PrimeThought Instrument Interface

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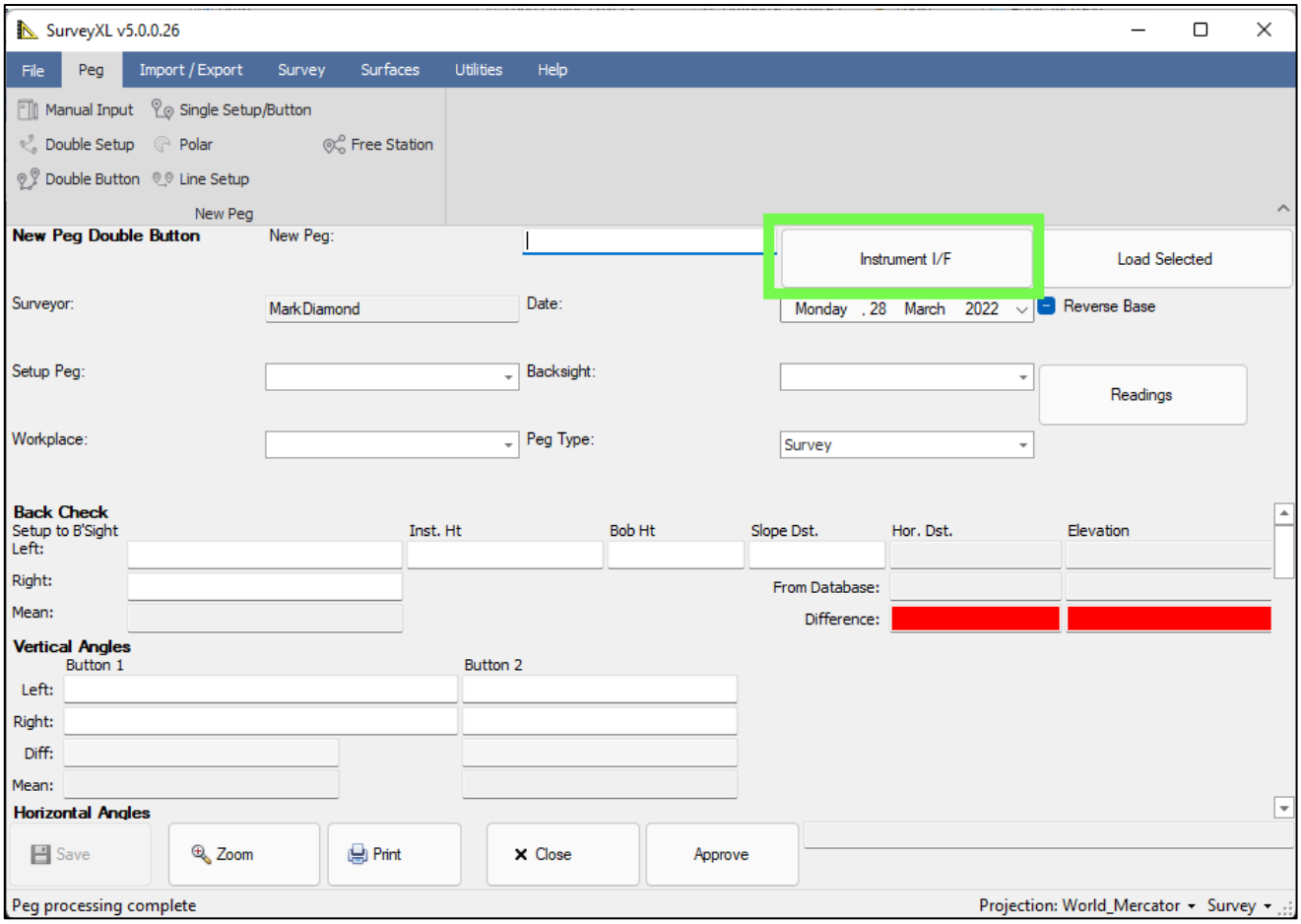
The PrimeThought Instrument Interface is a program within SurveyXL for loading raw survey readings straight from your surveying instrument such as Topcon and Leica, or from device files, so these can then be loaded into SurveyXL or MineModeller and calculated in various peg operations such as Double Setup.

It is accessed by clicking the {Instrument I/F} button in the dialogue of whatever peg operation you are currently doing. This is available for Double Setup, Double Button and Single Setup/Button:


SurveyXL v5.0.0.26
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Single Setup/Button
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Monday , 28 March 2022
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Bob Ht
Slope Dst.
Hor. Dst.
Elevation
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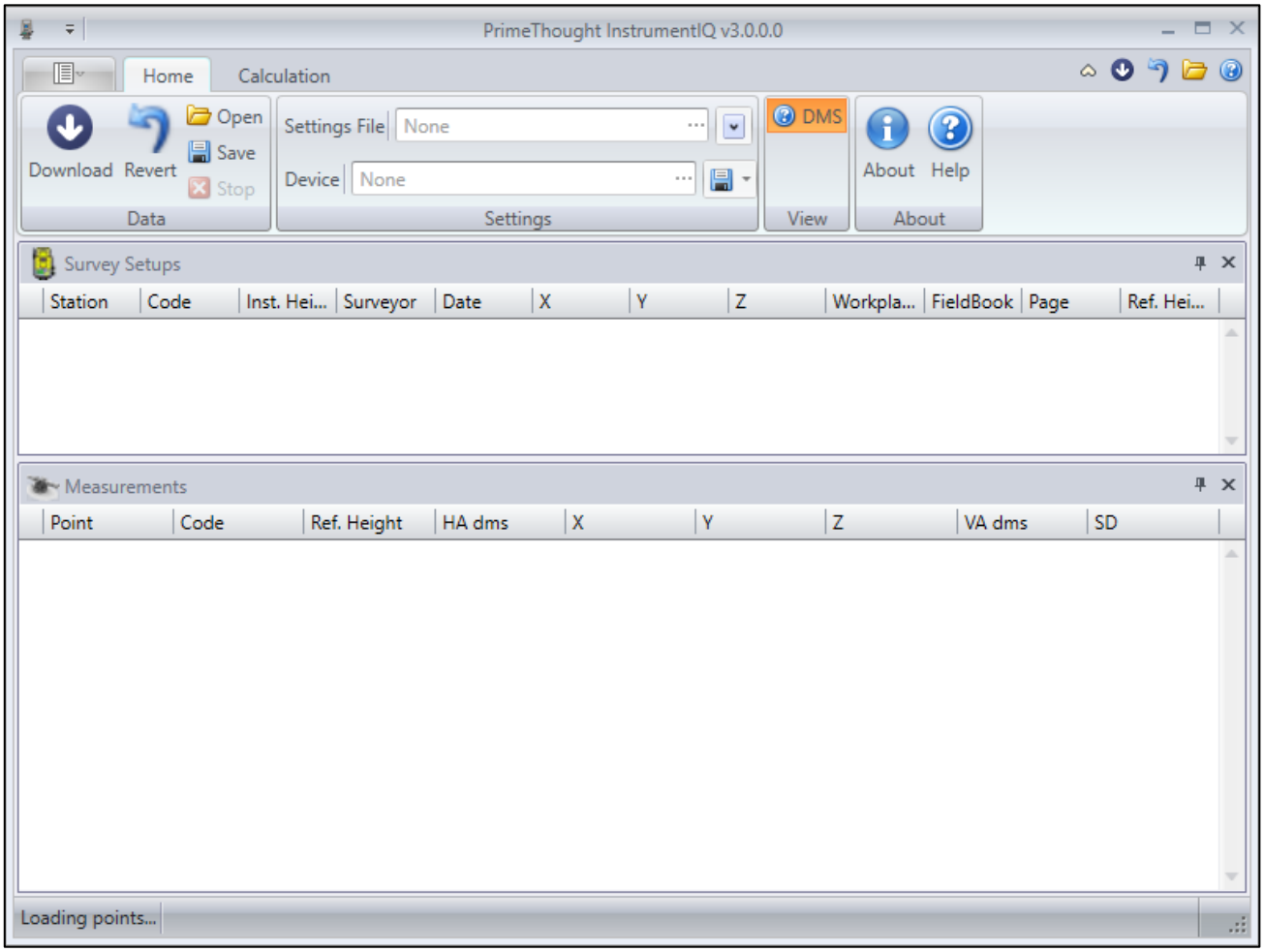
Difference:
Vertical Angles
Button 1
Button 2
Left:
Right:
Diff:
Mean:
Horizontal Angles
Save
Zoom
Print
Close
Approve
Peg processing complete
Projection: World_Mercator
Survey


