

Sorghum Lab

Purpose:

The purpose of the lab assignment is to apply the skills just learned from the tutorial.

Assignment:

1. Conduct an analysis, using the “old way” method, but with the following criteria: elevations ≤ 7 metres AND clay soil (name the map layer **Flood and Clay**). Change the colours to pink for suitable and light blue for unsuitable. Label the legend so it is clear what areas are suitable and what areas are not.
2. Conduct an analysis, using the “new way” (one step) method, but with the following criteria: elevations ≤ 7 metres OR clay soil (name the map layer **Flood or Clay**). Change the colours to pink for suitable and light blue for unsuitable. Label the legend so it is clear what areas are suitable and what areas are not.
3. Create a layout with these two maps (see attached map). Placing two maps onto one sheet of paper is something you have not yet done. Refer to the attached sheet for hints on how to do this.
4. Draw and label an analytical model for each analysis. Map boxes should include the name and units; arrows should have function name above and parameters below.
5. Discuss, in a paragraph, why the two maps differ. Your explanation should demonstrate your understanding of the analyses just conducted.

Deliverables:

1. A sheet with your analytical models (these can be hand drawn or created on MS Word – see me if you want to do this in MS Word, it is fairly easy).
2. Your answer to item 5 above. This should be a type written Word document.
3. Jpeg of your map. Insert this into your Word document.
4. Drop your working directory (e.g. CorrinSorghum) into my drop box.

Staple these items together with a cover page on front that provides the information pertaining to the course number and name, assignment number and name (Lab x: Sorghum), your name and the date.

Due:

Start of next lab period.

Hints for map layout with 2 maps (refer to the attached map):

- Change from “Data View” to “Layout View” (click the white box under the map area). Whatever layers you have ‘ticked’ will draw on top of one another. Ensure only “Flood and Clay” is ‘ticked’.
- “Grab” a corner of the map frame (e.g. hover over the green square in the bottom right corner) and drag it to shrink the map to about the right size (e.g. pull up and to the left). The ‘right size’ is approximately 1/3 the size of the page.
- Add the title (**Sorghum: Comparison of AND versus OR**) to the top of the map.
- Add a label (**Flood and Clay**) for the map you just inserted.
- Add a legend for this map (accept all the defaults and place it to the right of the map).

OK, now we are at the stage where we need to add the second map. In order to do this we have to add a second “data frame.”

- Add a second data layer by clicking the *Insert* menu and then *Data Frame*. An empty data frame appears on your page. Drag it to the bottom of the page.

You will note there is a new item on the Table of Contents on left called “New Data Frame”. This “New Data Frame” is linked to the empty box on our map page. However, there are no map layers listed in this new frame ... yet. The next step is to add our *Flood or Clay* map layer to this new Data Frame.

- These “arrowhead bullets” indicate you will be working with the Table of Contents (e.g. the list of maps on the left side)
- Click the *New Data Frame* in the Table of Contents (it should be highlighted in blue).
- Click and drag the *Flood or Clay* data layer to the new data frame. A copy of the map layer is created.
- Adjust the colours of this image as required (pink and blue, as before). Adjust the legend as required (i.e. to “suitable” and “unsuitable”).
- Now let’s get back to the map layout. Add a label (**Flood or Clay**) for the map you just inserted. Add a legend for this map (accept all the defaults and place it to the right of the map).
- Insert a text box with your name and date in the bottom right corner.

Sorghum: Comparison of AND versus OR



Legend

- Unsuitable
- Suitable

Flood and Clay



Legend

- Unsuitable
- Suitable

My Name

Date

Flood or Clay