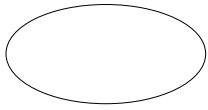








GPS Calibration Report

Project : R3405z

User name	rgmiller	Date & Time	9:39:03 AM 3/24/03
Coordinate System	US State Plane 1983(at ground)	Zone	North Carolina 3200
Project Datum	NAD 1983 (Conus)		
Vertical Datum		Geoid Model	Geoid99 NC Sub Grid
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		



Contents

-  Datum Transformation Parameters
 -  Updated Default Projection Definition
 -  Horizontal Adjustment Parameters
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Datum Transformation Parameters

Datum Transformation computation not requested

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Updated Default Projection (Transverse Mercator) Definition

Updated default projection not requested

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Horizontal Adjustment Parameters

Northing coordinate of rotation center	896230.013sft
Easting coordinate of rotation center	1355336.089sft
Rotation about the center point	0°00'00"
Translation north	-0.003sft
Translation east	0.002sft
Scale factor	1.00000000

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Vertical Adjustment Parameters

Northing coordinate of origin point	897786.674sft
Easting coordinate of origin point	1364928.252sft
Vertical separation at origin	0.033sft
Slope north	1.190ppm

Slope east

-0.425ppm

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Geoid Model Definition

Geoid99 NC Sub Grid

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Residual Differences Between GPS And Known Coordinates

Summary

	Maximum error	Root Mean Square error	Point
Horizontal	0.034sft	0.004	BLUE_GPS
Vertical	0.049sft	0.008	RONDA 2_GPS
Three-dimensional	0.050sft	0.009	RONDA 2_GPS

Point Residuals

GPS point		Calculated point		Control point	
Point	R3405-1_GPS	Northing	897786.674sft	Point	R3405-1
Latitude	36°11'52.04960"N	Easting	1364928.252sft	Northing	897786.678sft
Longitude	81°09'08.68918"W	Elevation	1278.733sft	Easting	1364928.250sft
Height	1170.521sft	Horizontal error	0.005sft	Elevation	1278.728sft
		Vertical error	0.005sft	Type	Horz and Vert
		3D error	0.007sft	Point quality	Adjusted quality
Point	R3405-2_GPS	Northing	898880.697sft	Point	R3405-2
Latitude	36°12'02.77612"N	Easting	1364513.659sft	Northing	898880.702sft
Longitude	81°09'14.03552"W	Elevation	1296.374sft	Easting	1364513.657sft
Height	1188.182sft	Horizontal error	0.005sft	Elevation	1296.371sft
		Vertical error	0.002sft	Type	Horz and Vert
		3D error	0.006sft	Point quality	Adjusted quality
Point	R3405-3_GPS	Northing	906860.145sft	Point	R3405-3
Latitude	36°13'20.75905"N	Easting	1360329.788sft	Northing	906860.147sft
Longitude	81°10'07.19424"W	Elevation	1327.371sft	Easting	1360329.788sft
Height	1219.379sft	Horizontal error	0.003sft	Elevation	1327.386sft
		Vertical error	0.016sft	Type	Horz and Vert
		3D error	0.016sft	Point quality	Adjusted quality
Point	R3405-4_GPS	Northing	908039.979sft	Point	R3405-4
Latitude	36°13'32.21730"N	Easting	1359379.948sft	Northing	908039.981sft
Longitude	81°10'19.09789"W	Elevation	1328.375sft	Easting	1359379.948sft
Height	1220.423sft	Horizontal error	0.002sft	Elevation	1328.394sft
		Vertical error	0.019sft	Type	Horz and Vert
		3D error	0.019sft	Point quality	Adjusted quality
Point	R3405-5_GPS	Northing	914081.645sft	Point	R3405-5
Latitude	36°14'31.16998"N	Easting	1355814.848sft	Northing	914081.644sft
Longitude	81°11'04.21835"W	Elevation	1341.828sft	Easting	1355814.852sft
Height	1234.080sft	Horizontal error	0.004sft	Elevation	1341.861sft
		Vertical error	0.033sft	Type	Horz and Vert
		3D error	0.033sft	Point quality	Adjusted quality
Point	R3405-6_GPS	Northing	914780.588sft	Point	R3405-6
Latitude	36°14'37.82392"N	Easting	1354641.338sft	Northing	914780.583sft

Longitude	81°11'18.72742"W	Elevation	1323.420sft	Easting	1354641.347sft
Height	1215.718sft	Horizontal error	0.010sft	Elevation	1323.455sft
		Vertical error	0.035sft	Type	Horz and Vert
		3D error	0.036sft	Point quality	Adjusted quality
Point	B 90_GPS	Northing	892946.652sft	Point	B 90
Latitude	36°11'00.72155"N	Easting	1348896.258sft	Northing	892946.656sft
Longitude	81°12'22.91593"W	Elevation	1335.645sft	Easting	1348896.256sft
Height	1227.728sft	Horizontal error	0.004sft	Elevation	1335.611sft
		Vertical error	0.034sft	Type	Horz and Vert
		3D error	0.034sft	Point quality	Control quality
Point	BLUE_GPS	Northing	927813.418sft	Point	BLUE
Latitude	36°16'33.96267"N	Easting	1298824.857sft	Northing	927813.397sft
Longitude	81°22'43.68465"W	Elevation	3470.370sft	Easting	1298824.883sft
Height	3365.256sft	Horizontal error	0.034sft	Elevation	3470.364sft
		Vertical error	0.006sft	Type	Horz and Vert
		3D error	0.034sft	Point quality	Control quality
Point	PROFFIT_GPS	Northing	864605.319sft	Point	PROFFIT
Latitude	36°06'04.94076"N	Easting	1281357.293sft	Northing	864605.314sft
Longitude	81°25'58.01494"W	Elevation	1160.568sft	Easting	1281357.279sft
Height	1054.099sft	Horizontal error	0.014sft	Elevation	1160.536sft
		Vertical error	0.033sft	Type	Horz and Vert
		3D error	0.035sft	Point quality	Control quality
Point	88 ATA_GPS	Northing	823625.552sft	Point	88 ATA
Latitude	35°59'43.40137"N	Easting	1386505.204sft	Northing	823625.558sft
Longitude	81°04'26.61016"W	Elevation	1146.736sft	Easting	1386505.188sft
Height	1039.261sft	Horizontal error	0.017sft	Elevation	1146.763sft
		Vertical error	0.027sft	Type	Horz and Vert
		3D error	0.032sft	Point quality	Control quality
Point	RONDA 2_GPS	Northing	909109.435sft	Point	RONDA 2
Latitude	36°13'57.89842"N	Easting	1433505.551sft	Northing	909109.444sft
Longitude	80°55'14.88749"W	Elevation	1142.639sft	Easting	1433505.546sft
Height	1033.400sft	Horizontal error	0.011sft	Elevation	1142.590sft
		Vertical error	0.049sft	Type	Horz and Vert
		3D error	0.050sft	Point quality	Control quality

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