

GPS Calibration Report

Project : U-3300B & B-5137

TIP Number	B-5137	Date	5/8/2006 Revised 11/30/2011
User name	dstaples & jjeffreys	Zone	North Carolina 3200
Coordinate System	US State Plane 1983		
Horizontal Datum	NAD 1983 (Conus)		
Vertical Datum	NAVD 88	Geoid Model	Geoid03 (Conus) NC Sub Grid
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

LOCAL SITE INFORMATION

Localized around	6A6 C
Latitude	N/A
Longitude	N/A
Site Scale Factor	N/A
Height	N/A

Datum Transformation Parameters

Warning: Datum parameter calculation did not converge

Method	Three Parameter
Translation along x axis	13.728sft
Translation along y axis	-80.177sft
Translation along z axis	57.042sft

Updated Default Projection (Transverse Mercator) Definition

Updated default projection not requested

Horizontal Adjustment Parameters

Northing coordinate of rotation center	602043.900sft
Easting coordinate of rotation center	1655847.056sft
Rotation about the center point	0°00'00"
Translation north	0.045sft
Translation east	0.163sft
Scale factor	1.00015228

Vertical Adjustment Parameters

Northing coordinate of origin point	605977.602sft
Easting coordinate of origin point	1656086.195sft
Vertical separation at origin	-0.086sft
Slope north	-1.046ppm
Slope east	0.249ppm

Geoid Model Definition

Geoid03 (Conus) NC Sub Grid

Residual Differences Between GPS (WGS84) And Local Coordinates

Summary

	Maximum error	Root Mean Square error	Point
Horizontal	0.016sft	0.002	V 49_GPS
Vertical	0.026sft	0.005	U3300B-6_GPS
Three-dimensional	0.027sft	0.005	U3300B-6_GPS

Point Residuals

WGS84 Coordinates		Calculated point FOR DISPLAY ONLY		Local Coordinates	
Point	6A6 C_GPS	Northing	605977.602sft	Point	6A6 C
Latitude	35°24'34.33818"N	Easting	1656086.195sft	Northing	605977.598sft
Longitude	80°09'15.25166"W	Elevation	602.947sft	Easting	1656086.186sft
Height	503.608sft	Horz error	0.010sft	Elevation	602.971sft
		Vert error	0.024sft	Utilized	Horz and Vert
		3D error	0.026sft	Quality	Survey quality
Point	AQUADALE_GPS	Northing	541765.494sft	Point	AQUADALE
Latitude	35°13'57.16645"N	Easting	1637768.577sft	Northing	541765.498sft
Longitude	80°12'47.03686"W	Elevation	568.432sft	Easting	1637768.587sft
Height	468.825sft	Horz error	0.011sft	Elevation	568.631sft
		Vert error	?	Utilized	Horizontal
		3D error	0.011sft	Quality	Survey quality
Point	KLOPMAN_GPS	Northing	674633.090sft	Point	KLOPMAN
Latitude	35°35'57.26327"N	Easting	1692707.819sft	Northing	674633.090sft
Longitude	80°02'01.51583"W	Elevation	556.096sft	Easting	1692707.819sft
Height	456.891sft	Horz error	0.001sft	Elevation	556.200sft
		Vert error	?	Utilized	Horizontal
		3D error	0.001sft	Quality	Survey quality
Point	PEE DEE 2_GPS	Northing	550736.196sft	Point	PEE DEE 2
Latitude	35°15'31.92111"N	Easting	1691752.996sft	Northing	550736.193sft
Longitude	80°01'57.47147"W	Elevation	437.801sft	Easting	1691753.006sft
Height	337.815sft	Horz error	0.010sft	Elevation	437.939sft
		Vert error	?	Utilized	Horizontal
		3D error	0.010sft	Quality	Survey quality
Point	V 49_GPS	Northing	639675.904sft	Point	V 49
Latitude	35°30'01.74841"N	Easting	1608676.724sft	Northing	639675.916sft
Longitude	80°18'53.30876"W	Elevation	725.445sft	Easting	1608676.735sft
Height	625.781sft	Horz error	0.016sft	Elevation	725.612sft
		Vert error	?	Utilized	Horizontal
		3D error	0.016sft	Quality	Survey quality
Point	U3300B-1_GPS	Northing	596996.490sft	Point	U3300B-1
Latitude	35°23'05.19516"N	Easting	1653250.963sft	Northing	596996.491sft
Longitude	80°09'48.22799"W	Elevation	565.577sft	Easting	1653250.961sft
Height	466.215sft	Horz error	0.002sft	Elevation	565.570sft
		Vert error	0.007sft	Utilized	Horz and Vert
		3D error	0.007sft	Quality	Survey quality

Point	U3300B-2_GPS
Latitude	35°23'20.54014"N
Longitude	80°09'39.02177"W
Height	455.932sft

Northing	598539.047sft
Easting	1654031.379sft
Elevation	555.289sft
Horz error	0.003sft
Vert error	0.001sft
3D error	0.003sft

Point	U3300B-2
Northing	598539.045sft
Easting	1654031.380sft
Elevation	555.290sft
Utilized	Horz and Vert
Quality	Survey quality

Point	U3300B-3_GPS
Latitude	35°23'45.05735"N
Longitude	80°09'15.79103"W
Height	504.090sft

Northing	600995.477sft
Easting	1655983.604sft
Elevation	603.443sft
Horz error	0.006sft
Vert error	0.013sft
3D error	0.015sft

Point	U3300B-3
Northing	600995.475sft
Easting	1655983.599sft
Elevation	603.430sft
Utilized	Horz and Vert
Quality	Survey quality

Point	U3300B-4_GPS
Latitude	35°23'48.03603"N
Longitude	80°09'37.09894"W
Height	484.442sft

Northing	601317.210sft
Easting	1654223.076sft
Elevation	583.788sft
Horz error	0.005sft
Vert error	0.022sft
3D error	0.022sft

Point	U3300B-4
Northing	601317.208sft
Easting	1654223.071sft
Elevation	583.810sft
Utilized	Horz and Vert
Quality	Survey quality

Point	U3300B-5_GPS
Latitude	35°24'25.69379"N
Longitude	80°09'33.30690"W
Height	488.474sft

Northing	605121.008sft
Easting	1654581.474sft
Elevation	587.809sft
Horz error	0.006sft
Vert error	?
3D error	0.006sft

Point	U3300B-5
Northing	605121.006sft
Easting	1654581.469sft
Elevation	587.949sft
Utilized	Horizontal
Quality	Survey quality

Point	U3300B-6_GPS
Latitude	35°24'41.64251"N
Longitude	80°09'25.37802"W
Height	504.592sft

Northing	606725.882sft
Easting	1655256.599sft
Elevation	603.926sft
Horz error	0.005sft
Vert error	0.026sft
3D error	0.027sft

Point	U3300B-6
Northing	606725.879sft
Easting	1655256.594sft
Elevation	603.900sft
Utilized	Horz and Vert
Quality	Survey quality