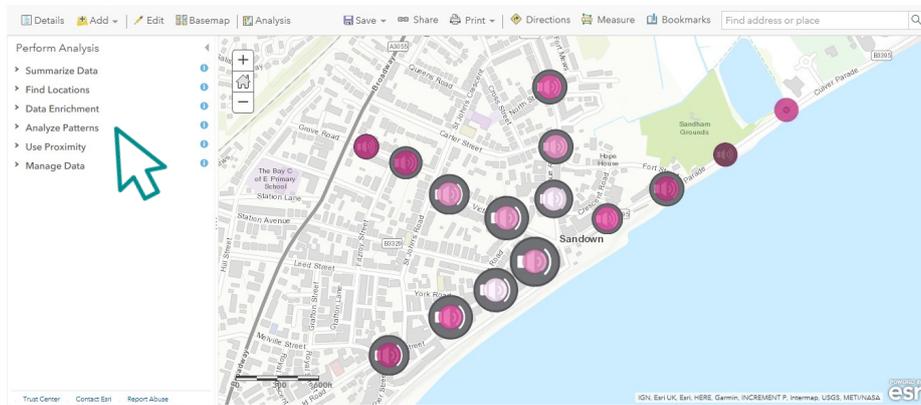
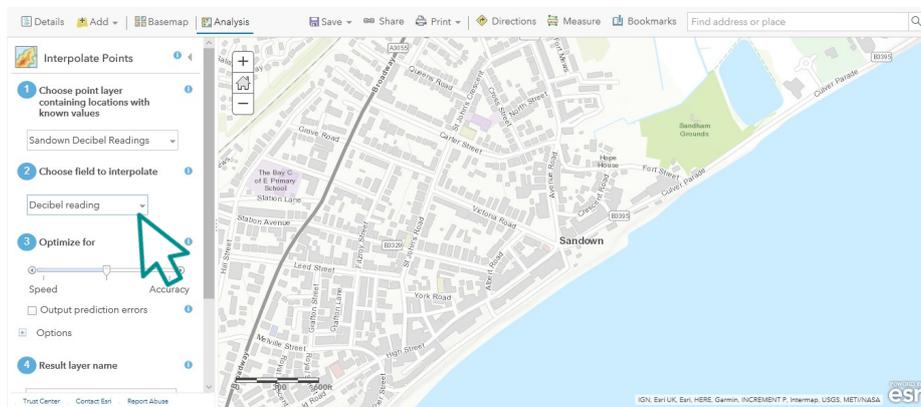


With your layers of data presented neatly and effectively on a basemap, it is now possible to **analyse the data** and try to get more meaning from the results.

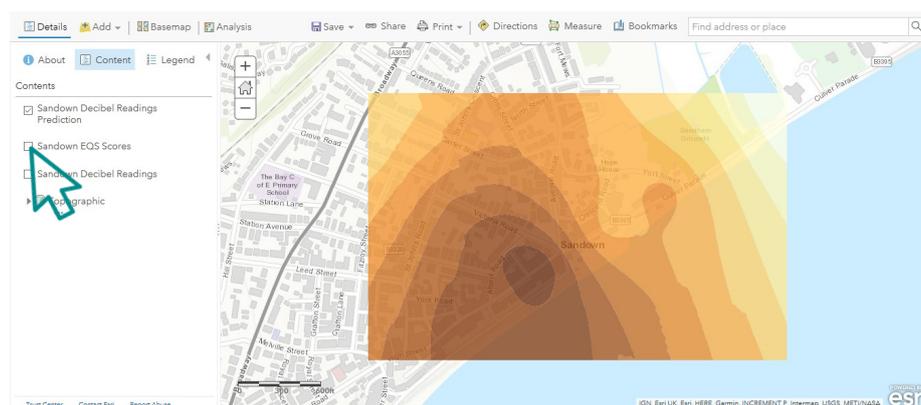
One way of doing this is to carry out an analysis through the 'Analysis' tab at the top of the map. Select this and a large range of possible tools come up. Select 'Analyse Patterns' from the list.



From the next list that appears select 'Interpolate Points'. This will create a shaded choropleth area map for any set of numerical data. From the left hand side, starting at the top, select which layer you would like to have drawn like this, and in the next box down the data from that layer that you wish to display. Scroll to the bottom and select 'Run Analysis'. Do not worry if it seems to be taking a long time for the program to draw your new analysis layer (though don't move the map around while it is calculating).

