

Topcon Site Calibration to SMG + GM

Oct 20, 2026 · @Johan

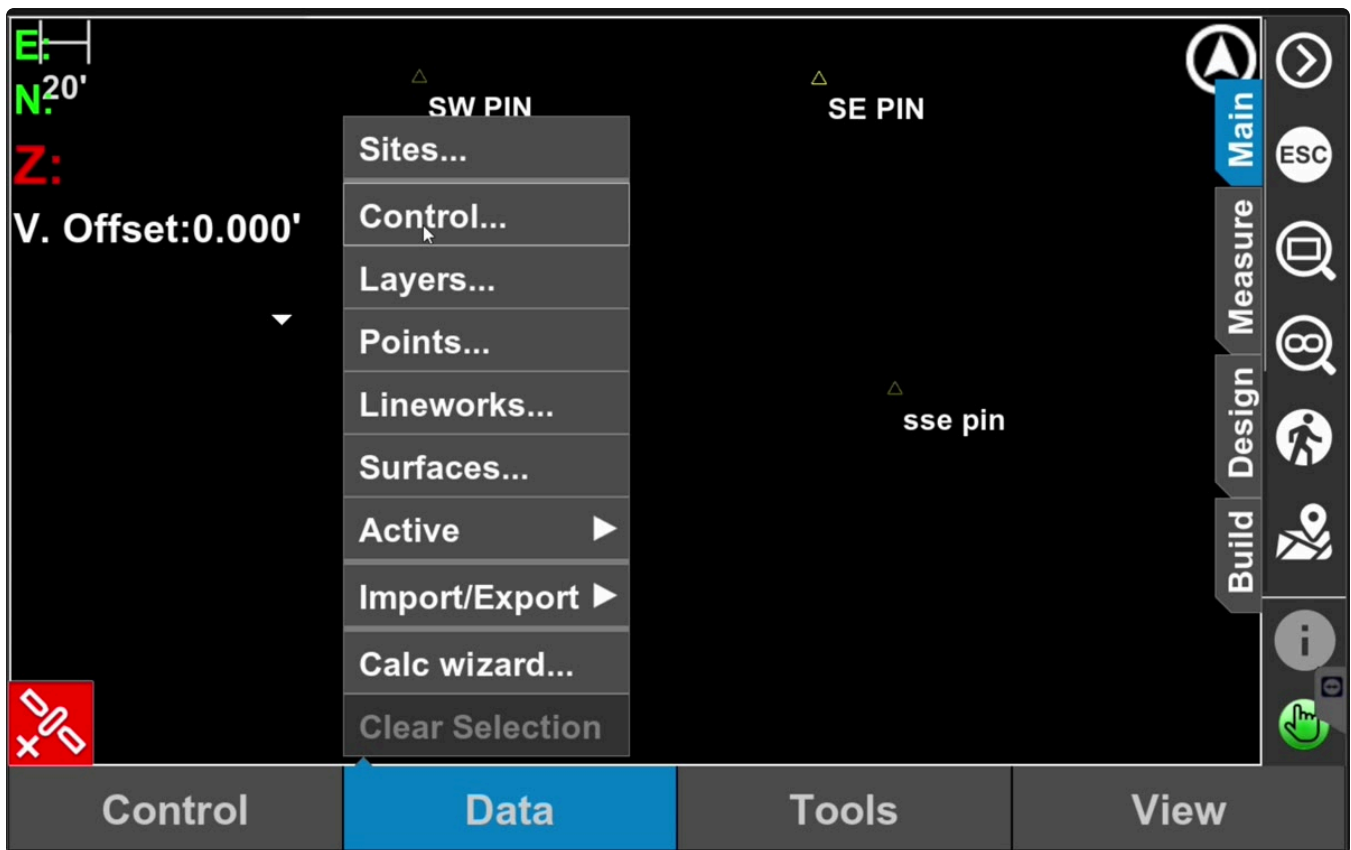
Use this guide to reuse a Topcon site calibration (localization) in SiteMetrix Grade (SMG) or GradeMetrix (GM). You export the control points from the Topcon software as a CSV file with local and WGS84 coordinates, then import that file into the job's localization.

You need: the Topcon software with the localized site open, and a USB stick.

Part A – Export the control points from Topcon

1. Check the control points

1. Tap **Data**, then **Control....**



2. Check the list of control points (here *tripod*, *SE PIN*, *SW PIN*, *sse pin*, *ssw pin*). Tap **OK**.

Control Points

Control points

Coord. system

Projection

Name ▾	H.Error	V.Error
tripod		
SE PIN	0.000'	0.000'
SW PIN	0.000'	0.000'
sse pin	0.000'	0.000'
ssw pin	0.000'	0.000'

Add...

