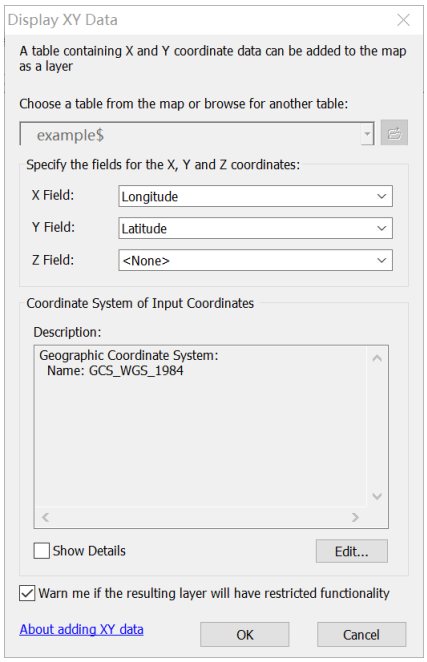
User Guide

GMPGIS_main.py

Step1: You need to prepare latitude and longitude of sampling points for analysis species in advance, and import the excel file and export to a *.shp* file, as shown in figure1. Or select in sample database.

Figure1.



Step2: You need to build a tool based on our algorithm. Special tips: intput2 should be set multivalue, and others default, as shown in figure2.

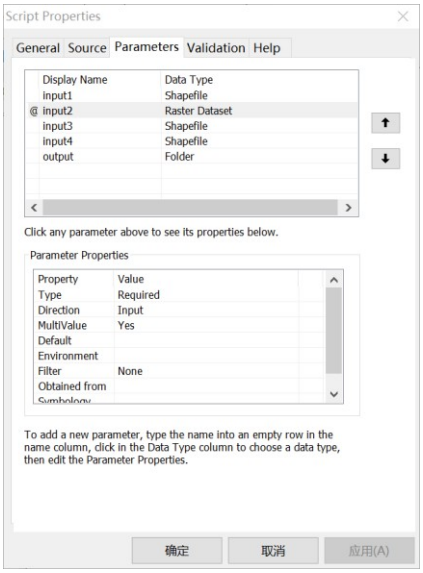


Figure2.

Step3: You need put the soil raster (hwsd), HWSD_SUM and HWSD_DATA in table of contents. These data are freely available at https://github.com/gmpgis/distribution, as shown in figure3.

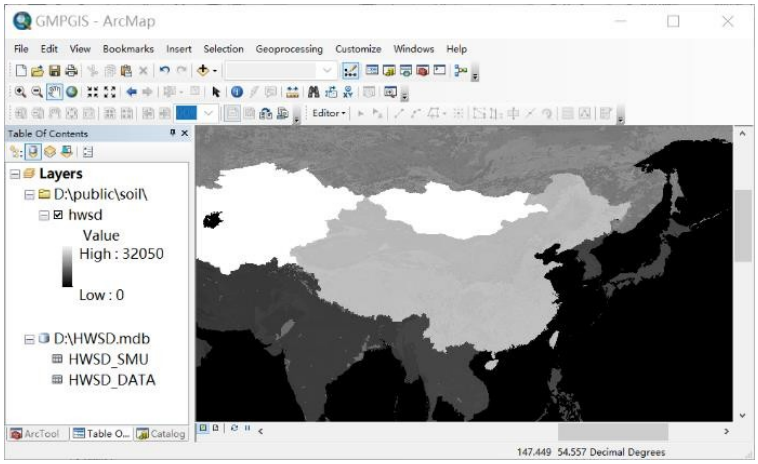


Figure3.

Step3: You need download climate database from a folder named PCAstd and add it in tool. These data are freely available at https://www.dropbox.com/s/b201m16isjq8e86/PCAstd.zip?dl=0. China.shp and Country.shp can be downloaded from https://github.com/gmpgis/distribution, in addition, if you need other regions *.shp* file, you can download them from https://www.gadm.org, click OK to execute the GMPGIS, as shown in figure 4.

