

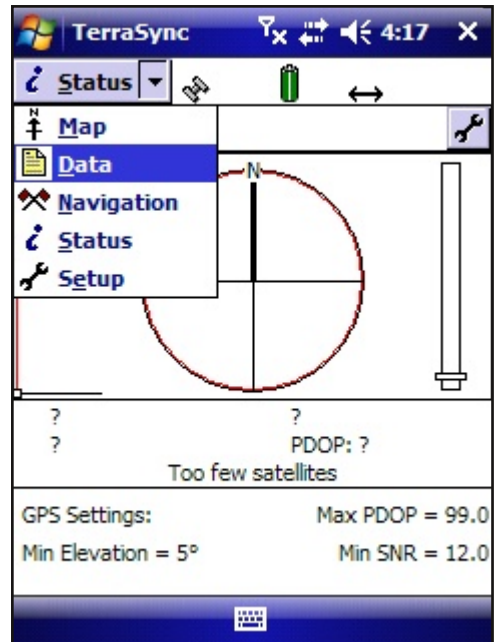
TerraSync User's Guide

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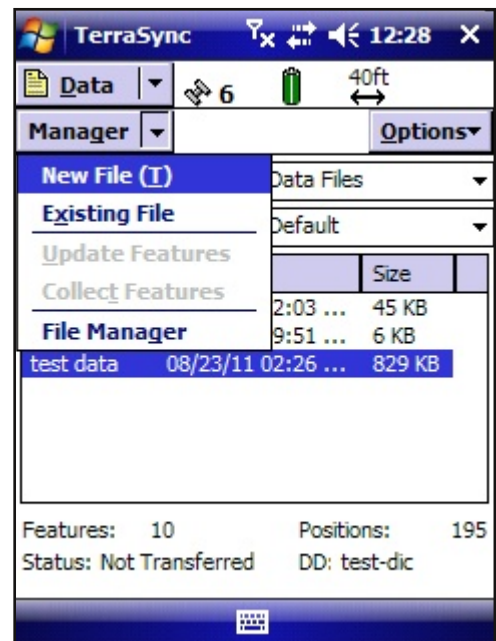
The TerraSync software is organized under 5 different groups: Map, Data, Navigation, Status, and Setup. 99% of the time you will be using either Map or Data.

To get started, you first open a data file from the Data screen. Click the dropdown box in the upper right and select Data.



From here you can create a new data file, open an existing one, or do various things from the File Manager.

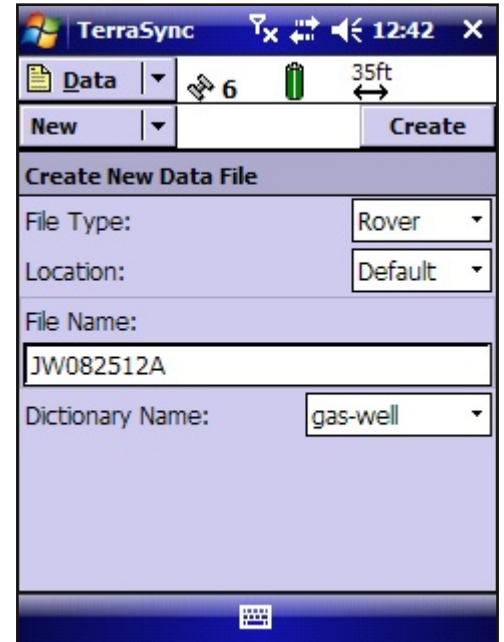
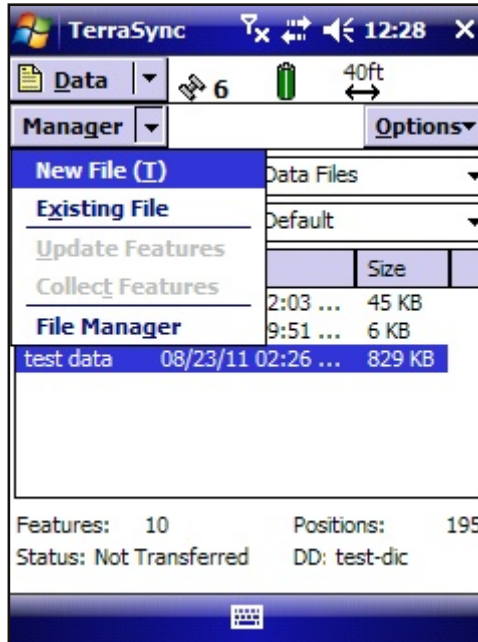
The very first step in recording data is to create a dictionary, which is a template that defines data files. There is a gas-wells dictionary already created on the devices.



To start logging data, go to the Data screen and select New File.

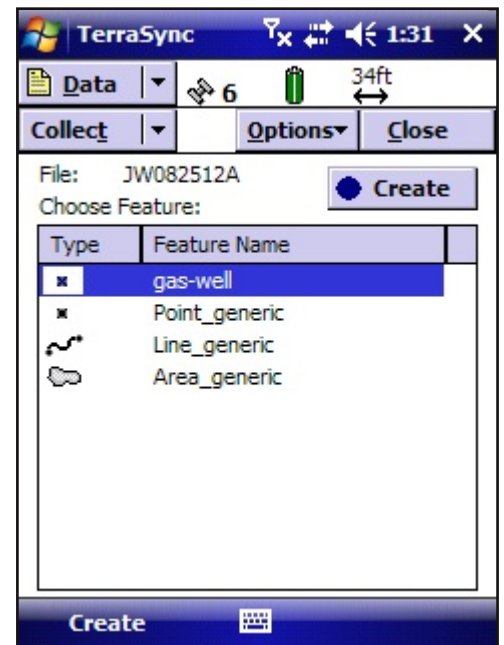
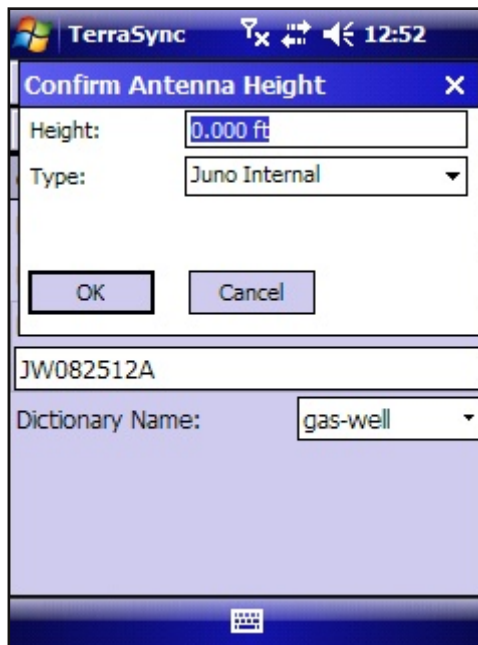
File Type should be Rover, meaning you will be moving around. The other option, Base, is for base stations that are used for post-processing.