Edit

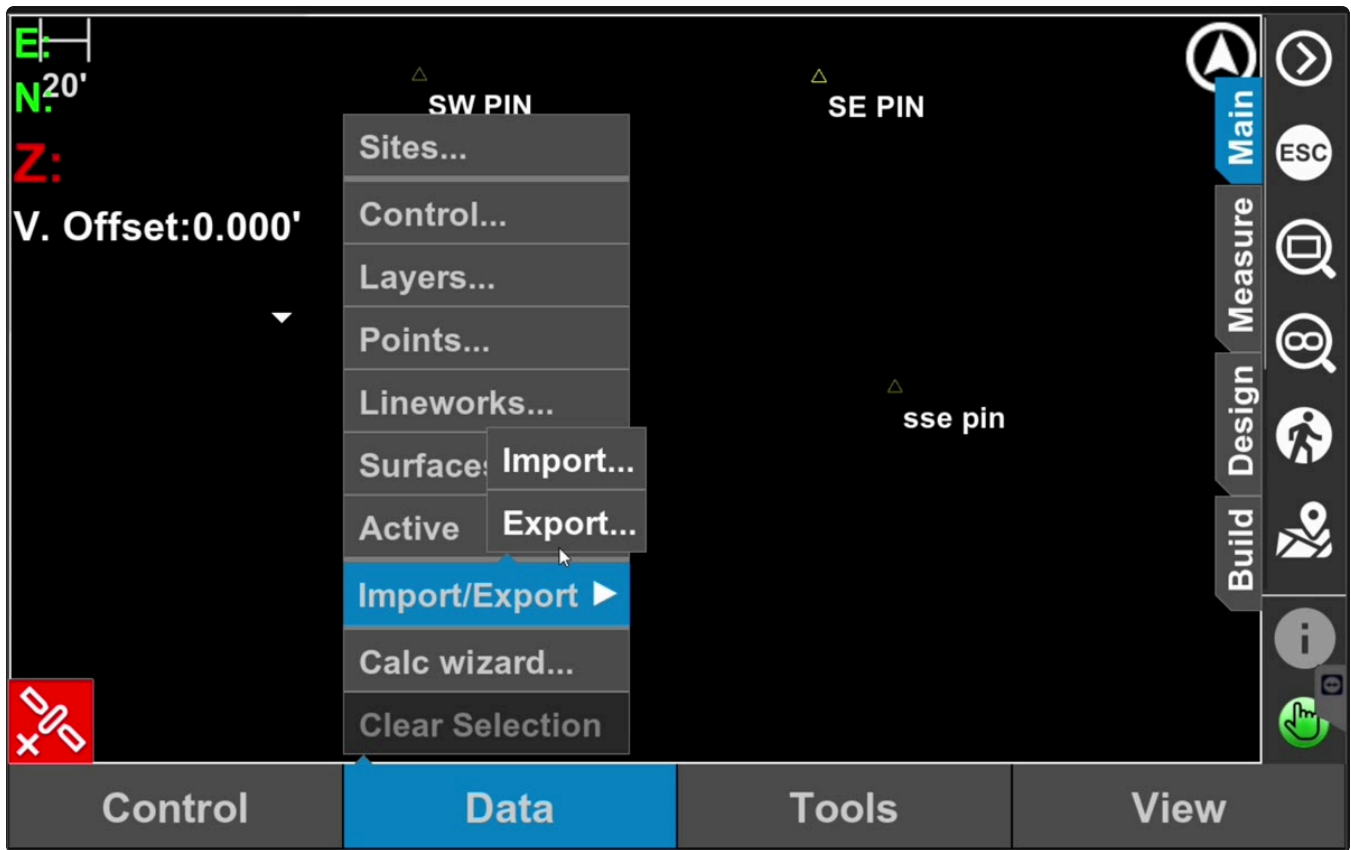
Delete

OK

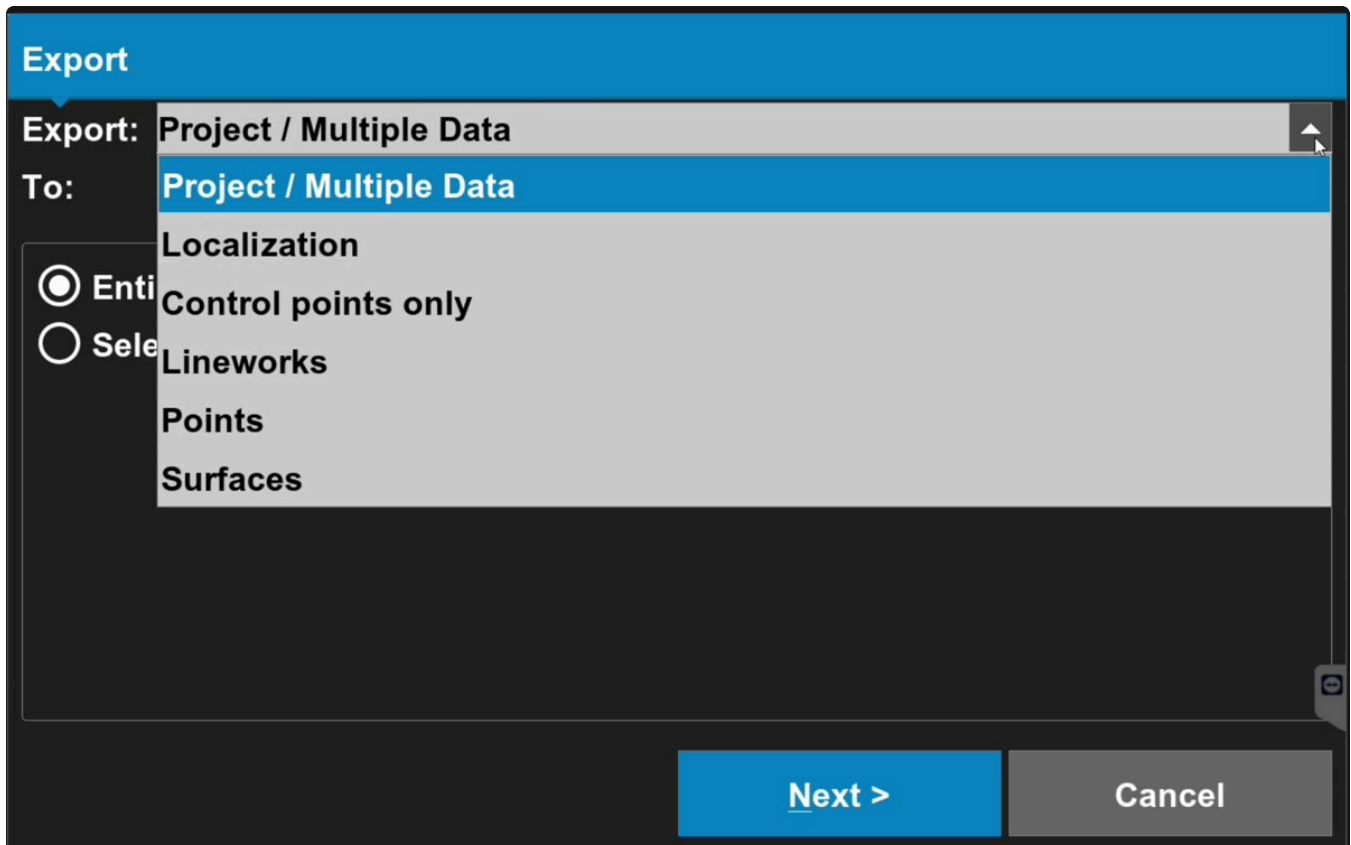
Cancel

2. Start the export

- 1. Tap Data → Import/Export → Export....

