**Using of GIS software for Mapping the Climatic Data Obtaining by Internet Network**

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**Abstract:**

Precipitation is one of the important elements in agriculture and is a major area in climatological studies. Studying about precipitation is important in identifying precipitation characteristics; temporal and spatial variability. In the present study, extract for each (0.5\*0.5) degree grid cell of the monthly precipitation data for year 2010 (with January as first and December as last month) using the GPCC Visualizer website was applied. Kriging interpolation method within the environment of ArcGIS9.3.1, the average monthly and seasonal precipitation maps were generated. The study revealed the possibility to use the more popular websites sources of historical climate datasets to compensate for the lack of climate data available from the meteorological stations in Iraq, which is often difficult to obtained. The Study area is Iraq, a country located in south-western Asia. It lies in the western part of Asia and occupies mostly the Mesopotamian Plain, located between 29 0 and 380 N latitudes, 390 and 490E longitudes ( small area lies west of 390). All data applied in the present study are related to monthly averages precipitation for the year 2010 as a case study. The main source of the data is the GPCC Visualizer website shown in figure (2). The Extract dataset of the precipitation were selected from the land surface Full Data Product of version 6 mode at the spatial grid resolution of 0.50 latitude x 0.50 longitude (approximately 55.5x55.5 km2) for every month and seasons of the year 2010. Generally, GPCC Visualizer gives the feasibility to global spatial coverage of longitude (-180 to 180 degree) and latitude (-90 to 90 degree) and the output dataset either in ASCII file or ArcView grid. These type of output data can be easily analysis and processing by the ArcGIS desktop software to create the climatic maps. ArcGIS9.3.1 was used for the extracting and mapping of the required precipitation data, as well as the related subsequent processing. For Iraq, the spatial coverage of the entire area is defined with the geographical coordinate system (GCS) of 29-38 N; 39-49 E. Therefore, the extraction of the precipitation data in ASCII grid format have been done within the defined geographical boundary. It concludes that, there is a general similarities in the precipitation feature in Iraq between the downloaded dataset from the GPCC VISUALIZER web site and those obtained from the meteorological stations. Also it concludes that, the spatial resolution of the monthly and seasonal precipitation maps produced by the Kriging interpolation method for downloaded data was more than those data depending on a limited number of meteorological stations.