File Name defaults to [User][Month][Day][Hour][letter] The filename shown was created on JW's device on August 25th during the 12pm hour. The letter 'A' will increment to 'B' if another file is created during the same hour of the same day.



Click Create and the Confirm Antenna Height box appears. Unless you have an external antenna attached, click OK to accept the defaults.

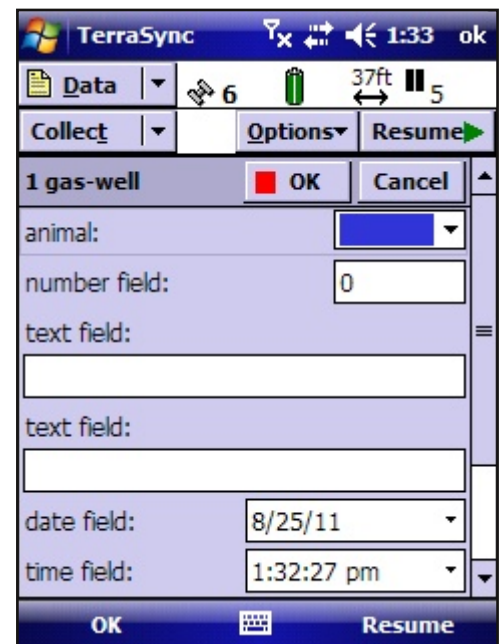
Now select the feature type you want to create and click the Create button. Fill in the attribute



Under Options you can set up an offset for the point. This is useful if you can't record the point by physically standing there. Possible examples would be under a structure that blocks the GPS signal or the center of a storage tank that you can't reach apart from climbing on top.

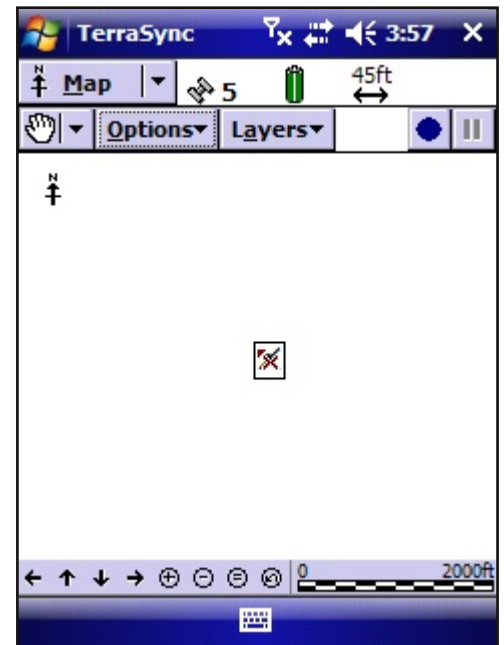
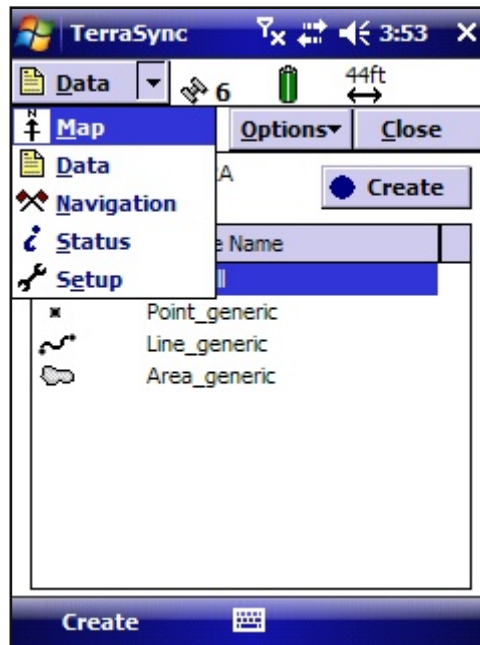
Under the same menu, Logging Interval lets you adjust the rate that points are automatically logged. Clicking the Resume button will cause the automatic logging to begin. Clicking the button again, when it says Pause, will stop it. For point features, it averages all the collected points into one. For lines and areas, the points are used individually to make up the feature.

When everything is attributed and logged, click OK to finish adding the point.

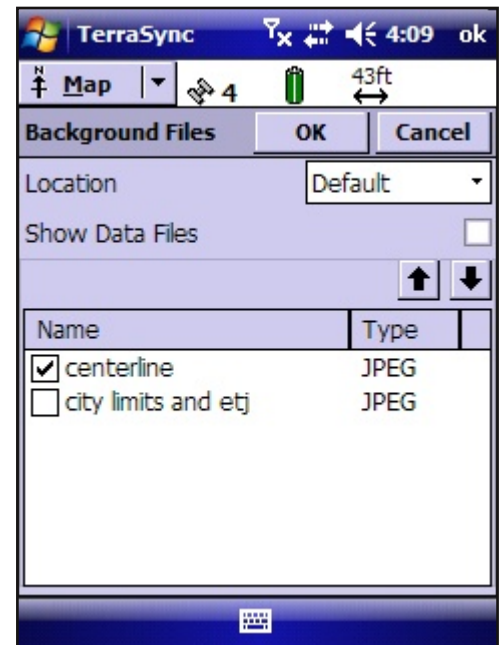
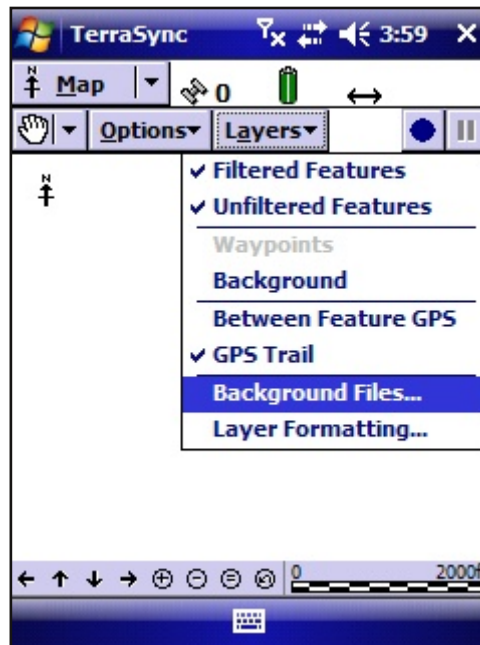


To view the features you've added, click the dropdown box that says Data and select Map.