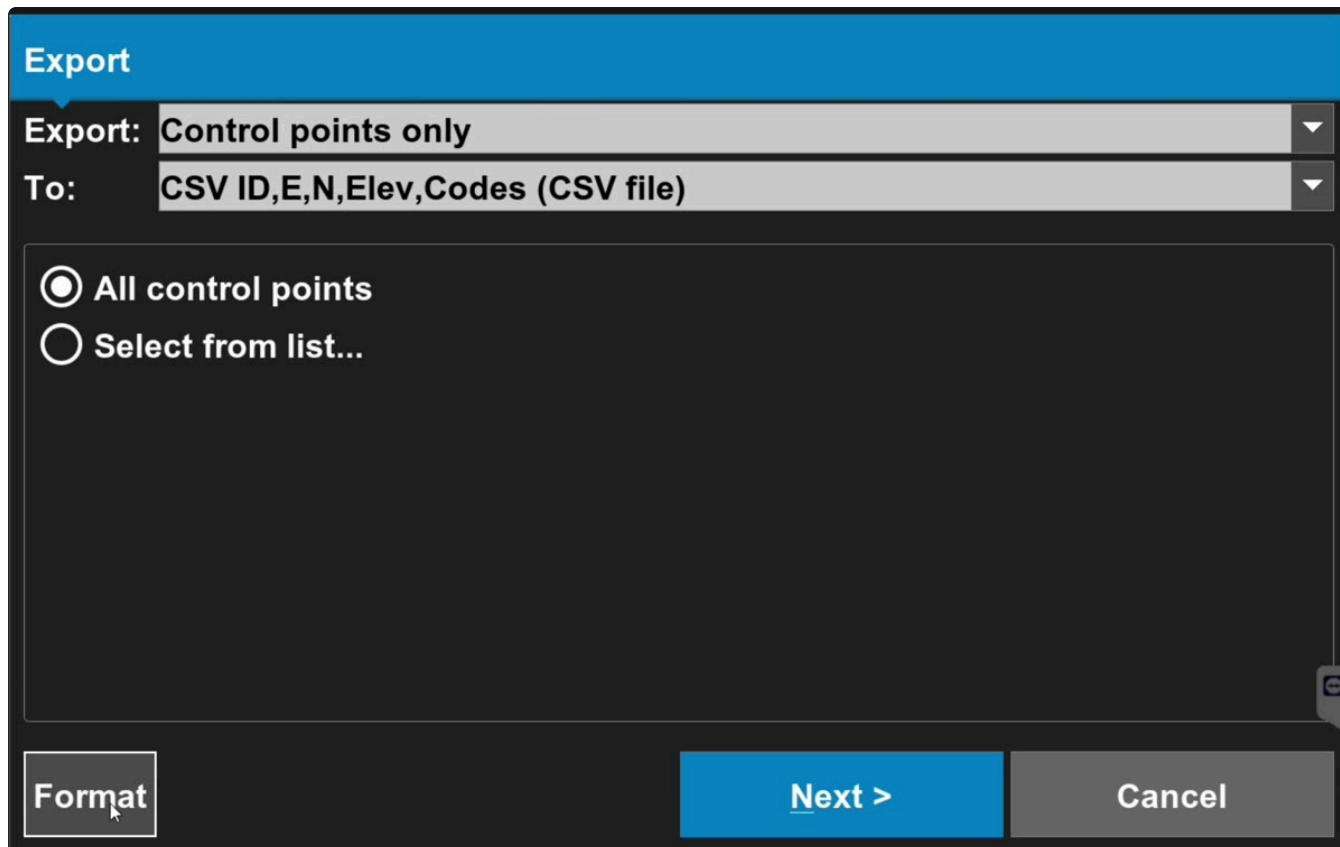


2. Export: choose Control points only.



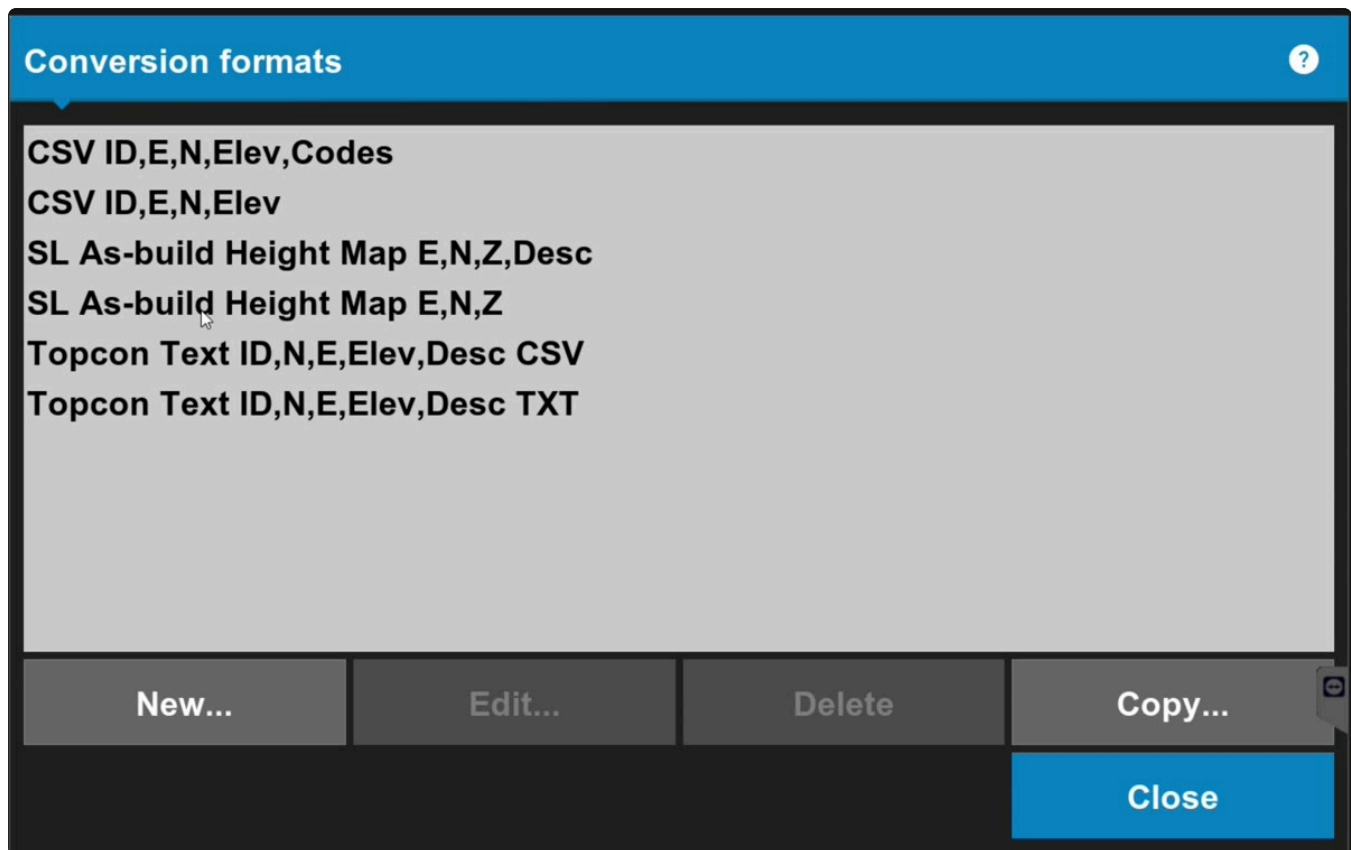
Note: *Localization* → GC3 file is a Topcon-only format. SMG/GM needs a CSV, so use *Control points only*.