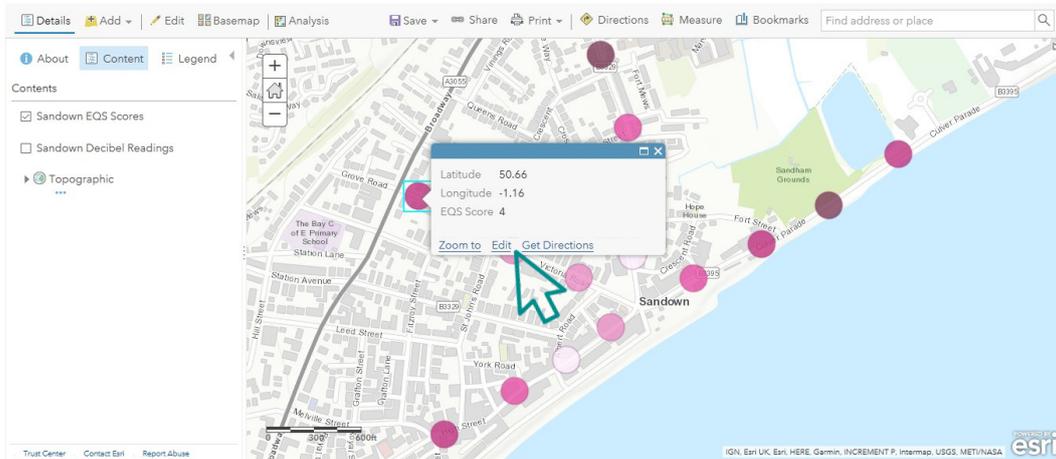


The colours and scale of your new analysis layer can be changed in the same way as the primary data layers. Under the 'Change Style' tab you can select 'Options' giving you the chance to change the wording of the key as well as the colours used. From the 'Details' tab you can also make additional layers visible on the map to allow further comparisons between the data sets.

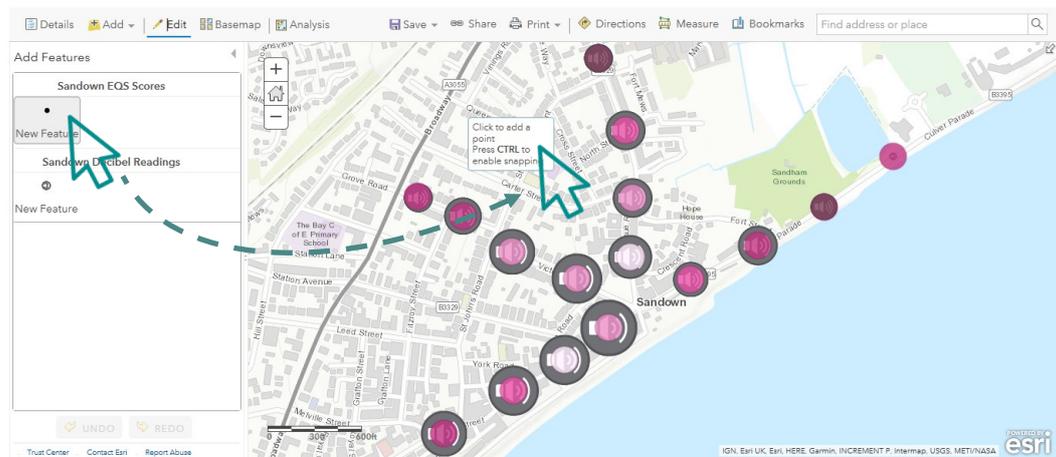


Other forms of analysis are available through the 'Analysis' tab at the top of the map. Under 'Analyse Patterns' one can also find clusters of points of the same type (under 'Find Point Clusters') as well as produce density maps (under 'Calculate Density') when data is simply a location of where a phenomenon is happening.

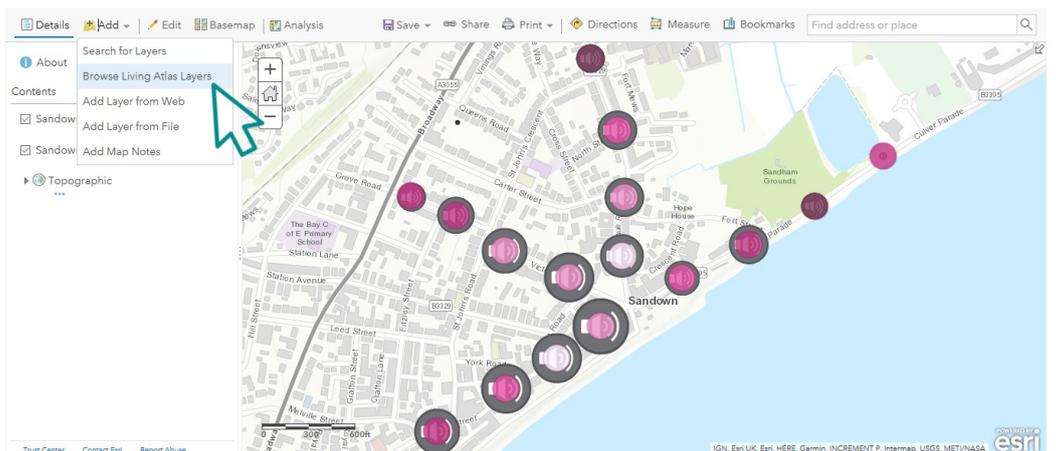
It is also possible to **edit the data** you have collected, either the actual values or the location of where something happened. Clicking on a point you already have brings up a dialogue box. Selecting 'Edit' at the bottom of the box brings up the data as it currently stands for you to edit and you can drag and drop the symbol into a different position too. If you change any data remember to save your layer.



