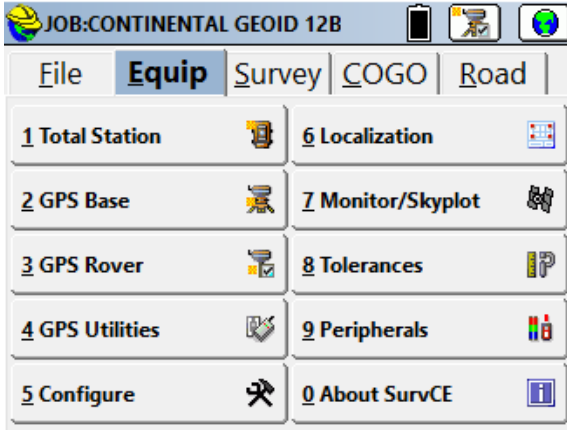
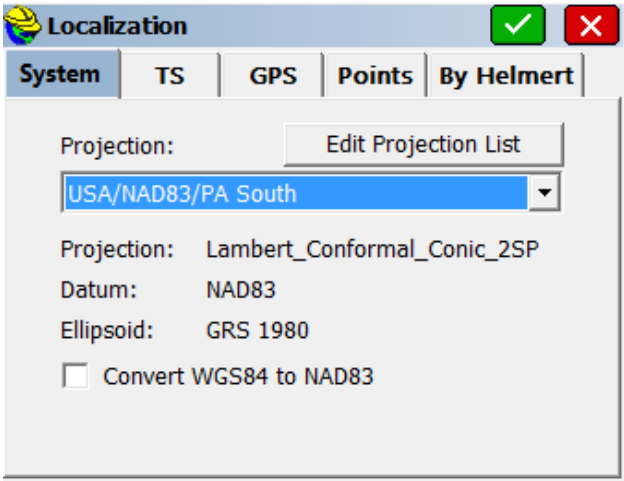


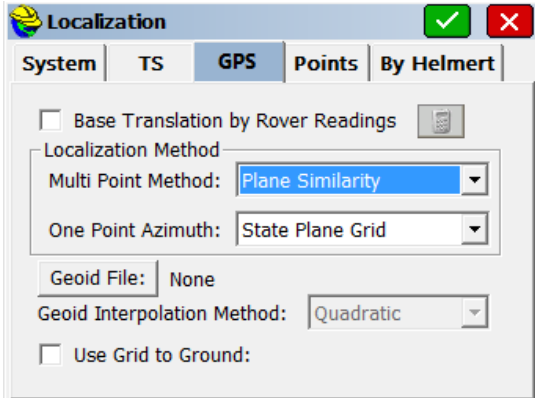
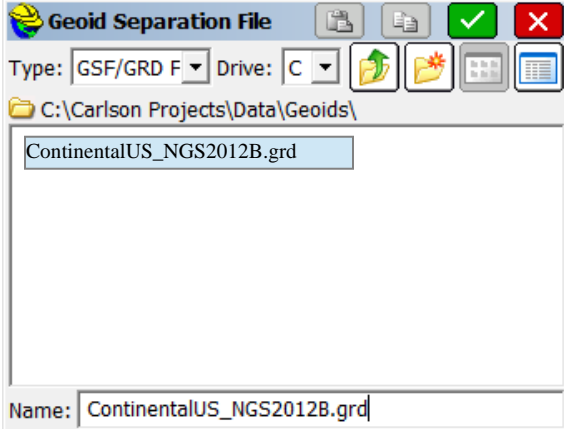
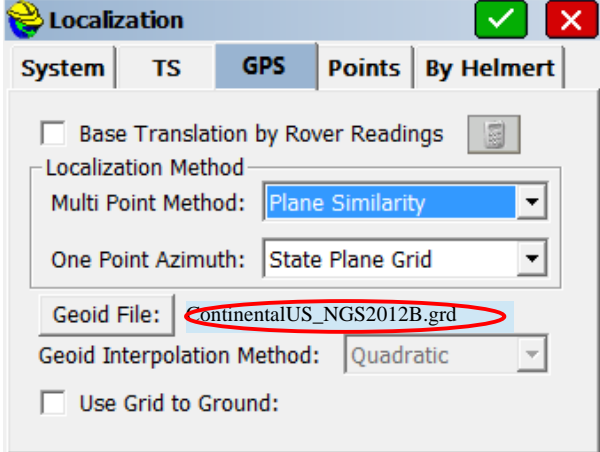
Continental Geoid Installation