3. Leave **All control points** selected and tap **Format** to set up the CSV layout.



3. Create the HEMI CSV format (one time only)

1. In **Conversion formats**, tap **New....**



2. **Name:** HEMI, **Extension:** CSV.

3. Under **Line items**, tap **New** and add these items in this order. For each: **Append = Trailing comma**, **Precision = 3**.

- Point name
- Point northing
- Point easting
- Point elevation
- Point WGS84 latitude
- Point WGS84 longitude
- Point WGS84 height

Format ?

Name: **HEMI**

Extension: **CSV**

Line items Import rules Export rules

Point name

Point northing

Point easting

New Edit Delete

OK Cancel

Line item ?

Type:

Append:

☐ Fixed width field

Justified:

Width:

Point name

Point name

Point description

Point northing

Point easting

Point elevation

Point layer name

Literal text string

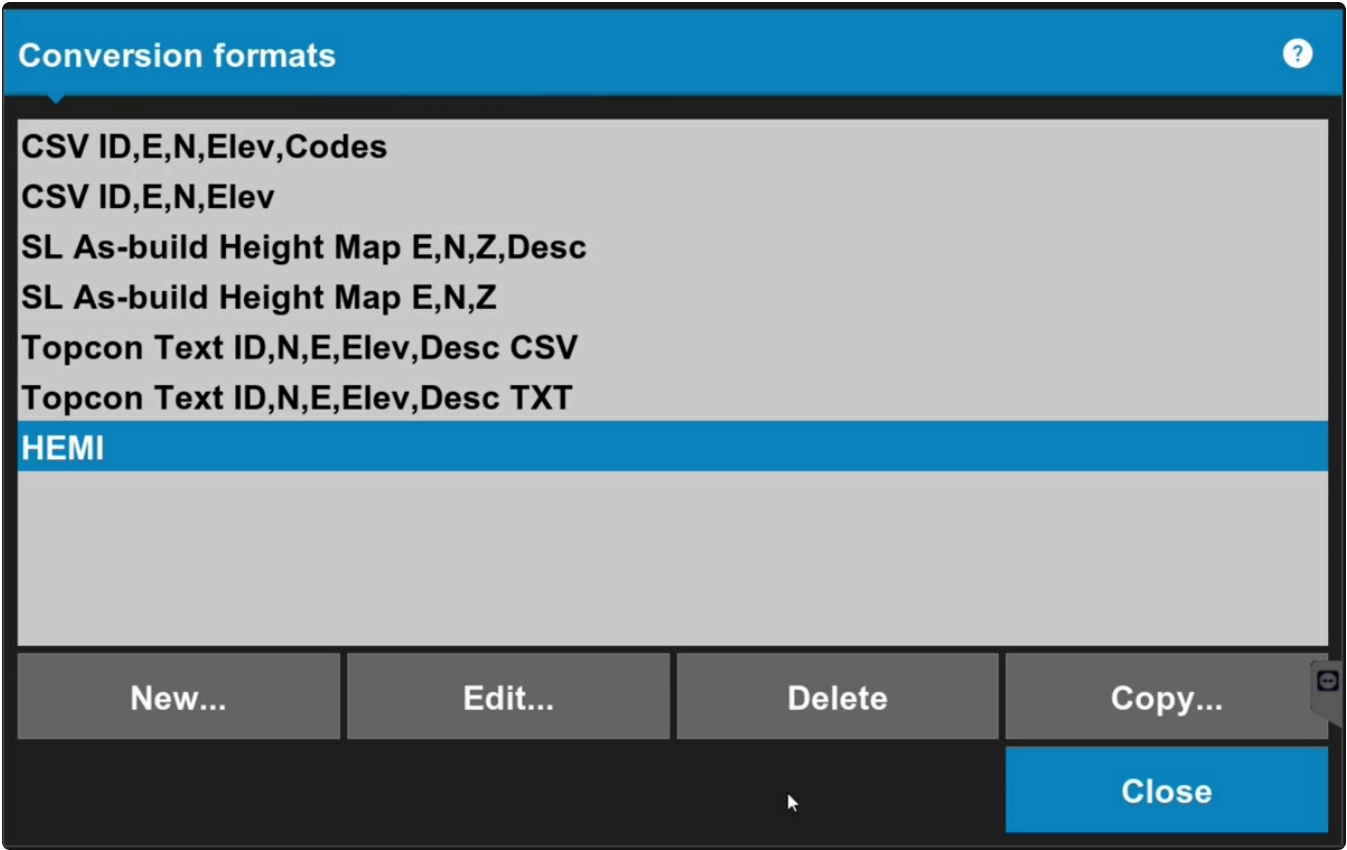
Point WGS84 latitude

Point WGS84 longitude

Point WGS84 height

OK Cancel

4. Tap **OK**, then select **HEMI** in the list and tap **Close**.



4. Export to USB

- 1. Check **Export: Control points only**, **To: HEMI (CSV file)**. Tap **Next >**.

