Targeted skills

By the end of this module, you will know how to:

- convert Excel file to csv (comma separated value) files
- import/convert csv file with lat, lon attributes into GIS layer
- overlay layer created over GoogleMap or OpenStreeMap layers

Data

Data to be used in this module can be found in the following folders:

`data/bluetongue_2014_2015.xls`

Exercise outline & memos

1. Converting Excel file format to csv

Before being able to import your data into QGIS as a plain GIS layer, you need to pre-process it via Microsoft Excel or OpenOffice for instance.
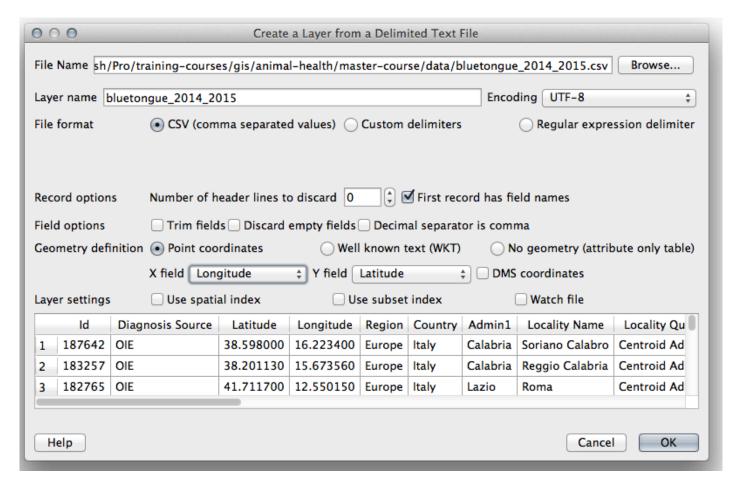To do so for instance with Microsoft Excel:

```
Open: data/bluetongue_2014_2015.xls

[In Excel top menu]
File   Save As..
[In Save window/dialog]
Change "Format" dropdown to "Windows Comma Separated (.csv)
```

2. Importing/converting csv file with lat, lon attributes into GIS layer

```
[In QGIS top menu]
Layer   Add Layer   Add Delimited Text Layer...
```

then reproduce settings shown below (File format, First record as field names, X field, …:

Click "OK"

Select "WGS84" as CRS then click "Ok"

Finally, save the layer as shapefile: click right on layer and "Save As"

Congrats, you have created your first GIS layer / shapefile from scratch !

3. Overlaying layer created over GoogleMap or OpenStreeMap layers

Install "OpenLayers Plugin" if not already installed. If/when installed the plugin needs to be activated (checkbox on).

```
[In QGIS top menu]
Web   OpenLayers plugin   Google Maps   Google Hybrid
```

Warning: Check order of layers in the Layers panel as the point layer might be lower in the stack