Shown to the right are several points floating somewhere in a void.

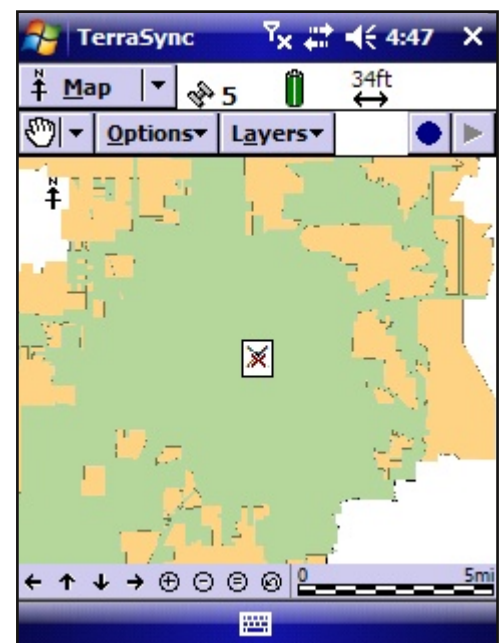
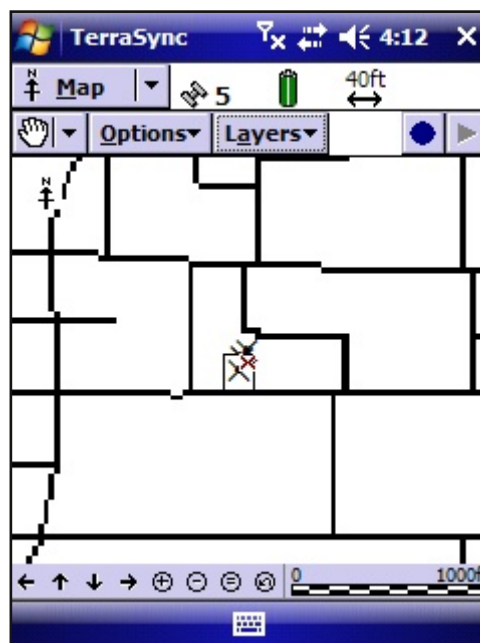


By clicking the Layers button you can turn on background layers. Check the layers you want displayed and click ok.

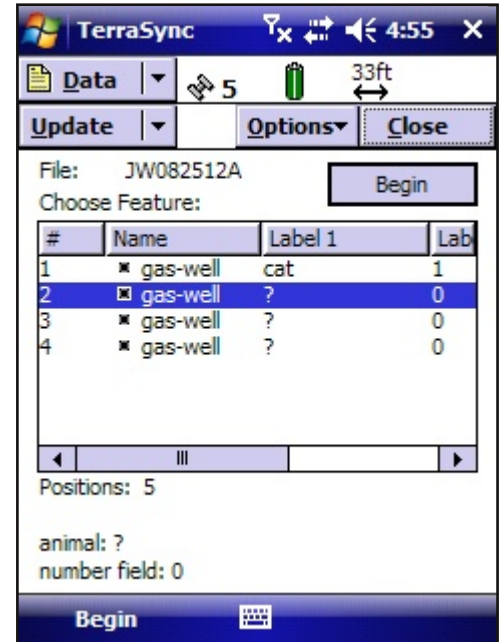
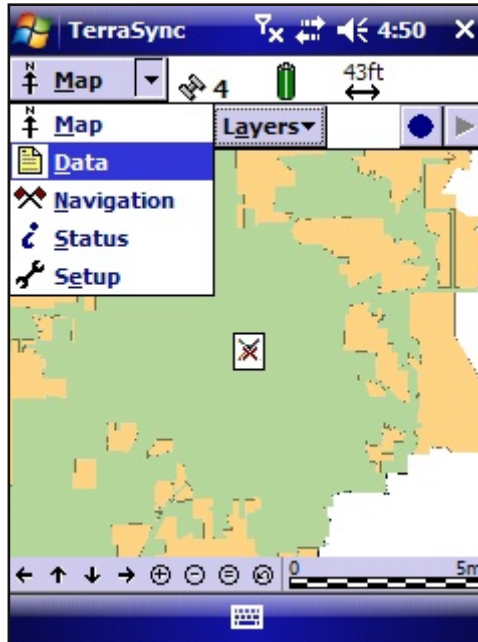


Now there is a frame of reference. Background images load fairly slowly so it isn't practical to use a high resolution image for the entire city.

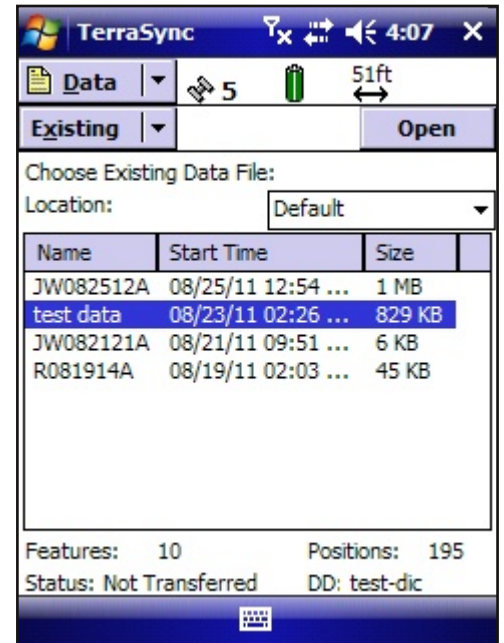
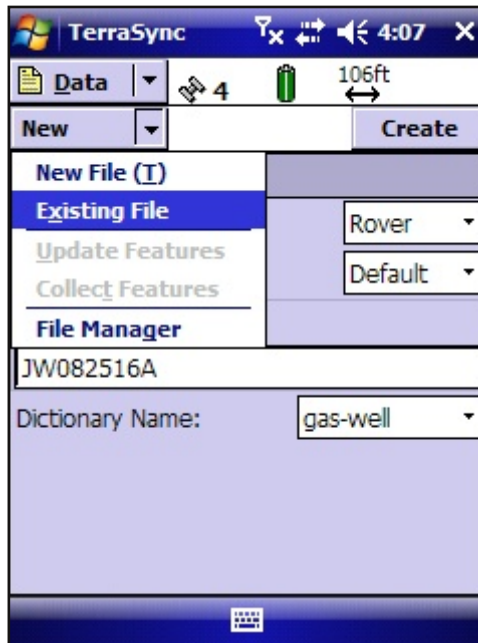
The City Limits and ETJ image is smaller and loads faster. Background images can be easily toggled by selecting Background from the Layers dropdown.