Export

Export:

Control points only

To:

HEMI (CSV file)

All control points

Select from list...

Format

Next >

Cancel

2. Set Folder to **USB Storage (D:)** and type a file name (for example *HEMI CONTROL*).

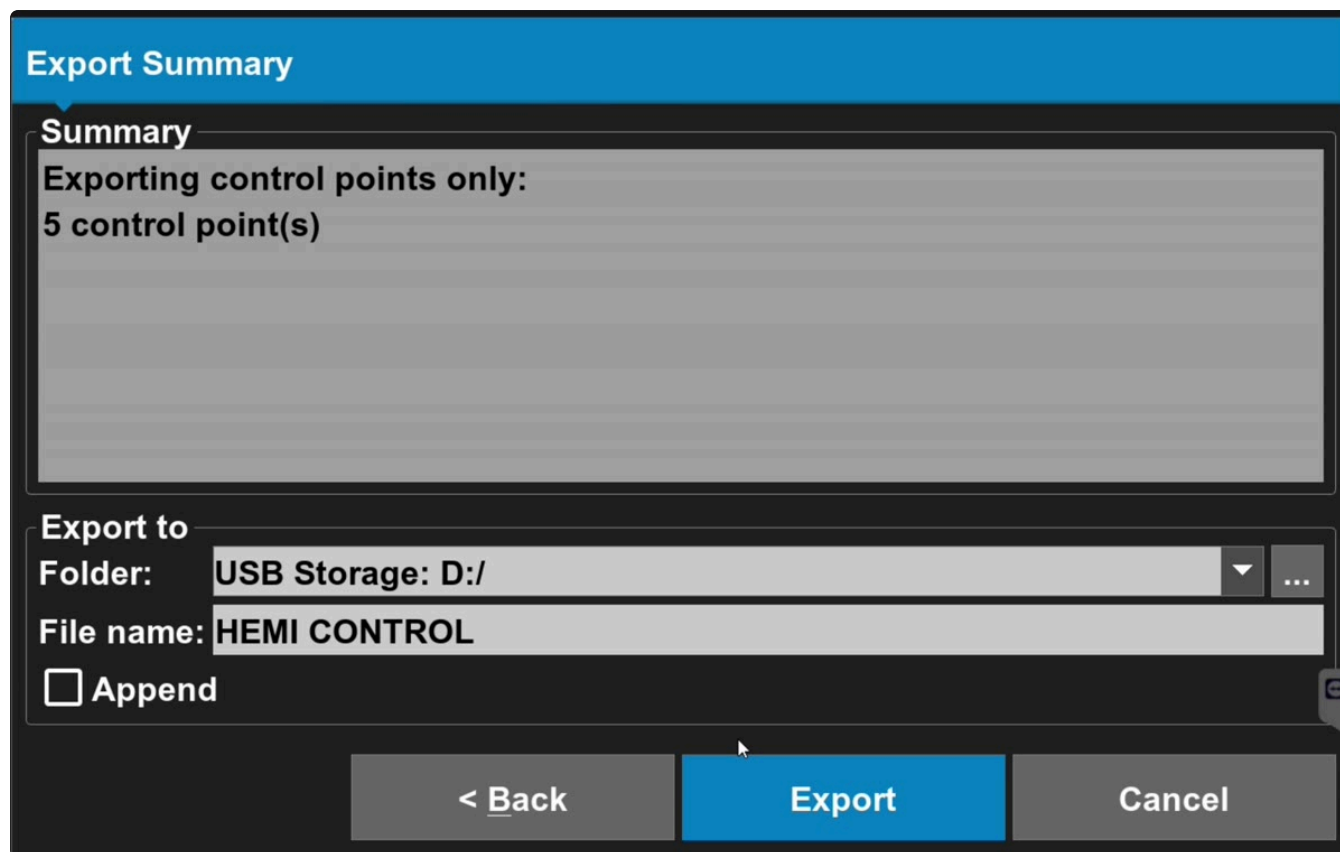
HEMI CONTRO

1	2	3	4	5	6	7	8	9	0
q	w	e	r	t	y	u	i	o	p
a	s	d	f	g	h	j	k	l	
z	x	c	v	b	n	m			
Shift		Space						-	

OK

Cancel

3. Tap **Export**. The summary shows how many control points are exported (5 in the video).



The image shows a software dialog box titled "Export Summary". It has a blue header bar with the title. Below the header, there is a section labeled "Summary" with a grey background. Inside this section, it says "Exporting control points only:" followed by "5 control point(s)". Below the summary section, there are two input fields: "Export to Folder:" with the value "USB Storage: D:/" and a dropdown arrow, and "File name:" with the value "HEMI CONTROL". Below these fields is a checkbox labeled "Append" which is currently unchecked. At the bottom of the dialog, there are three buttons: "< Back", "Export" (highlighted in blue), and "Cancel".

Export Summary

Summary

Exporting control points only:
5 control point(s)

