111.455927	-0.357	53.568827	-113.046771	-0.318
52.084772	-123.283581	-0.069	52.841932	-110.854644	-0.375	53.605018	-112.449967	-0.371
52.146530	-122.135690	-0.028	52.850950	-110.316433	-0.414	53.510258	-112.091151	-0.333
52.116851	-121.957834	-0.029	52.840795	-109.389703	-0.403	53.622155	-110.865916	-0.370
52.074074	-118.564191	0.120	52.987638	-105.271044	-0.257	53.656469	-106.986815	-0.367
52.041789	-116.863096	0.204	52.936739	-104.976629	-0.357	53.642525	-103.372344	-0.409
52.062105	-116.415444	0.123	52.842154	-102.383599	-0.433	53.507629	-76.609595	-0.278
52.059583	-115.659727	-0.023	52.880488	-99.121916	-0.504	53.659872	-76.058950	-0.238
52.109377	-113.881961	-0.199	52.880965	-77.273316	-0.240	53.526802	-74.866609	-0.189
52.135962	-111.680698	-0.305	52.895208	-67.047609	-0.045	53.576539	-74.432634	-0.205
52.059990	-111.313822	-0.298	53.027216	-122.506343	0.040	53.646464	-73.937004	-0.165
52.042717	-111.124207	-0.311	53.014779	-119.527643	0.179	53.560379	-66.353143	0.002
52.143581	-106.718157	-0.428	53.034382	-119.229575	0.134	53.656915	-64.692963	0.172
52.045249	-106.479769	-0.435	53.078029	-118.034276	-0.090	53.591221	-64.231122	0.139
52.020324	-104.076948	-0.406	53.034439	-116.694264	-0.037	53.708142	-121.051346	0.161
52.066735	-101.275318	-0.410	53.047392	-113.443399	-0.320	53.765774	-118.375084	0.255
52.058901	-68.089499	-0.137	53.047461	-112.818833	-0.326	53.813947	-113.700156	-0.302
52.283297	-125.096796	0.031	53.130242	-111.901857	-0.322	53.774484	-112.889083	-0.349
52.220042	-122.190096	0.014	53.088303	-110.882909	-0.360	53.743400	-112.750485	-0.325
52.253842	-122.116108	-0.020	53.005518	-110.009885	-0.443	53.667953	-105.813555	-0.405
52.198707	-119.232144	0.160	53.040310	-107.024391	-0.386	53.698042	-78.570989	-0.210
52.217868	-117.193861	0.248	53.045187	-105.958867	-0.304	53.678014	-78.230618	-0.243
52.314671	-112.939414	-0.227	53.156743	-77.469706	-0.223	53.728200	-77.695143	-0.255
52.308606	-112.524544	-0.255	53.061102	-66.207106	-0.133	53.813258	-73.626824	-0.145
52.290232	-112.251880	-0.249	53.075516	-61.774706	0.290	53.785266	-73.084298	-0.151
52.185051	-111.788402	-0.273	53.033015	-61.297423	0.265	53.786727	-65.912803	0.140
52.288693	-110.837739	-0.359	53.302262	-122.527233	0.119	53.797185	-65.482780	0.161
52.230624	-109.144991	-0.337	53.301942	-120.165684	0.169	53.751370	-63.446409	0.187
52.196256	-106.398352	-0.428	53.289754	-117.742204	0.008	53.910309	-122.340387	0.145
52.202199	-105.337510	-0.424	53.279264	-117.524063	-0.079	53.882721	-122.121794	0.158
52.227798	-102.574253	-0.444	53.307582	-117.311683	-0.011	53.917166	-121.794351	0.221
52.328516	-90.784732	-0.353	53.174305	-117.008535	-0.003	53.852036	-121.460225	0.172
52.307164	-90.563741	-0.329	53.171707	-115.317694	-0.216	53.890106	-115.908549	-0.238
52.171407	-77.144341	-0.118	53.310769	-114.976057	-0.134	53.964437	-115.175490	-0.321
52.226475	-67.766435	-0.082	53.307376	-113.540294	-0.336	53.834802	-114.746288	-0.319
52.375190	-126.795022	-0.144	53.291646	-110.882805	-0.379	53.891070	-113.323871	-0.338
52.388265	-126.589252	-0.086	53.281738	-110.077840	-0.390	53.918609	-110.895264	-0.385
52.418888	-126.436095	-0.021	53.248901	-109.870576	-0.378	53.990525	-104.658194	-0.336
52.449521	-122.401997	-0.045	53.216796	-105.930106	-0.347	53.969824	-101.175671	-0.435
52.421501	-119.155732	0.174	53.216442	-105.660331	-0.318	53.873589	-99.239966	-0.421

The GPS Height Transformation (v2.0)

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
53.834112	-78.992655	-0.291	54.683605	-99.083825	-0.381	56.075689	-111.880043	-0.239
53.848314	-72.677477	-0.145	54.748702	-95.978167	-0.303	56.239874	-121.402859	-0.407
53.945253	-72.209963	-0.127	54.787469	-68.790651	-0.119	56.246732	-120.729854	-0.352
53.879018	-66.424723	0.007	54.811495	-67.789002	-0.087	56.330571	-119.971492	-0.300
53.844982	-65.052368	0.169	54.804866	-66.809419	-0.025	56.169249	-118.501072	-0.280
53.946178	-63.007540	0.157	54.862364	-118.253725	-0.200	56.232511	-117.609987	-0.290
54.019394	-128.708945	-0.028	54.848919	-114.067536	-0.201	56.287970	-115.359680	-0.347
54.101449	-125.288162	0.034	54.999203	-113.667020	-0.323	56.277900	-111.594759	-0.258
54.058486	-124.849125	0.056	54.840599	-112.547491	-0.294	56.189685	-108.843103	-0.357
54.026917	-124.389395	0.049	54.949582	-98.638496	-0.253	56.423079	-129.366703	-0.063
54.129820	-118.519545	0.140	54.857029	-69.757609	-0.162	56.373046	-121.113799	-0.367
54.135428	-115.739584	-0.304	55.000156	-128.338421	-0.046	56.409167	-118.712732	-0.300
54.093288	-115.606637	-0.297	55.098825	-128.075557	-0.090	56.363797	-117.668545	-0.334
54.069068	-115.387747	-0.285	55.015045	-127.328306	0.047	56.495806	-117.663642	-0.189
54.152441	-114.375143	-0.310	55.060871	-123.030712	-0.035	56.609577	-129.657233	-0.088
54.152592	-113.975606	-0.338	55.133940	-118.743732	-0.310	56.552944	-121.358159	-0.303
54.074824	-113.107464	-0.346	55.091318	-117.687336	-0.256	56.566291	-119.553575	-0.299
54.092780	-112.615165	-0.388	55.004867	-115.259813	-0.342	56.508593	-119.186143	-0.349
54.122297	-112.051182	-0.361	55.069851	-114.028206	-0.284	56.578861	-115.307841	-0.344
54.135538	-111.627333	-0.346	55.111197	-112.491773	-0.291	56.586842	-103.591811	-0.561
54.125278	-108.504261	-0.450	55.106036	-107.702746	-0.479	56.626998	-99.935612	-0.304
54.092906	-108.478066	-0.399	55.159197	-106.367665	-0.482	56.752147	-129.927578	-0.045
54.059837	-71.745542	-0.131	55.162256	-105.299723	-0.555	56.717364	-121.783708	-0.304
54.293101	-130.352900	-0.184	55.125741	-101.113240	-0.396	56.741399	-117.644271	-0.302
54.209671	-129.983260	-0.119	55.310329	-128.089199	0.005	56.712340	-111.361932	-0.441
54.248596	-129.503664	-0.024	55.246800	-127.590429	0.038	56.769524	-108.937527	-0.388
54.278600	-128.533423	-0.032	55.222813	-122.718562	-0.093	56.679043	-99.072677	-0.313
54.232647	-125.763528	0.092	55.196326	-119.397162	-0.212	56.920195	-130.155009	-0.175
54.320562	-122.640365	0.080	55.190720	-118.870467	-0.251	56.934670	-122.072053	-0.294
54.321269	-116.767187	-0.272	55.172837	-118.718092	-0.286	56.865683	-115.226464	-0.354
54.296255	-116.245991	-0.243	55.187118	-118.538746	-0.270	56.861792	-101.066937	-0.285
54.186834	-115.785814	-0.325	55.199584	-118.308188	-0.262	57.038119	-122.458354	-0.275
54.284028	-114.676304	-0.228	55.213974	-118.149306	-0.290	57.017091	-117.597746	-0.394
54.195897	-110.830468	-0.417	55.283471	-117.052595	-0.243	57.095519	-115.105687	-0.377
54.322466	-107.810588	-0.415	55.301673	-115.359981	-0.337	57.084901	-101.997710	-0.304
54.240390	-105.944748	-0.476	55.294312	-114.776379	-0.312	57.256135	-130.247946	-0.126
54.253191	-71.435015	-0.117	55.208479	-114.403875	-0.311	57.298551	-122.785312	-0.296
54.173554	-63.120191	0.095	55.184925	-114.038236	-0.264	57.234844	-117.543510	-0.336
54.336037	-129.268661	-0.061	55.311196	-112.485109	-0.333	57.276876	-94.180749	-0.240
54.413758	-128.886495	-0.091	55.494601	-128.268181	-0.019	57.421983	-122.867735	-0.318
54.424184	-126.605900	0.027	55.434870	-122.696461	-0.216	57.359827	-115.376974	-0.405
54.402935	-126.051718	0.061	55.446819	-119.897208	-0.331	57.356371	-103.986486	-0.628
54.355791	-118.340779	-0.055	55.341294	-119.640791	-0.247	57.588705	-130.134443	-0.230
54.483219	-116.970833	-0.285	55.459665	-118.662564	-0.260	57.520916	-117.476845	-0.355
54.382931	-116.775225	-0.258	55.468476	-116.713674	-0.257	57.613422	-115.329481	-0.431
54.447389	-115.537719	-0.227	55.416239	-116.294337	-0.288	57.824888	-129.969133	-0.237
54.343904	-113.912405	-0.304	55.353941	-114.984598	-0.390	57.811921	-122.879471	-0.309
54.356524	-112.938847	-0.350	55.489479	-102.305026	-0.437	57.788172	-117.611256	-0.374
54.456553	-111.203028	-0.416	55.441246	-98.218569	-0.304	57.822913	-103.873710	-0.611
54.340662	-110.080034	-0.422	55.584249	-128.424361	-0.007	57.901908	-115.511394	-0.422
54.440831	-101.370154	-0.398	55.615356	-122.288339	-0.227	58.046041	-129.922189	-0.309
54.384029	-66.584781	0.011	55.612504	-121.965349	-0.294	58.048767	-122.716077	-0.316
54.402609	-63.167713	0.098	55.541394	-114.862673	-0.328	58.021046	-117.365086	-0.432
54.517690	-128.599211	0.030	55.539706	-112.328771	-0.220	58.139675	-115.719838	-0.399
54.598276	-128.402714	-0.027	55.561084	-104.800573	-0.582	58.049082	-94.154546	-0.115
54.622109	-126.855125	-0.042	55.574006	-128.835950	-0.068	58.109831	-68.412214	-0.321
54.502782	-126.476927	0.012	55.5829156	-121.816020	-0.277	58.312806	-129.896403	-0.208
54.580241	-122.713641	0.029	55.718329	-121.209002	-0.327	58.287236	-122.666725	-0.308
54.592715	-118.206994	-0.149	55.743624	-120.034916	-0.357	58.291732	-117.232780	-0.410
54.522805	-115.093423	-0.269	55.747273	-118.614501	-0.318	58.436782	-130.029227	-0.289
54.587091	-112.829122	-0.354	55.732161	-117.131684	-0.289	58.486816	-117.170116	-0.315
54.562715	-110.976145	-0.418	55.799540	-115.162703	-0.333	58.340692	-115.955061	-0.392
54.545662	-110.308379	-0.501	55.777935	-112.193027	-0.284	58.536179	-130.028455	-0.306
54.586306	-103.989476	-0.484	55.828652	-99.612780	-0.301	58.531238	-122.684007	-0.343
54.607773	-97.766821	-0.338	55.911858	-130.017501	0.021	58.520549	-117.133420	-0.375
54.553421	-94.477404	-0.297	55.959045	-120.612548	-0.443	58.514937	-116.624586	-0.377
54.512361	-71.257542	-0.110	55.897934	-120.123164	-0.329	58.515197	-116.151735	-0.371
54.534342	-70.822197	-0.061	55.839650	-119.540428	-0.461	58.534993	-115.675831	-0.351
54.665524	-70.339538	-0.084	55.984997	-117.133592	-0.302	58.588655	-115.172395	-0.329
54.631877	-66.675157	0.078	55.945301	-112.028950	-0.319	58.735560	-130.078979	-0.281
54.802521	-128.276699	-0.036	55.984226	-111.981279	-0.321	58.681798	-124.044638	-0.203
54.822222	-127.190106	0.017	55.846756	-98.022935	-0.251	58.749682	-117.282631	-0.378
54.800774	-122.830398	-0.015	56.106346	-129.360803	-0.120	58.722812	-111.155214	-0.495
54.752167	-117.202965	-0.264	56.016614	-129.117986	-0.093	58.747161	-94.118491	-0.141
54.717594	-115.404035	-0.238	56.010092	-122.188664	-0.388	58.759234	-93.990094	-0.144
54.733750	-113.358784	-0.345	56.120611	-121.744838	-0.419	58.851833	-123.451965	-0.339
54.762258	-112.030695	-0.361	56.109854	-118.052794	-0.268	58.903291	-123.124671	-0.362
54.798237	-102.856456	-0.459	56.160440	-117.285036	-0.306	58.841491	-122.576569	-0.378
54.754818	-101.876224	-0.371	56.053018	-115.341648	-0.289	58.995505	-117.656137	-0.373

The GPS Height Transformation (v2.0)

Latitude (degrees)	Longitude (degrees)	Disc. (m)	Latitude (degrees)	Longitude (degrees)	Disc. (m)
58.981025	-111.821304	-0.283	60.865372	-114.241241	-0.679
59.013912	-125.769444	-0.265	60.928485	-114.117078	-0.667
59.130256	-123.248408	-0.404	60.964809	-113.954650	-0.669
59.117467	-112.437672	-0.277	60.985891	-113.819571	-0.659
59.258228	-129.621811	-0.372	61.044958	-135.221685	-0.193
59.206375	-125.943341	-0.334	61.071398	-117.450220	-0.577
59.200701	-117.528881	-0.419	61.038569	-113.687768	-0.645
59.411801	-126.096542	-0.383	61.132085	-113.630207	-0.612
59.414468	-117.272309	-0.423	61.216919	-138.721879	-0.214
59.589483	-133.714469	-0.111	61.247137	-117.552814	-0.550
59.657453	-126.957213	-0.359	61.184901	-113.699109	-0.535
59.553609	-126.478580	-0.374	61.472537	-135.776108	-0.233
59.625670	-117.169882	-0.456	61.485393	-128.243571	-0.337
59.541357	-111.461071	-0.248	61.366069	-117.501437	-0.569
59.763436	-134.970454	-0.167	61.427991	-117.398730	-0.521
59.731600	-127.469704	-0.337	61.592671	-139.444898	-0.177
59.765632	-111.539212	-0.320	61.582212	-133.086160	-0.350
59.910987	-131.601737	-0.423	61.513823	-117.245920	-0.520
59.970437	-131.223942	-0.455	61.601273	-117.140870	-0.521
59.958045	-128.147474	-0.429	61.689402	-135.922180	-0.274
59.999515	-112.604801	-0.310	61.765789	-131.850281	-0.227
59.999168	-111.838610	-0.267	61.676885	-117.024800	-0.532
60.164429	-134.706314	-0.205	61.721010	-116.879267	-0.475
60.161861	-132.702758	-0.322	61.780612	-116.771617	-0.522
60.006880	-132.144340	-0.359	61.904497	-136.139832	-0.246
60.085581	-130.740239	-0.464	61.929255	-132.496252	-0.500
60.120011	-130.282088	-0.422	61.836601	-116.670663	-0.541
60.082457	-129.368694	-0.343	61.979414	-116.437354	-0.510
60.019400	-116.932542	-0.461	62.093803	-136.281273	-0.337
60.105719	-116.758264	-0.492	62.163411	-133.255709	-0.256
60.149201	-113.555587	-0.340	62.087953	-116.287620	-0.523
60.120024	-113.380835	-0.326	62.192562	-134.876800	-0.266
60.045615	-113.255467	-0.324	62.301876	-116.428995	-0.639
60.034571	-113.127640	-0.333	62.191900	-116.304726	-0.540
60.025578	-112.973167	-0.289	62.465507	-136.663314	-0.308
60.047143	-112.809543	-0.275	62.406143	-116.494098	-0.573
60.013852	-112.246923	-0.058	62.479298	-114.726915	-0.598
60.012517	-112.044760	-0.149	62.458350	-114.586675	-0.610
60.005147	-111.953907	-0.215	62.473449	-114.442388	-0.615
60.166830	-129.754959	-0.393	62.417642	-114.306228	-0.626
60.233109	-123.477119	-0.668	62.599565	-136.858847	-0.308
60.173263	-116.692136	-0.482	62.623434	-131.282307	-0.237
60.263499	-116.576437	-0.476	62.556187	-116.409466	-0.619
60.306142	-114.096957	-0.563	62.640905	-116.257097	-0.616
60.227599	-113.846877	-0.501	62.634534	-115.246727	-0.588
60.174242	-113.705519	-0.456	62.531527	-114.944814	-0.587
60.448614	-134.848760	-0.127	62.550816	-114.362800	-0.610
60.454483	-134.230741	-0.199	62.530776	-114.163036	-0.615
60.398512	-133.743330	-0.214	62.800888	-136.594565	-0.231
60.485709	-133.300273	-0.242	62.827864	-116.010494	-0.540
60.340630	-133.064830	-0.282	62.784484	-115.993104	-0.679
60.350793	-129.054867	-0.236	62.758530	-115.806685	-0.682
60.384657	-116.399017	-0.481	62.709392	-115.588955	-0.606
60.431631	-114.296081	-0.631	62.686215	-115.464678	-0.612
60.577428	-134.684865	-0.158	63.134988	-136.487668	-0.224
60.641475	-116.353918	-0.488	63.175075	-130.200555	-0.176
60.506011	-116.253066	-0.455	63.540849	-137.342422	-0.190
60.591845	-116.100580	-0.443	63.770559	-137.754959	-0.121
60.573562	-114.440382	-0.685	63.873371	-138.128925	-0.170
60.758532	-137.546656	-0.242	63.880003	-128.778228	-0.192
60.786357	-136.479814	-0.052	64.086482	-141.001334	0.024
60.772576	-136.064370	-0.178	64.212333	-138.559679	-0.188
60.725573	-135.090408	-0.125	64.386748	-138.343508	-0.156
60.800218	-116.592189	-0.559	64.618545	-138.364819	-0.118
60.716648	-116.472251	-0.524	64.837906	-138.359702	-0.213
60.725057	-115.892467	-0.440	65.068155	-138.248833	0.051
60.742438	-115.739655	-0.442	65.361460	-138.299733	-0.233
60.738536	-115.517791	-0.391	65.772276	-137.846413	-0.040
60.724844	-115.354635	-0.437	65.898845	-137.530189	-0.122
60.720179	-115.080967	-0.526	66.260520	-136.809354	-0.017
60.719244	-114.782325	-0.609	66.449055	-136.632583	-0.117
60.752417	-114.596584	-0.638	67.097792	-136.125514	0.013
60.824692	-114.371228	-0.661	67.244580	-135.207017	0.044
60.859181	-137.062852	-0.186	67.428598	-134.865498	-0.124
60.852275	-135.644891	-0.187	67.437389	-133.771510	-0.116
60.984899	-117.247314	-0.567	68.302152	-133.510629	-0.305
60.935532	-117.067250	-0.506			
60.931008	-116.918138	-0.580			
60.870273	-116.731286	-0.598			
60.837793	-115.780270	-0.553			