The map screen displays the data from the currently open data file. To view different data, return to the Data screen and close the open file.

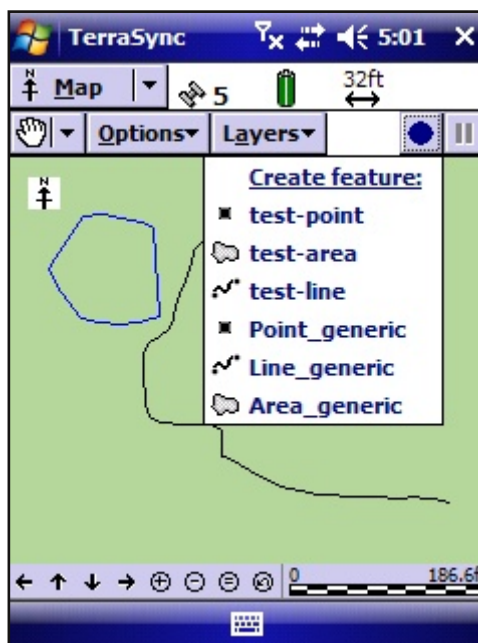


If it sends you to the New File screen, select Existing File from the menu and then open a different data file.



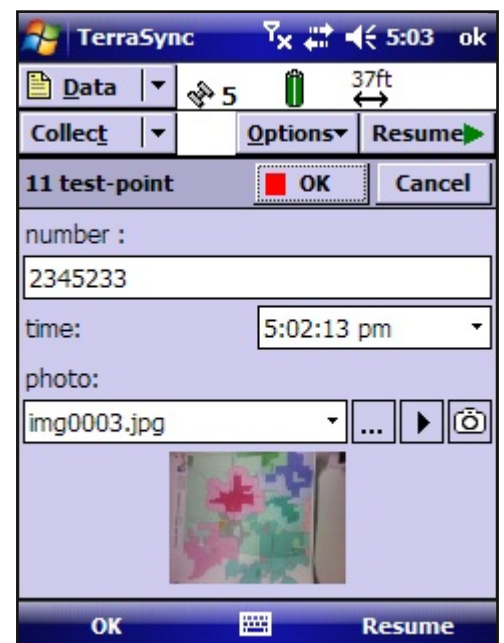
Switch back to the map and the newly opened data file will be displayed.

You can log points from the Map screen by clicking the button with a circle on it in the upper right.



Select the feature type you want to create and fill out the attributes.

After clicking OK to add the point you will be returned to the map page.

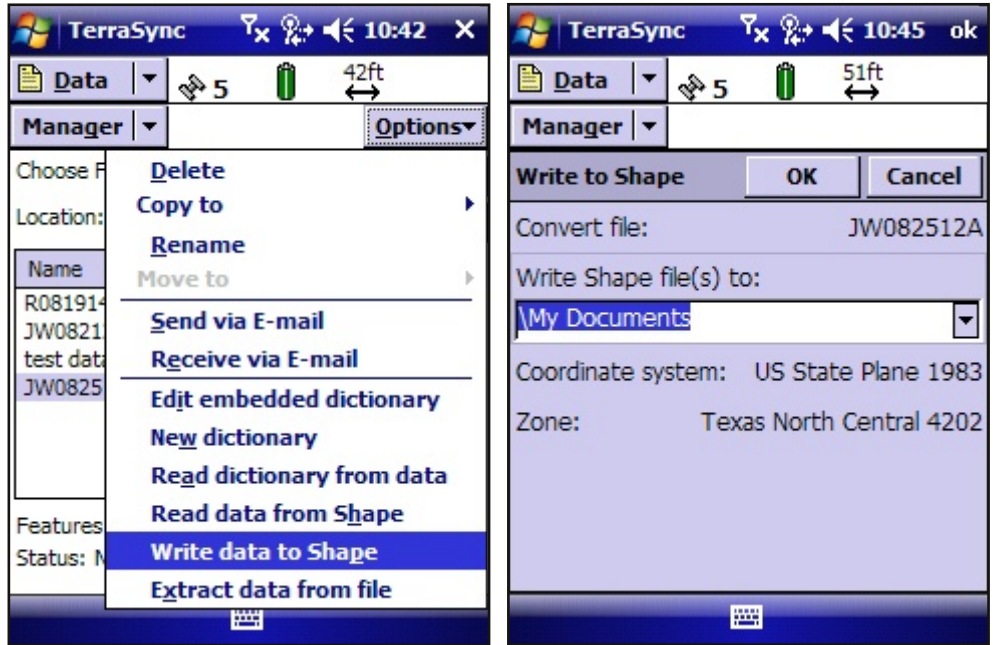


Moving Data to a PC

To retrieve data from the device as a shape file, go to the Data screen and open the File Manager.