Export to
Folder: USB Storage: D:/

File name: HEMI CONTROL

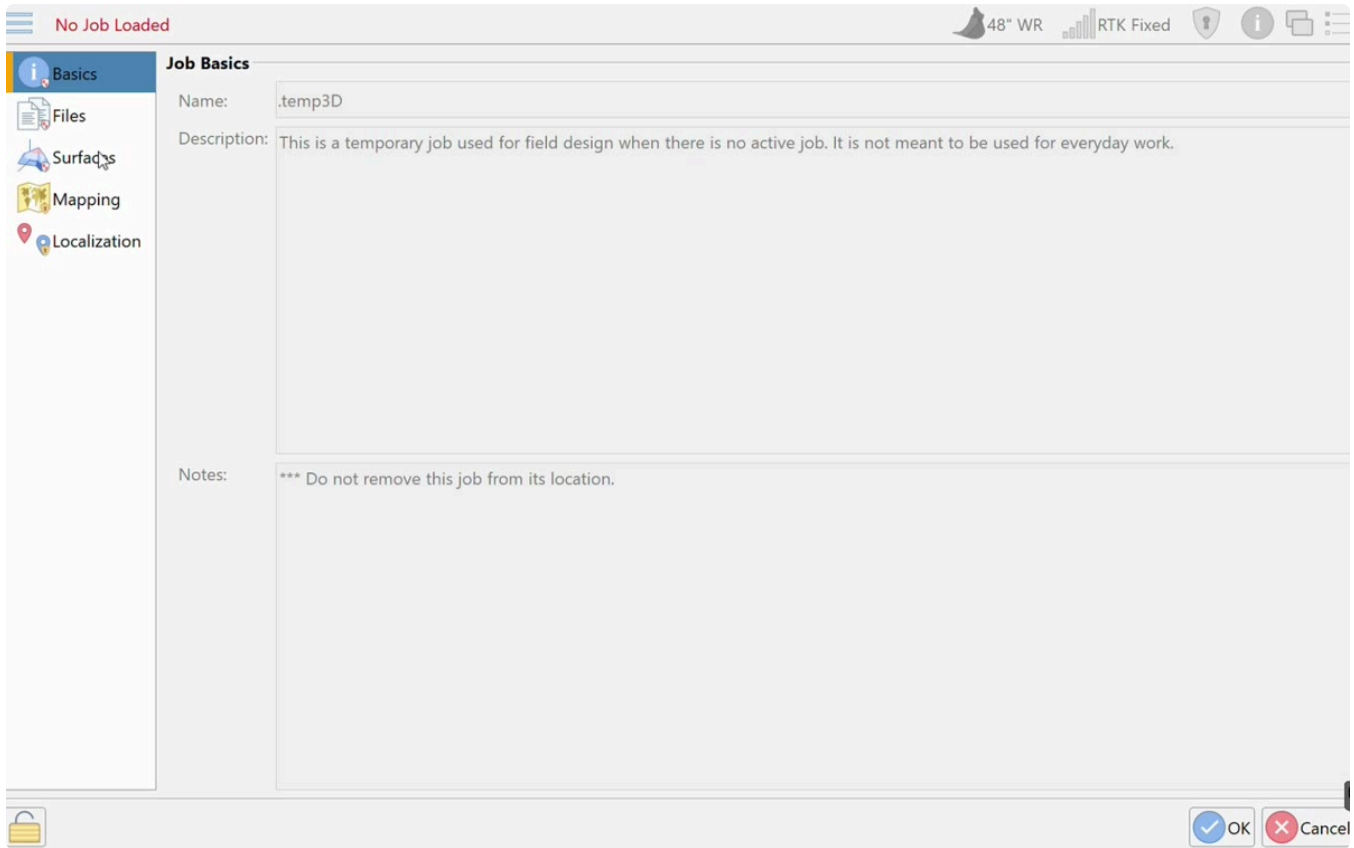
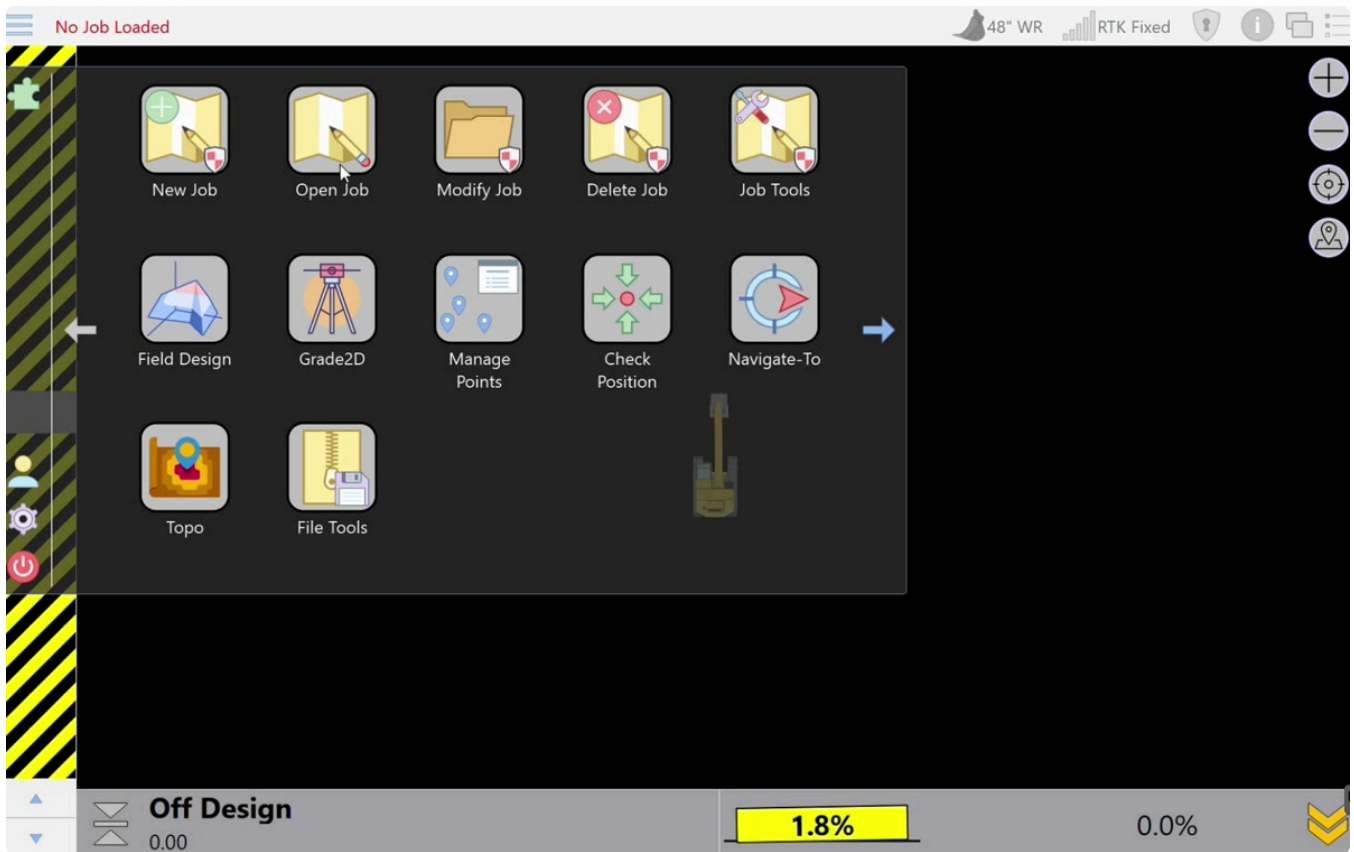
☐ Append

