

GPS Calibration Report

Project : b4410_calib

| | | | |
|--------------------------|---------------------|------------------------|-----------------------------|
| TIP Number | B-4410 | Date & Time | 11:52:27 AM 11/20/2006 |
| User name | 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 | B4410-1 |
| Latitude | N/A |
| Longitude | N/A |
| Site Scale Factor | N/A |
| Height | N/A |

Datum Transformation Parameters

| | |
|---------------------------------|-----------------|
| Method | Three Parameter |
| Translation along x axis | 14.156sft |
| Translation along y axis | -80.771sft |
| Translation along z axis | 57.646sft |

Updated Default Projection (Transverse Mercator) Definition

Updated default projection not requested

Horizontal Adjustment Parameters

| | |
|---|----------------|
| Northing coordinate of rotation center | 509372.097sft |
| Easting coordinate of rotation center | 1666705.335sft |
| Rotation about the center point | 0°00'00" |
| Translation north | 0.000sft |
| Translation east | 0.000sft |
| Scale factor | 1.00014038 |

Vertical Adjustment Parameters

| | |
|--|----------------|
| Northing coordinate of origin point | 509872.491sft |
| Easting coordinate of origin point | 1666127.088sft |
| Vertical separation at origin | 0.161sft |
| Slope north | 133.681ppm |
| Slope east | 78.344ppm |

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 | 0.001sft | 0.000 | B4410-2_GPS |
| Vertical | 0.000sft | 0.000 | B4410-1_GPS |
| Three-dimensional | 0.001sft | 0.000 | B4410-2_GPS |

Point Residuals

| WGS84 Coordinates | | Calculated point FOR DISPLAY ONLY | | Local Coordinates | |
|-------------------|------------------|--------------------------------------|-----------------|----------------------|----------------|
| Point | B4410-1_GPS | Northing | 509872.491sft | Point B4410-1 | |
| Latitude | 35°08'44.91121"N | Easting | 1666127.088sft | Northing | 509872.491sft |
| Longitude | 80°07'00.88146"W | Elevation | 308.720sft | Easting | 1666127.088sft |
| Height | 208.470sft | Horz error | 0.000sft | Elevation | 308.720sft |
| | | Vert error | 0.000sft | Utilized | Horz and Vert |
| | | 3D error | 0.000sft | Quality | Survey quality |
| Point | B4410-2_GPS | Northing | 509142.910sft | Point B4410-2 | |
| Latitude | 35°08'37.75740"N | Easting | 1666680.919sft | Northing | 509142.909sft |
| Longitude | 80°06'54.11439"W | Elevation | 327.170sft | Easting | 1666680.919sft |
| Height | 226.964sft | Horz error | 0.001sft | Elevation | 327.170sft |
| | | Vert error | 0.000sft | Utilized | Horz and Vert |
| | | 3D error | 0.001sft | Quality | Survey quality |
| Point | B4410-3_GPS | Northing | 509100.892sft | Point B4410-3 | |
| Latitude | 35°08'37.41144"N | Easting | 1667307.998sft | Northing | 509100.892sft |
| Longitude | 80°06'46.55855"W | Elevation | 322.330sft | Easting | 1667307.998sft |
| Height | 222.074sft | Horz error | 0.000sft | Elevation | 322.330sft |
| | | Vert error | 0.000sft | Utilized | Horz and Vert |
| | | 3D error | 0.000sft | Quality | Survey quality |