

GPS Calibration Report

Project : b3623_ctrlsheets

TIP Number	B-3623	Date & Time	8:11:43 AM 11/10/2003
User name	jjeffreys	Zone	North Carolina 3200
Coordinate System	US State Plane 1983(at ground)	Geoid Model	GEOID99 (Conus)
Horizontal Datum	NAD 1983 (Conus)		
Vertical Datum	NAVD 88		
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

LOCAL SITE INFORMATION

Localized around	B3623-1
Latitude	35°18'10.72553"N
Longitude	80°35'37.01067"W
Site Scale Factor	1.0001270161

Datum Transformation Parameters

Warning: Datum parameter calculation did not converge

Method	Three Parameter
Translation along x axis	13.392sft
Translation along y axis	-80.193sft
Translation along z axis	57.623sft

Updated Default Projection (Transverse Mercator) Definition

Updated default projection not requested

Horizontal Adjustment Parameters

Northing coordinate of rotation center	575607.430sft
Easting coordinate of rotation center	1545892.042sft
Rotation about the center point	0°00'00"
Translation north	0.000sft
Translation east	0.000sft
Scale factor	1.00000478

Vertical Adjustment Parameters

Northing coordinate of origin point	602896.908sft
Easting coordinate of origin point	1520417.165sft
Vertical separation at origin	-0.003sft
Slope north	-0.033ppm
Slope east	0.078ppm

Geoid Model Definition

GEOID99 (Conus)

Residual Differences Between GPS (WGS84) And Local Coordinates

Summary

	Maximum error	Root Mean Square error	Point
Horizontal	0.018sft	0.002	AQUADALE - WGS84
Vertical	0.014sft	0.002	V 49 - WGS84
Three-dimensional	0.021sft	0.003	V 49 - WGS84

Point Residuals

WGS84 Coordinates		Calculated point FOR DISPLAY ONLY		Local Coordinates	
Point	BUFFALO 2 - WGS84	Northing	602896.908sft	Point	BUFFALO 2 - Local
Latitude	35°23'45.14806"N	Easting	1520417.165sft	Northing	602896.907sft
Longitude	80°36'33.58113"W	Elevation	764.717sft	Easting	1520417.165sft
Height	664.523sft	Horz error	0.001sft	Elevation	764.720sft
		Vert error	0.003sft	Utilized	Horz and Vert
		3D error	0.003sft	Quality	Control quality
Point	M048 - WGS84	Northing	545825.046sft	Point	M048 - Local
Latitude	35°14'17.58670"N	Easting	1500918.981sft	Northing	545825.039sft
Longitude	80°40'17.44837"W	Elevation	744.833sft	Easting	1500918.983sft
Height	645.317sft	Horz error	0.008sft	Elevation	744.825sft

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Vert error	0.008sft
3D error	0.011sft

Utilized	Horz and Vert
Quality	Control quality

Point	V 49 - WGS84
Latitude	35°30'01.74832"N
Longitude	80°18'53.30865"W
Height	625.799sft

Northing	639679.910sft
Easting	1608694.401sft
Elevation	725.627sft
Horz error	0.016sft
Vert error	0.014sft
3D error	0.021sft

Point	V 49 - Local
Northing	639679.920sft
Easting	1608694.414sft
Elevation	725.613sft
Utilized	Horz and Vert
Quality	Control quality

Point	6A6 C - WGS84
Latitude	35°24'34.33812"N
Longitude	80°09'15.25147"W
Height	503.608sft

Northing	605982.309sft
Easting	1656102.912sft
Elevation	603.129sft
Horz error	0.008sft
Vert error	0.013sft
3D error	0.015sft

Point	6A6 C - Local
Northing	605982.316sft
Easting	1656102.909sft
Elevation	603.142sft
Utilized	Horz and Vert
Quality	Control quality

Point	AQUADALE - WGS84
Latitude	35°13'57.16643"N
Longitude	80°12'47.03659"W
Height	468.818sft

Northing	541771.517sft
Easting	1637785.686sft
Elevation	568.637sft
Horz error	0.018sft
Vert error	0.006sft
3D error	0.019sft

Point	AQUADALE - Local
Northing	541771.511sft
Easting	1637785.669sft
Elevation	568.631sft
Utilized	Horz and Vert
Quality	Control quality