PrimeThought InstrumentIQ v3.0.0.0
Home
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FieldBook
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Code
Ref. Height
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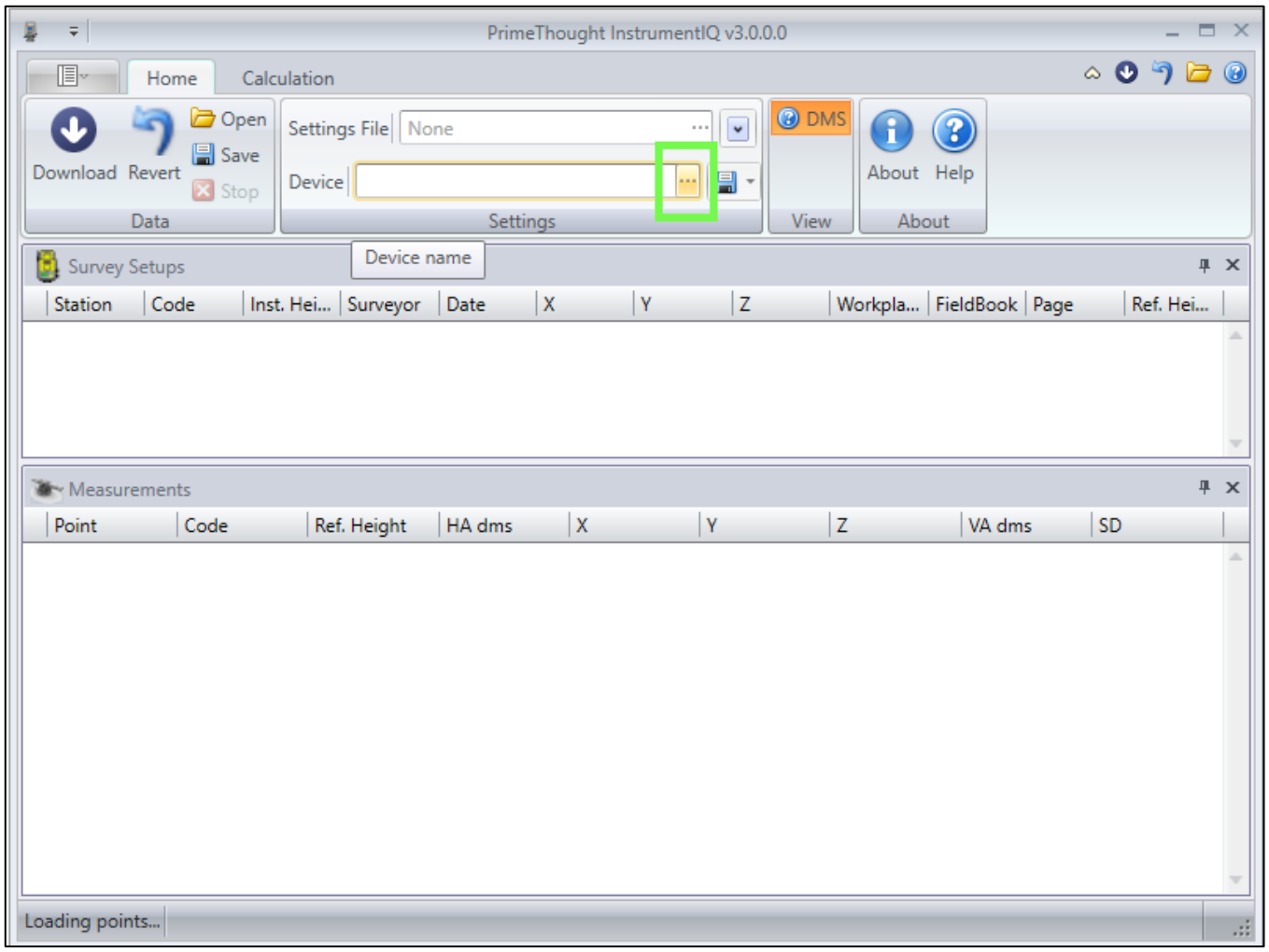
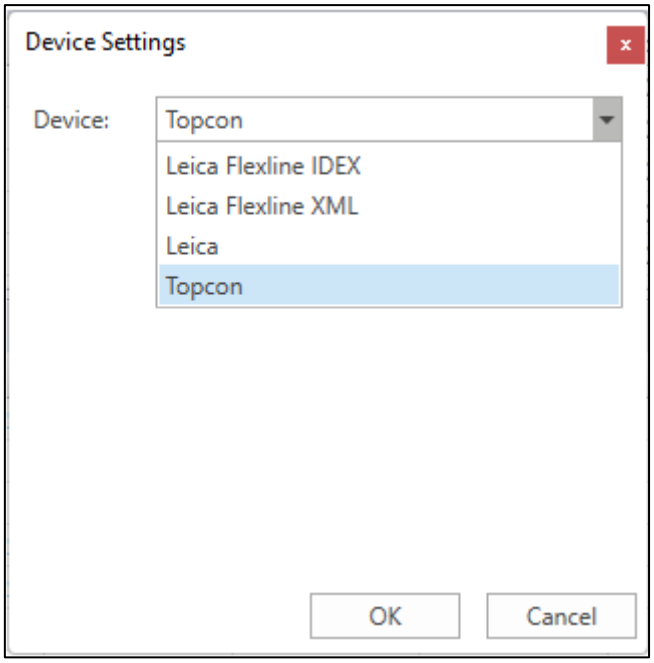
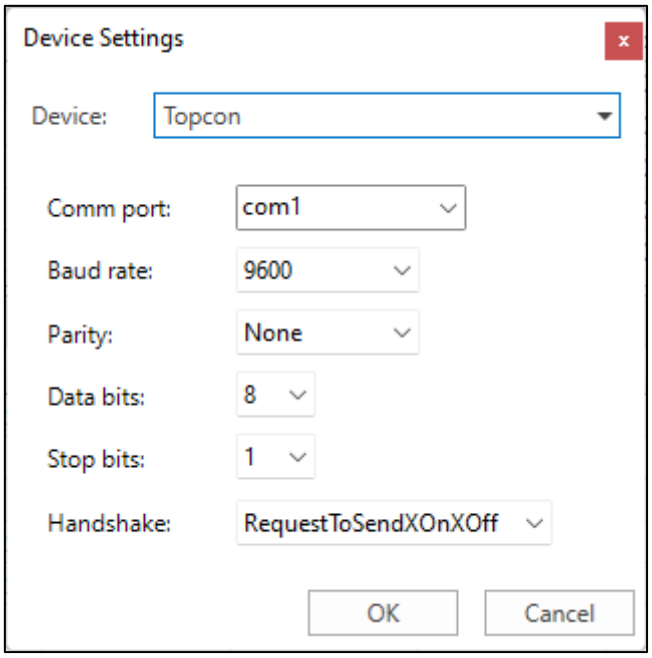
Y
Z
VA dms
SD
Loading points...

First, connect your total station to your computer then select the three little dots by the “Device” field, a “Device Settings” window will come up. Choose the type of Device you are using from the dropdown:

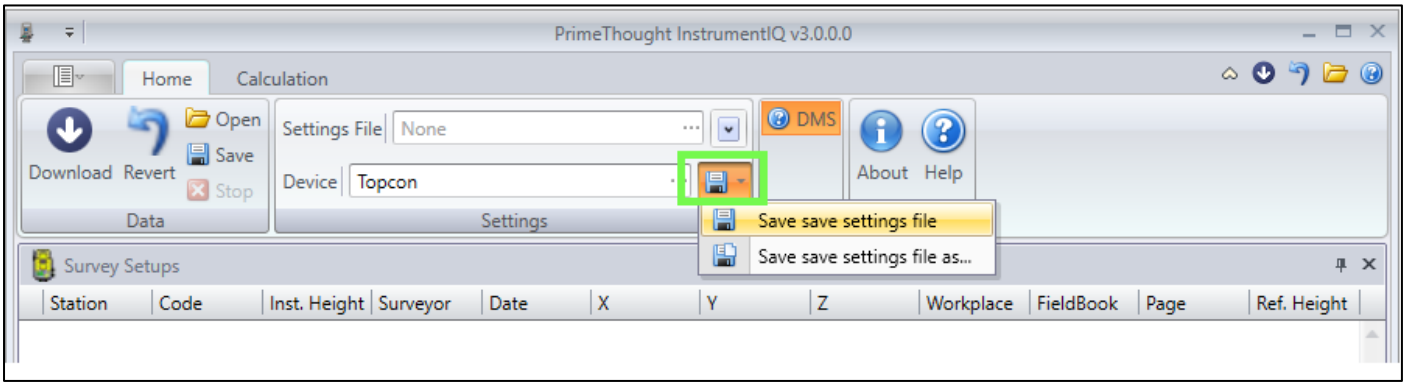




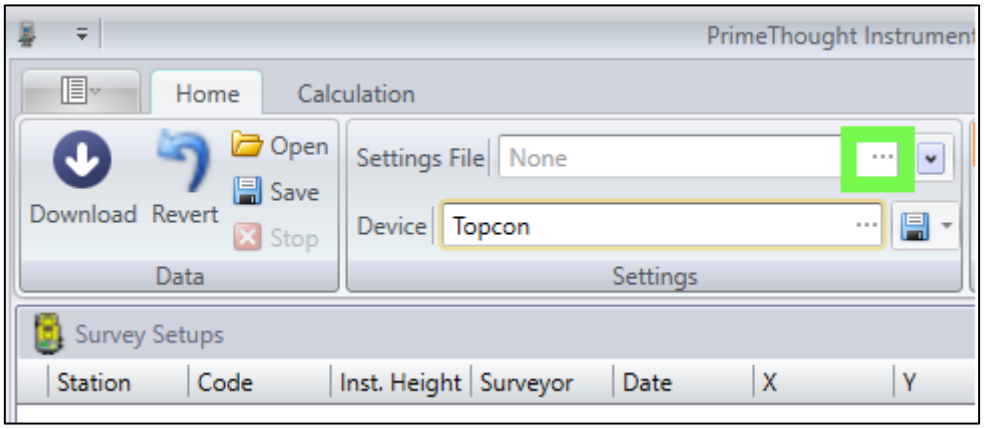
Then, some default settings for that device will populate; you can adjust these as necessary, then click **OK**:



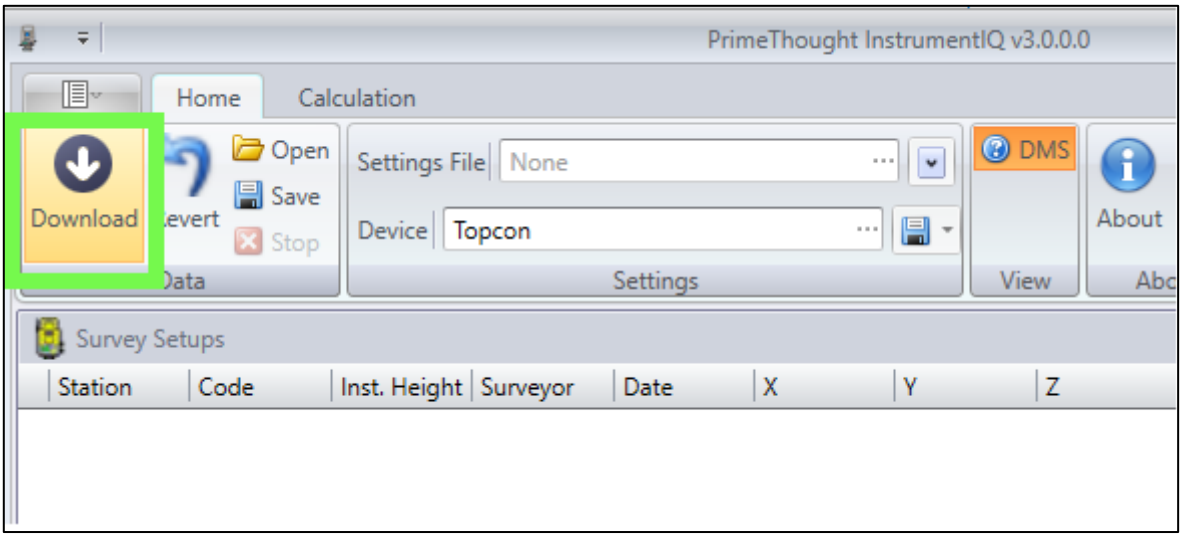
You can then save this settings file for reuse if you wanted to:

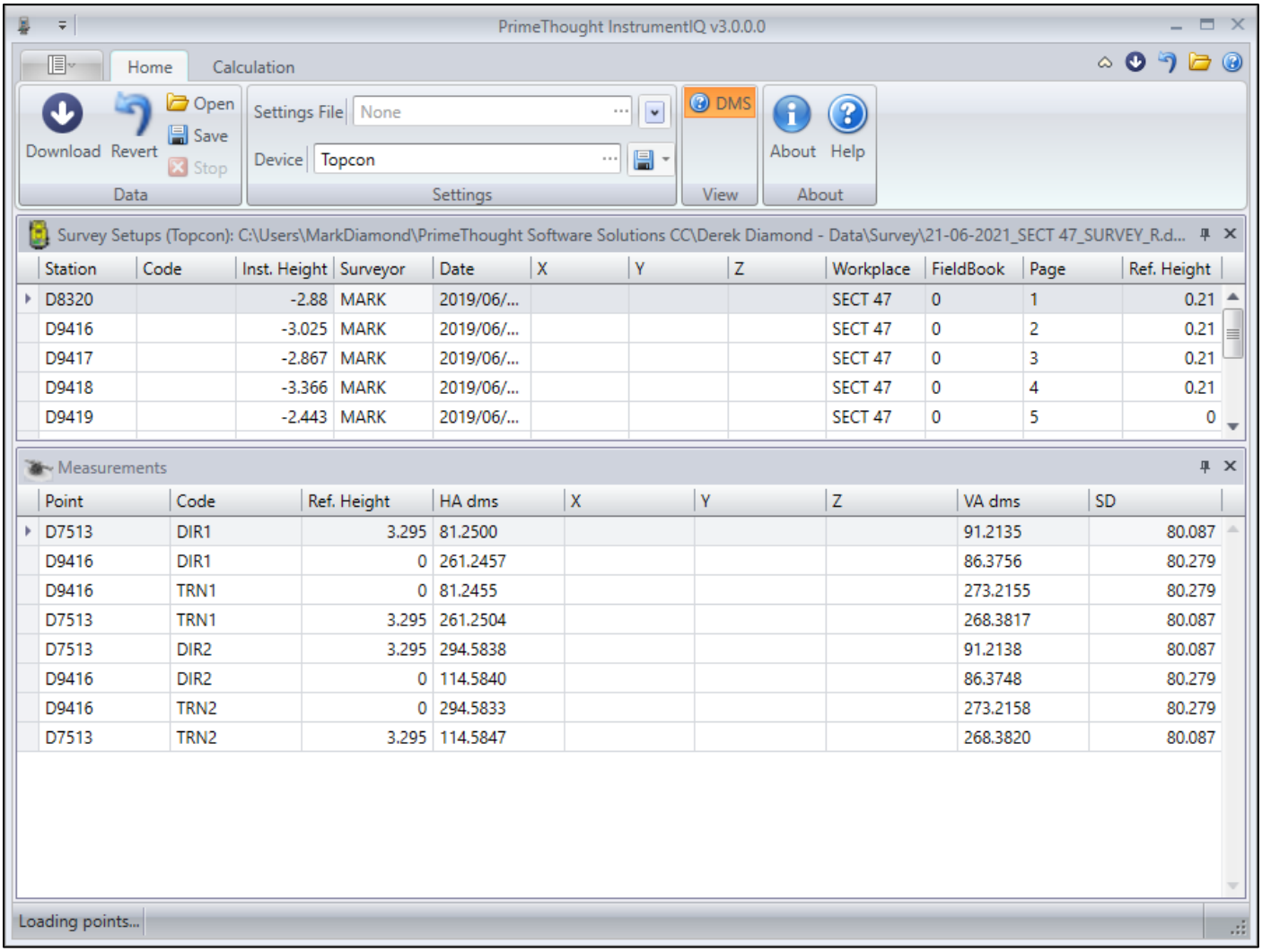


This file can then be loaded at a later date by browsing to it by the three little dots by the Settings File field:

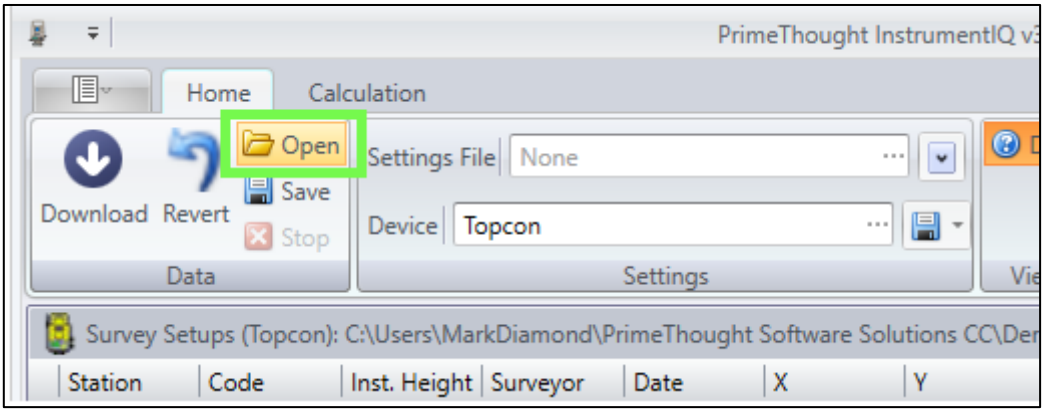


Then, you can simply click **Download** to download the readings from this device; when you download, the settings are automatically correct per the device specification:

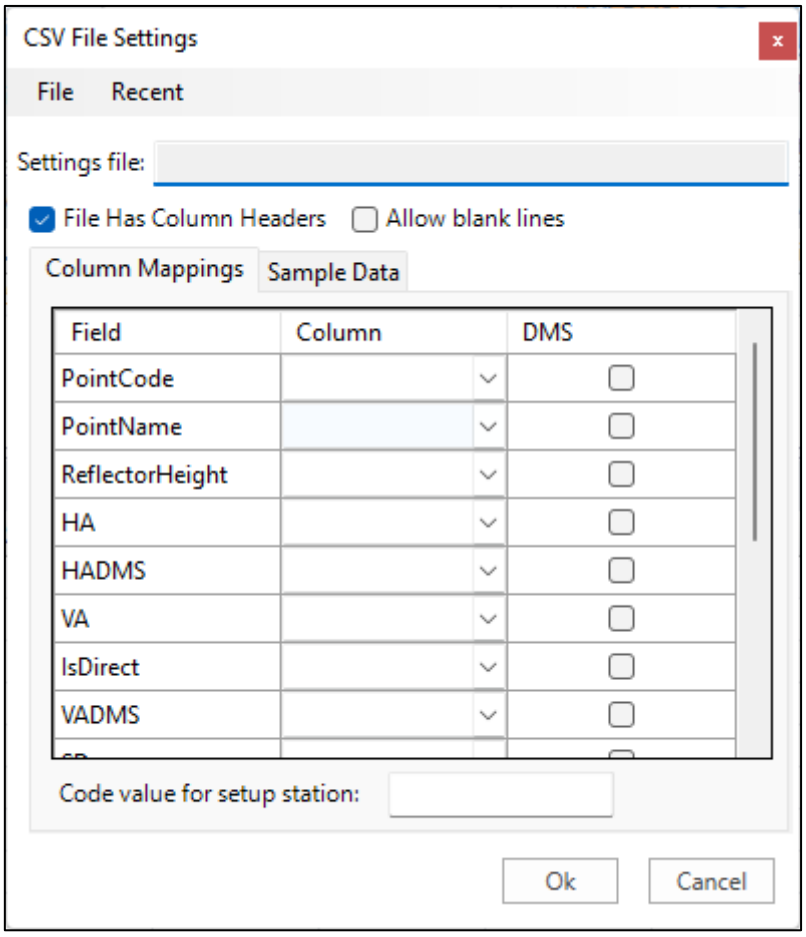




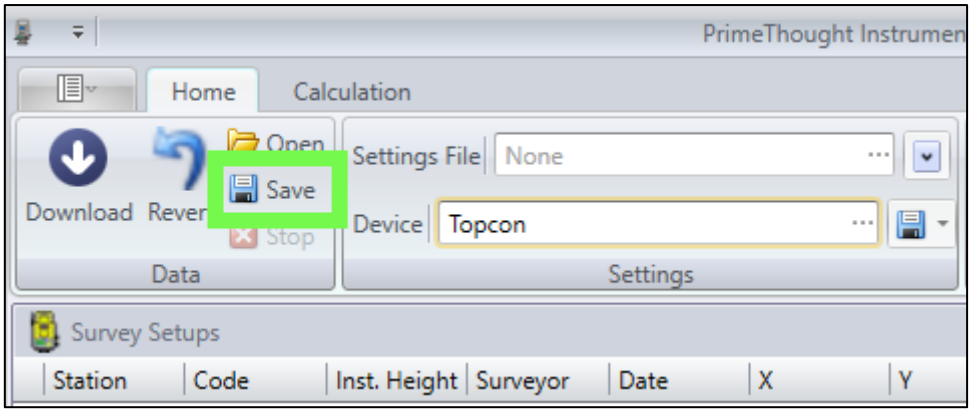
This data can also be opened up from a device file, instead of loading directly from the instrument:



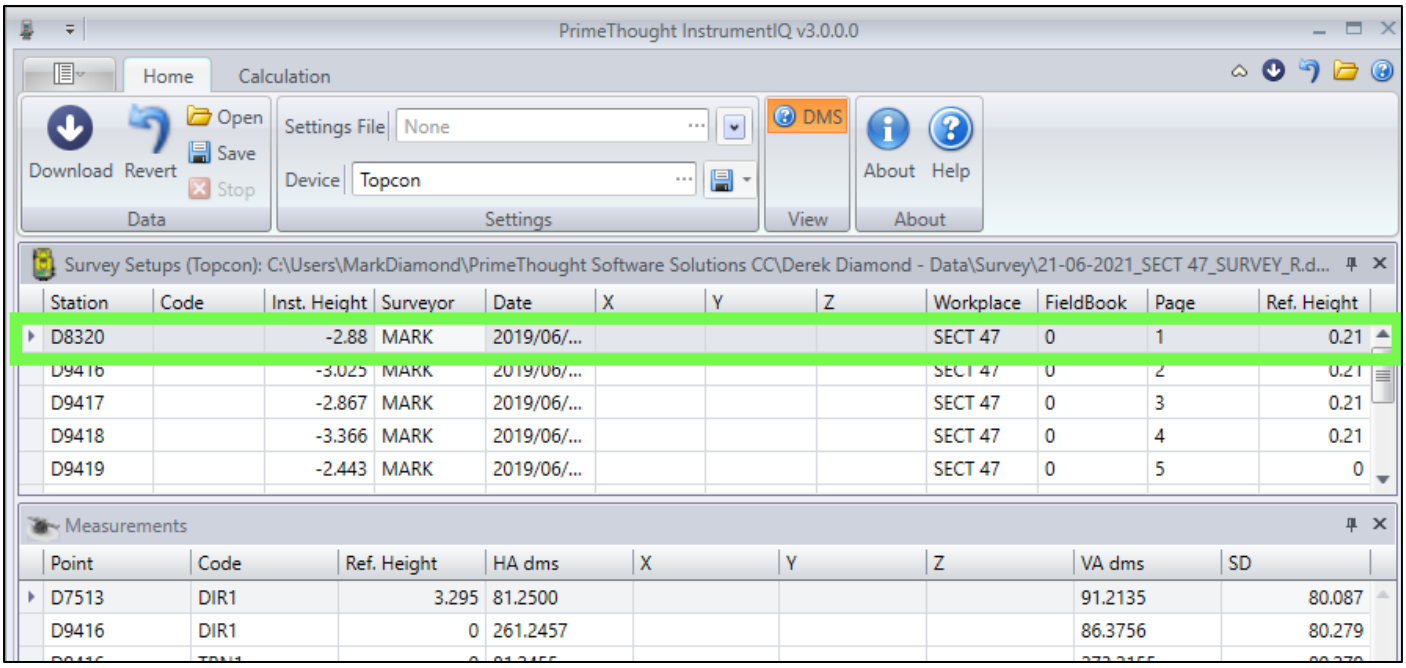
If you choose to load from a CSV file you will have to set up the settings for the column specification and then the data will be loaded:

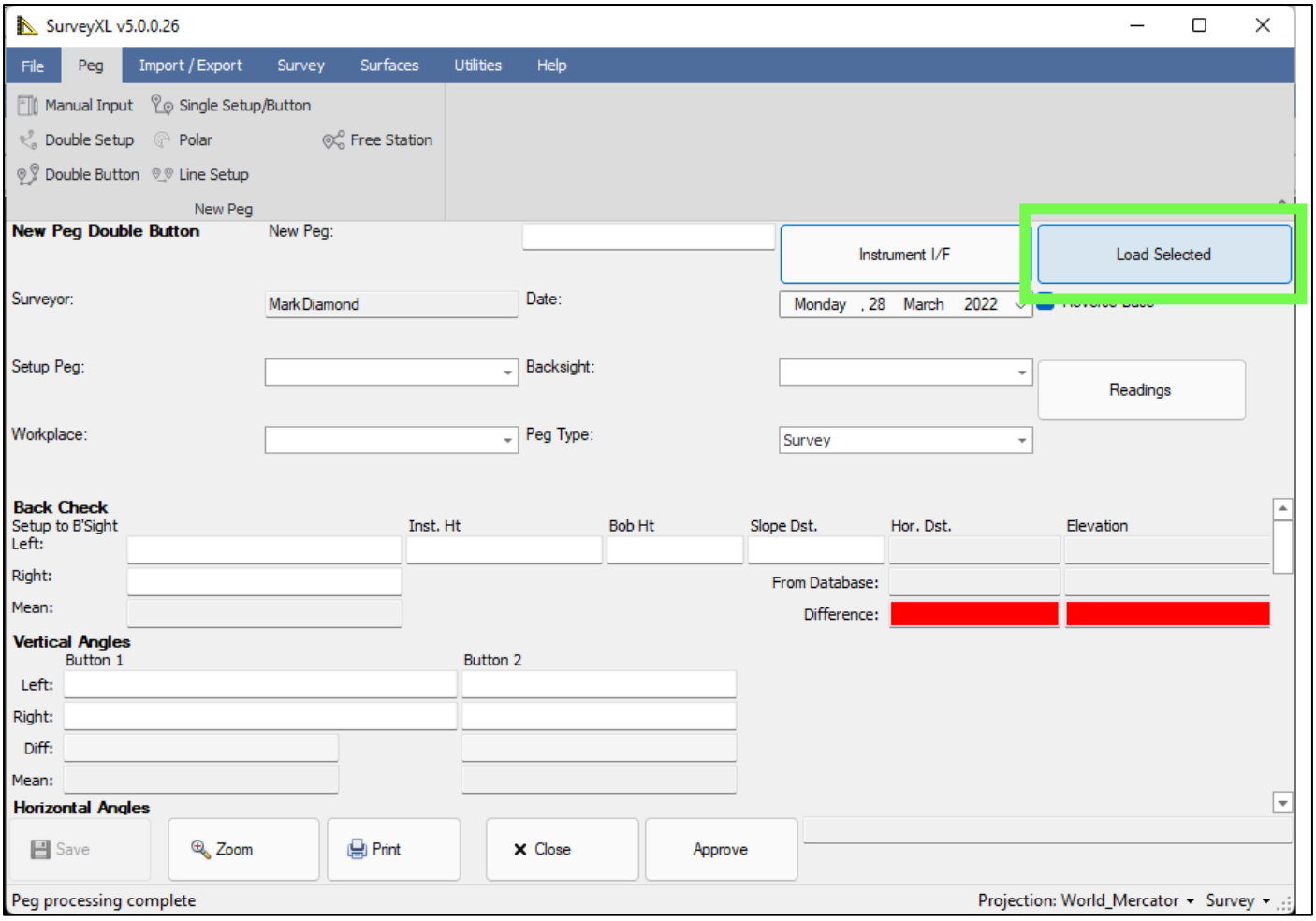


The loaded data in the Instrument Interface can be saved out as well by clicking the **Save** button:

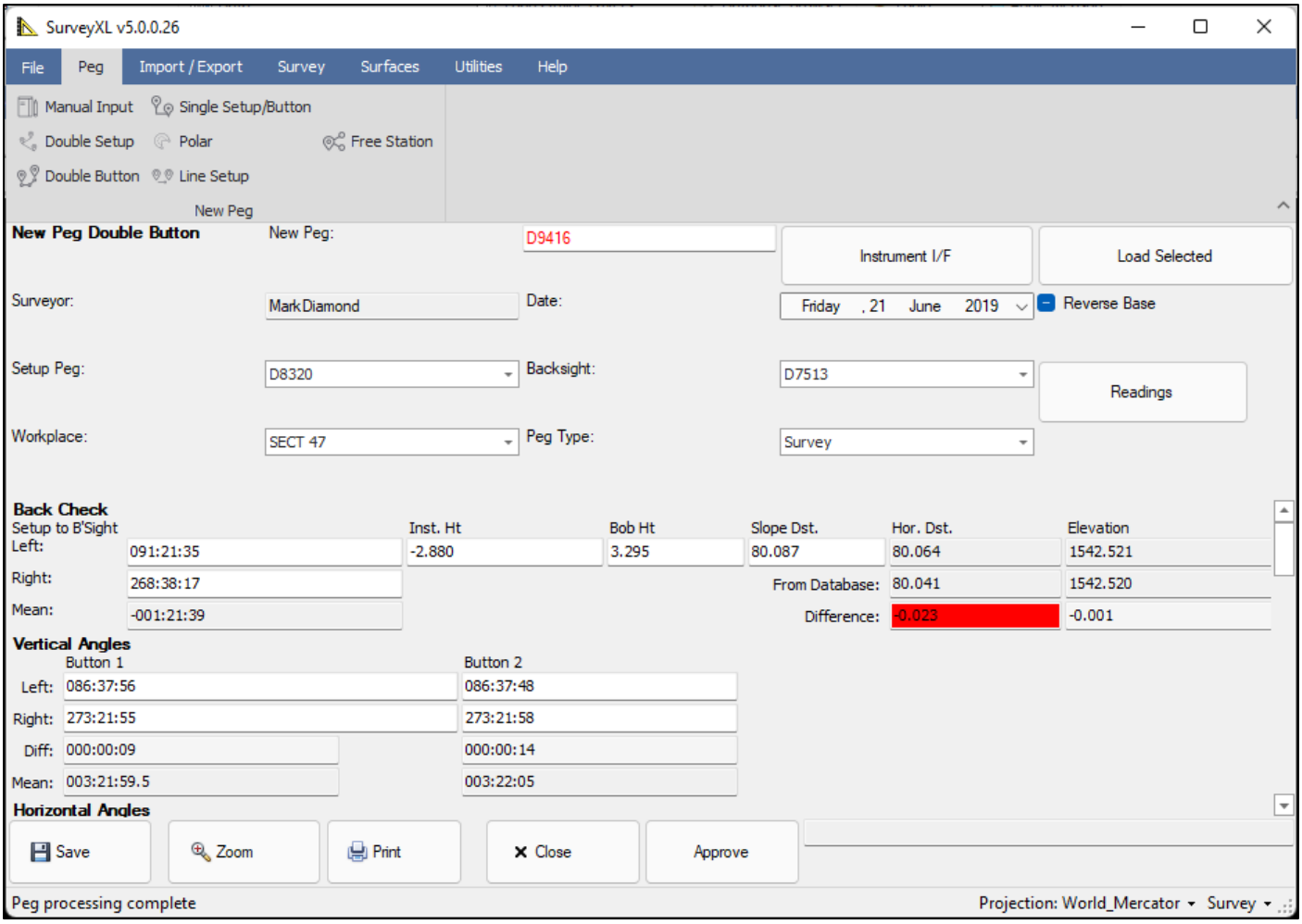


Choose the survey setup to add to the database by clicking on **Load Selected** in the peg operation dialogue; the current selected survey setup will load:

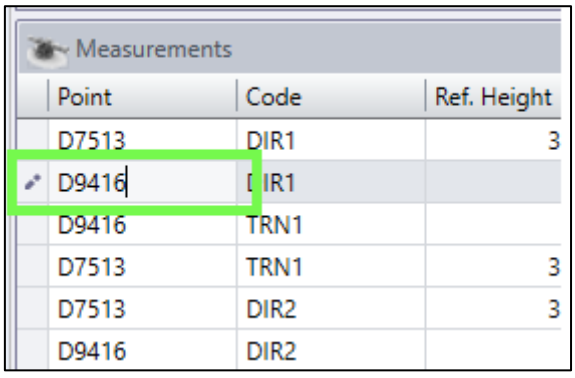




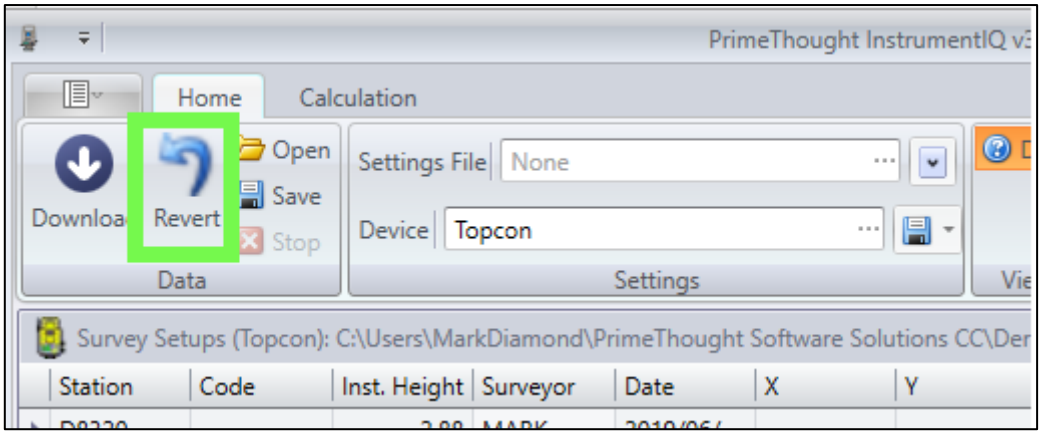
The result is as below:



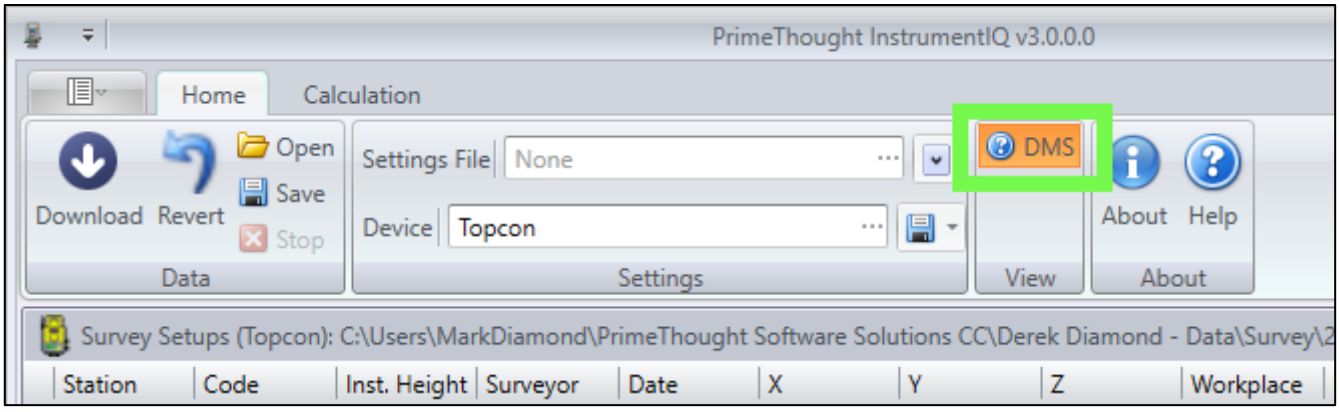
In the interface you are able to edit the data as well, for example if you wanted to change the name of a peg:



When editing, at any point you can revert back to the original source data by clicking the **Revert** button:

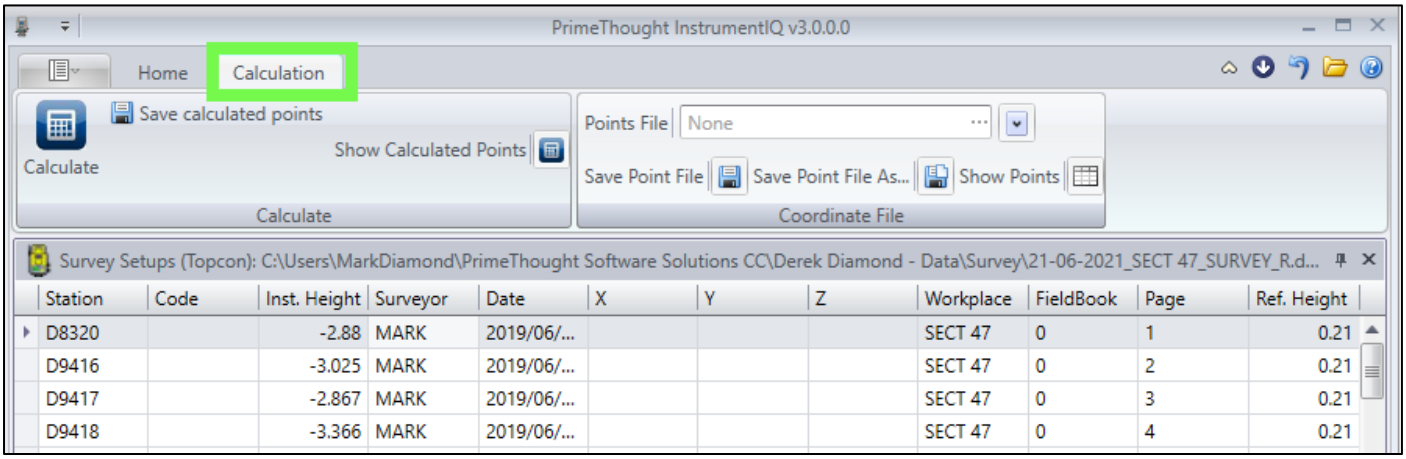


The **DMS** button is toggled on by default, this will display your angles in Degrees, Minutes and Seconds, if you toggle it off your angles will be displayed as decimals:

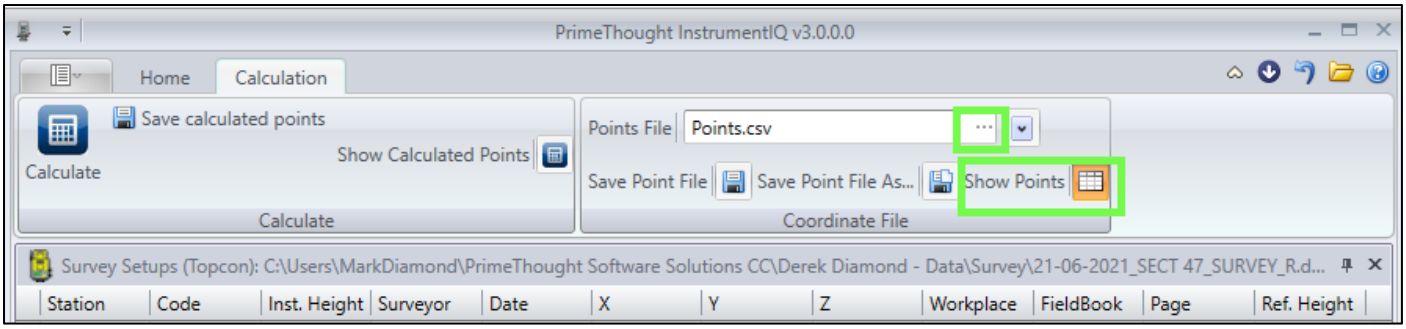


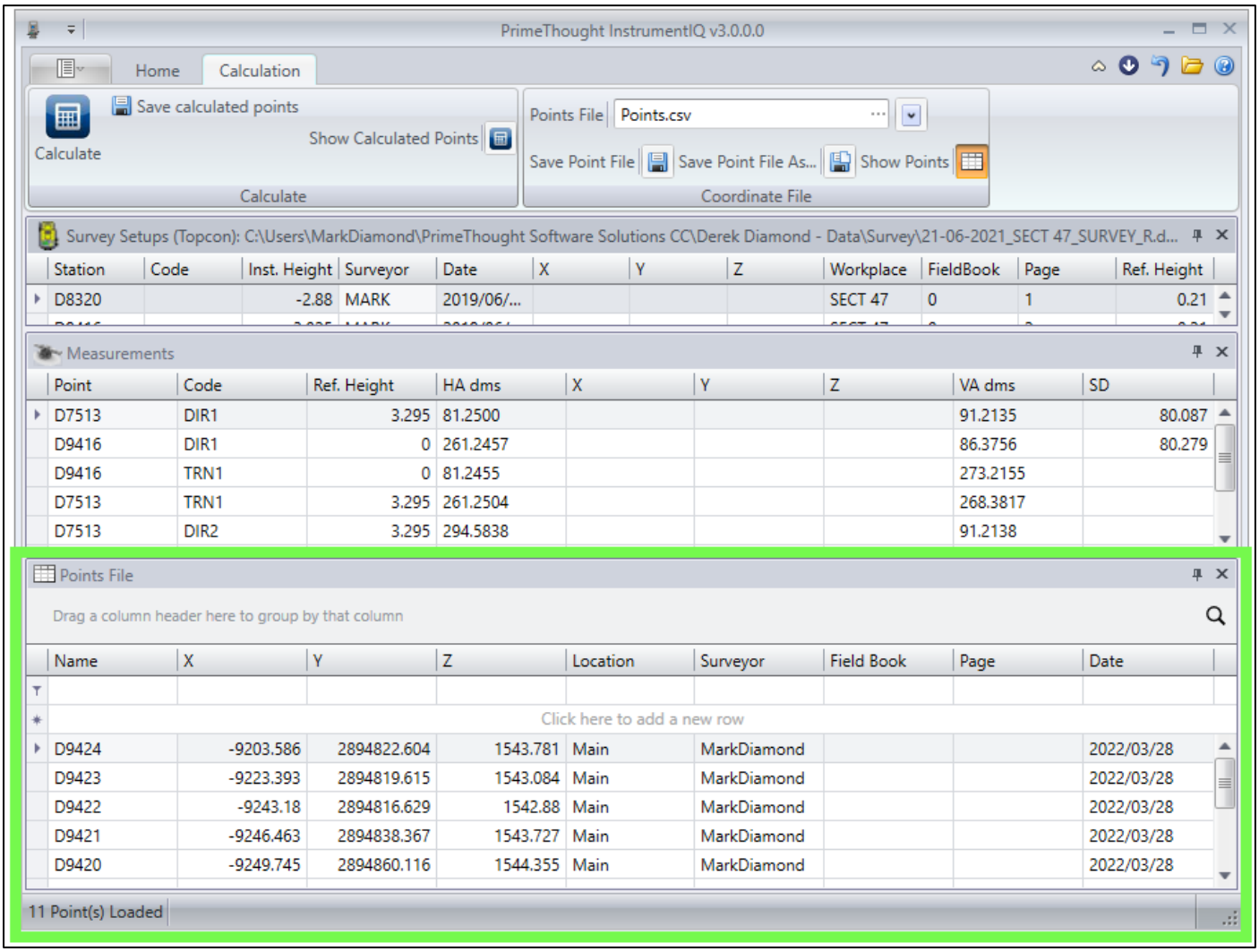
Calculation

In the **Calculation** tab you can load points with coordinates from a file, these can then be used to get quick calculations of your survey data:

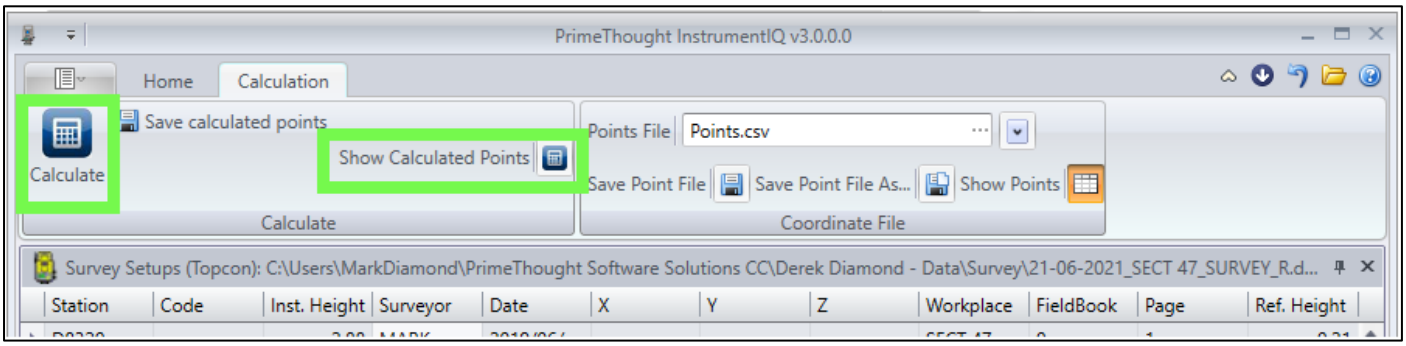


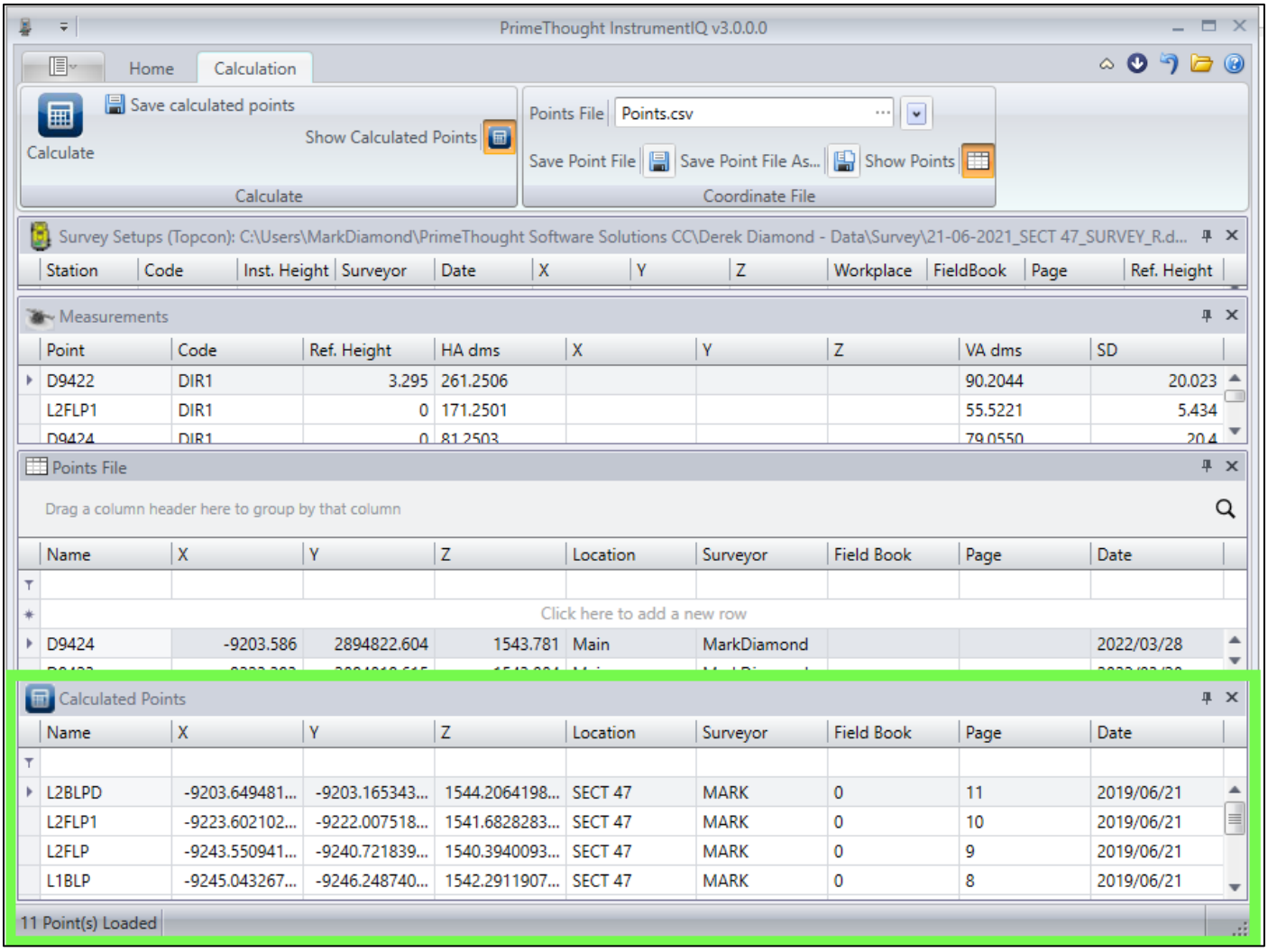
Click the three little dots by the **Points File** field to load the file, then click **Show Points** which will bring up a dialogue at the bottom with your point data:



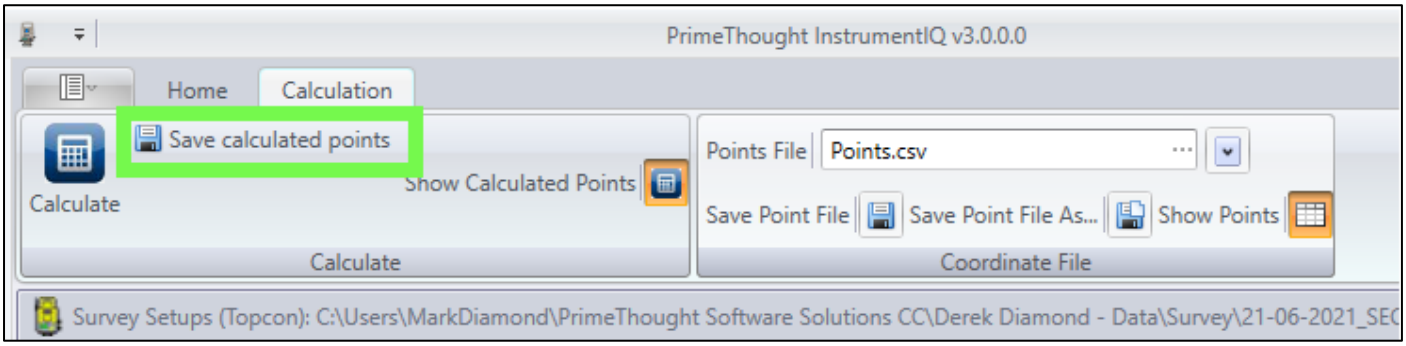


Then click **Calculate** and the coordinates of your new surveyed pegs will be calculated for you, to see the calculations click **Show Calculated Points**:



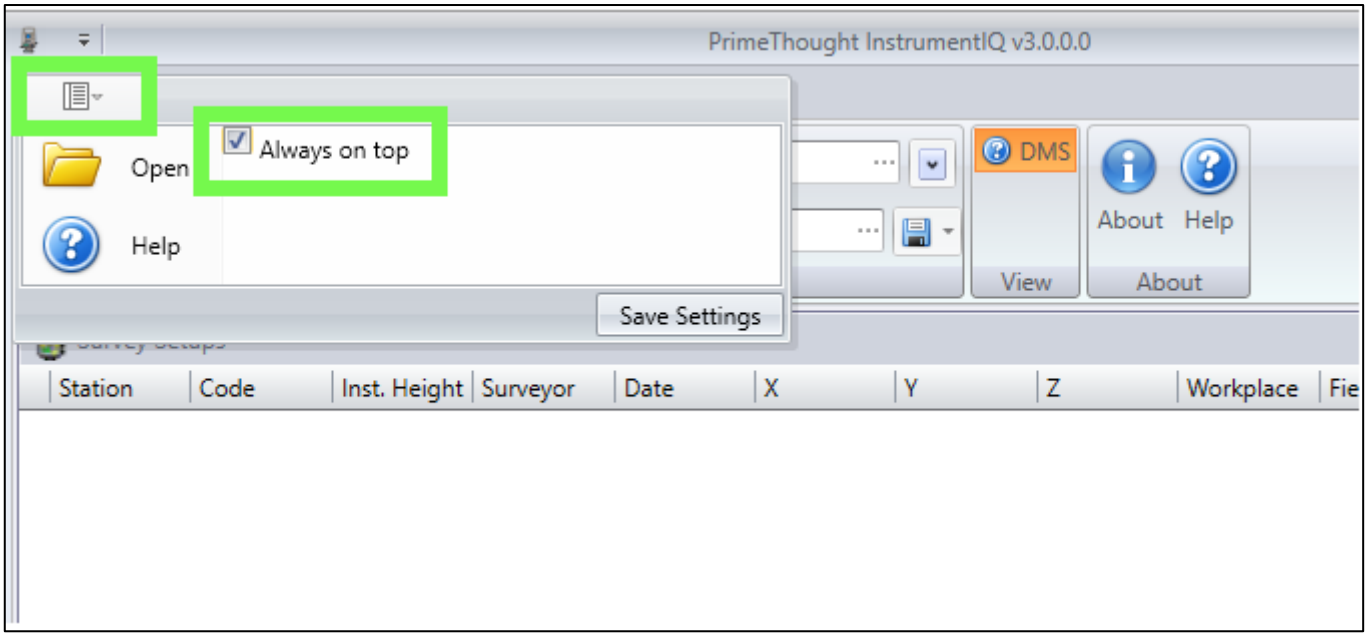


You can save these calculations out by clicking **Save calculated points**:



File Menu

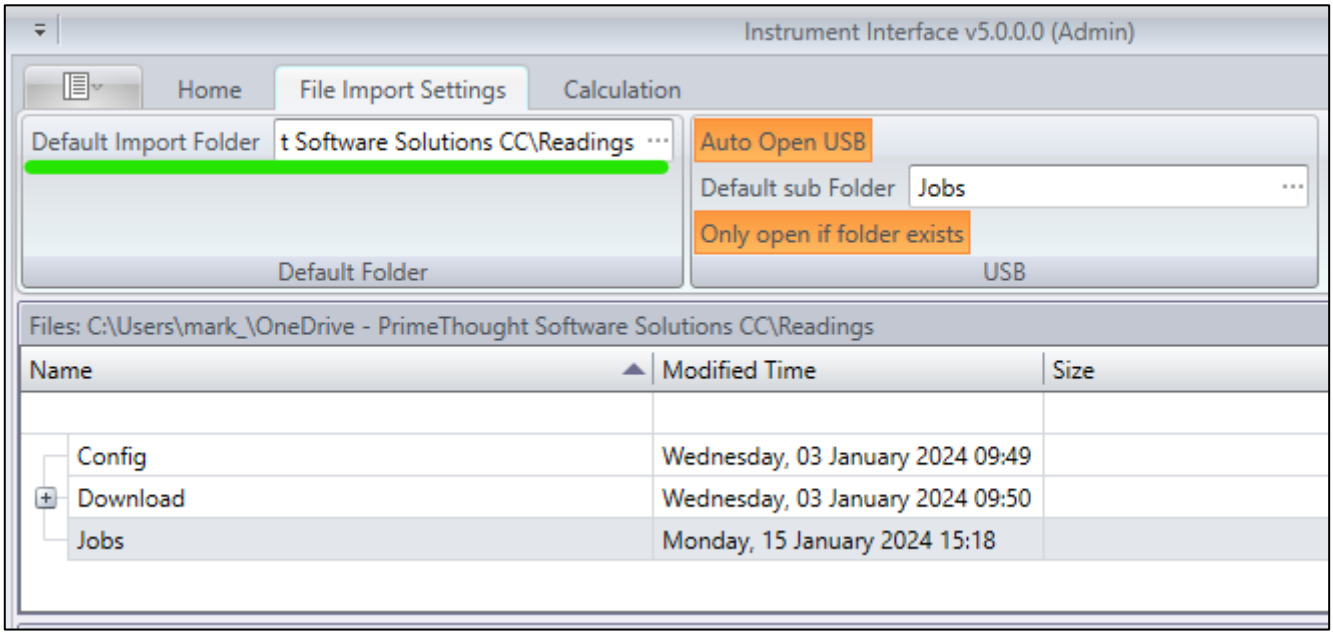
You can make the Instrument Interface window always show on top and not disappear in the background, such as when you click on your Survey window, by ticking on **Always on top**:



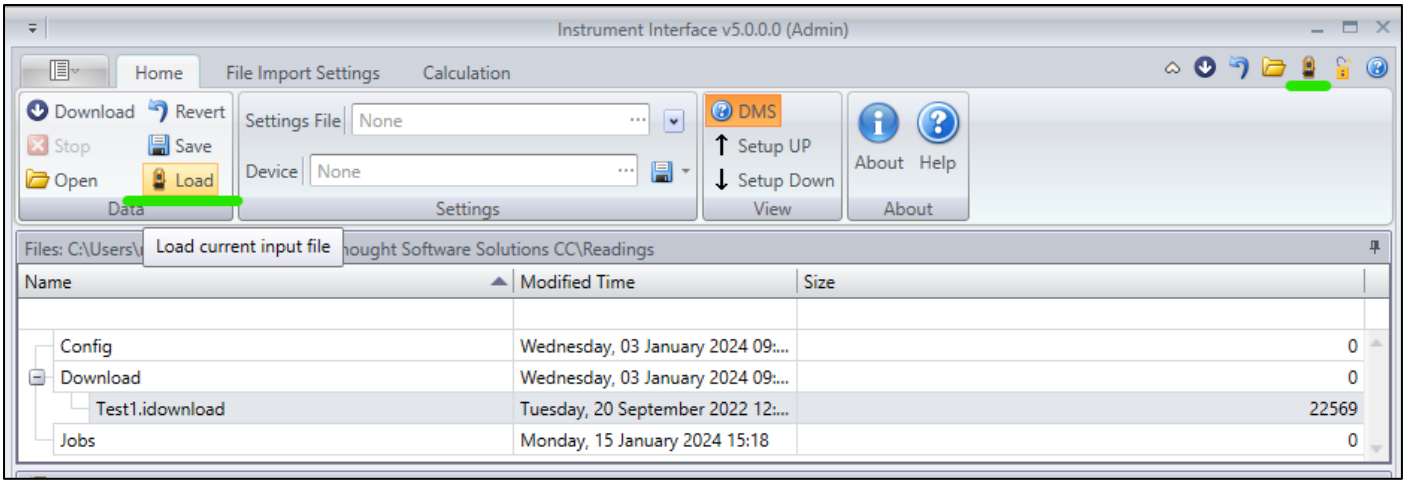
File Import Settings

In the **File Import Settings** tab you can set up a default import folder path to load your readings files from. Such a folder may exist on an FTP server for example or other shared location where readings files are uploaded to from the total station via FTP or Wi-Fi.