Carlson SurvCE

Step	Action	Display
1	<p>In SurvCE version 5.01.15 and higher there is support added for a Continental USA Geoid that loads fast and does not require the making of a smaller and limited Geoid GSF files for the lower 48 states in the USA.</p> <p>The complete continental Geoid 12B is include in SurvCE and does not require any additional downloads.</p> <p>The purpose of this guide will be to show how to load the Geoid 12B model for the entire continental US.</p>	
2	<p>a) Launch Carlson SurvCE</p> <p>b) Create or use an existing Job</p> <p>c) Select the "Equip" Tab</p> <p>NOTE: Carlson SurvCE 5.01.15 is required to install the continental Geoid</p>	
3	<p>a) From the "Equip" tab select "Localization"</p>	

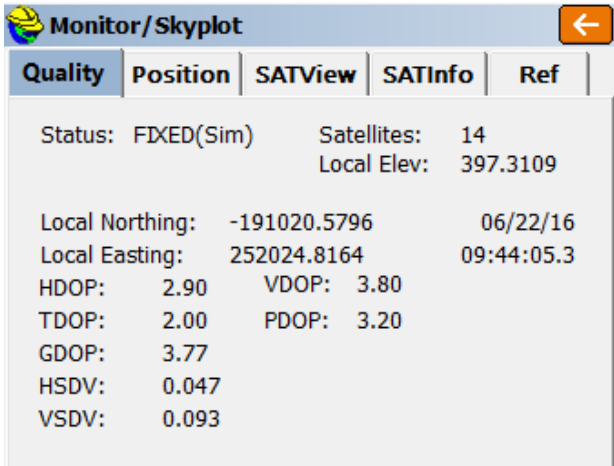
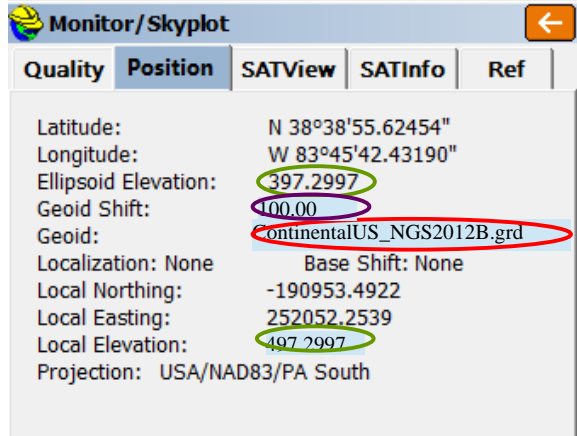
Continental Geoid Installation

Carlson SurvCE

Step	Action	Display
4	<ul style="list-style-type: none"> a) Select the “GPS” tab b) Select the “Geoid File” button 	 <p>The screenshot shows the 'Localization' dialog box with the 'GPS' tab active. The 'Geoid File' field is set to 'None'. Other settings include 'Multi Point Method' set to 'Plane Similarity' and 'One Point Azimuth' set to 'State Plane Grid'.</p>
5	<ul style="list-style-type: none"> a) Select the “ContinentalUS_NGS2012B.grd” b) Press the “Green Check Mark” c) It will take 10 to 30 seconds for it to load this new file do not tap anything until it returns to the GPS tab of the Localization screen. <p>NOTE: This will only be available in versions of SurvCE greater than 5.01.15. The version number can be found in the “Equip” tab, “About SurvCE”</p>	 <p>The screenshot shows the 'Geoid Separation File' dialog box. The file 'ContinentalUS_NGS2012B.grd' is selected in the file list. The 'Name' field at the bottom also contains 'ContinentalUS_NGS2012B.grd'.</p>
6	<ul style="list-style-type: none"> a) Once SurvCE has returned to the “GPS” tab it will show that the new Geoid is loaded b) Press the “Green Check Mark” 	 <p>The screenshot shows the 'Localization' dialog box with the 'GPS' tab active. The 'Geoid File' field now contains 'ContinentalUS_NGS2012B.grd', which is circled in red in the original image. Other settings remain the same as in step 4.</p>