< Back Export Cancel

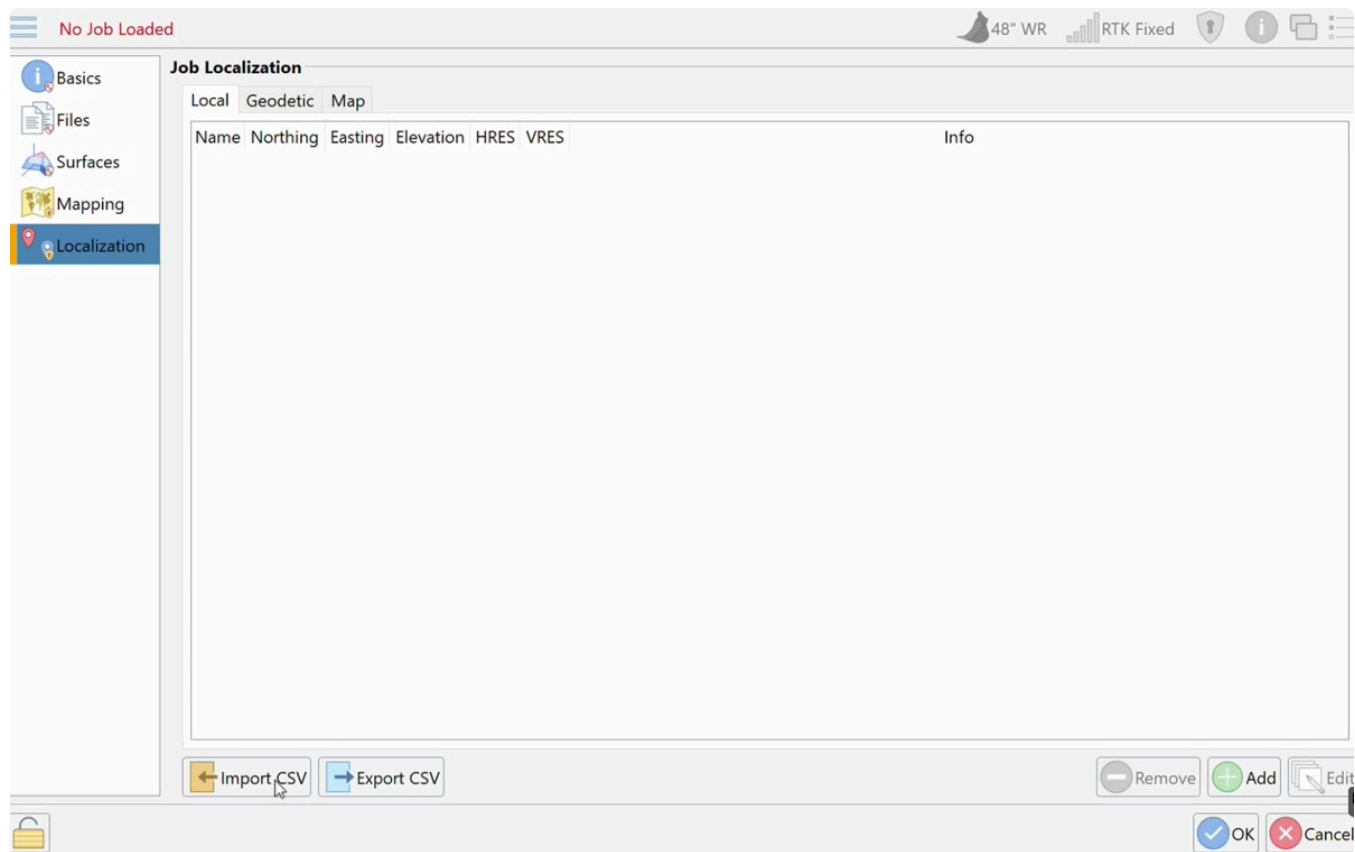
Part B – Import into SiteMetrix / GradeMetrix

5. Open the job's localization

1. Plug the USB stick into the SMG/GM tablet. From the job menu, open the job settings (the video goes to the **Job Basics** screen).