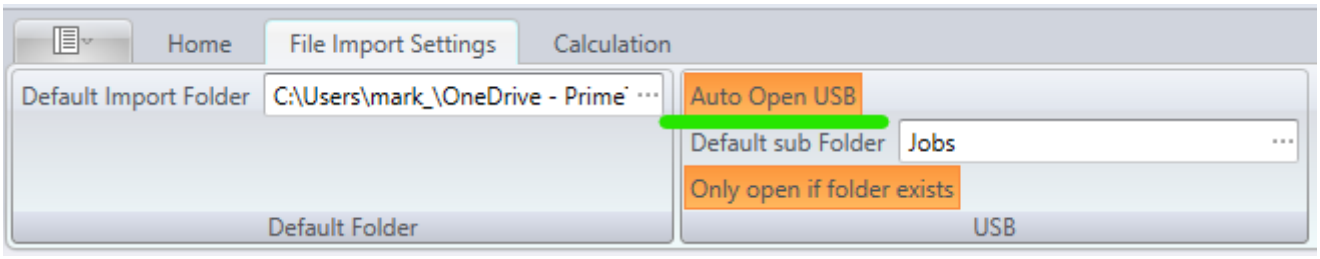
This path will be remembered so each time you open up the Instrument Interface you will be in the correct location and ready to load your files. This default folder's contents are populated in the pane just below this tab:



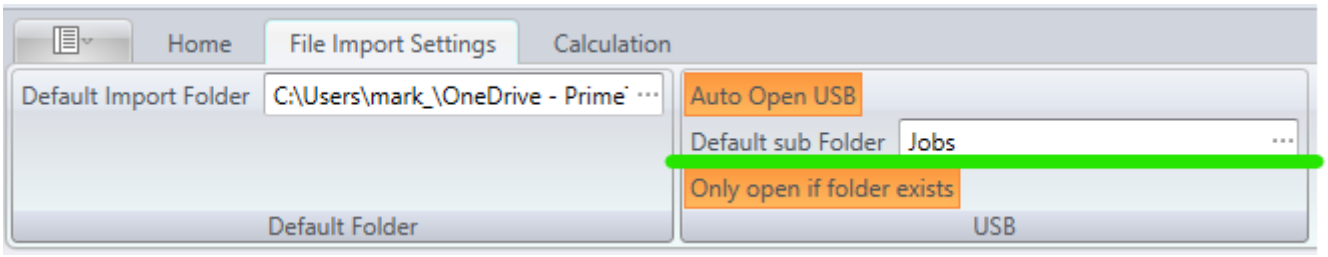
Click on the file you want to load then click the **Load** button available in the **Home** tab or in the shortcuts toolbar in the top right:



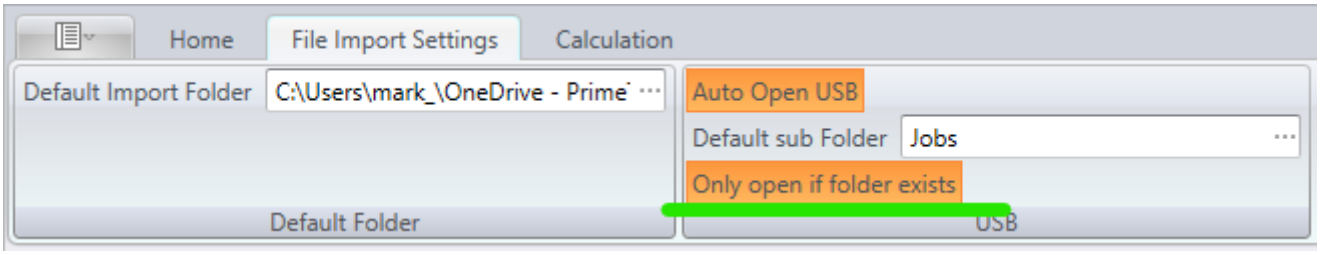
You can also toggle the **Auto Open USB** option which will automatically open a USB when it is inserted to your pc:



You can also specify a default sub folder to open directly to in the USB when it is plugged in by the **Default sub folder** field:



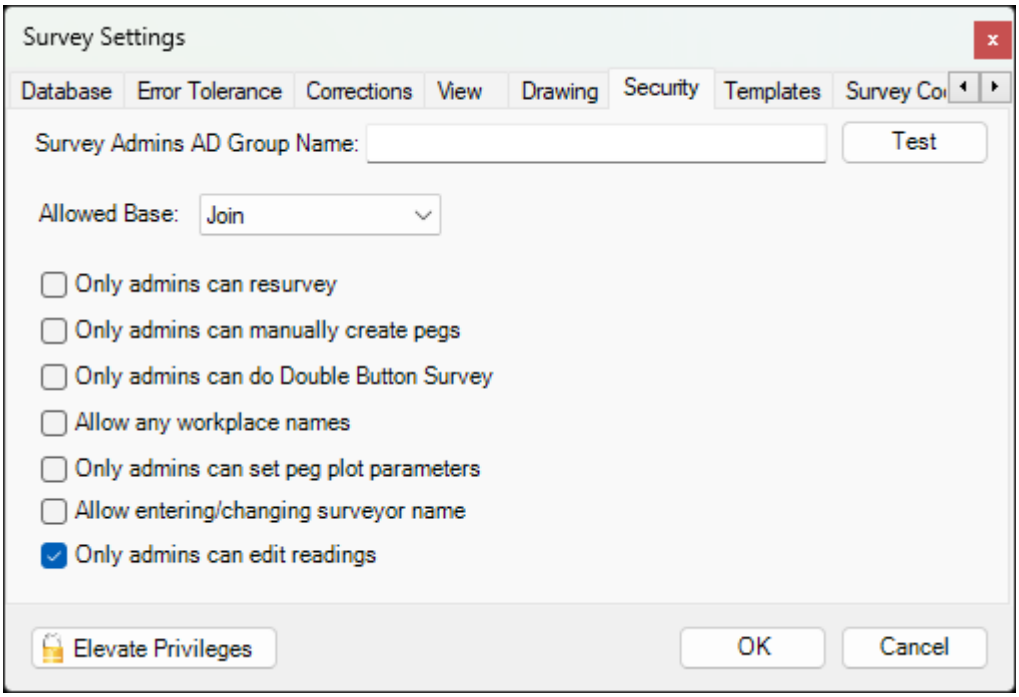
If you toggle on **Only open if folder exists**, this will only auto open the USB if the folder you specified in the **Default sub folder** field exists:



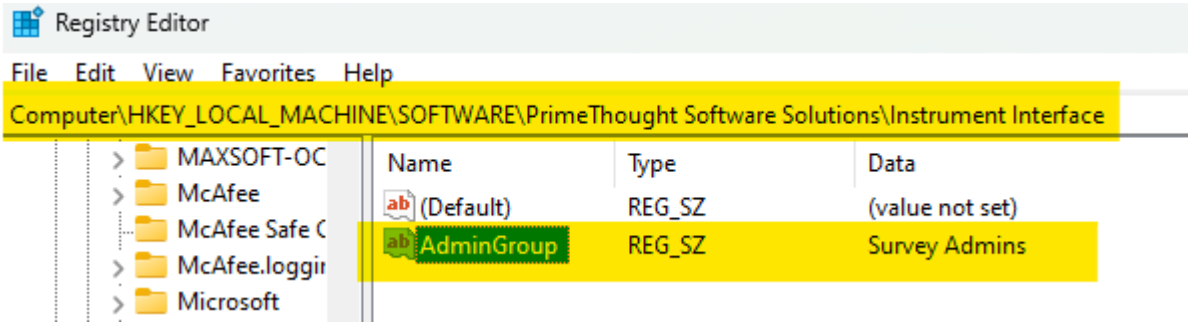
Security

The Instrument Interface can be protected so that only an administrator part of the survey admins group can make any changes to data as downloaded from the instrument.

The permissions of who is able to do what, such as can edit readings, is set up in the Security tab of the Survey Settings dialogue, this of course depends on having set up a Survey Admins group in Active Directory and being a member or not of that group:



Then in order to make the Instrument Interface not editable, you will set up a registry key as follows. If the key exists and the user is not part of the survey admins group then he won't be able to edit the interface, otherwise if he is a part of the group or the key doesn't exist then he can edit it.



(The survey admin group in this example is called "Survey Admins", it will be whatever name your survey admin group's name is.)

Support

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