The GPS Height Transformation (v2.0)

Appendix F

Maps showing the agreement between GPS/CGG2000-derived orthometric heights and scientific Jan01d orthometric heights (in cm) at 1090 stations

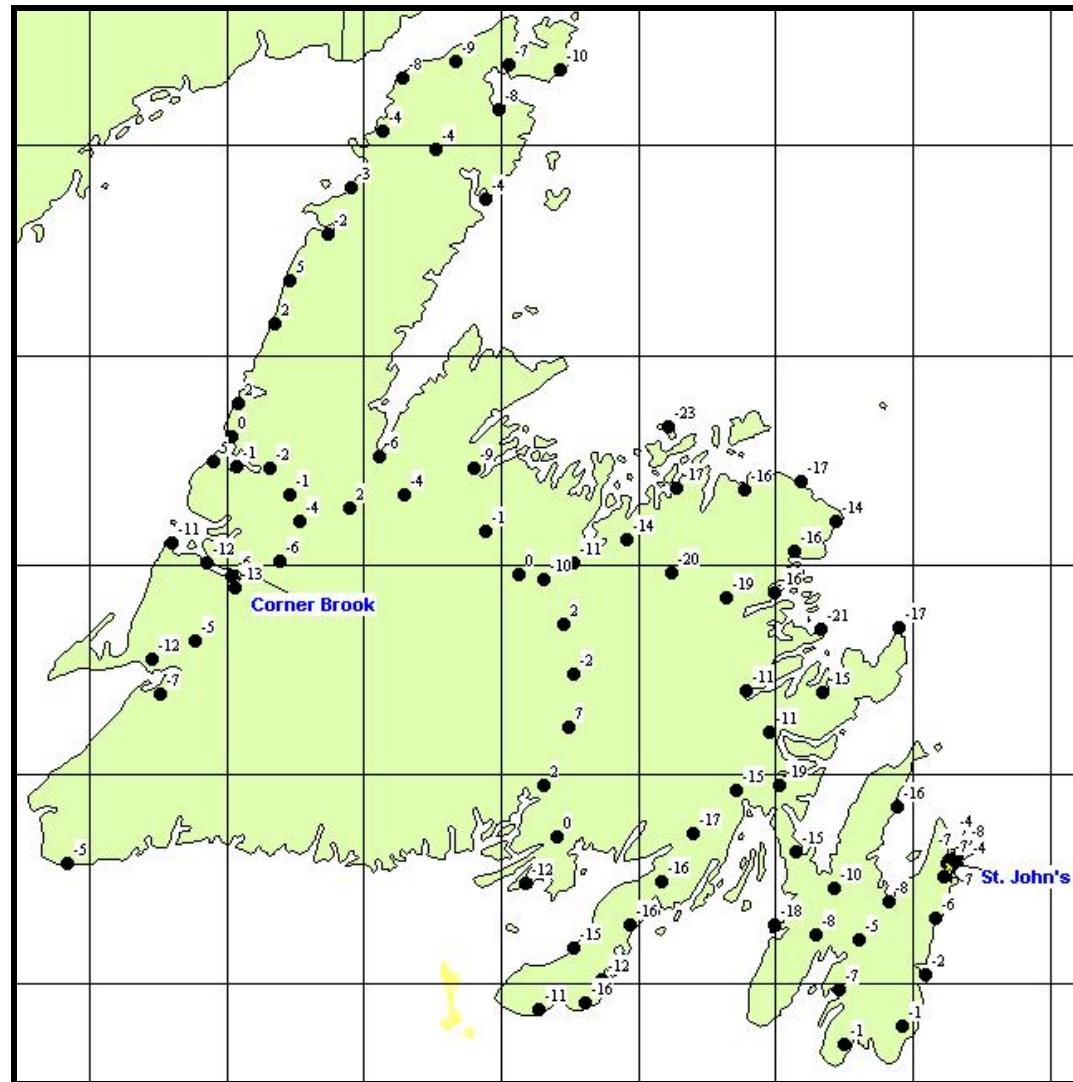
Note: The stations in red are not part of the determination of the height transformation (HTv2.0)

The maps are shown from east to west as follows:

1. Newfoundland
2. Maritimes and Gaspé Peninsula
3. Southern Québec (Montréal, Québec City and Eastern Township)
4. Northern Québec and Labrador
5. Ottawa
6. Southern Ontario
7. North-East Ontario and West Québec
8. Western Ontario
9. Southern Manitoba and Saskatchewan
10. Northern Manitoba and Saskatchewan
11. Southern Alberta and South-East British Columbia
12. Northern Alberta
13. Great Slave Lake, Northwest Territories
14. Southern British Columbia
15. Northern British Columbia
16. The Yukon Territory

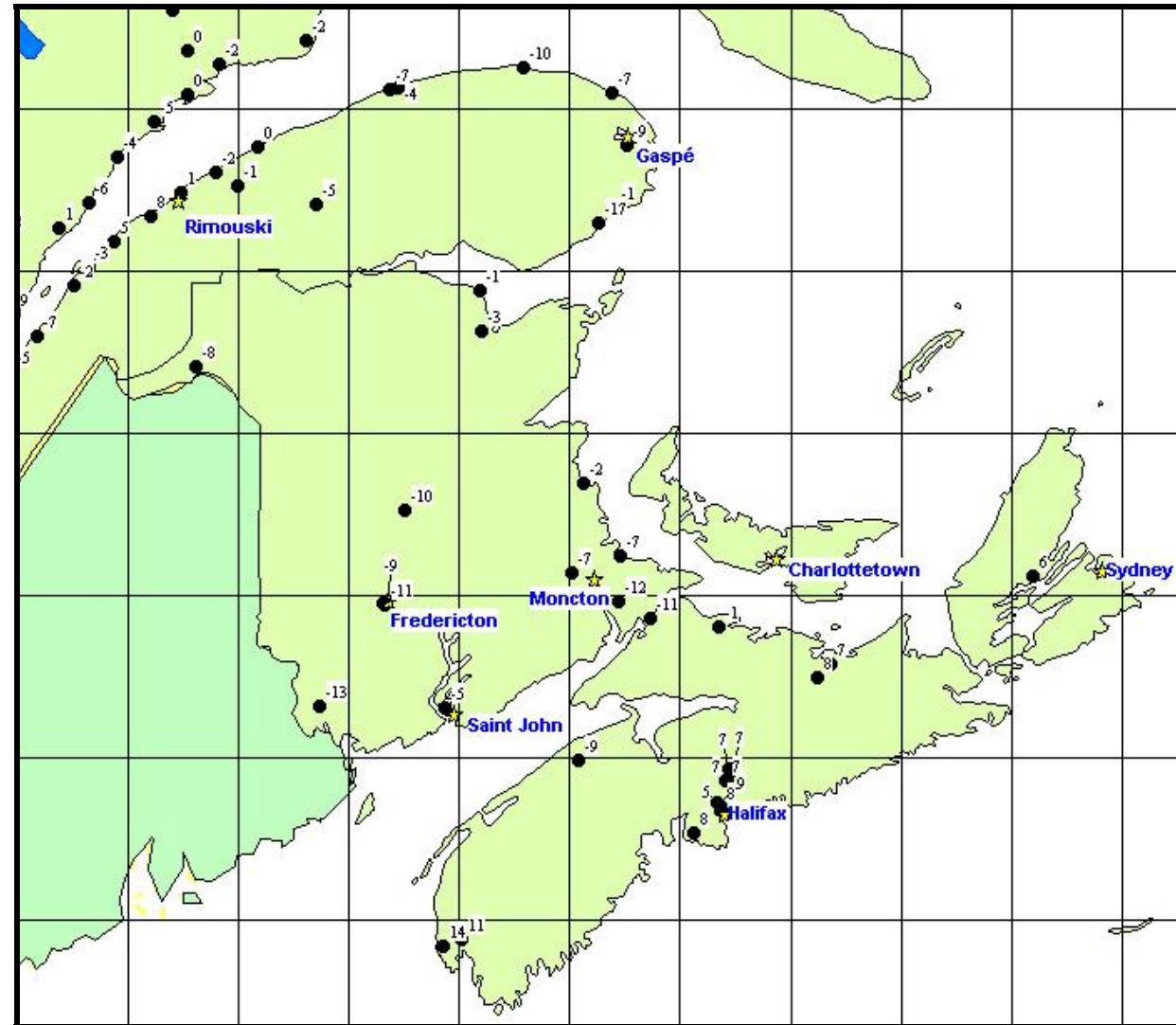
The GPS Height Transformation (v2.0)

Figure F.1: Newfoundland



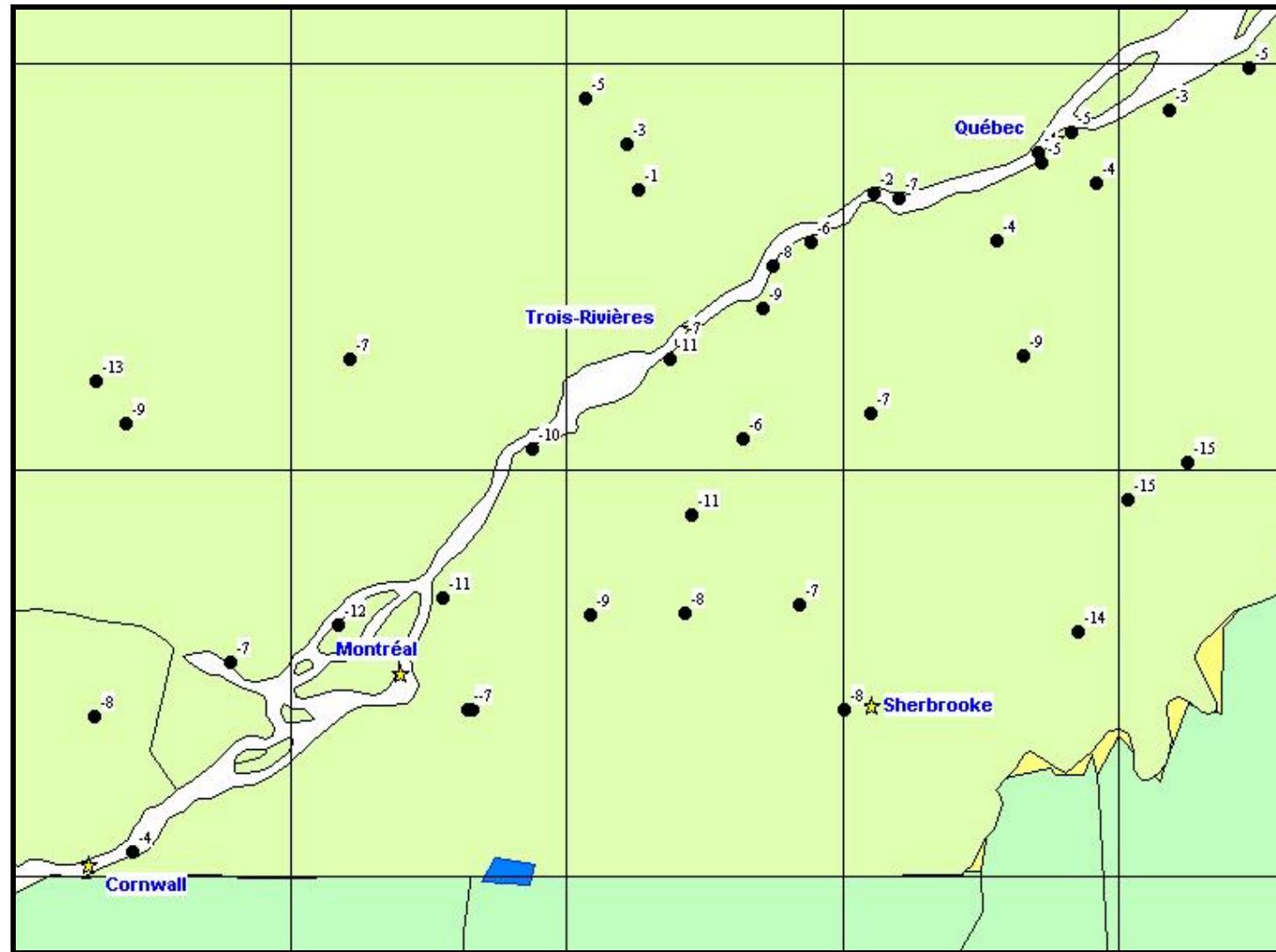
The GPS Height Transformation (v2.0)

Figure F.2: Maritimes and Gaspe Peninsula



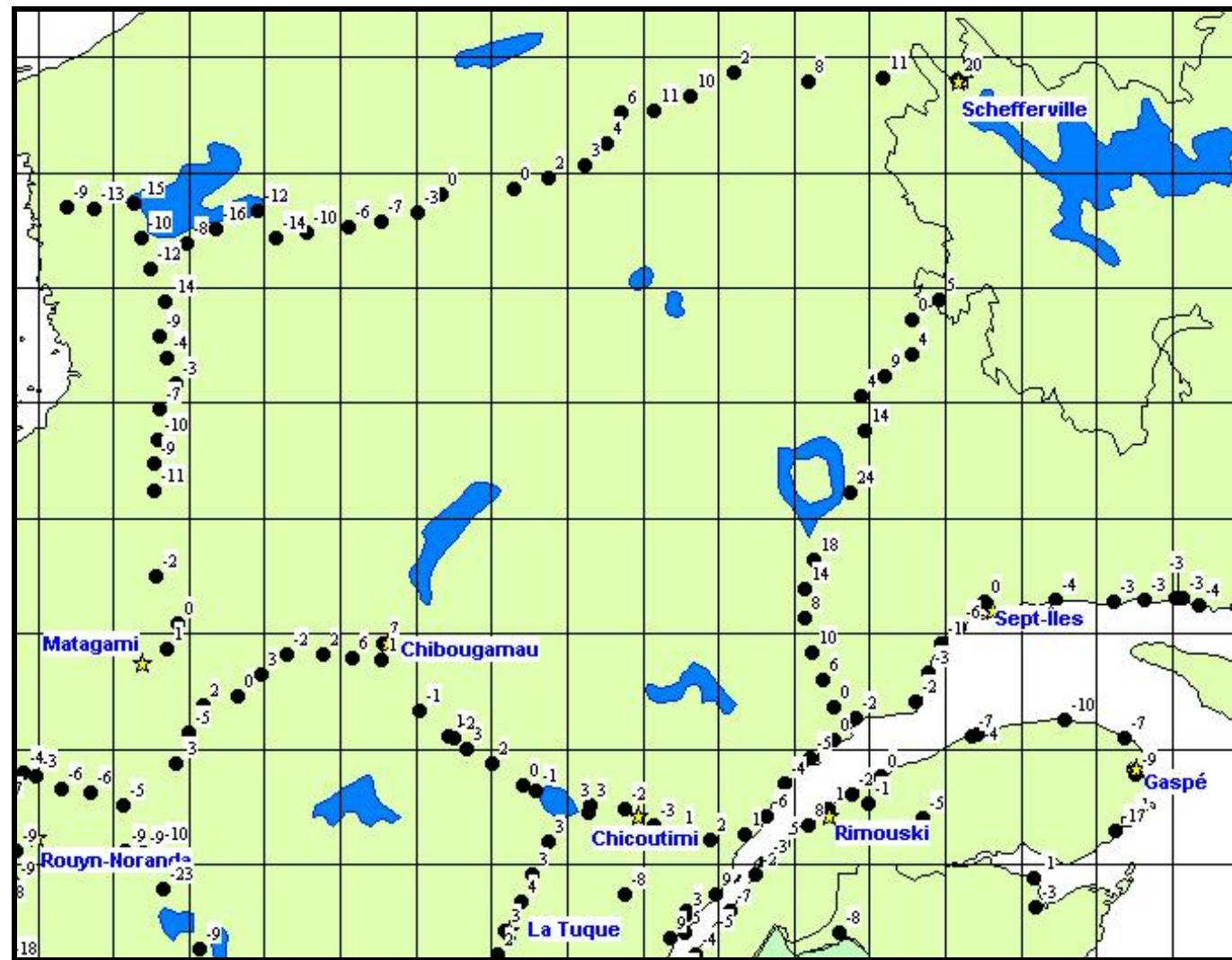
The GPS Height Transformation (v2.0)

