شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الاصلية تالفة

بالرسالة صفحات لم ترد بالاصل

AIN SHAMES UNIVERSITY
GIRLS COLLEGE
PHYSICS DEPARTMENT

STUDY OF THE EFFECT OF THE AEROSOLS LEVEL ON SOLAR -THERMAL RADIATION OVER EGYPT

BY

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A THESIS
For the degree of Ph.D. in science

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CHAPTER 5

ABSTRACT

Khaled Sadek Mohamed Essa. Study of the effect of the aerosols level on solar thermal radiation over Egypt. Doctor of Philosophy in Science, Ain Shames University, Girls College, Physics department, 1996.

There is now compelling observational evidence that the chemical composition of the atmosphere is changing at a rapid rate on a global scale. These changes in atmospheric composition in part reflect the metabolism of the biosphere and are in part due to national and international energy , agricultural and other industrial policies. Affecting a change in policy will require a nationally coordinated inter disciplinary research.

The present work reflects this need as the aerosols in terms of physical and chemical impact are discussed over the Cairo city with population density 28% and the general pattern is also investigated over different locations.

The insoluble particles in the atmosphere has major concentration to the soluble part which seems to be constant all over the year . The concentration of pollution is maximum in fall and minimum in the cold season .

The PH value of the aerosol indicated strong alkaline scale for long periods. Also the ratio (I/D) confirm significant drop in radiation component due to the side effects of Kuwait oil fire burning .

The association between air temperature and solar radiation indicated that phase lag between both factor changes significantly from coastal to inland stations. A significant fact was extracted from this work that no climate changes had been observed.

The coupling of physical and dynamical model is able to produce high performance in prediction of climate variables.

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