Select the data file you want to export then click Options and select "Write data to Shape"

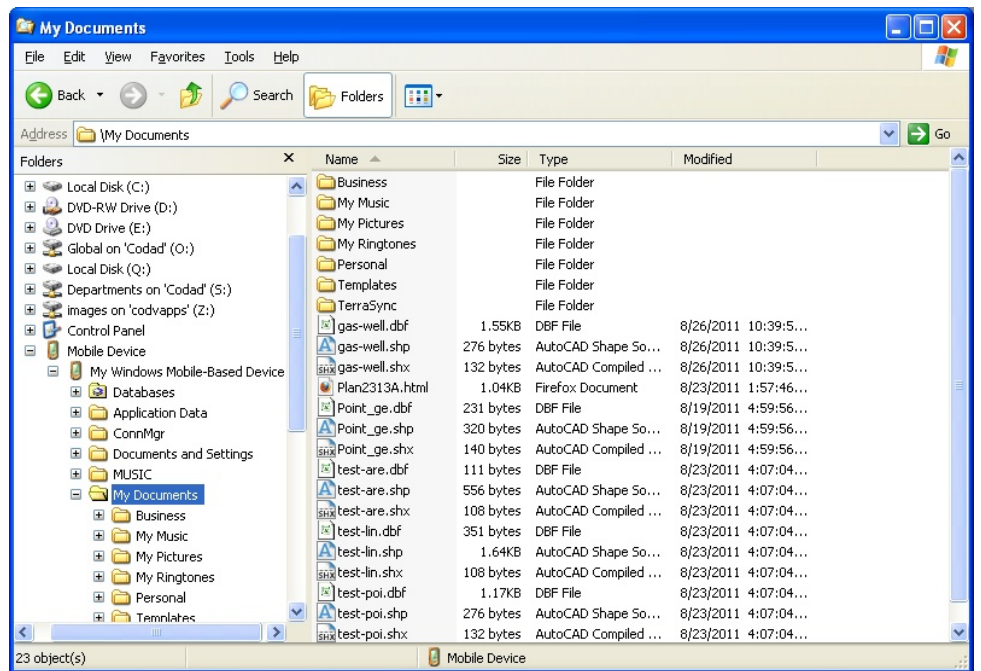
The shapefile will be named after the dictionary it uses, not the data file.



Connect the device to your computer and wait for Microsoft ActiveSync to connect to it.

The default \My Documents location can be found here in Windows Explorer.

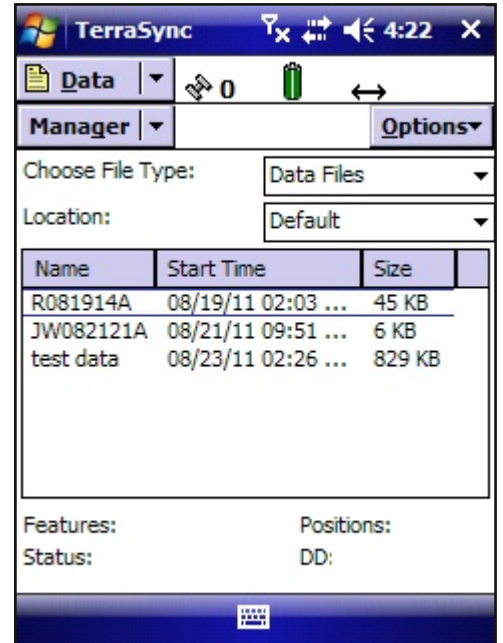
gas-well.shp is the result of exporting the JW082512A data file.



Creating a Dictionary

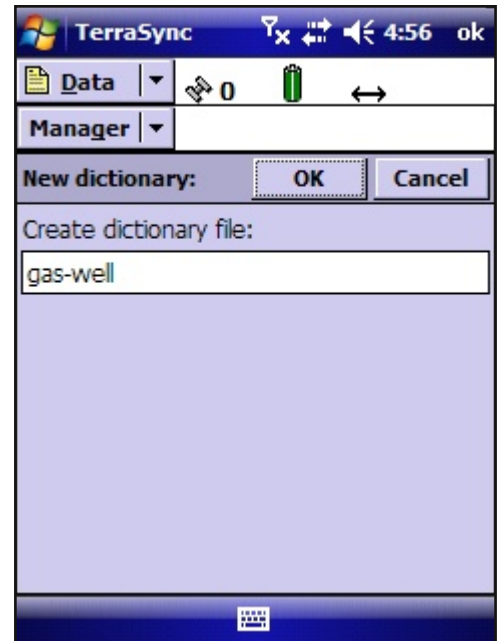
Go to the File Manager on the Data screen by clicking the dropdown box below Data and selecting File Manager.

To create a new dictionary, click the Options dropdown and select New Dictionary.



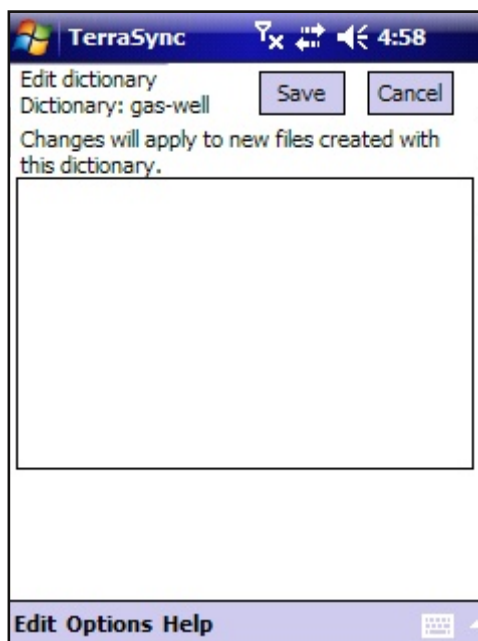
Enter a name for the dictionary.

Click OK to move to the next screen.



Here you'll see an empty listbox of the features defined in this dictionary.

To add a feature, click Edit in the bottom left and select New Feature.

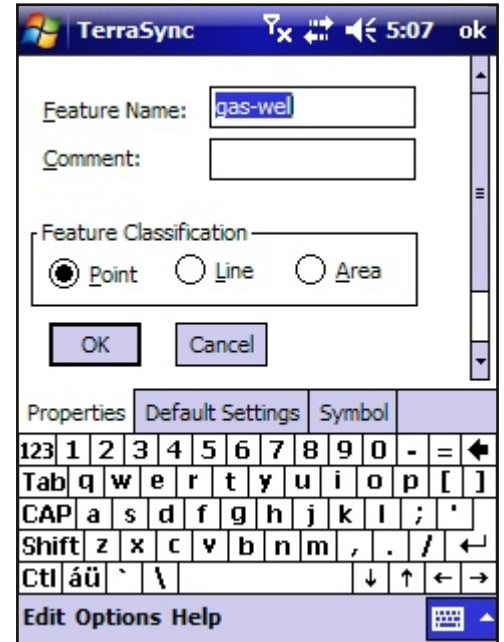


Enter the feature name and select the type.

