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Study of the Behavior of PM_{10} and SO_2 in the Urban Atmosphere of Sfax: Influence of Anthropised Contributions and Special Meteorological Conditions, 2008

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Abstract : The study of the temporal variation of the PM10 and the SO_2 in the area of Sfax during the year of 2008, showed very significant fluctuations of the contents. They depend on the transmitting sources and the weather conditions. The study of the evolutionary behavior of the PM10 and the SO_2 in a situation of the Sirocco revealed the determining influence of the Sahara which was confirmed by its strong enrichment of the atmosphere with particulate matter. The analysis of a situation of breeze of sea highlighted the increase in the contents of the PM10 of agreement with the increase the speed of the marine wind, in particular for the diurnal period, possibly testifying to the enrichment of the aerosol in a considerable maritime component. A situation of anticyclonic winter examined when with it the accumulation of the contents of the PM10 at a rate of 70 µg/m³ showed such concentrations remained weak by comparison with other studies which show contents of about 300 µg/m³.

Keywords : PM10, sea breeze, SO_2, sirocco, anticyclone
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