Figure F.3: Southern Québec (Montreal, Quebec City and Eastern Township)



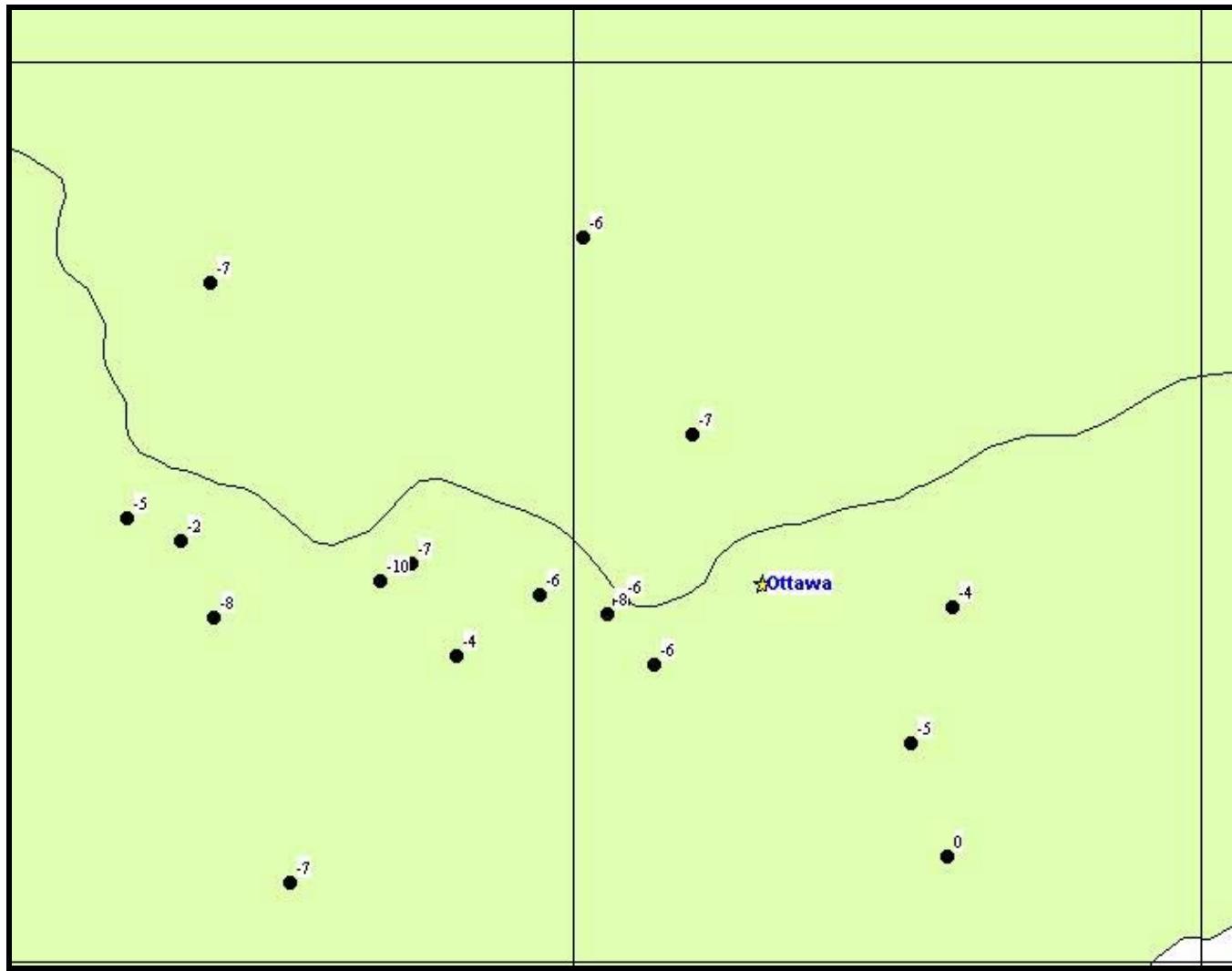
The GPS Height Transformation (v2.0)

Figure F.4: Northern Québec and Labrador



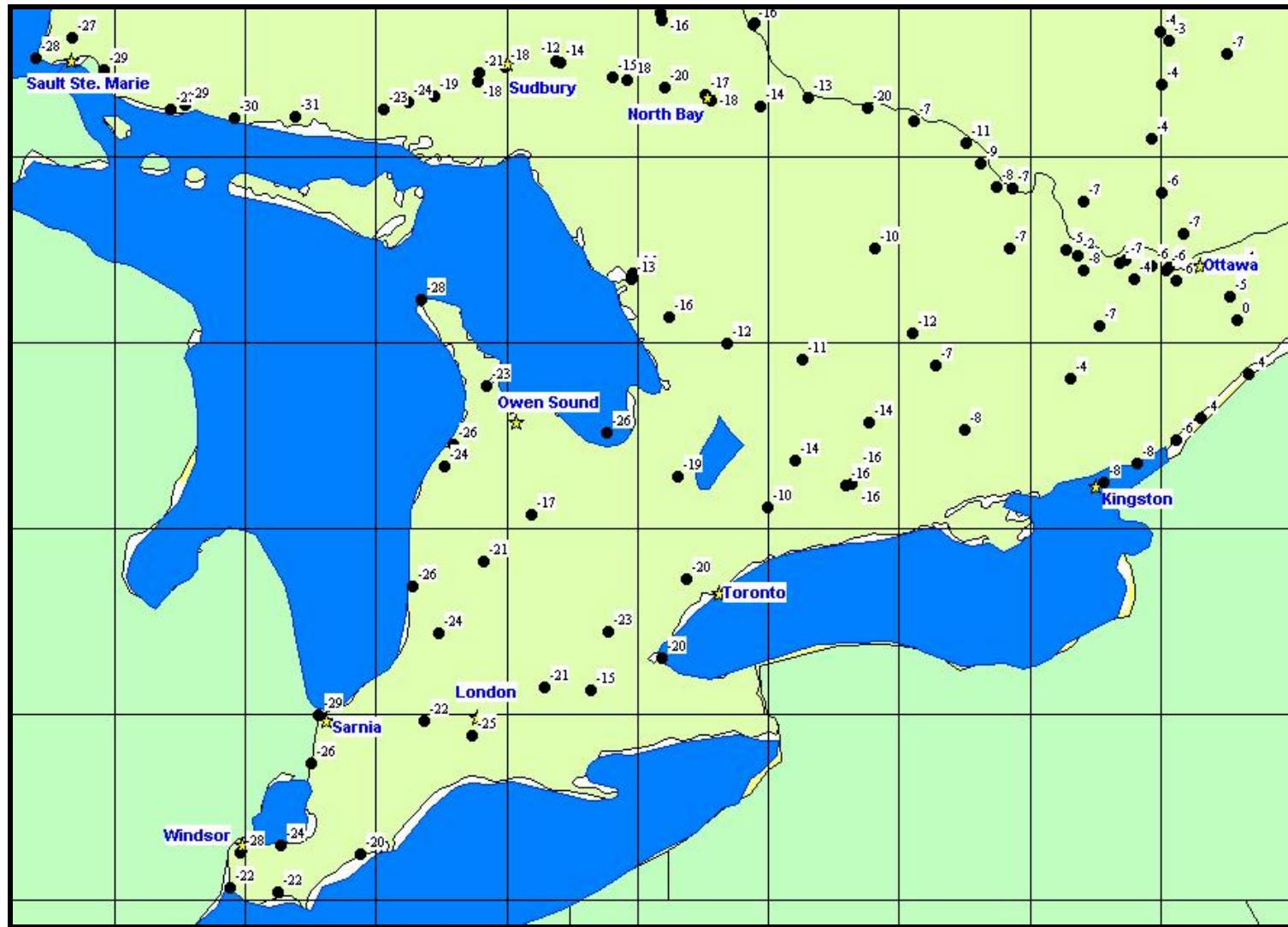
The GPS Height Transformation (v2.0)

Figure F.5: Ottawa



The GPS Height Transformation (v2.0)

Figure F.6: Southern Ontario



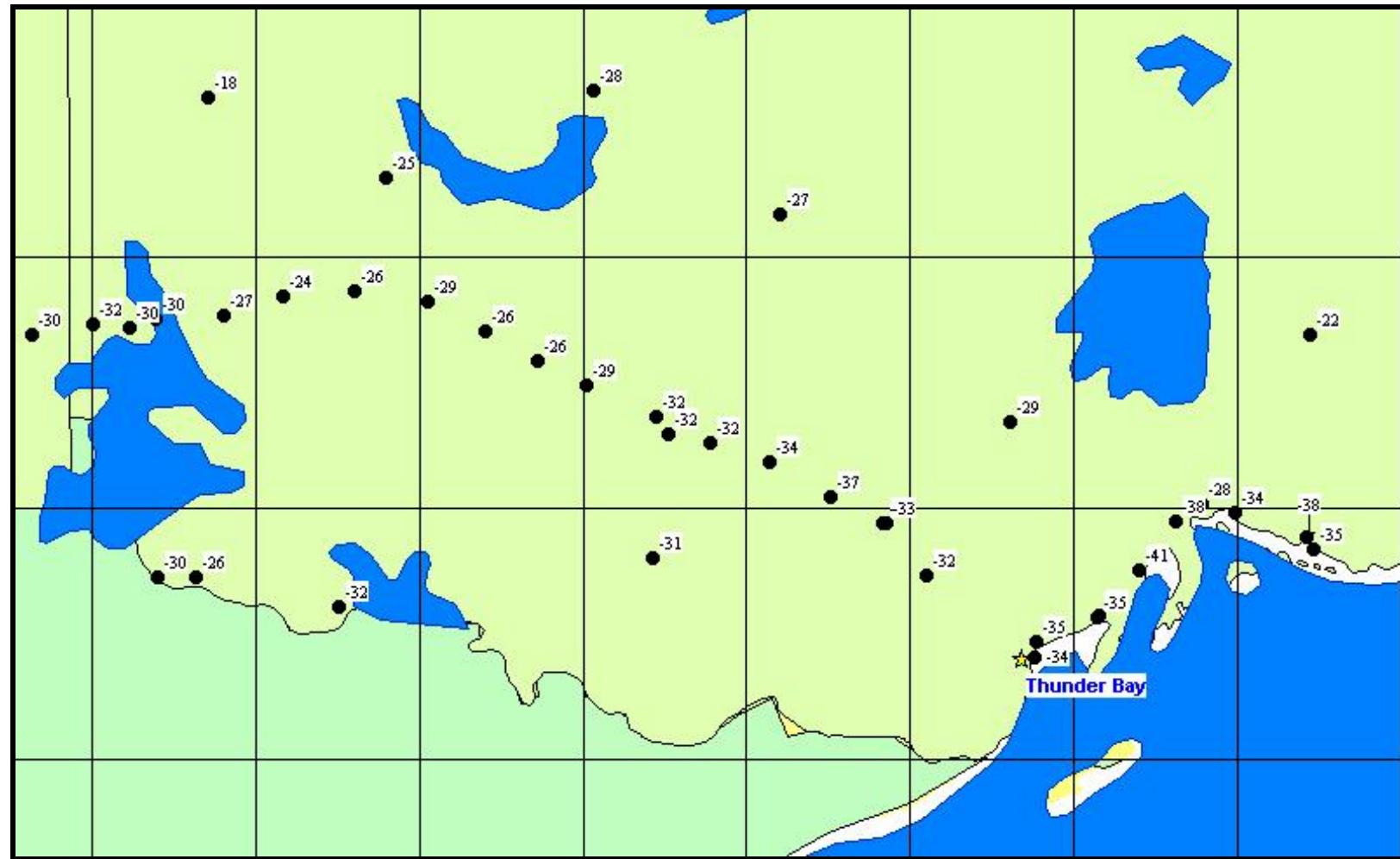
The GPS Height Transformation (v2.0)

Figure F.7: North-East Ontario and West Québec



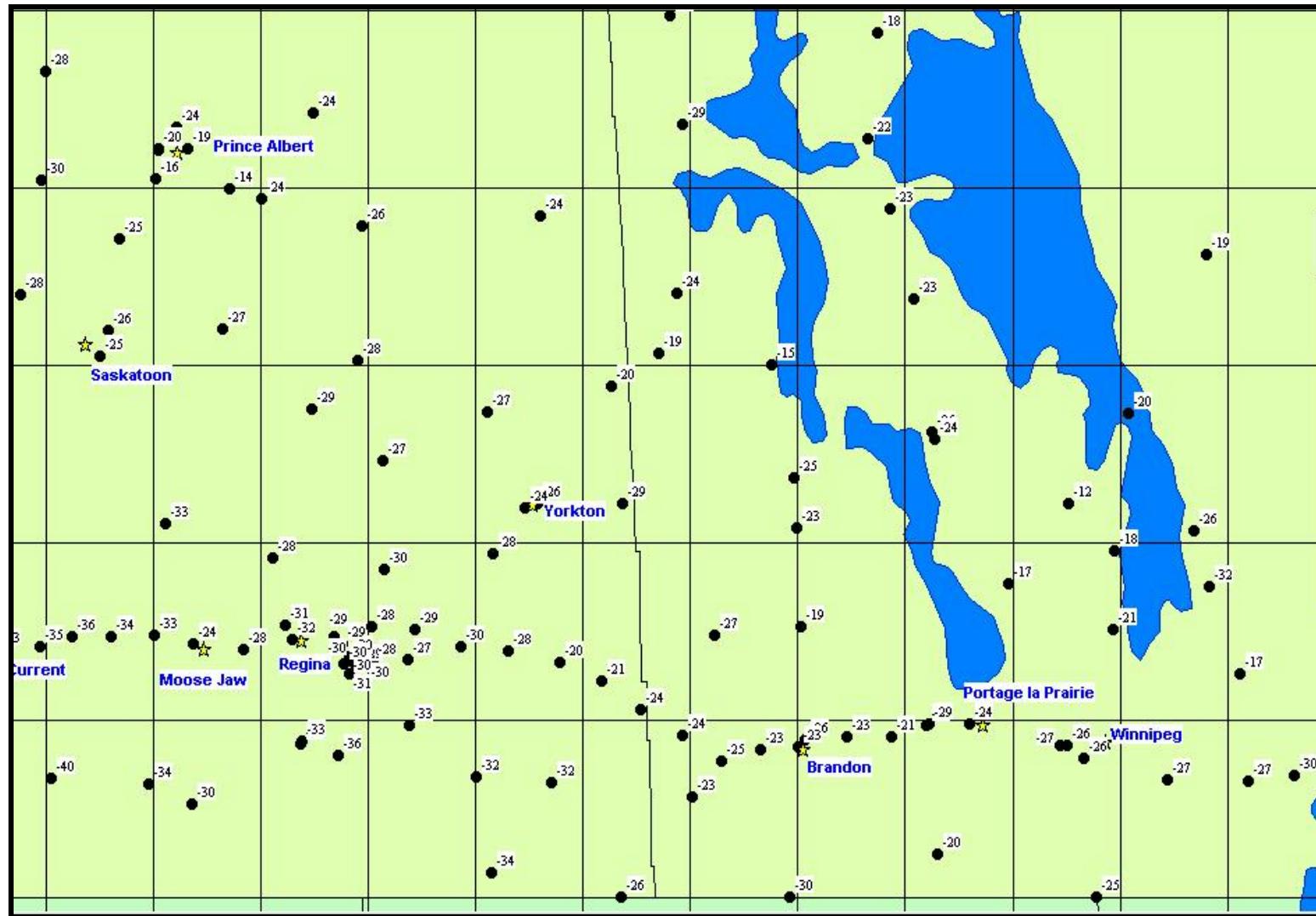
The GPS Height Transformation (v2.0)