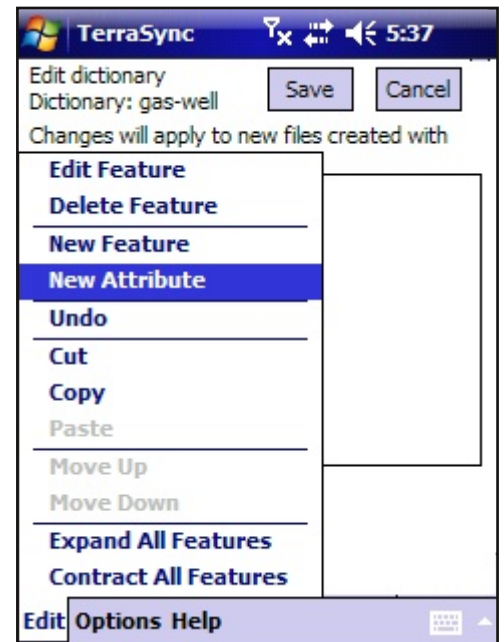
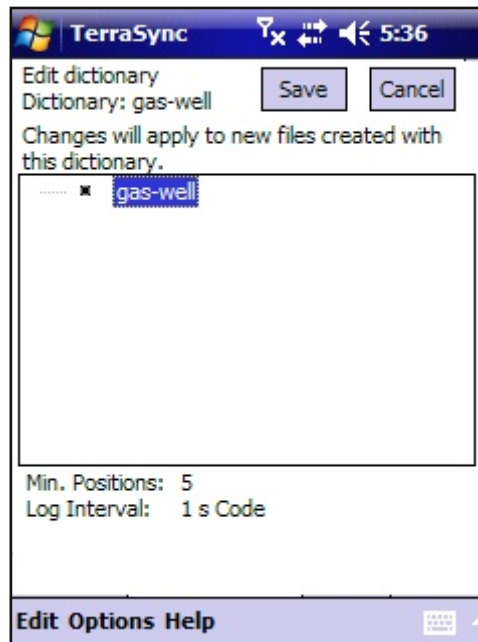
On the Default Settings tab you can change the Logging Interval. When you are in the field logging points, you can set the device to automatically log based on time intervals or distance travelled. Point features can only use time intervals, while Line and Area features can use either. Line and Area features also allow you to define an offset here.

The Symbol tab allows you to change how the features display on the Map screen.

For now, these aren't important and you can go back and edit later if you find it isn't setup perfectly. Click OK to create the feature.



The feature now appears in the listbox, but it doesn't have any attributes yet. Click Edit in the bottom right and select New Attribute.



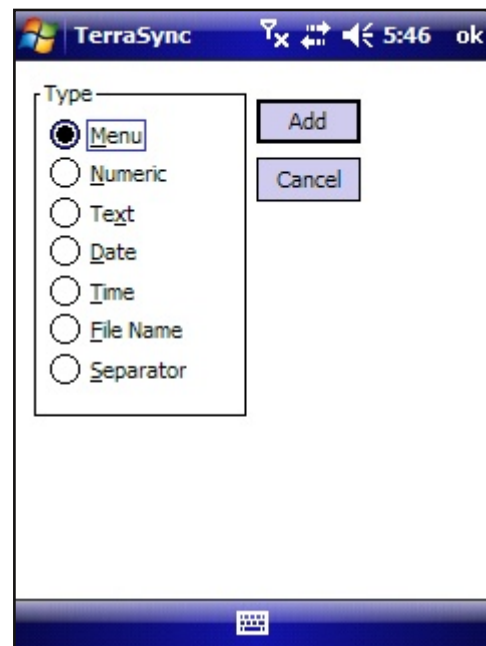
Attribute Types

Menu creates a dropdown menu that is useful for quickly attributing data.

Numeric, Text, Date, and Time are fairly straightforward.

File Name allows you to attach an image to a data point. The software lets you easily attach a photo using the built-in camera on the device.

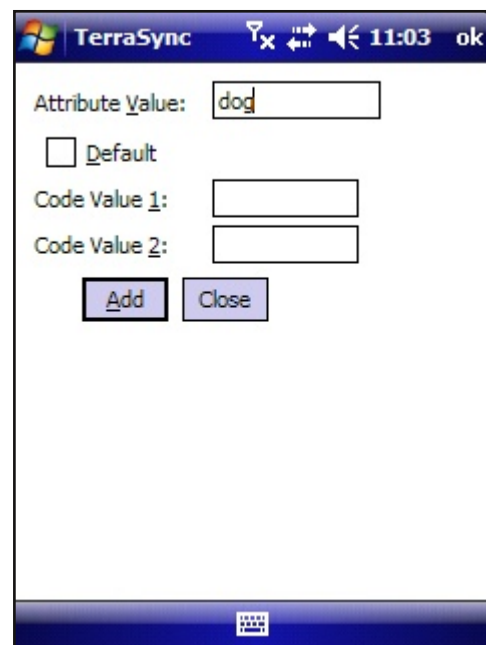
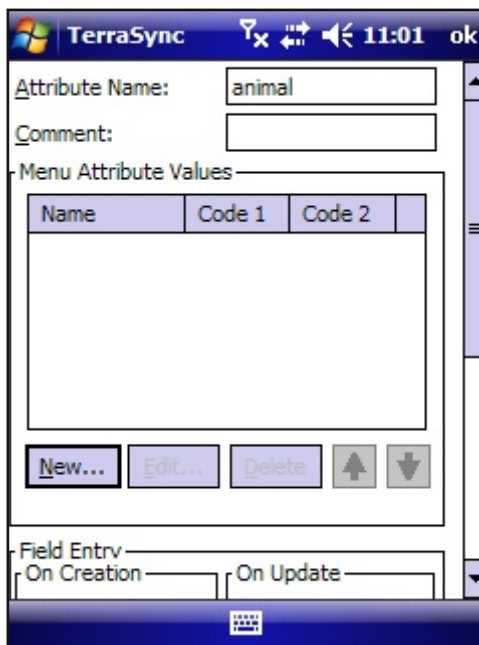
Separator lets you create groups of attributes that can be collapsed to hide them. If you have a feature with many attributes, you can use this to group the attributes to make them more accessible.