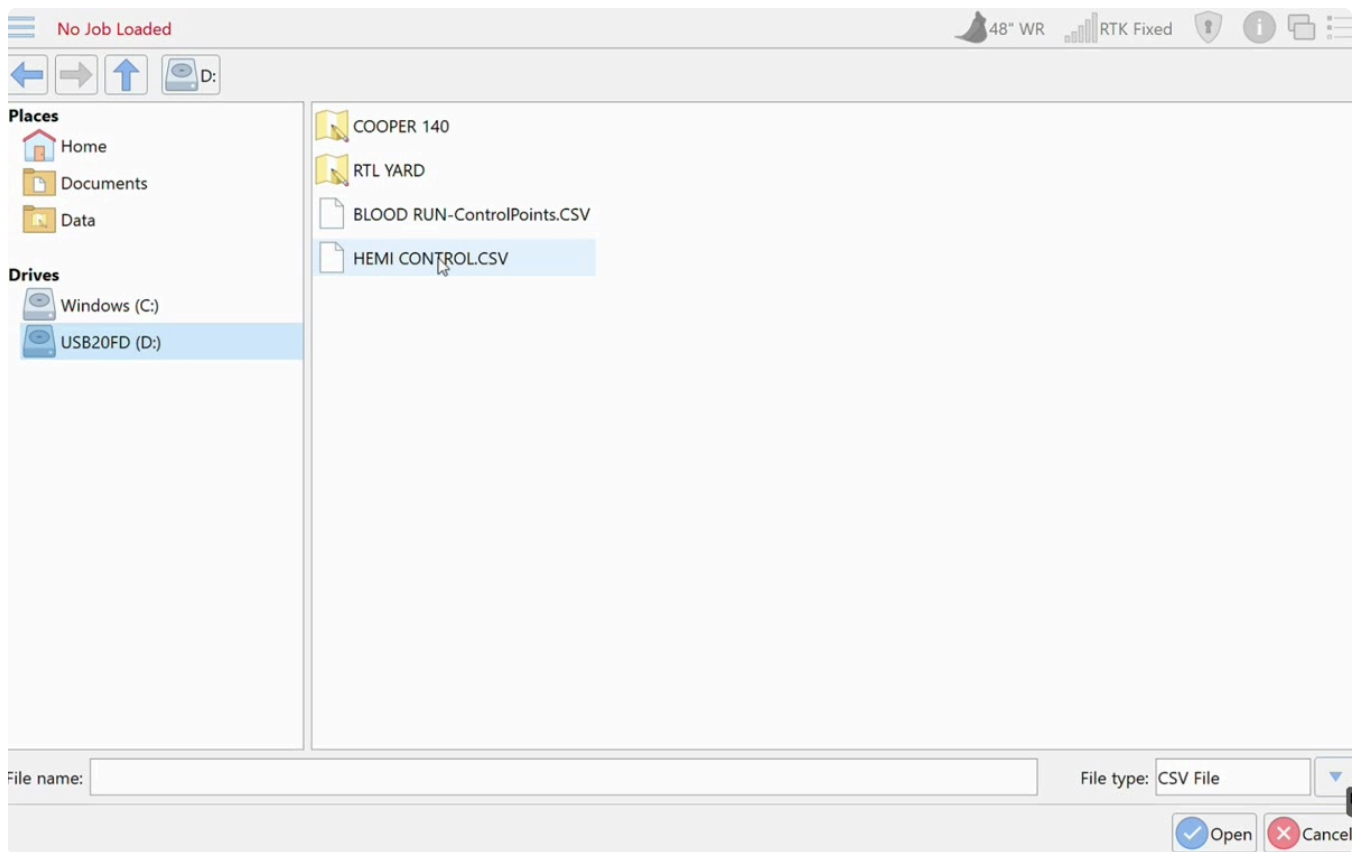


2. Tap **Localization** on the left, then **Import CSV**.



6. Import the CSV

1. Tap the **browse** button next to *Source File*, open **USB (D:)** and pick the file (HEMI CONTROL.CSV). Tap **Open**.



2. Check the parsing options:

- **Delimiter:** Comma
- **Text Qualifier:** None
- **CSV Format:** Name, Northing, Easting, Elevation, Latitude, Longitude, Height
- **LLH Format:** Decimal Degrees
- **Geodetic Height Format:** Meters

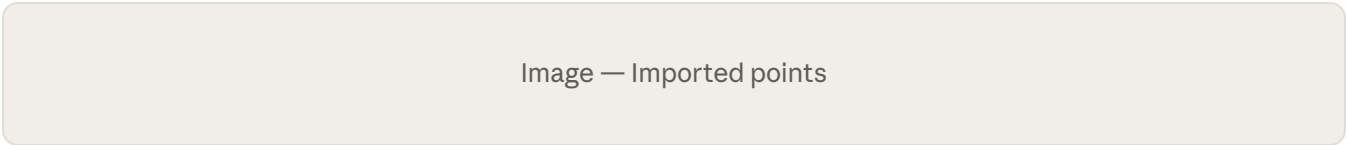
Image — Parsing options and preview

3. Check the **Preview**: each column should line up under the right heading. Tap **OK**.

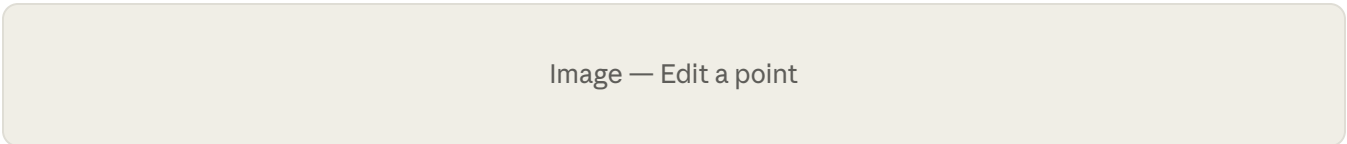
Image — Decimal Degrees selected

7. Check the points and residuals

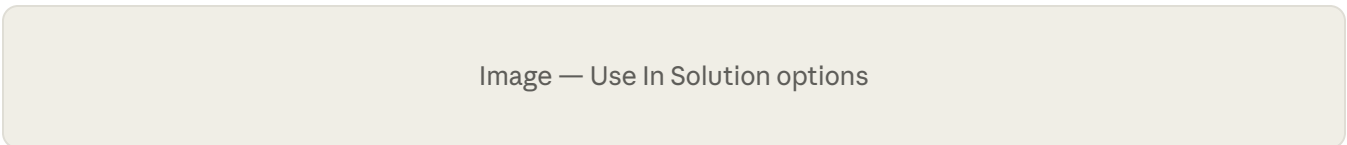
1. The points appear with their **HRES** and **VRES** (horizontal and vertical residuals).

A placeholder for an image showing imported points.

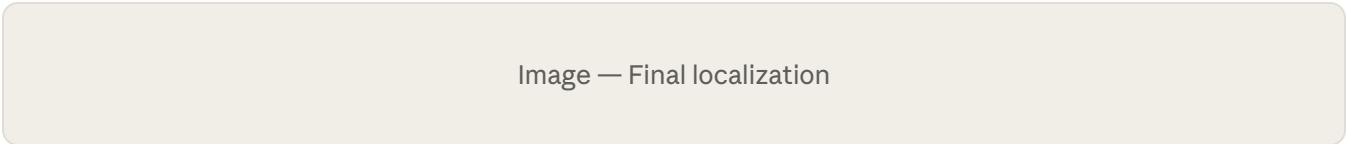
2. To leave a point out of the solution, select it and tap **Edit**.

A placeholder for an image showing the edit point screen.

3. Set **Use In Solution** to **Do Not Use**, **Horizontal Only**, **Vertical Only** or **Use Both**. Tap **OK**.
In the video, the *tripod* point (0, 0, 0) is set to **Do Not Use**.

A placeholder for an image showing the 'Use In Solution' options menu.

4. Check that the residuals of the remaining points are small, then tap **OK** to save.

A placeholder for an image showing the final localization results.

Tips

- Make the HEMI format once; next time just pick it in the **To:** list.
- Leave out points that aren't real control (like a base/tripod point at 0, 0, 0) and any point with large residuals.
- If the preview looks shifted, check the delimiter, text qualifier and CSV format.