Figure F.8: Western Ontario



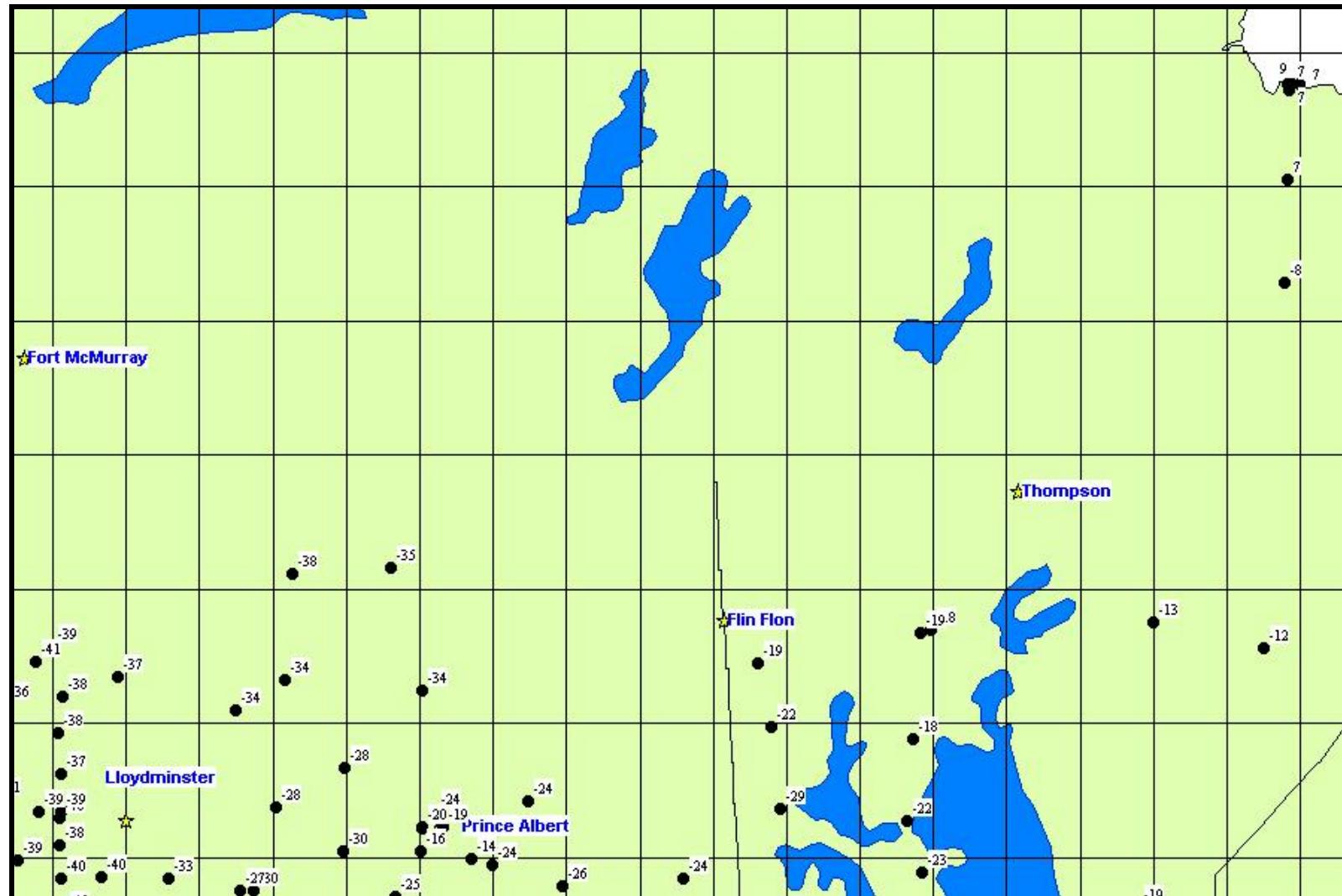
The GPS Height Transformation (v2.0)

Figure F.9: Southern Manitoba and Saskatchewan



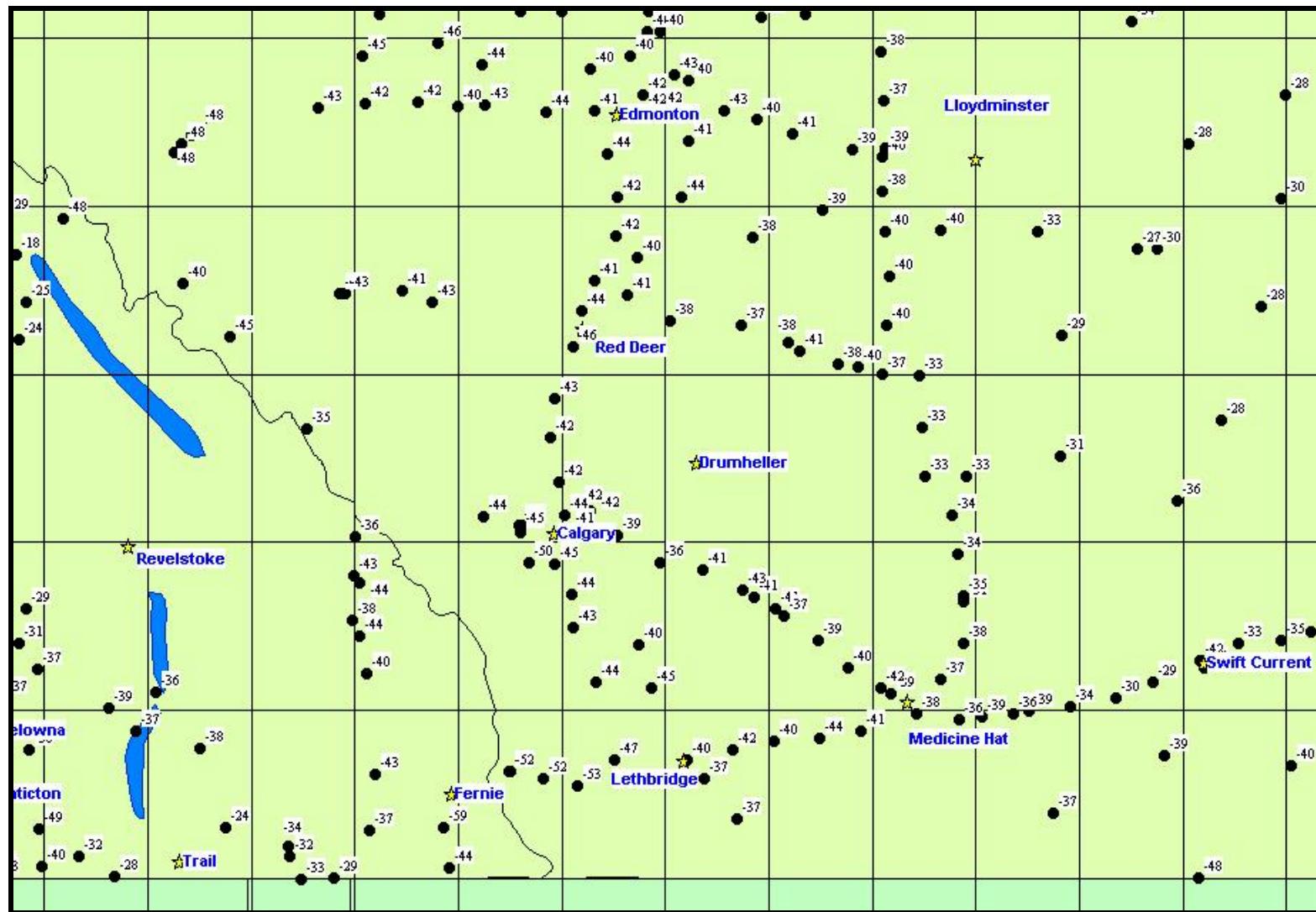
The GPS Height Transformation (v2.0)

Figure F.10: Northern Manitoba and Saskatchewan



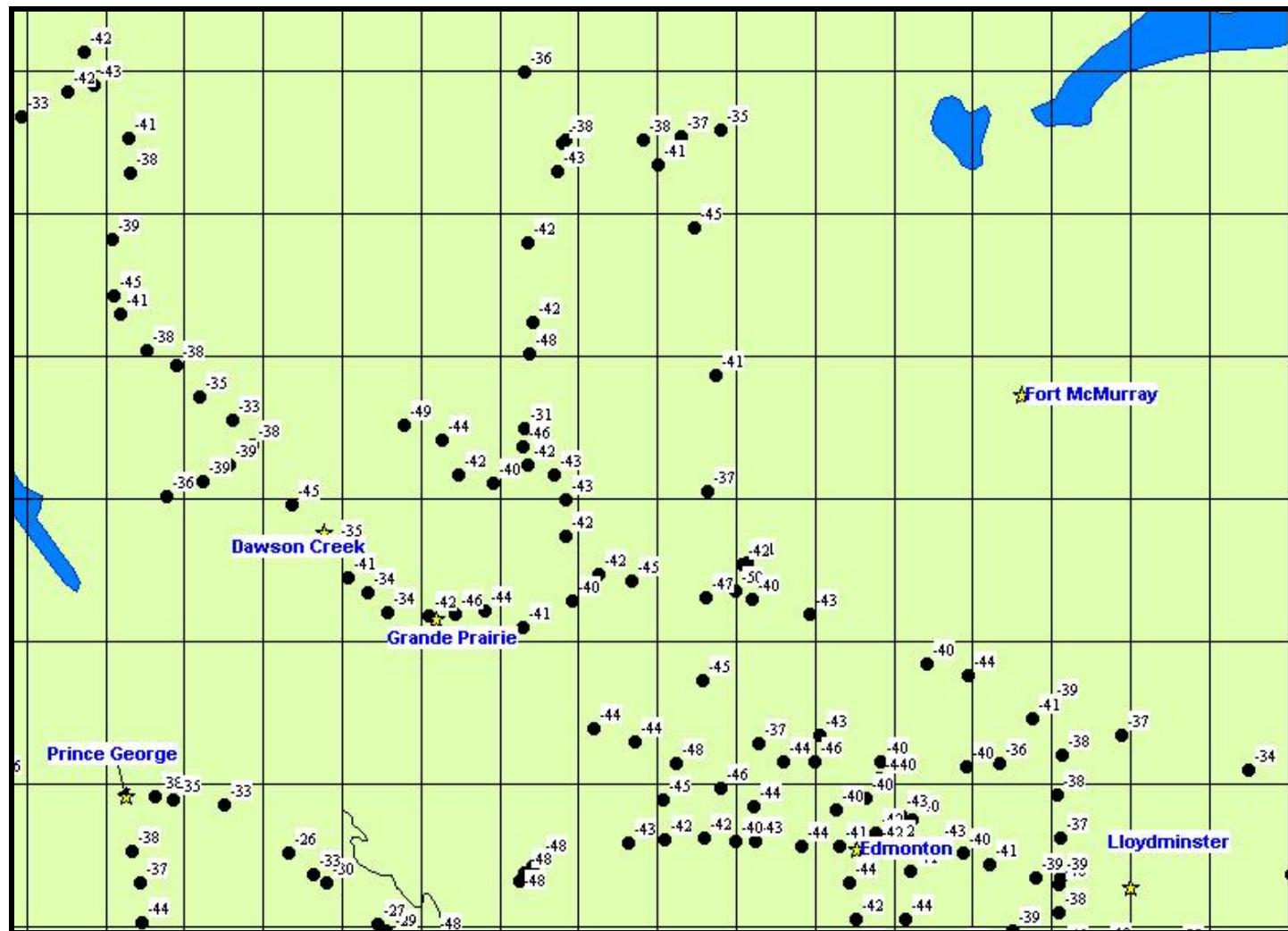
The GPS Height Transformation (v2.0)

Figure F.11: Southern Alberta and South-East British Columbia



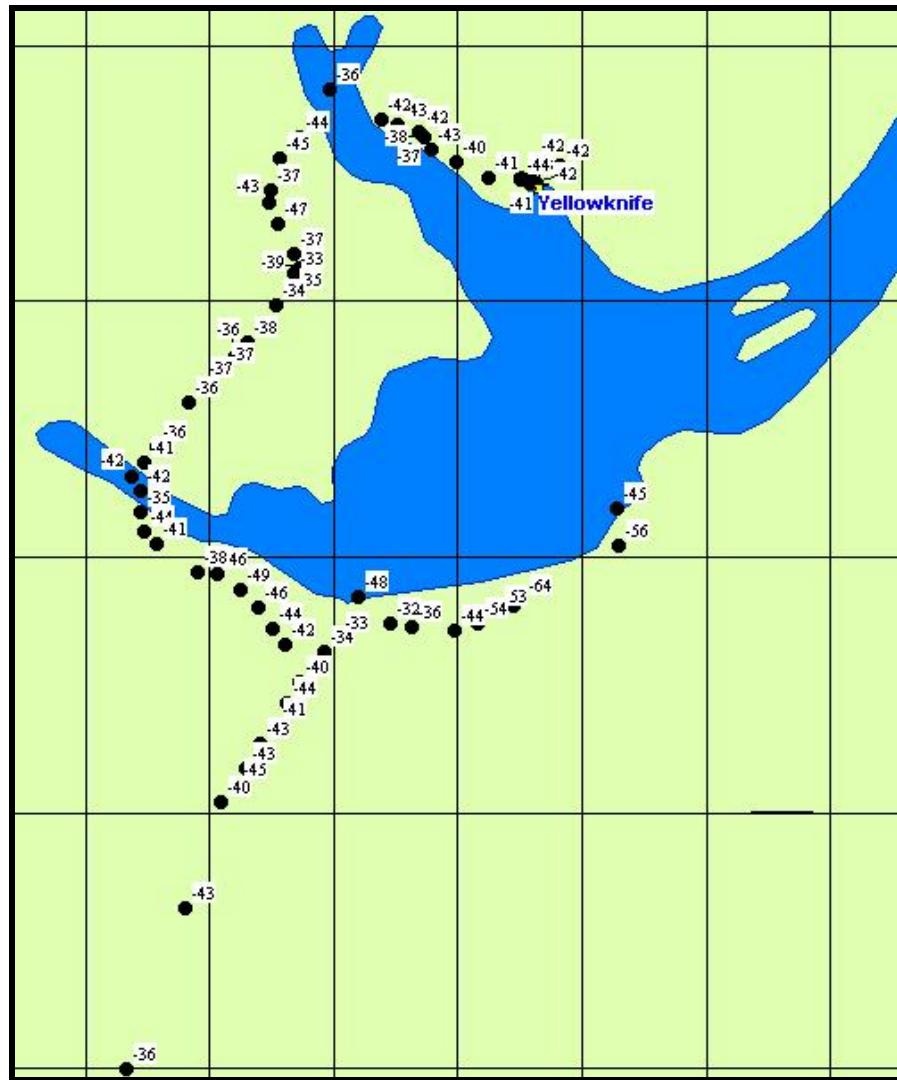
The GPS Height Transformation (v2.0)

Figure F.12: Northern Alberta



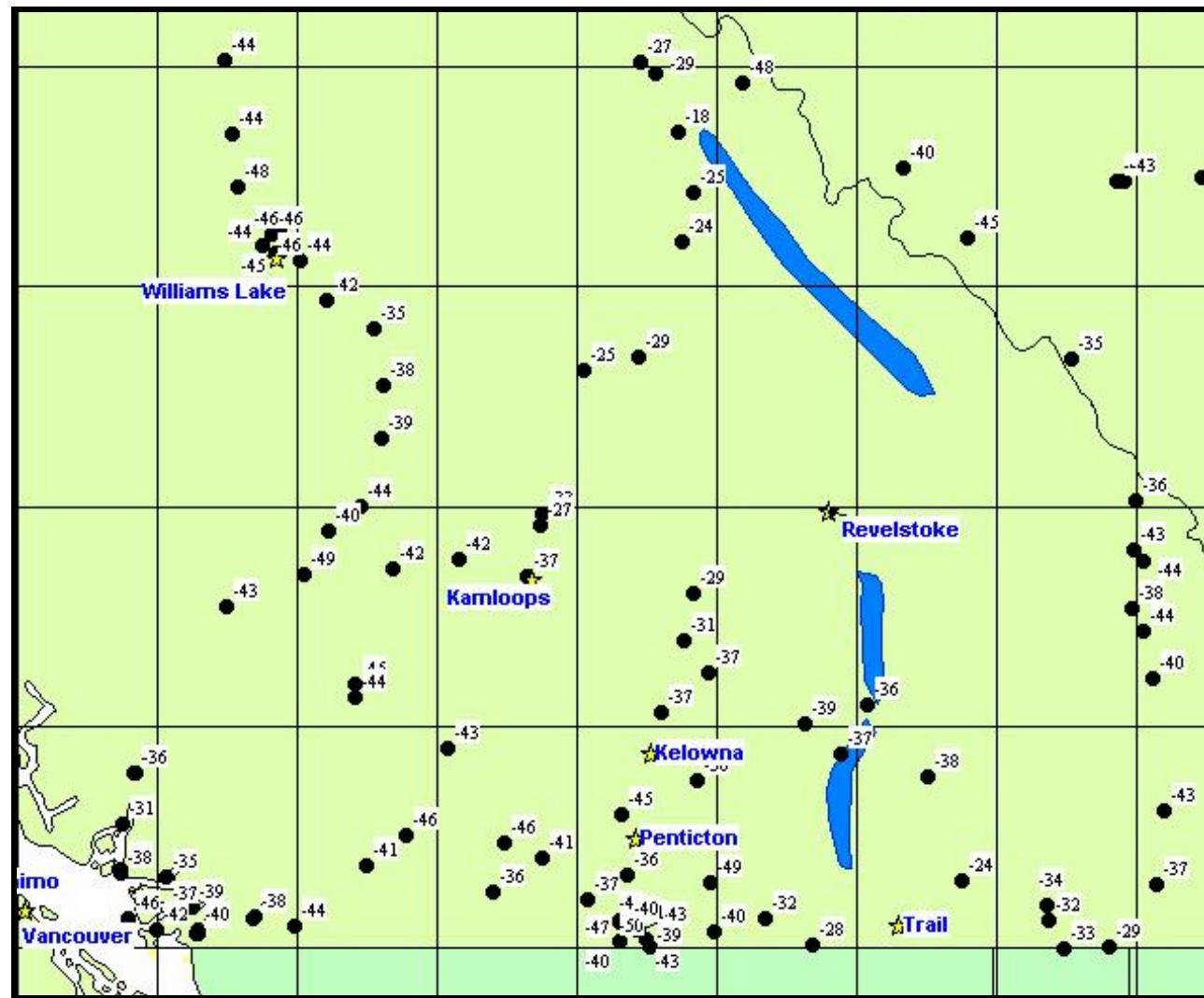
The GPS Height Transformation (v2.0)