Continental Geoid Installation

Carlson SurvCE

Step	Action	Display																																																							
7	<ul style="list-style-type: none"> a) To verify that your Geoid is being applied finish setting up the Rover. Then go to the “Equip” tab b) Then press the “Monitor/Skyplot” Button. 	 <p>Monitor/Skyplot</p> <table border="1"> <thead> <tr> <th>Quality</th> <th>Position</th> <th>SATView</th> <th>SATInfo</th> <th>Ref</th> </tr> </thead> <tbody> <tr> <td>Status:</td> <td>FIXED(Sim)</td> <td>Satellites:</td> <td>14</td> <td></td> </tr> <tr> <td></td> <td></td> <td>Local Elev:</td> <td>397.3109</td> <td></td> </tr> <tr> <td>Local Northing:</td> <td>-191020.5796</td> <td></td> <td>06/22/16</td> <td></td> </tr> <tr> <td>Local Easting:</td> <td>252024.8164</td> <td></td> <td>09:44:05.3</td> <td></td> </tr> <tr> <td>HDOP:</td> <td>2.90</td> <td>VDOP:</td> <td>3.80</td> <td></td> </tr> <tr> <td>TDOP:</td> <td>2.00</td> <td>PDOP:</td> <td>3.20</td> <td></td> </tr> <tr> <td>GDOP:</td> <td>3.77</td> <td></td> <td></td> <td></td> </tr> <tr> <td>HSDV:</td> <td>0.047</td> <td></td> <td></td> <td></td> </tr> <tr> <td>VSDV:</td> <td>0.093</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Quality	Position	SATView	SATInfo	Ref	Status:	FIXED(Sim)	Satellites:	14				Local Elev:	397.3109		Local Northing:	-191020.5796		06/22/16		Local Easting:	252024.8164		09:44:05.3		HDOP:	2.90	VDOP:	3.80		TDOP:	2.00	PDOP:	3.20		GDOP:	3.77				HSDV:	0.047				VSDV:	0.093								
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8	<ul style="list-style-type: none"> a) Select the “Position” tab. b) If the Geoid is being applied the “Geoid” name will be seen c) There will be a “Geoid Shift” d) And the “Local Elevation” will be different then the “Ellipsoid Elevation” 	 <p>Monitor/Skyplot</p> <table border="1"> <thead> <tr> <th>Quality</th> <th>Position</th> <th>SATView</th> <th>SATInfo</th> <th>Ref</th> </tr> </thead> <tbody> <tr> <td>Latitude:</td> <td colspan="4">N 38°38'55.62454"</td> </tr> <tr> <td>Longitude:</td> <td colspan="4">W 83°45'42.43190"</td> </tr> <tr> <td>Ellipsoid Elevation:</td> <td colspan="4">397.2997</td> </tr> <tr> <td>Geoid Shift:</td> <td colspan="4">100.00</td> </tr> <tr> <td>Geoid:</td> <td colspan="4">ContinentalUS_NGS2012B.grd</td> </tr> <tr> <td>Localization:</td> <td>None</td> <td>Base Shift:</td> <td colspan="2">None</td> </tr> <tr> <td>Local Northing:</td> <td colspan="4">-190953.4922</td> </tr> <tr> <td>Local Easting:</td> <td colspan="4">252052.2539</td> </tr> <tr> <td>Local Elevation:</td> <td colspan="4">497.2997</td> </tr> <tr> <td>Projection:</td> <td colspan="4">USA/NAD83/PA South</td> </tr> </tbody> </table>	Quality	Position	SATView	SATInfo	Ref	Latitude:	N 38°38'55.62454"				Longitude:	W 83°45'42.43190"				Ellipsoid Elevation:	397.2997				Geoid Shift:	100.00				Geoid:	ContinentalUS_NGS2012B.grd				Localization:	None	Base Shift:	None		Local Northing:	-190953.4922				Local Easting:	252052.2539				Local Elevation:	497.2997				Projection:	USA/NAD83/PA South			
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<p>Please contact Champion Instruments or your local distributor with any additional questions.</p>																																																									