Menus:

Enter a name for the attribute and then click "New..." to add values.

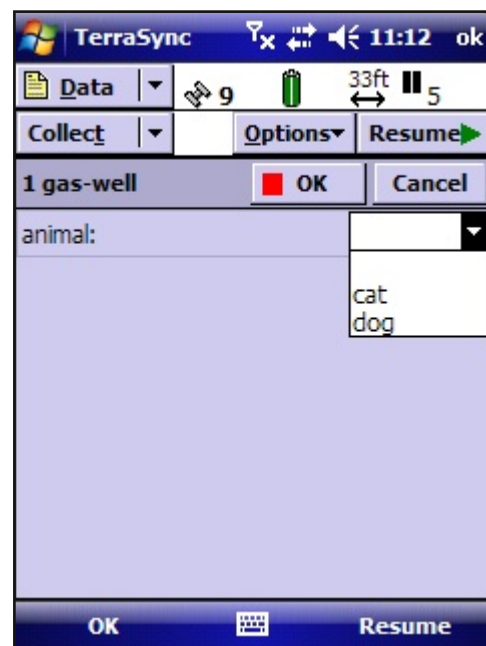
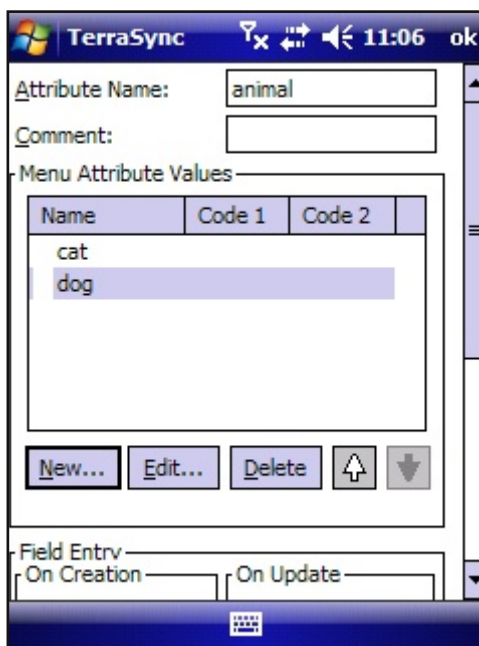
When you click Add, it will add the value and remain on the same screen. When you're done adding values, click Close.



The values now appear in the list where you can reorder, edit, and delete them.

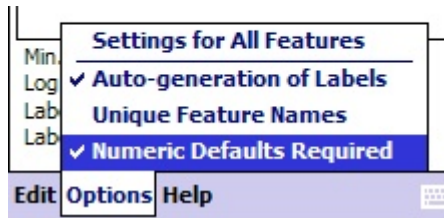
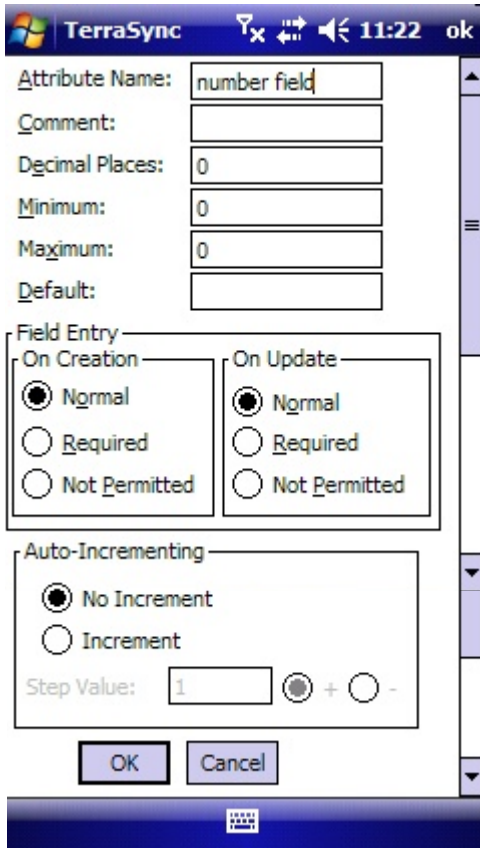
When you create a point in the field, the menu appears on the attribute page as seen to the far right.

You can add and remove values later on by editing the dictionary.



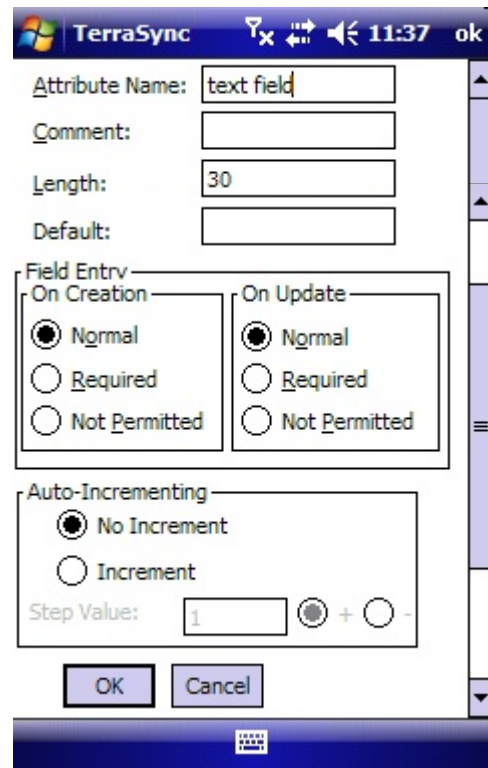
Numeric:

Minimum and Maximum should be set to different values. On the main dictionary screen you can set whether a Default value is required.