Figure F.13: Great Slave Lake, Northwest Territories



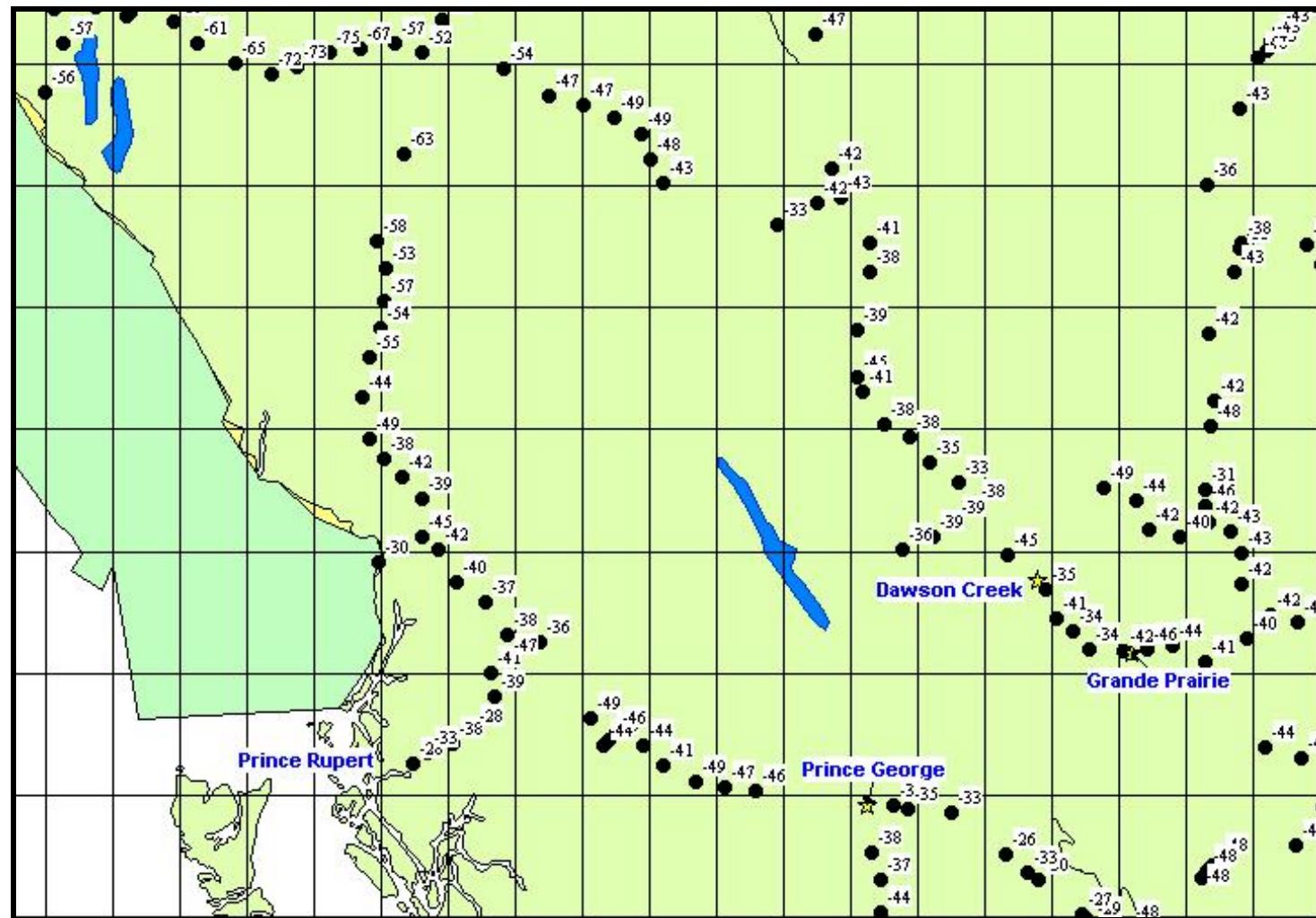
The GPS Height Transformation (v2.0)

Figure F.14: Southern British Columbia



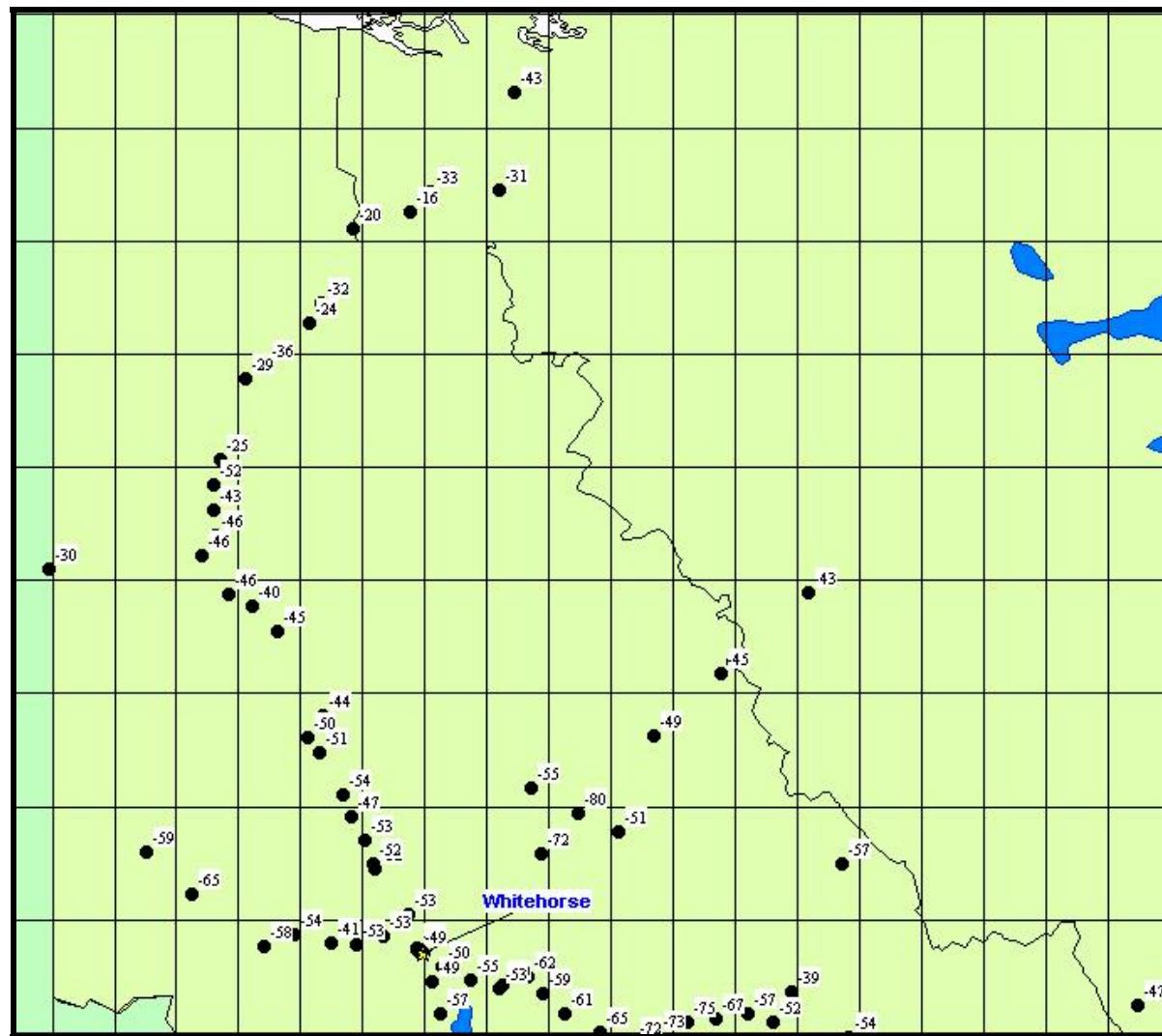
The GPS Height Transformation (v2.0)

Figure F.15: Northern British Columbia



The GPS Height Transformation (v2.0)

Figure F.18: The Yukon Territory



The GPS Height Transformation (v2.0)

Appendix G

Maps showing the agreement between GPS/HT v2.0-derived orthometric heights and published CGVD28 orthometric heights (in cm) at 1967 stations

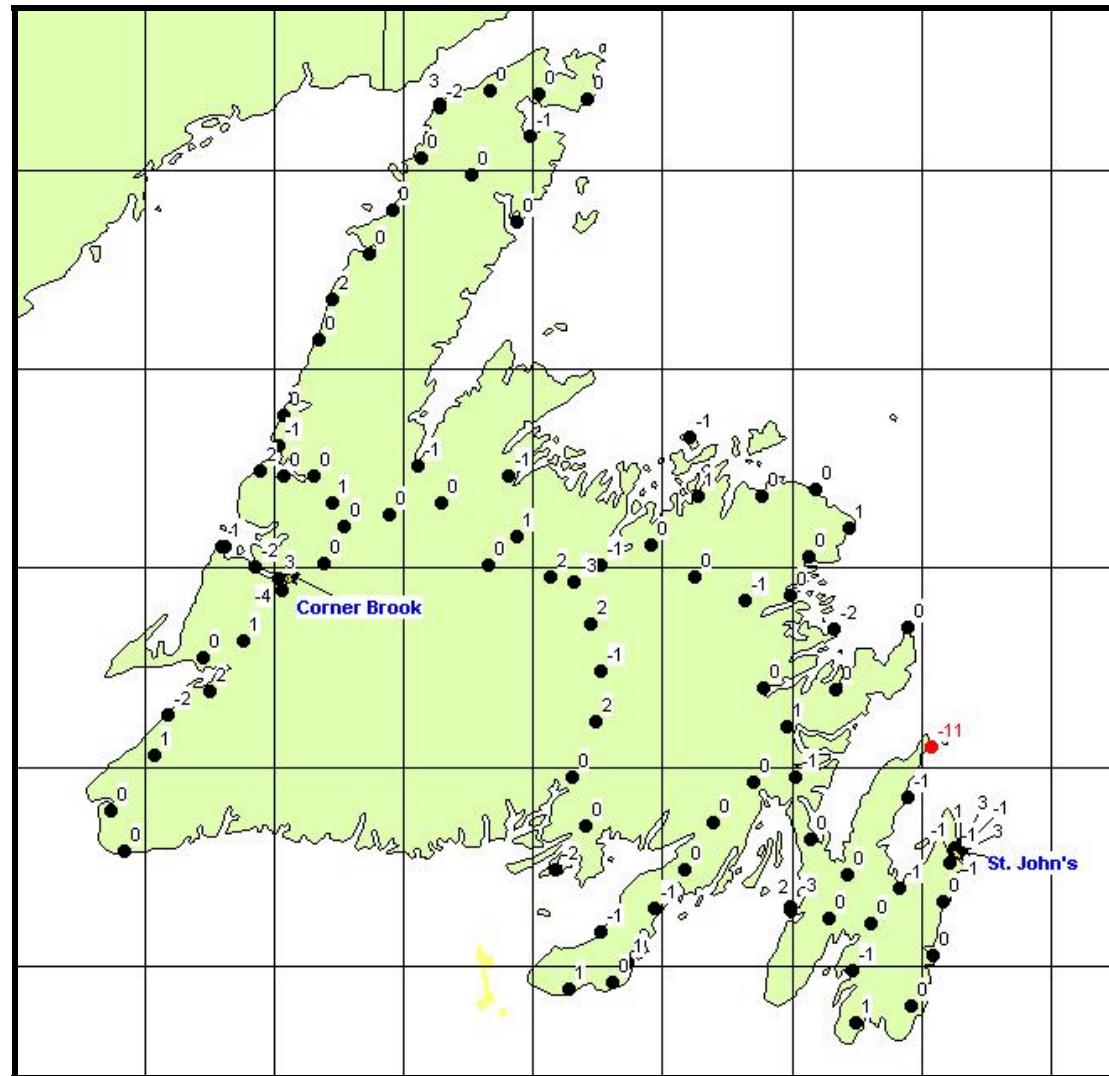
Note: The stations in red are not part of the determination of the height transformation (HTv2.0)

The maps are shown from east to west as follows:

1. Newfoundland
2. Maritimes and Gaspe Peninsula
3. Southern Québec (Montréal, Québec City and Eastern Township)
4. Northern Québec and Labrador
5. Ottawa
6. Southern Ontario
7. North-East Ontario and West Québec
8. Western Ontario
9. Southern Manitoba and Saskatchewan
10. Northern Manitoba and Saskatchewan
11. Southern Alberta and South-East British Columbia
12. Northern Alberta
13. Great Slave Lake, Northwest Territories
14. Southern British Columbia
15. Vancouver
16. Victoria
17. Northern British Colombia
18. The Yukon Territory

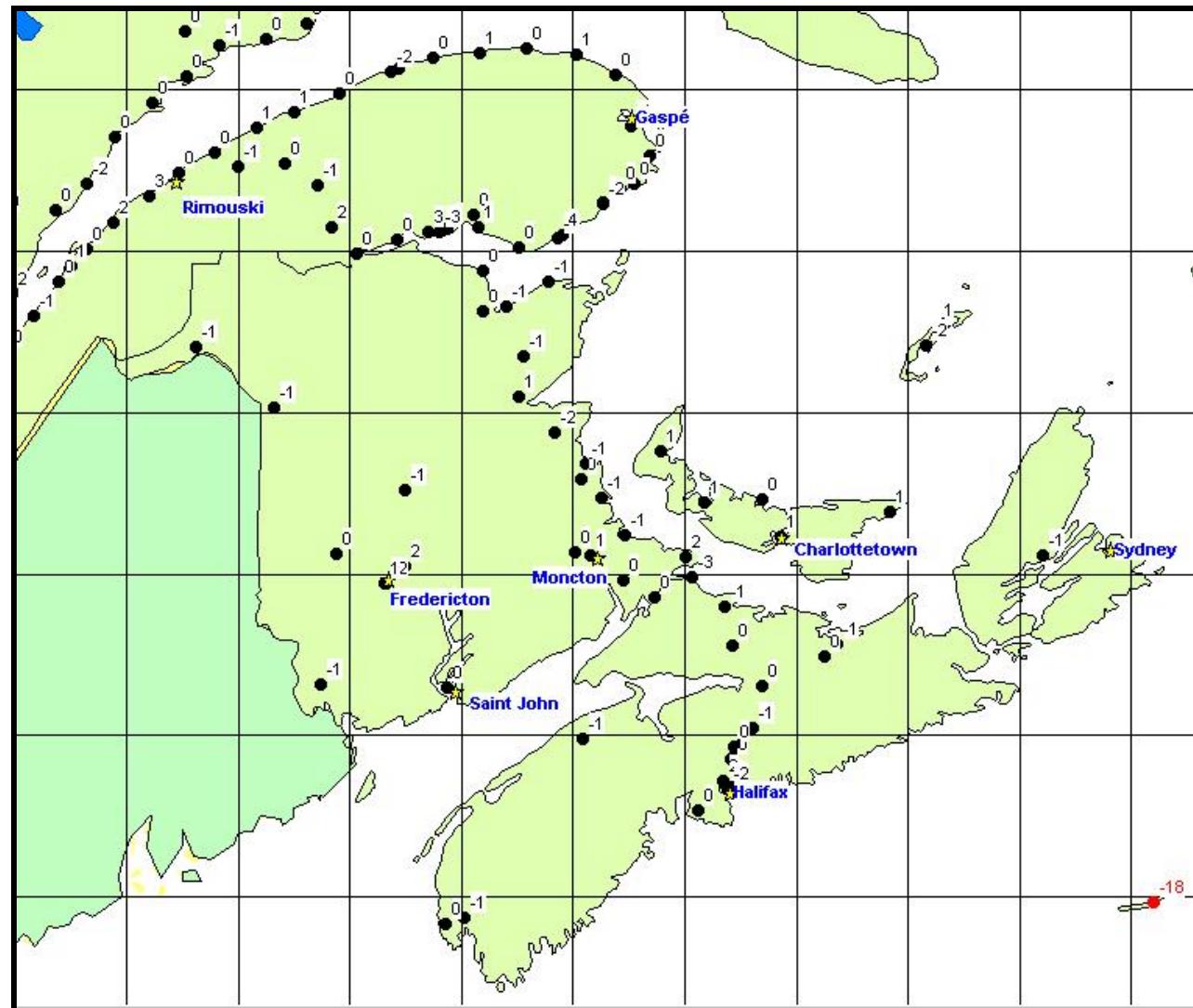
The GPS Height Transformation (v2.0)

