Variability of some doses emission over middle east and north Africa (MENA(

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The green house gases emission are one of the serious problem related to global warming. The emission inventory is a necessary parameter needed for global modeling of the atmospheric climate.Over MENA there are deficiencies in data base. For the above mentioned target the current thesis is aiming to diagnose number of emissions over 12 locations- available to the author-to justify the accuracy of surface data in comparison to satellite observations. A comparison between surface and satellite observations was also performed for total ozone to study the pattern over MENA and find out pattern at different locations. Also the trajectory of dust storms and their relationship to amount of particulate matter injected in the atmosphere were analyzed in detail with the emission related to these storms and the gases emissions associated with these storms.It was observed that the mesoscale changes for GHGs exist all over the study region and each location has specific characterization. Also it was remarkably defined that CO2 concentrations over Cairo city higher than Kuwait city which indicate that the regional pattern of emissions should be examined very carefully.In the last chapter a scenario for emission in CO2 was carried out using regional climate model with a hypothetical Scenario due to 20% increase of CO2 were investigated through number of Meteorological parameters.