

Transcripts - Intro to Mapping and GIS Putting dots on a map (QGIS)

Hello everybody! Welcome back to the hands-on portion of this class where we go through QGIS.

Last week, we just kind of looked at the program and at some of the very basics, so why don't you start where we ended up last time? Have that countries shapefile open. Your screen should kind of look like mine right now with QGIS opened, and in the shapefile over here on the left side you'll see here in the layers panel we have that countries shapefile that we work with last time. So go ahead and have that open.

The first video is going to go over actually adding dots to the map, so we have shapes on the map right now. So we're going to go to website and download some data, and add dots to the map on top of the shapes that we have in the dot. The data with the dots is going to be hospitals in the United States and there's going to be a link in the class materials with the URL where you can go to download that data.

So make sure you check that out. So anyways, I'm just going to pull up the website right now. It's I have already have it pulled up here. Again, you'll see this is from the government website and you'll see we have lots of dots on this map over here in the United States, and like I said, this is basically all the hospitals in the United States.

So I'm going to go ahead and download this data with this little button over here, you're going to want the full data set and you're going to want a spreadsheet, so go ahead and download that.

For me mine is in the downloads folder, so wherever yours is at go ahead and navigate there and then go back into QGIS, and I'll show you how to open dots and put them on the map.

So go ahead and go up to layer, add layer, add delimited text layer. So we just downloaded our file as a CSV, which is a comma separated value, that is a type of delimited text. So when we go into QGIS, if we go to add delimited text layer, we can pull in CSVs and other different types of spreadsheets basically.

So go ahead and have this open and then up here the file name, click these little dots, go to wherever you downloaded it at, for me it's my downloads folder open that up. It should be called "hospitals.csv" might be something a little bit different, but mine is "hospital.csv", go ahead and hit open and you're going to see some options that you're going to want to pay attention to file format as I mentioned is a CSV.

If you have like a TSV file that you ever want to upload which is like a instead of a comma it's a tab or if you have any other sort of delimiter you can change that right here, but for ours is a pretty standard CSV and you can see the QGIS is smart enough to kind of already recognize that and guess that's what we want, so it already has it selected.

This geometry definition is also important. So within the the CSV that we download we have latitude and longitude points for each one of the hospitals in the United States, that's actually how we're going to get those hospitals to show up as dots on the map, is that latitude and longitude points.

So as you can see QGIS is already guessed that we do have point coordinates in our spreadsheet which we do, and it's guess this X field and Y field for us as well. So the X field is always going to be the longitude field whatever it's called in the spreadsheet, for this spreadsheet is called LONGITUD in all caps.

So if you have like another spreadsheet, that's called long or longitude in lowercase you want to make sure you enter that here and then the Y field is the latitude so same thing only this is for the latitude. So it's already pre-populated, it's already done a good guessing job, but if you if something freaks out or you can't go further in a spreadsheet you're working with checking this area and make sure you have the right field selected.

So but this looks good to me. And then we will actually get into this option down here, which is the no geometry, which we will be using actually in the next video. I'll show you how we can use that, but for now this is what we needed. We got the coordinates in there, which is great.

So we'll go ahead and hit add and then close out of here and you will now see on top of the country shapes, you'll now see a bunch of dots where the United States is at.

So I'm going to go ahead and zoom in to that, and you will see on the map here all these dots represent hospitals in the United States. I'm zooming in in Texas right now, but you can look around here and check it out.

So that's all for this video, next we're going to look at another data set and we're going to actually be joining data with this country's data, and I'll kind of explain what that means now, so go ahead and just leave this open and hop into the next video. Thanks.