Figure G.1: Newfoundland



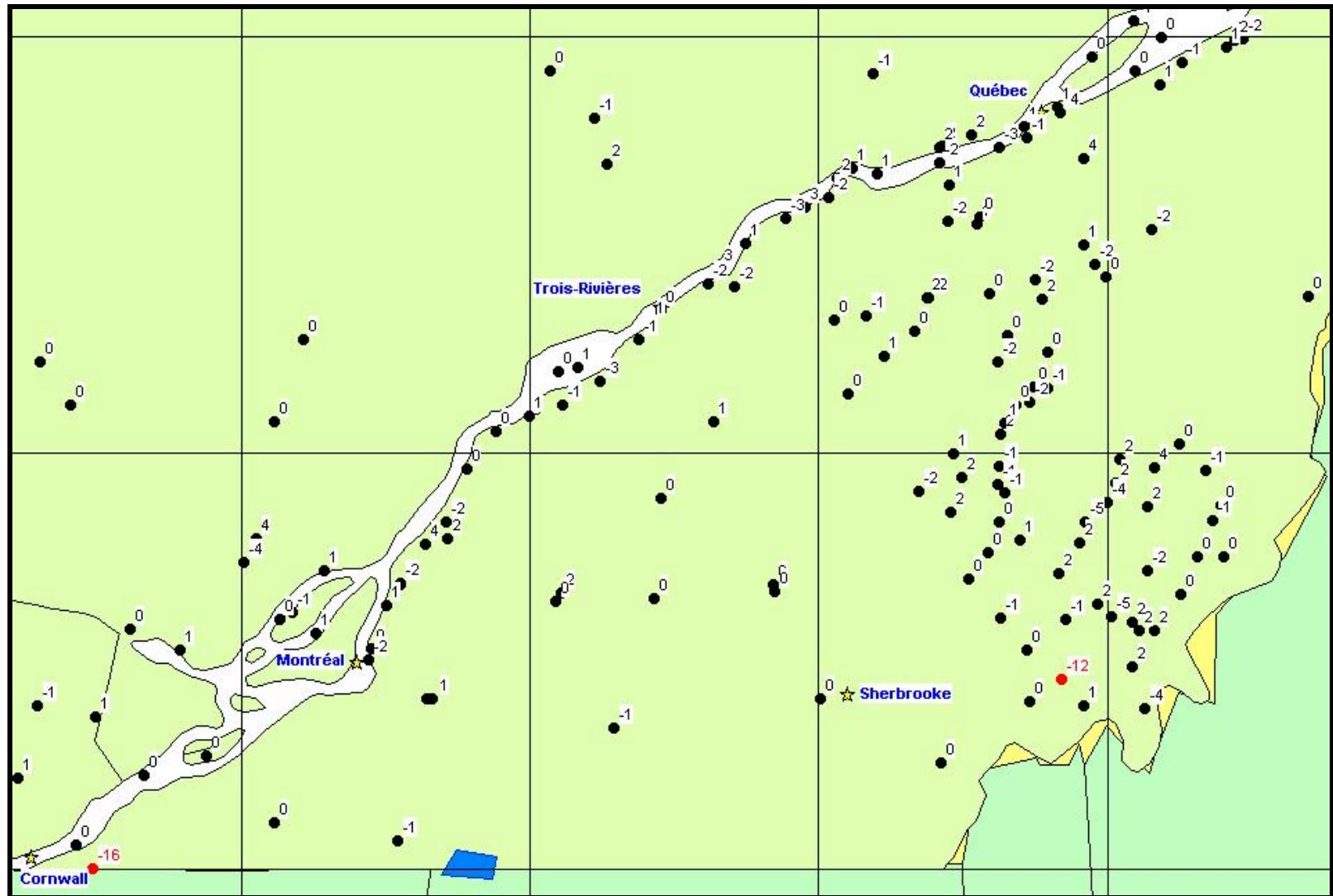
The GPS Height Transformation (v2.0)

Figure G.2: Maritimes and Gaspe Peninsula



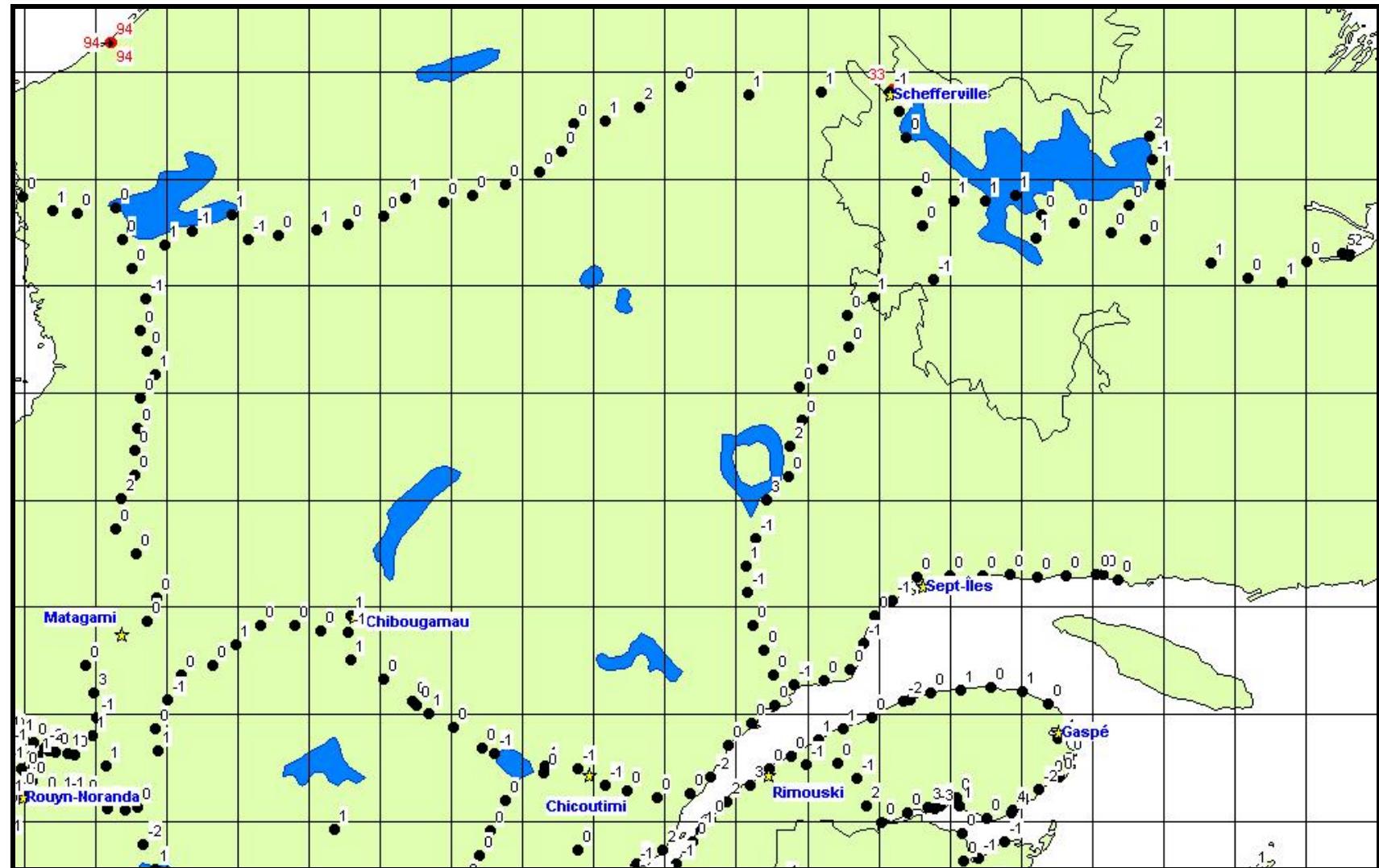
The GPS Height Transformation (v2.0)

Figure G.3: Southern Québec (Montreal, Quebec City and Eastern Township)



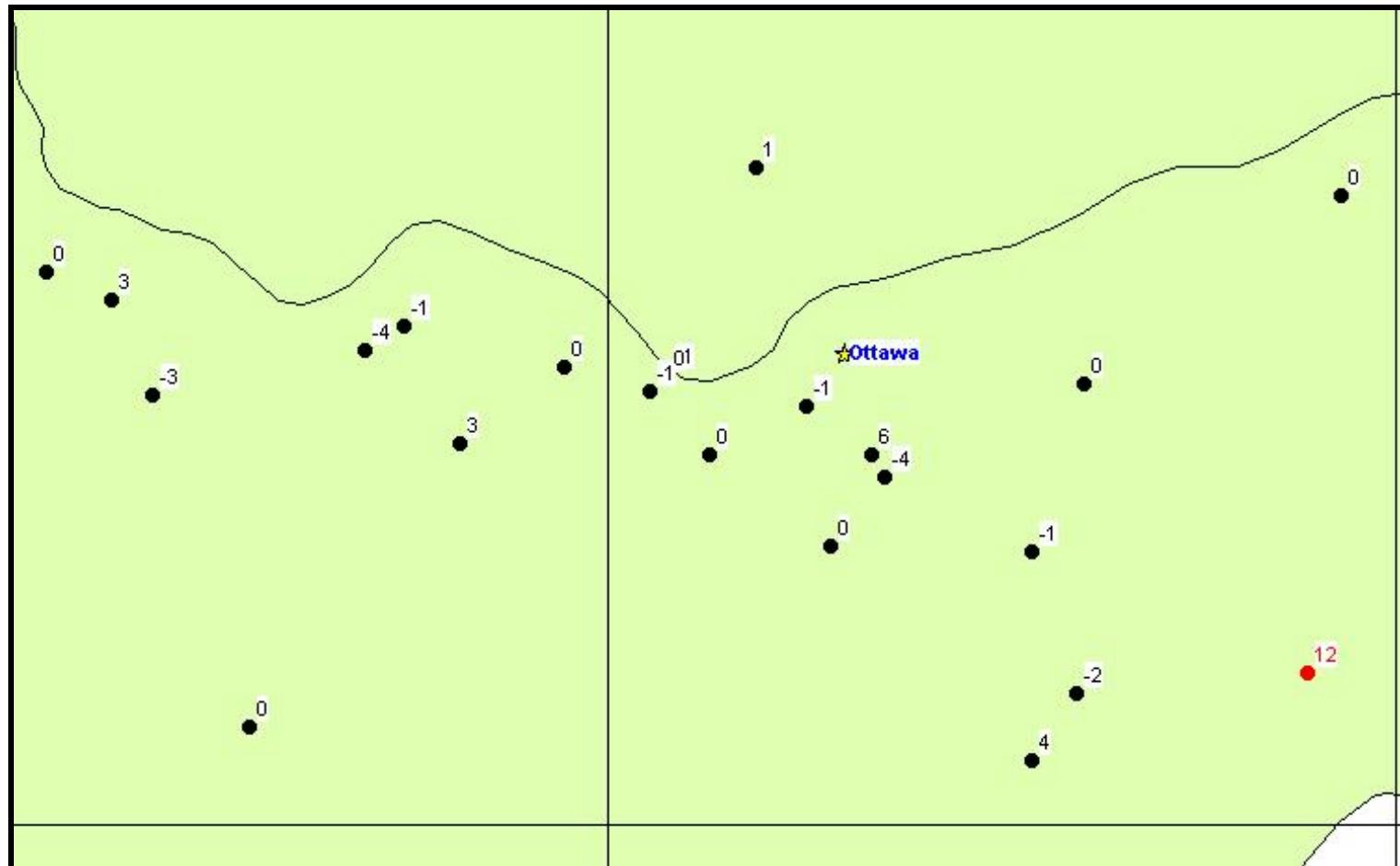
The GPS Height Transformation (v2.0)

Figure G.4: Northern Québec and Labrador



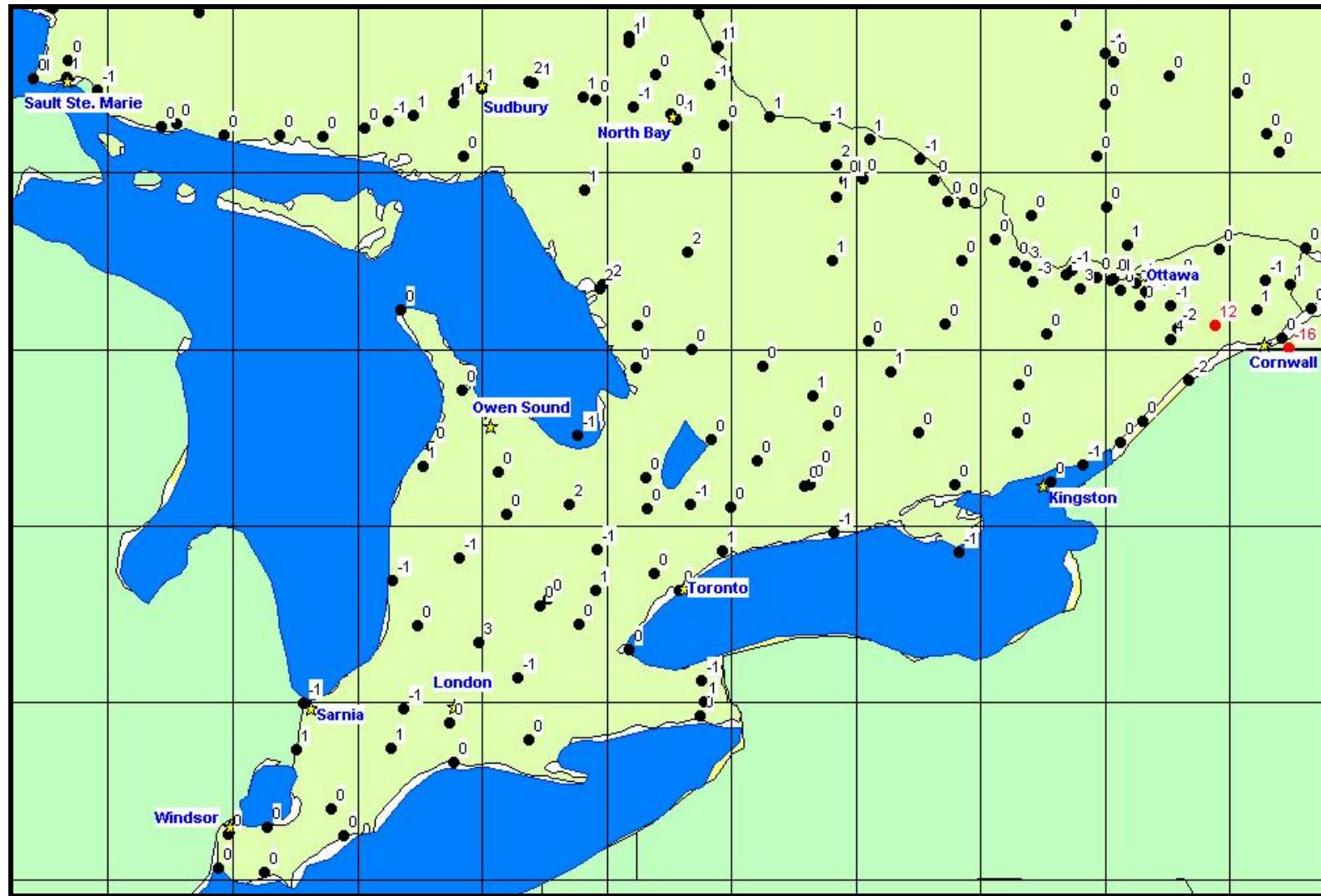
The GPS Height Transformation (v2.0)

Figure G.5: Ottawa



The GPS Height Transformation (v2.0)

Figure G.6: Southern Ontario



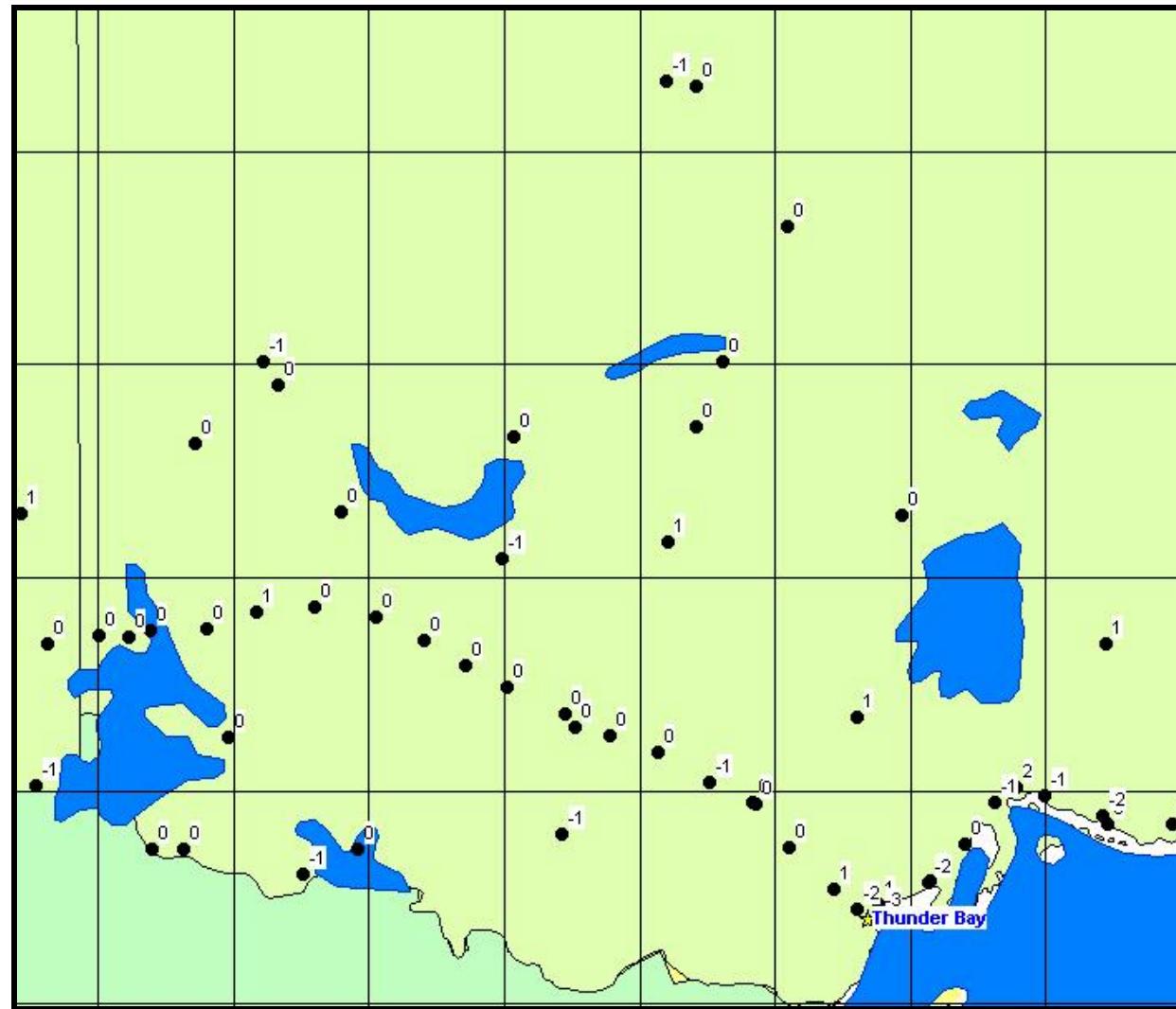
The GPS Height Transformation (v2.0)