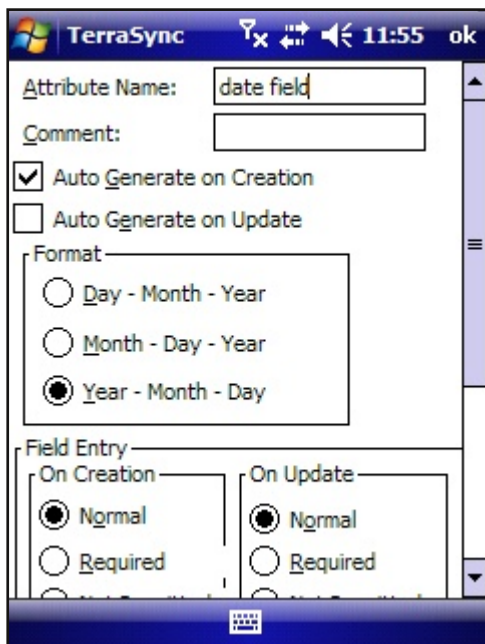


Text:

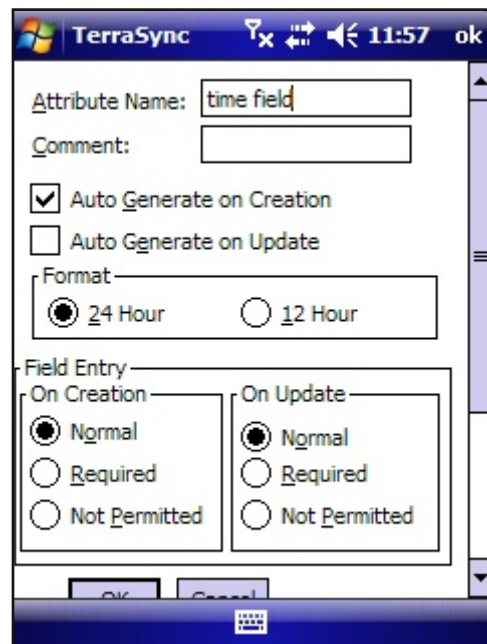
Auto-increment works on the last number in a field, as shown in these examples:
47A -> 48A
AA -> AA
A100-K9 -> A100-K10



Date:

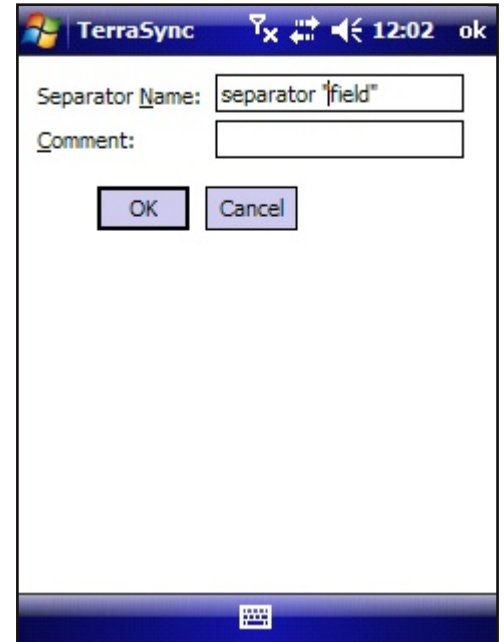
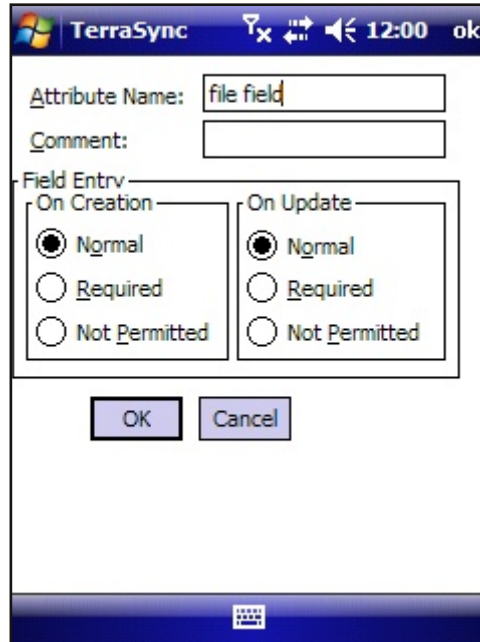


Time:



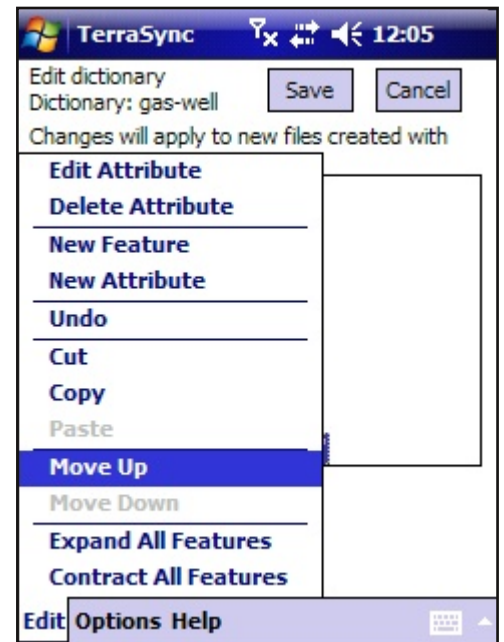
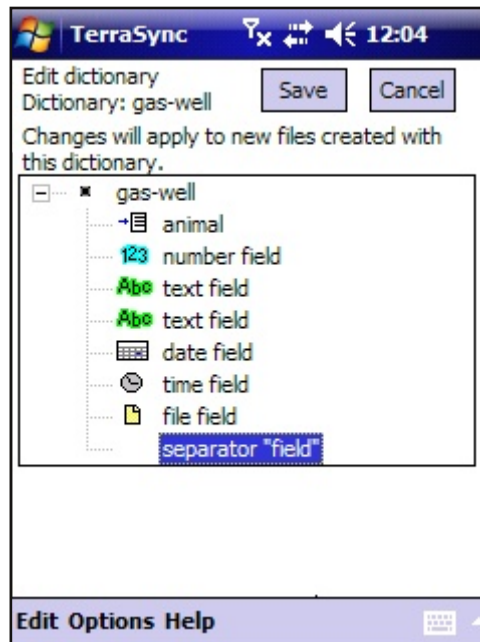
File and Separator:

File allows you to attach a file, such as a photo, to an entry, and Separator creates collapsible groups.



After adding one of each, the gas-well type now has one of every field. To demo how the separator works, I've selected it and then gone to the edit menu and told it to Move Up, which will put it above the file field.

When you are done adding fields, click Save to return to the Data screen.



Here is how all the attributes appear when you create a point in the field.

Clicking the small "-" button will hide the file field.

The buttons next to file field allow you to browse images on the device, view the current image fullscreen, and take a picture using the camera.

