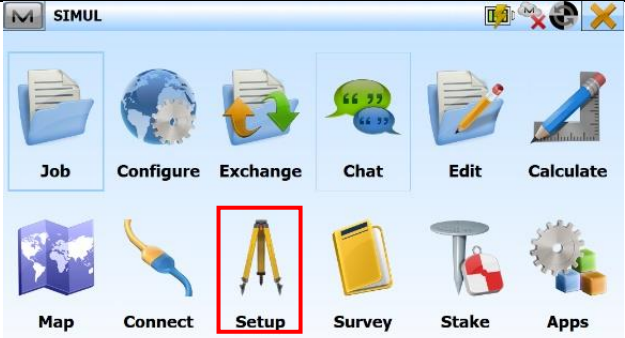

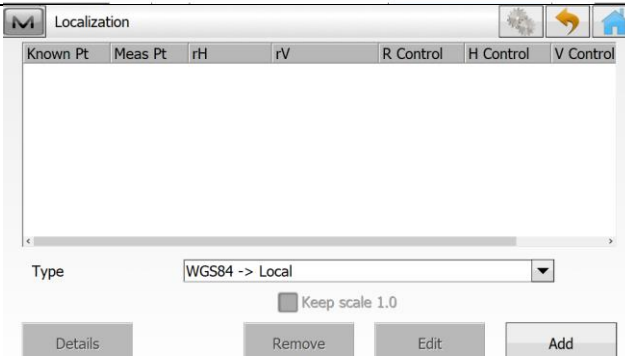
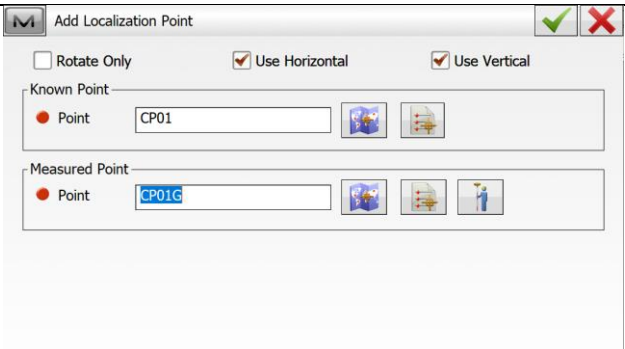


Topcon Magnet: GNSS Localization in MAGNET Field

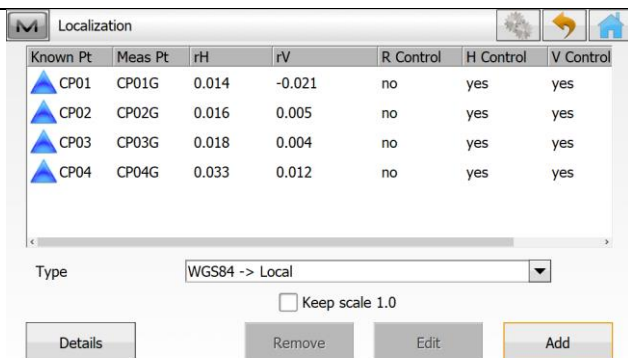
1		<p>Localization is the process of creating a local coordinate system for recording GNSS information. Before starting you will need a minimum of 4 Control Points on the target coordinate system stored in the job, the job projection & geoid model should be set to None and the Datum should be WGS84. When this is done select Setup</p>
2		<p>Press Localization</p>
3		<p>Under Type select the type of localization you would like to do. Usually this will be WGS84 -> Local. Click Add</p>
4		<p>In Known Point select the target control point. In Measured Point enter a point name for your GPS point and press the record button. You will then be taken to the normal Topo screen to record your point</p>

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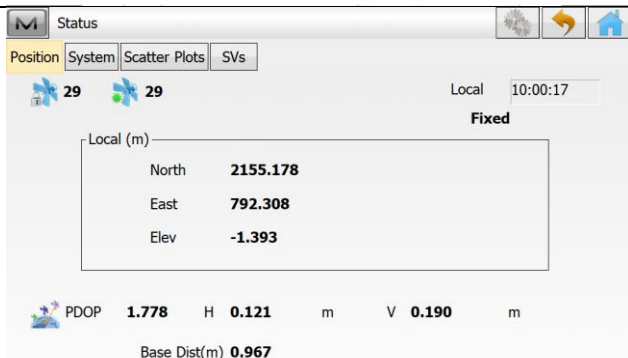
The screenshot shows the 'Localization' window. It contains a table with the following data:

Known Pt	Meas Pt	rH	rV	R Control	H Control	V Control
CP01	CP01G	0.014	-0.021	no	yes	yes
CP02	CP02G	0.016	0.005	no	yes	yes
CP03	CP03G	0.018	0.004	no	yes	yes
CP04	CP04G	0.033	0.012	no	yes	yes

Below the table, the 'Type' is set to 'WGS84 -> Local'. There is a checkbox for 'Keep scale 1.0' which is unchecked. At the bottom are buttons for 'Details', 'Remove', 'Edit', and 'Add'.

Repeat the process for all your control points. After you have measured the 4th you will start to see residual errors. If you press **Details** you can get more information about the transformation.

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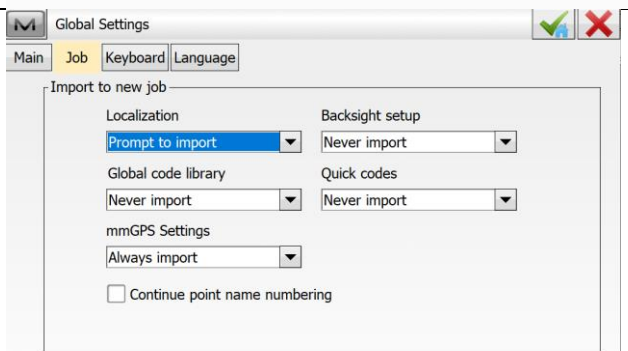
The screenshot shows the 'Status' window with the 'Position' tab selected. It displays the current position as 'Fixed' with the following coordinates:

Local (m): North 2155.178, East 792.308, Elev -1.393

Quality indicators: PDOP 1.778, H 0.121 m, V 0.190 m, Base Dist(m) 0.967

Back in the main menu, if you now press **Setup** then **Status**, your current position should now be showing on your local grid. Another good check is to stake out one of your control points

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The screenshot shows the 'Global Settings' window, 'Job' tab. Under 'Import to new job', the 'Localization' dropdown is set to 'Prompt to import'. Other settings include 'Baksight setup' (Never import), 'Global code library' (Never import), 'Quick codes' (Never import), and 'mmGPS Settings' (Always import). There is a checkbox for 'Continue point name numbering' which is unchecked.

If you will be using the localization in multiple jobs, go to **Configure** then **Global** and select the **Job** tab. Change the **Localization** option to **Prompt to Import**. Next time you create a job you will be asked If you want to use the localization.

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