Figure G.7: North-East Ontario and West Québec



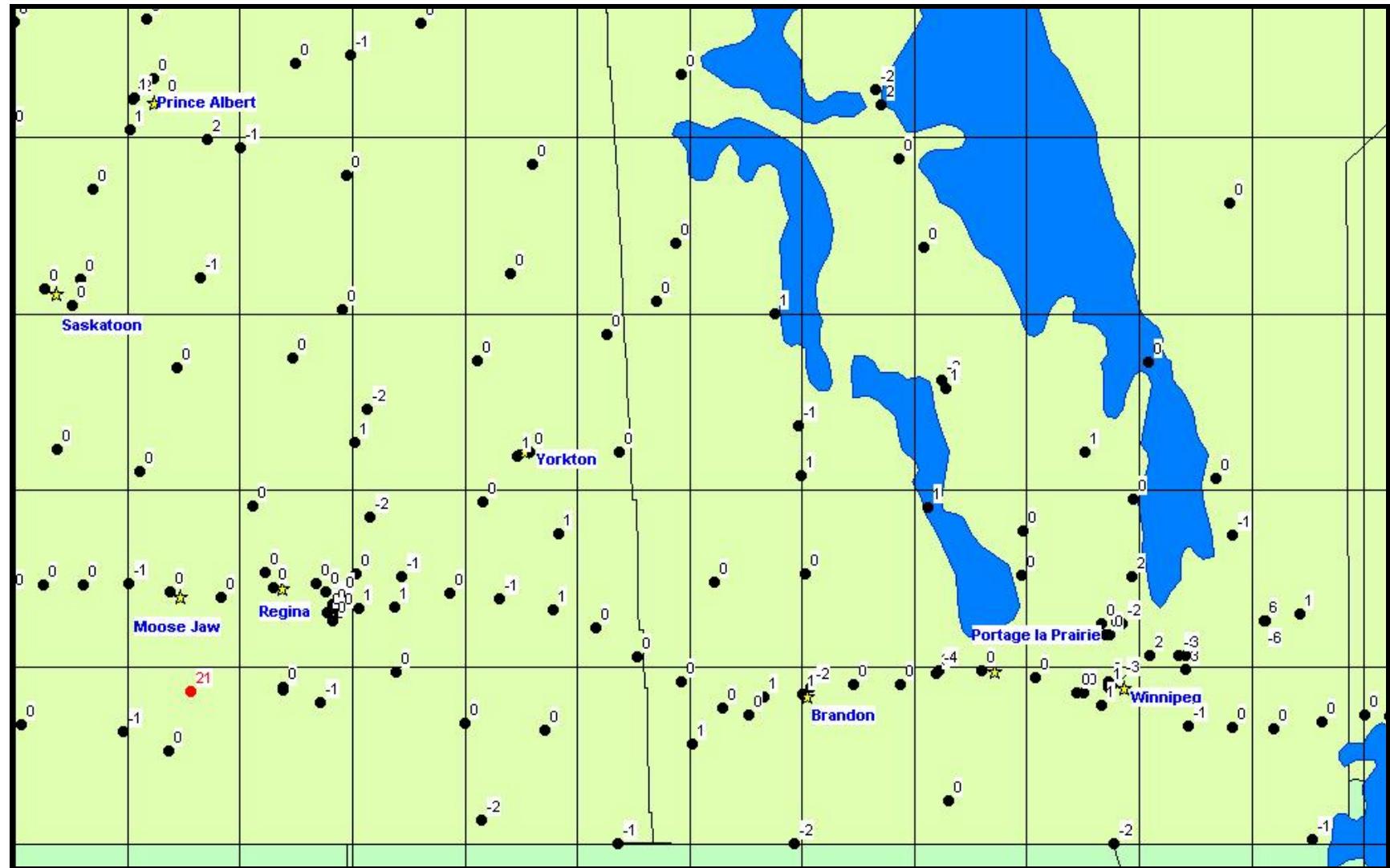
The GPS Height Transformation (v2.0)

Figure G.8: Western Ontario



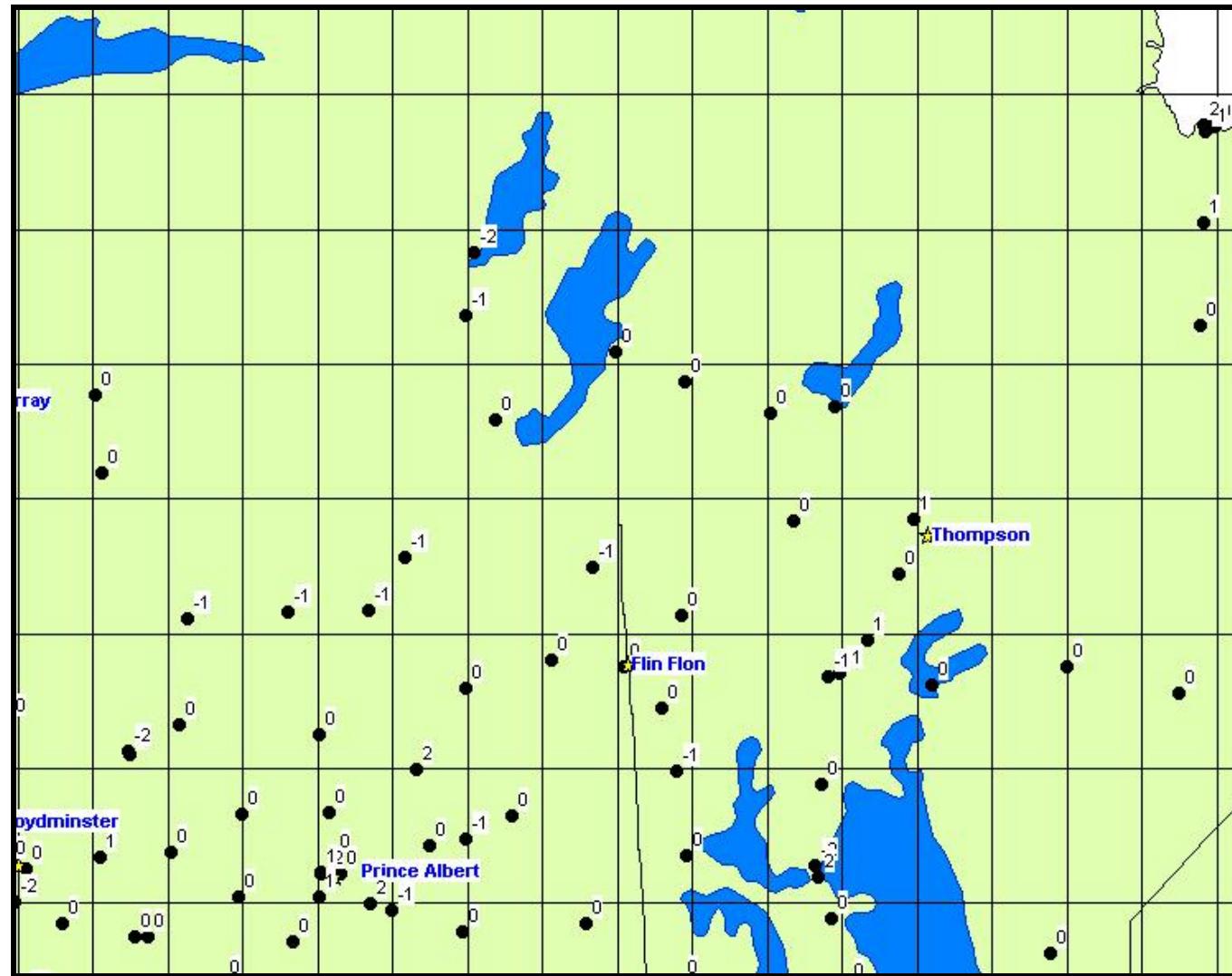
The GPS Height Transformation (v2.0)

Figure G.9: Southern Manitoba and Saskatchewan



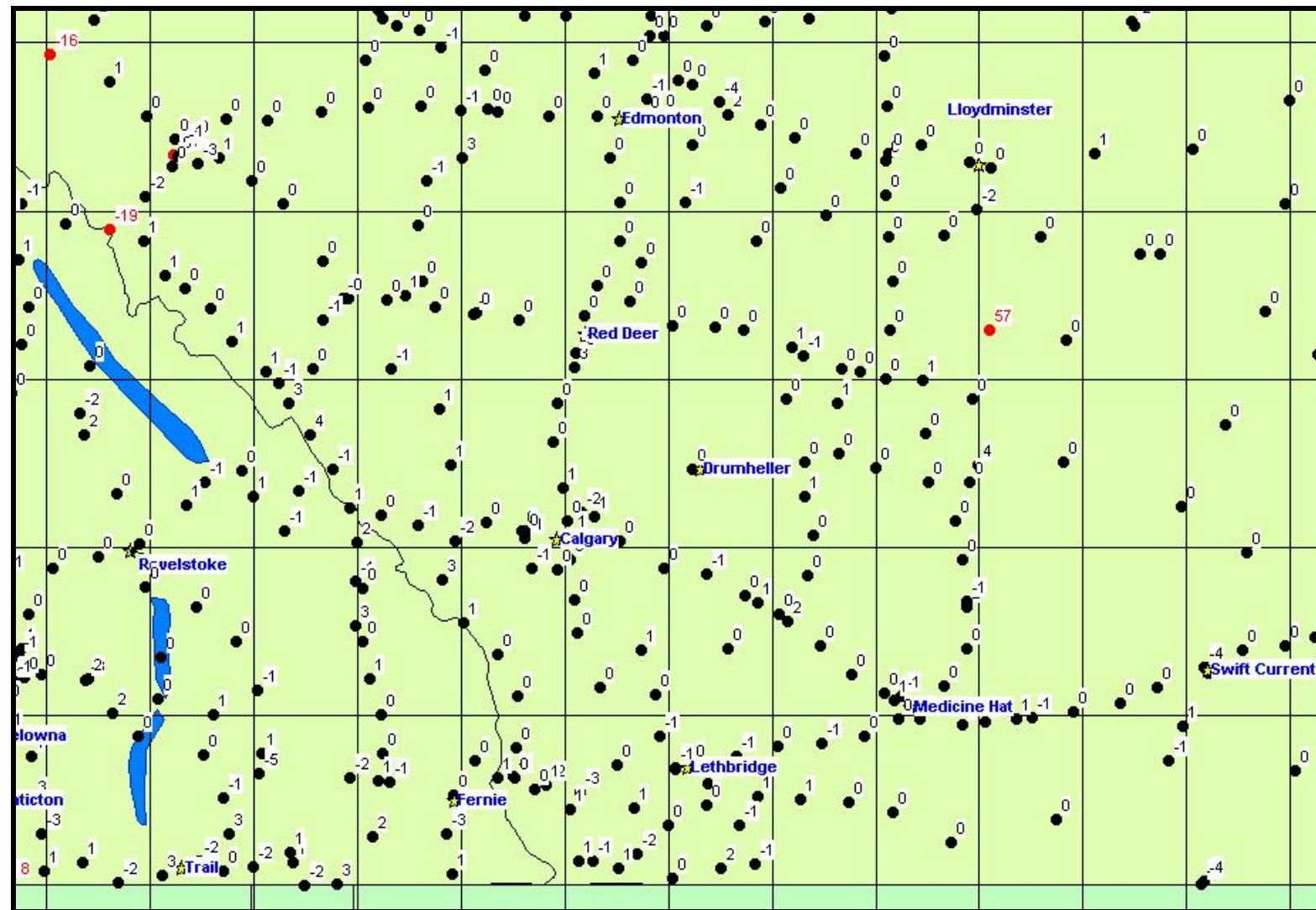
The GPS Height Transformation (v2.0)

Figure G.10: Northern Manitoba and Saskatchewan



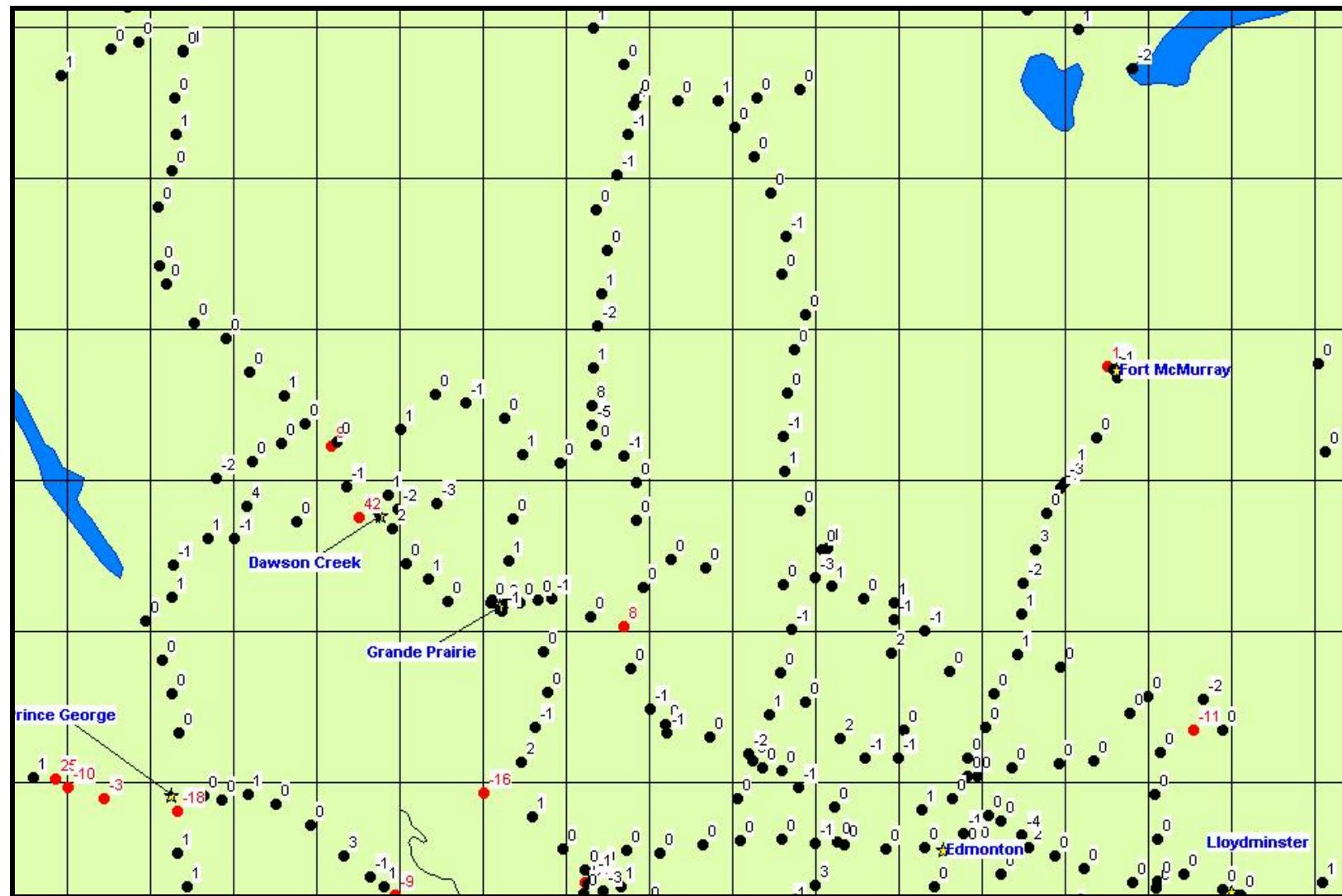
The GPS Height Transformation (v2.0)