Point	B3623-1 - WGS84
Latitude	35°18'10.72546"N
Longitude	80°35'37.01075"W
Height	467.909sft

Northing	569011.964sft
Easting	1524557.356sft
Elevation	567.491sft
Horz error	0.003sft
Vert error	0.002sft
3D error	0.004sft

Point	B3623-1 - Local
Northing	569011.966sft
Easting	1524557.358sft
Elevation	567.493sft
Utilized	Horz and Vert
Quality	Control quality

Point	B3623-2 - WGS84
Latitude	35°18'15.88723"N
Longitude	80°35'45.26266"W
Height	474.277sft

Northing	569544.790sft
Easting	1523881.859sft
Elevation	573.867sft
Horz error	0.002sft
Vert error	0.000sft
3D error	0.002sft

Point	B3623-2 - Local
Northing	569544.792sft
Easting	1523881.860sft
Elevation	573.867sft
Utilized	Horz and Vert
Quality	Control quality

Point	P1 - WGS84
Latitude	35°17'58.27329"N
Longitude	80°35'34.69556"W
Height	476.836sft

Northing	567750.008sft
Easting	1524729.028sft
Elevation	576.410sft
Horz error	0.005sft

Point	P1 - Local
Northing	567750.004sft
Easting	1524729.030sft
Elevation	576.413sft

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Vert error	0.003sft
3D error	0.005sft

Utilized	Horz and Vert
Quality	Control quality

Point	P2 - WGS84
Latitude	35°18'04.47167"N
Longitude	80°35'26.50962"W
Height	450.570sft

Northing	568365.765sft
Easting	1525417.520sft
Elevation	550.142sft
Horz error	0.005sft
Vert error	0.002sft
3D error	0.005sft

Point	P2 - Local
Northing	568365.763sft
Easting	1525417.515sft
Elevation	550.144sft
Utilized	Horz and Vert
Quality	Control quality

Point	P3 - WGS84
Latitude	35°18'03.77586"N
Longitude	80°35'33.09781"W
Height	483.985sft

Northing	568304.176sft
Easting	1524870.374sft
Elevation	583.561sft
Horz error	0.002sft
Vert error	0.001sft
3D error	0.003sft

Point	P3 - Local
Northing	568304.174sft
Easting	1524870.373sft
Elevation	583.562sft
Utilized	Horz and Vert
Quality	Control quality

Point	P4 - WGS84
Latitude	35°18'13.63037"N
Longitude	80°35'34.37230"W
Height	441.174sft

Northing	569302.131sft
Easting	1524780.734sft
Elevation	540.755sft
Horz error	0.006sft
Vert error	0.001sft
3D error	0.006sft

Point	P4 - Local
Northing	569302.137sft
Easting	1524780.736sft
Elevation	540.754sft
Utilized	Horz and Vert
Quality	Control quality

Point	P5 - WGS84
Latitude	35°18'21.55392"N
Longitude	80°35'45.75878"W
Height	479.297sft

Northing	570118.336sft
Easting	1523849.954sft
Elevation	578.890sft
Horz error	0.001sft
Vert error	0.004sft
3D error	0.004sft

Point	P5 - Local
Northing	570118.335sft
Easting	1523849.954sft
Elevation	578.894sft
Utilized	Horz and Vert
Quality	Control quality

Point	P6 - WGS84
Latitude	35°18'21.05705"N
Longitude	80°35'50.81649"W
Height	519.609sft

Northing	570074.846sft
Easting	1523429.997sft
Elevation	619.205sft
Horz error	0.002sft
Vert error	0.000sft
3D error	0.002sft

Point	P6 - Local
Northing	570074.845sft
Easting	1523429.999sft
Elevation	619.205sft
Utilized	Horz and Vert
Quality	Control quality

Point	P7 - WGS84
Latitude	35°18'19.03363"N
Longitude	80°35'55.33043"W
Height	528.486sft

Northing	569876.308sft
Easting	1523052.617sft
Elevation	628.085sft
Horz error	0.003sft

Point	P7 - Local
Northing	569876.306sft
Easting	1523052.620sft
Elevation	628.087sft

Vert error	0.002sft
3D error	0.004sft

Utilized	Horz and Vert
Quality	Control quality