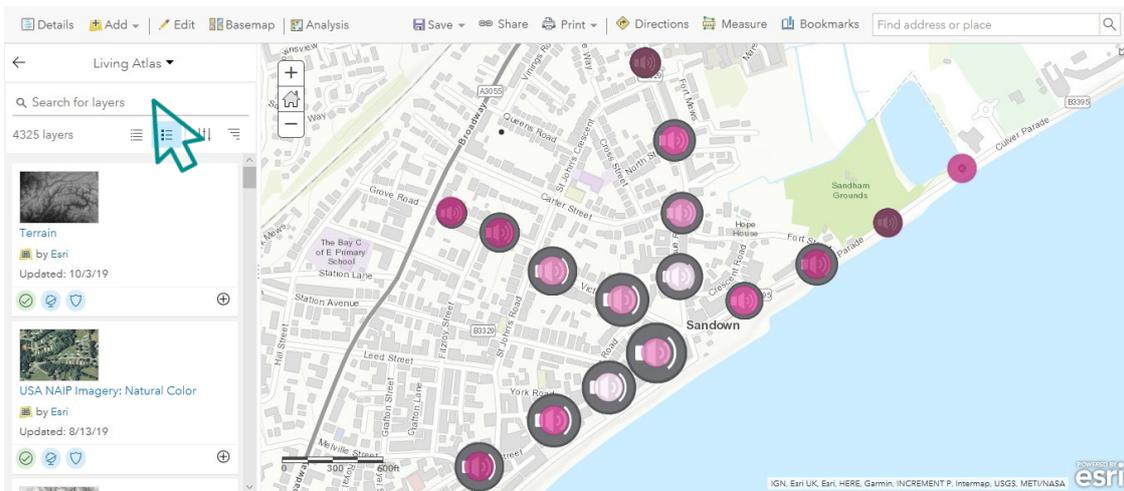
Additional data can also be added to a layer. To do this, under the 'Edit' tab, select the feature you wish to add and then click on the location on the map where you wish to add it. An empty dialogue box will come up where you can enter extra data. Remember to save your layer after you have added all the additional data you wish.



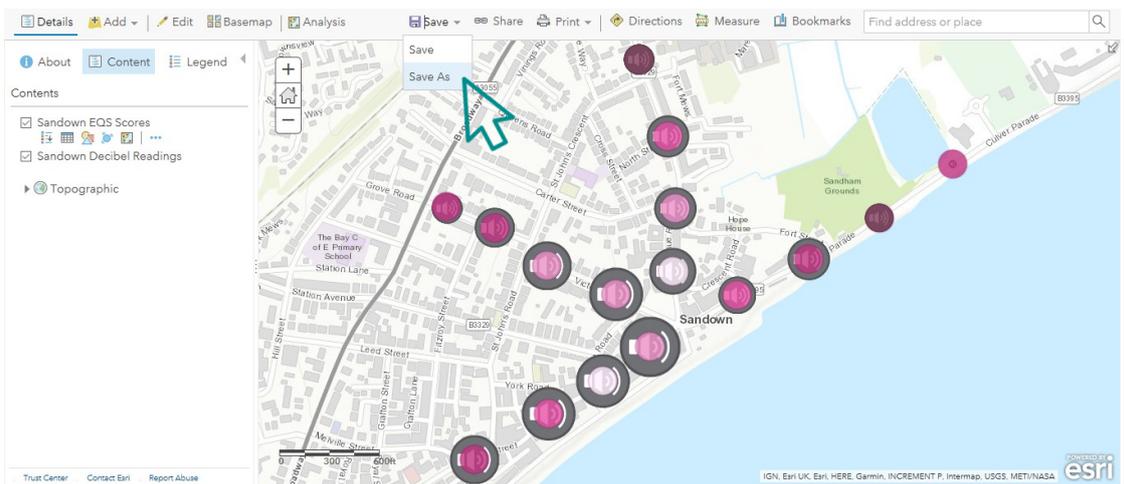
Secondary data, in the form of entirely new layers, can also be added to the map after you have created your primary data layers. At the top of the map, select 'Add' and a drop-down menu of options will appear. If you have the secondary data on a layer you have created yourself and saved in your school's user area of ArcGIS, you can select the 'Search for Layers' option.



A list of your layers will appear and clicking the '+' symbol in the bottom right hand corner of the layer's box will add it to the layers you already have on a map. Alternatively, you can search for layers of data from larger secondary data sets by selecting 'Browse Living Atlas Layers'. There are thousands to choose from so the search tool at the top of the list can be very helpful.



It is worth remembering that changes you make to your data are done at a layer level, not at a map level. If you wish to keep a bundle of layers together, it is best to **save the map** where they are being hosted. This can be done through the 'Save' tab at the top of the map. By selecting 'Save As' you will be able to give you map a suitable title.



If you wish to **print your map**, to paper or to PDF if it is to form part of a larger study like an NEA, there is also a tab at the top named 'Print' which creates a new window from which you can print the map.