Figure G.11: Southern Alberta and South-East British Columbia



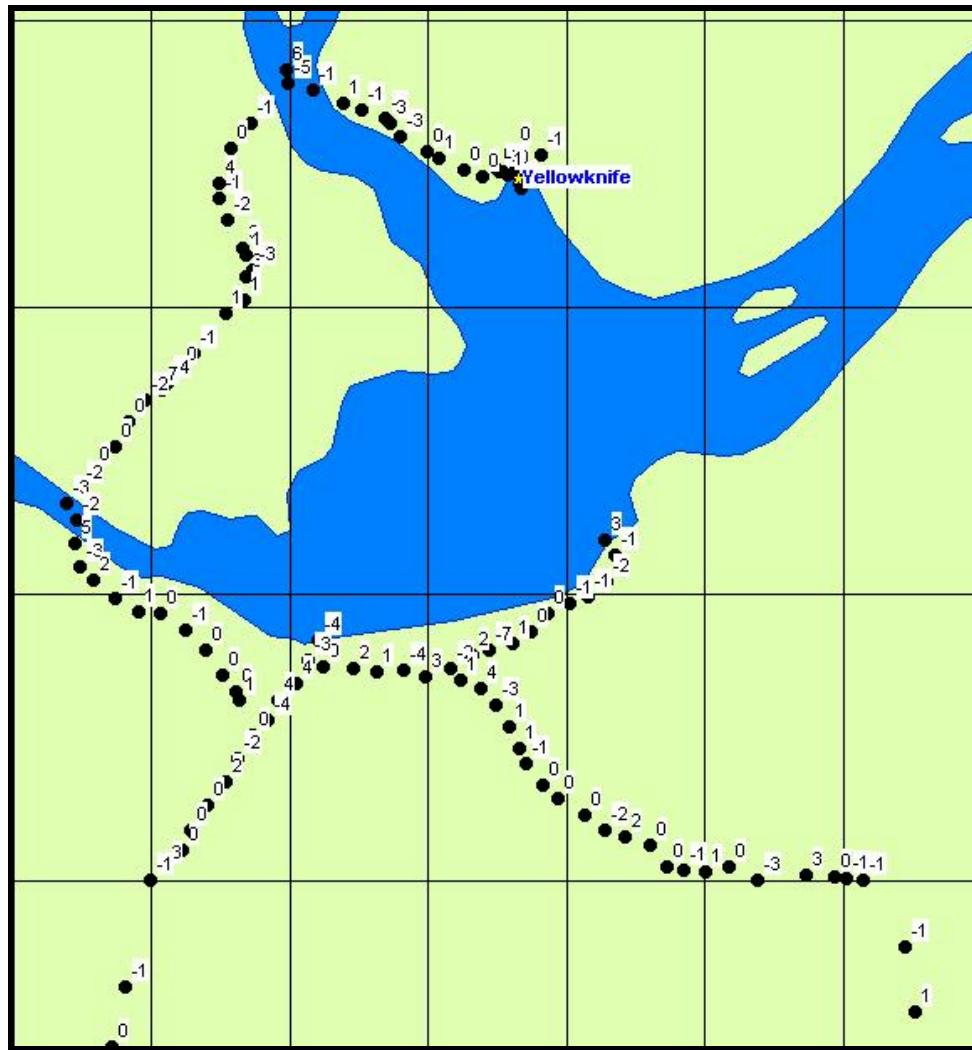
The GPS Height Transformation (v2.0)

Figure G.12: Northern Alberta



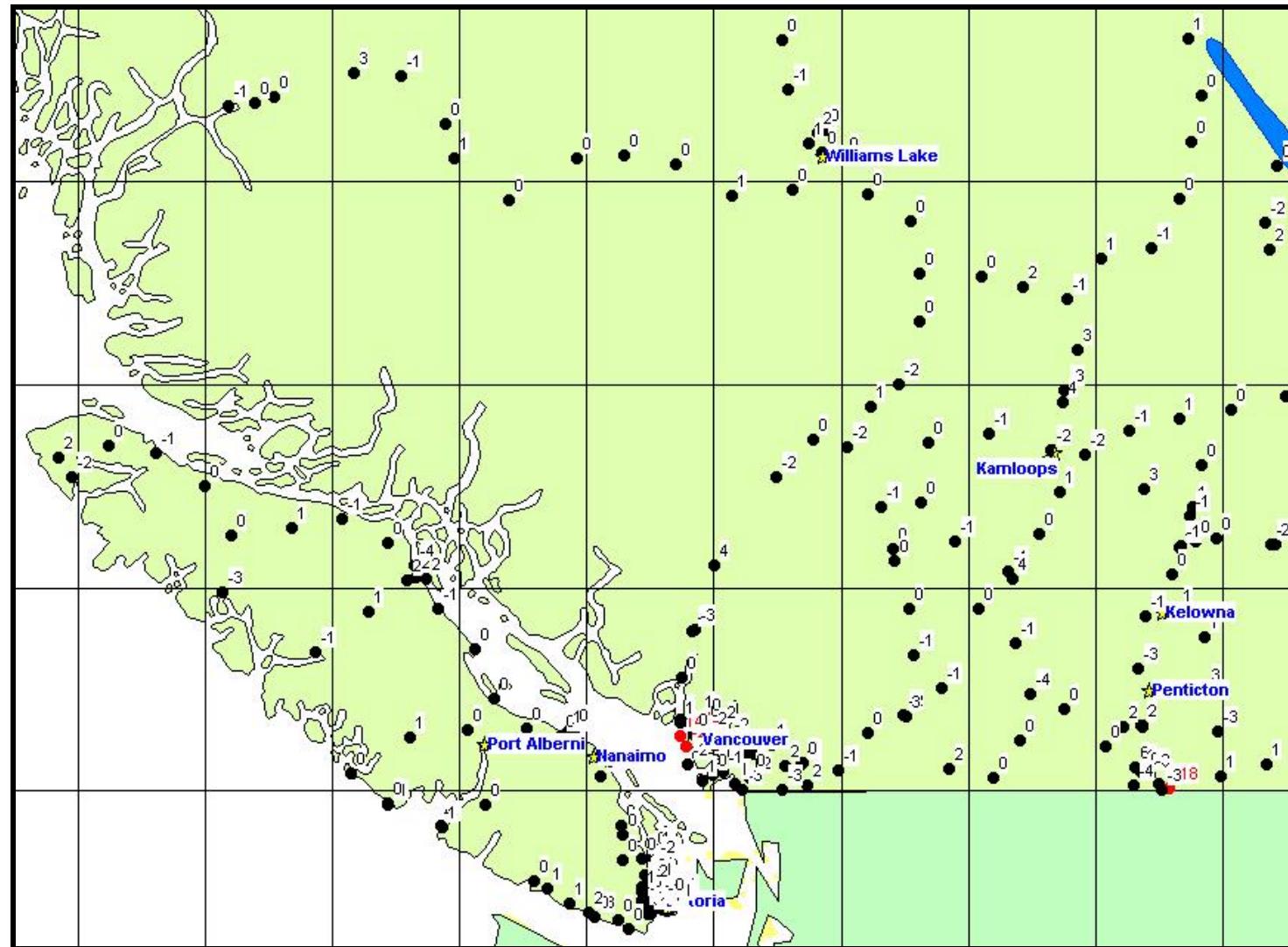
The GPS Height Transformation (v2.0)

Figure G.13: Great Slave Lake, Northwest Territories



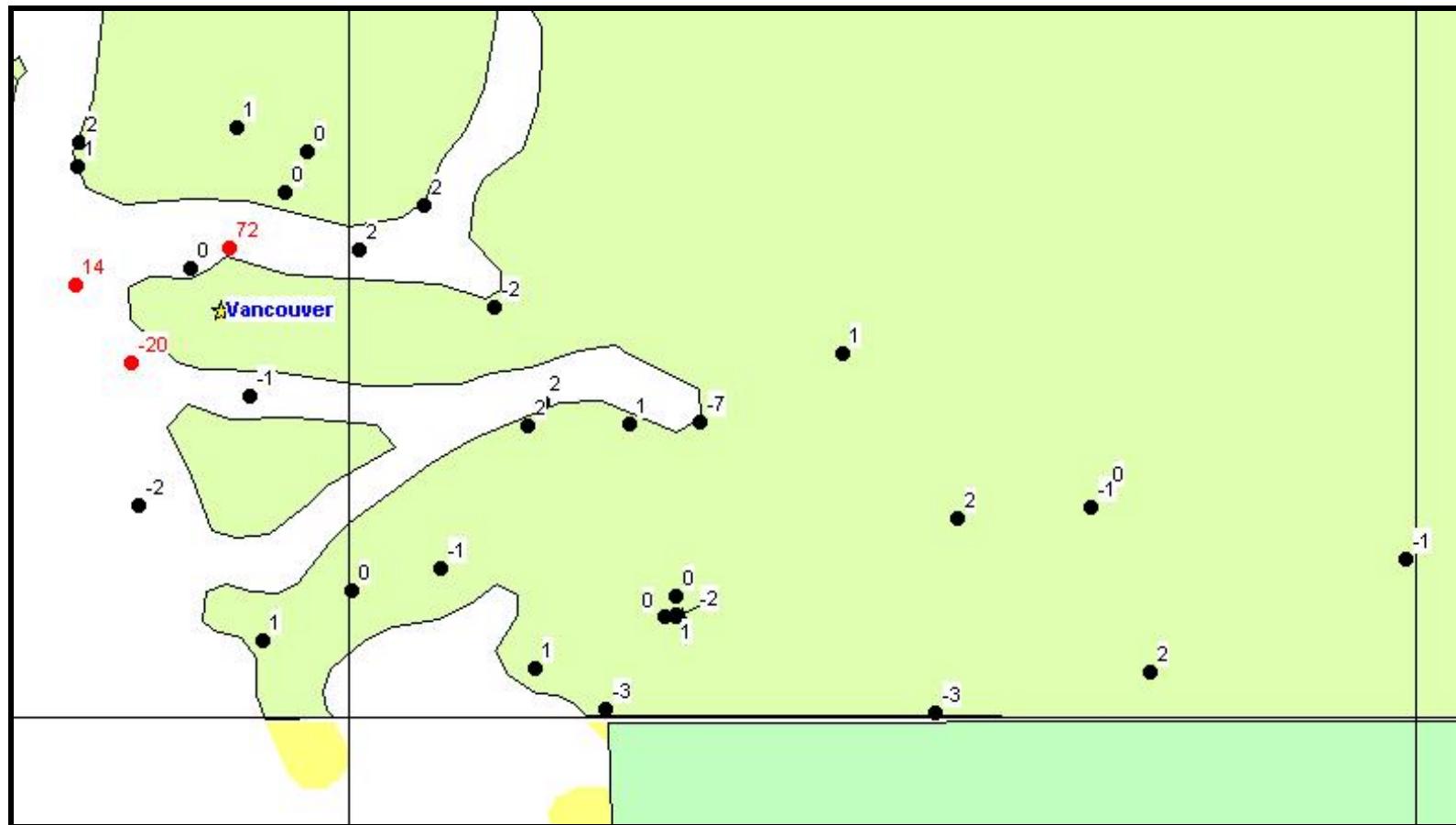
The GPS Height Transformation (v2.0)

Figure G.14: Southern British Columbia



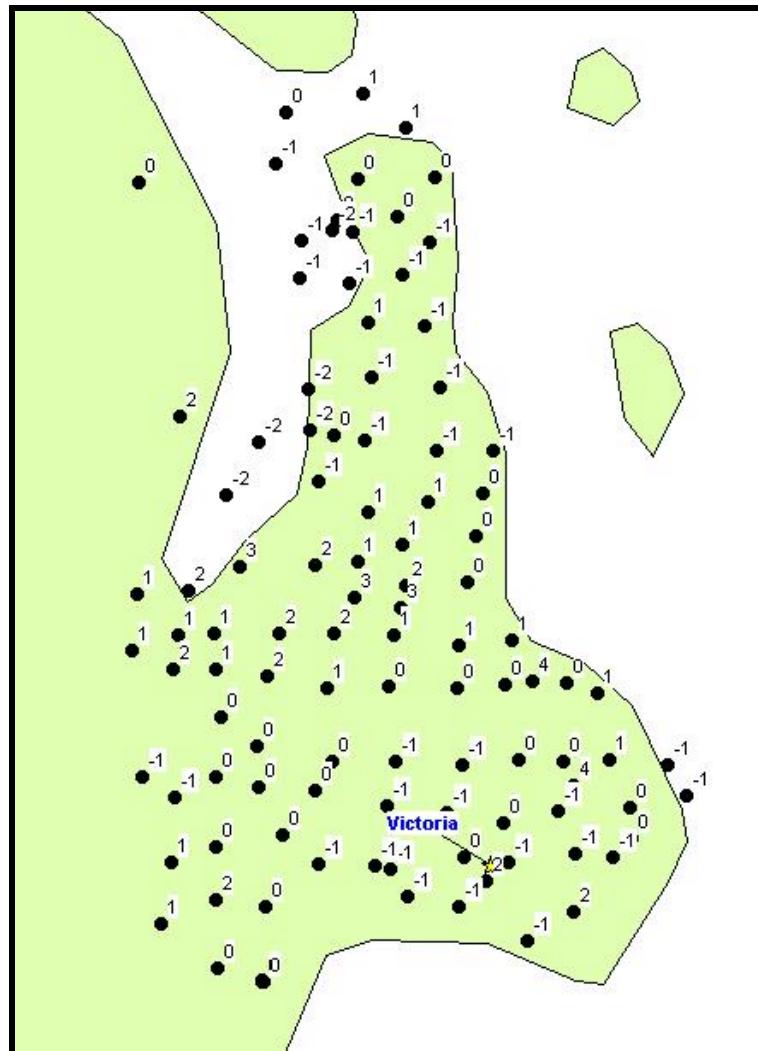
The GPS Height Transformation (v2.0)

Figure G.15: Vancouver



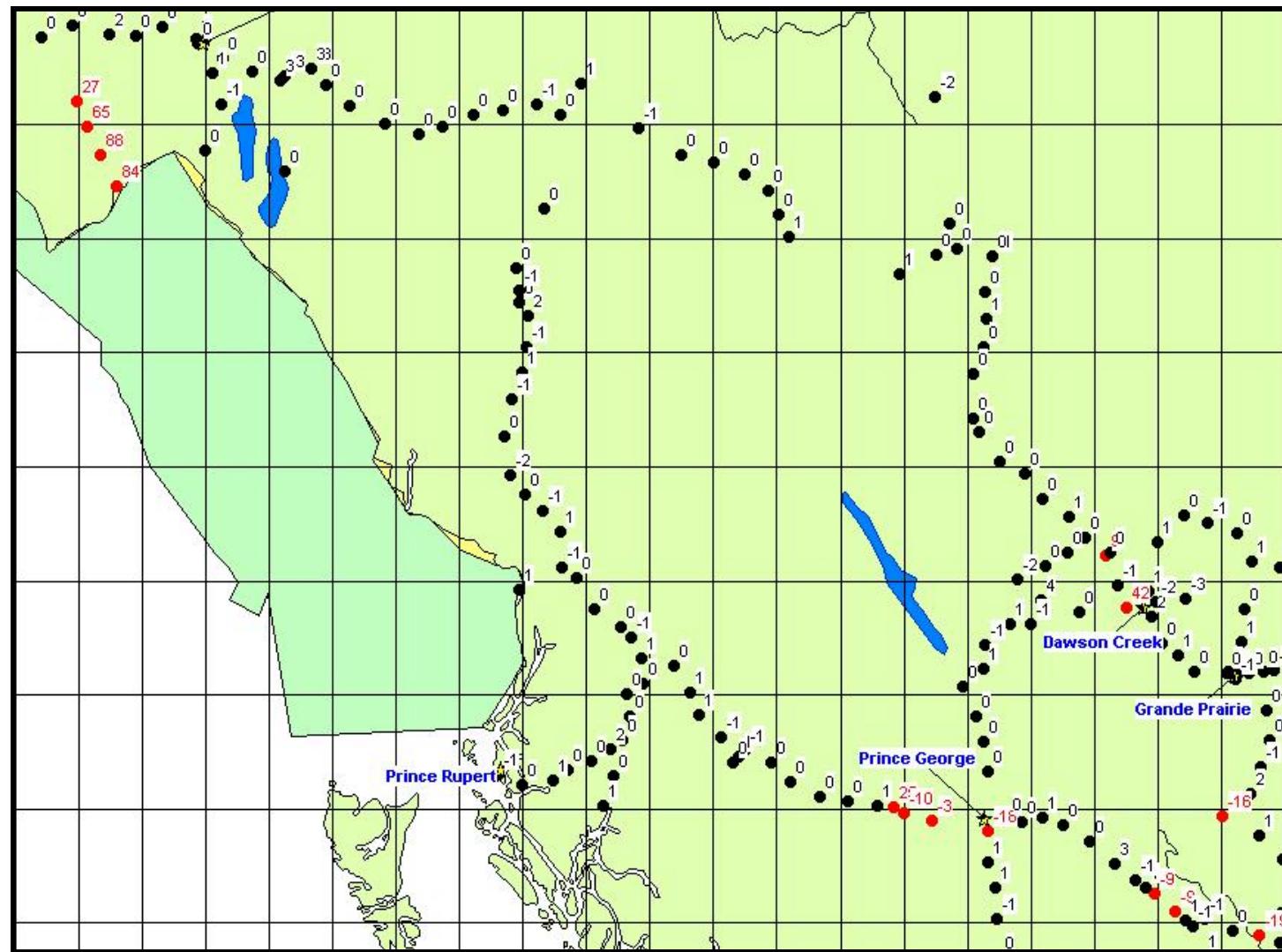
The GPS Height Transformation (v2.0)

Figure G.16: Victoria



The GPS Height Transformation (v2.0)

Figure G.17: Northern British Columbia



The GPS Height Transformation (v2.0)

Figure G.18: The Yukon Territory

