

HEATSTRESS ASSIGNMENT TUTORIAL FOR ASSESSING LOCAL CONDITIONS - CITY OF COIMBRA (PORTUGAL)

Below, find a step-by-step tutorial to install the QGIS and Google Earth software, and to access files that will allow you to carry out the proposed assignment (see Manual).

In addition, you might find also guidance in the video that was prepared to complement those instructions.

Check:

https://drive.google.com/drive/folders/1xwUwXRgW6vVPZZG7u_4urnrjaaQZiVTm?usp=sharing

Step 1. Download QGIS to your work platform:

- Open <u>https://qgis.org/en/site/forusers/download.html</u> and select for Windows System "Long term release (most stable)" version 64 bit or 32 bit.

- In case you use macOS, also select "Long term release (most stable)" version.
- Download the file to your system and install.

Step 2. Download the files from Google Drive that correspond to the urban study case areas (spots) assigned to your Group (the example "AB", which was used in the tutorial, is for Street Afonso de Albuquerque, in Coimbra), link: https://drive.google.com/drive/u/3/folders/1xwUwXRgW6vVPZZG7u_4urnrjaaQZiVTm

Step 3. Create a folder in your system to store the downloaded files. Suggestion: Name folder as "LST Coimbra".

Step 4. Open QGIS.

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Step 5. Insert files LST.tif (Land Surface Temperature from Coimbra 05/08/2018) and AB.shp (the example is for Street Afonso de Albuquerque, in Coimbra) in QGIS:

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- Insert LST.tif file.

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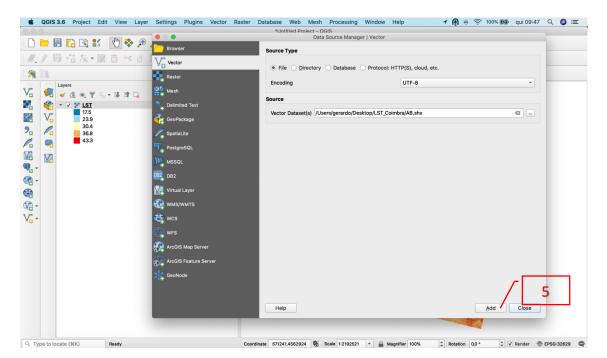


- Insert AB.shp file.

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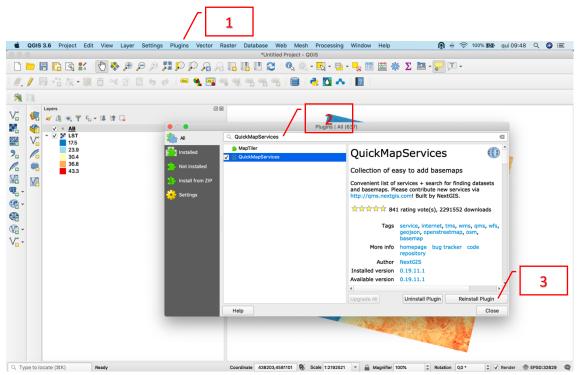
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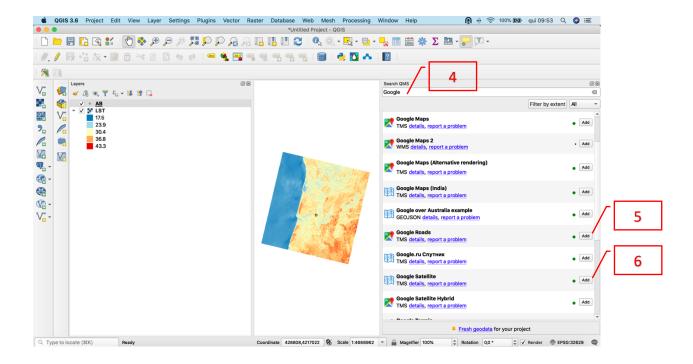
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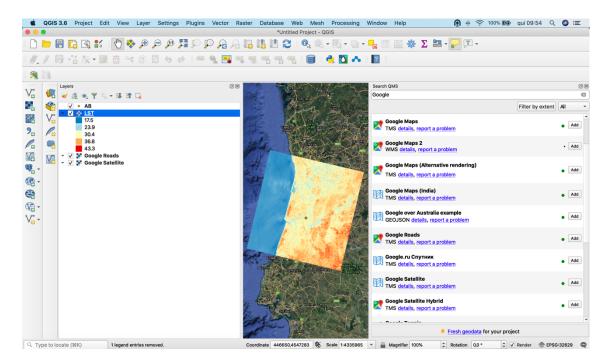
Step 6. Insert Google Maps in QGIS:



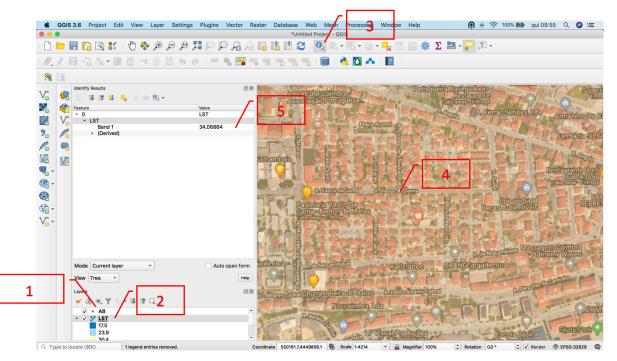




Step 7. Order layers in QGIS:



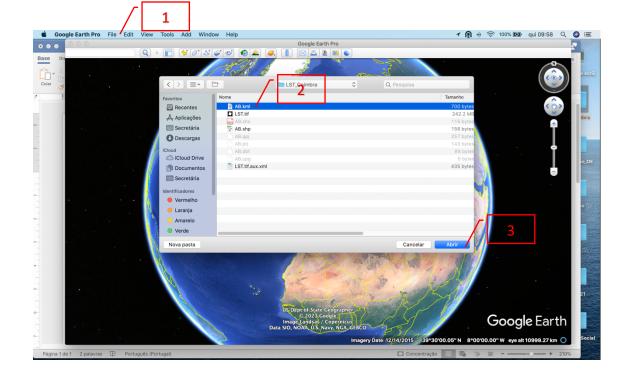
Step 8. Zoom file "AB.shp" and verify local surface temperature in file "LST.tif" (for obtaining LST profiles in QGIS, check the video at <u>https://youtu.be/Y2MvmwB-9OA</u>).



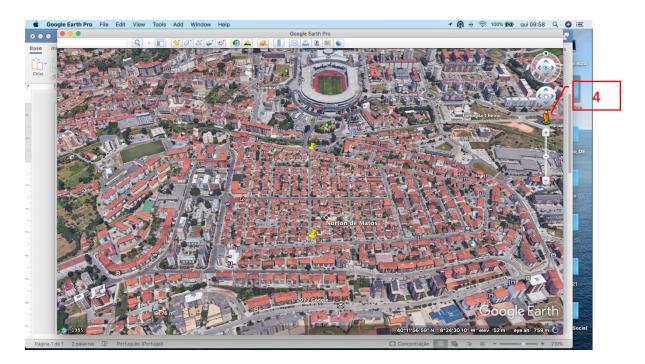


Step 9. Install Google Earth from

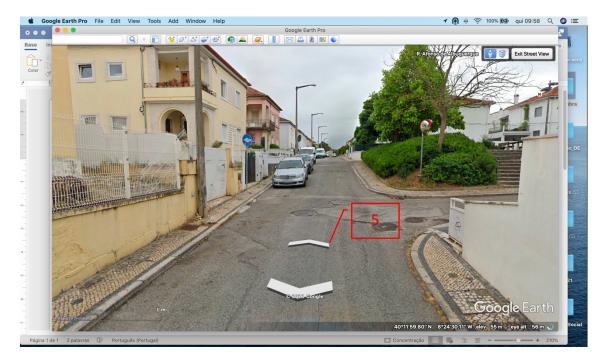
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Step 10. Open file "AB.kml" in Google Earth.







.... and now, it is up to you!!!