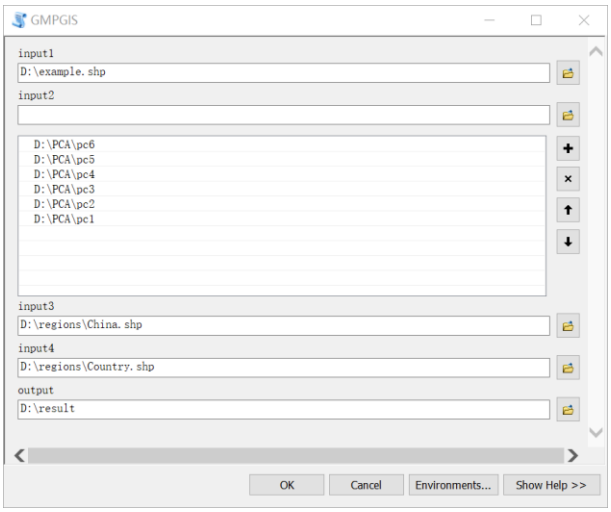


Figure 4.

The final distribution file is fin, tables of areas are CountAreas1and CountAreas2.

GMPGIS_ecoFactor.py

Step1: You need to build a tool based on our algorithm. Special tips: intput2 should be set multivalue, and others default, as shown in figure5.

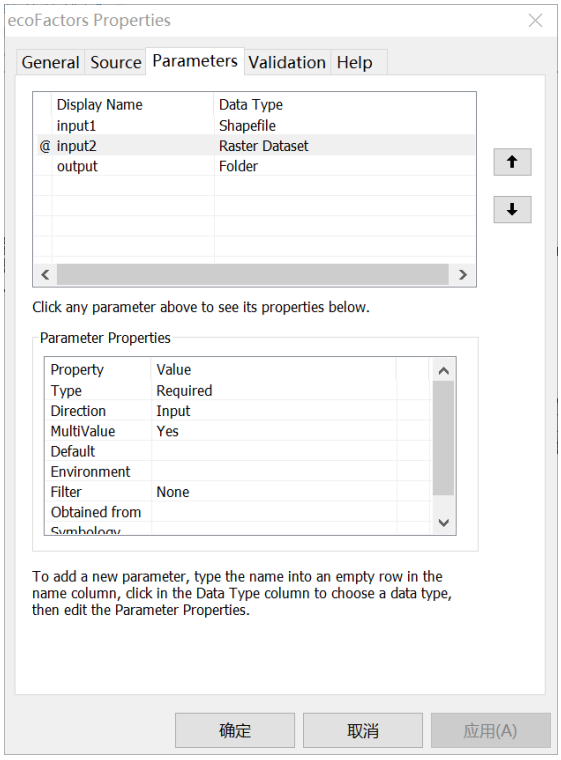


Figure 5.

Step2: You need download climate database from a folder named wc2.0_30s_bio and add it in tool. These data are freely available at http://www.worldclim.org, click OK to execute the GMPGIS, as shown in figure 6.

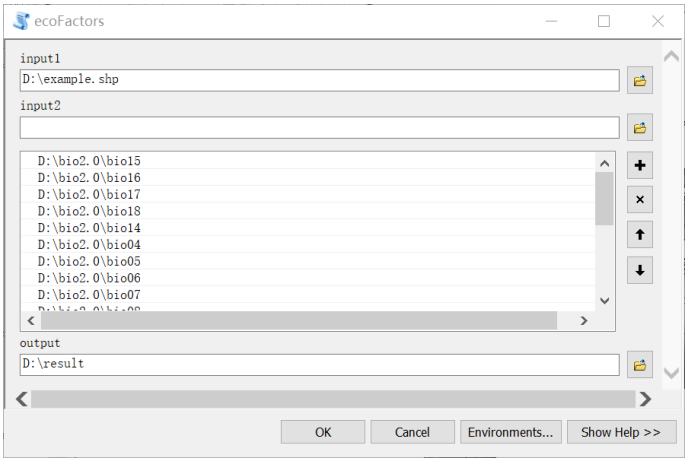


Figure 6.

The final result is ecoFactor.xls

If you have any questions about GMPGIS, please don't hesitate to let me know, I will reply your email as soon as possible.

Email: jwu1986@icmm.ac.cn