



Resume

Name Mohamed Magdy Abdel -Wahab
Date of Birth 1949
Nationality Egyptian
Profession Professor of meteorology
Faculty of Science, Cairo University
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Education

- Ph. D. in Numerical weather prediction, Moscow State Univ., 1977
- Diploma in Meteorology, Cairo Univ., 1972.
- B. Sc. in Special physics, Cairo Univ., 1971.

Key Qualifications

- Has over 35 years of experience in the field of meteorology and atmospheric science. He is specialized in weather modeling, climate change and air pollution. He is currently teaching and consulting in these fields.
- He has been a Principle Investigator and co-Director of many scientific projects including the establishing of an Earth Observation satellite data receiving station at Cairo University (funded by NATO Science for Peace program).
- Established Climate Research Laboratory at faculty of Science, Cairo University to model climate changes over the Middle East and North Africa (MENA) region.
- Conducted a project on Nile basin precipitation and early warning system of flash floods with National Forecasting Center, Ministry of Water Resources and Irrigation. Also, he is the Egyptian PI with weather modification and climate change programs.
- Currently participating in a few climate change assessment studies and use of limited area models to enhance regional changes and develop assessment scenario for nuclear safety of the

future Egyptian power planet. He is long experience with meteorological data and measurement's at different scales.

Dr wahab preformed many environmental impact assessment (EIA) for pollution emissions and climate change.

- He is currently leading experiments on Aerosol characterization over Cairo city (CACHE) in collaboration with University of Paris. Also he is carrying the Air Pollution and Assessment Climate program in collaboration with University of Basel, Swaziland.

- He is currently leading some international projects with co-partners from Italy, Switzerland, USA (NCAR) and Purdue University. Recently Dr. Wahab has been engaged with Ionospheric physics simulations and space weather problems.

Dr. Wahab now is working on regional climate models and provide in country and out country training in climate data, modeling and projections.

- He authored and co-authored several publications and reports related to his area of interest.

- Participated and organized many conferences and workshops in Egypt and abroad.

- He is a member in Third National Communication Report Team.

- He is the responsible for the Adaptation Strategy INDCs

Career Record

Professor Emirate (2010-now)

September 2010-2015

Director of Space Research Center-Cairo University

August 2002-2008

Head; Astronomy and Meteorology Department, Faculty of Science Cairo University;

May 1997- 2000

Director; Meteorology Center for Studies and Environmental Consultancy (MACSEC)

Faculty of Science, Cairo University

1988- Present

Professor of Atmospheric Physics Department of Meteorology;

Faculty of Science - Cairo University

Consultants; Egyptian Environmental Affairs Agency

1983- 1988

Faculty of Science - Cairo University

Associate Professor; Department of Meteorology, Cairo University

1981 - 1984

Post-Doctoral Fellow Mc Master University Hamilton – Ontario –Canada

1977- 1981

Assistant Professor; Faculty of Science – Cairo University

1973- 1977

Graduate Student; State University Moscow

Faculty of Physics Moscow

1971- 1973

Demonstrator; Department of Meteorology

Faculty of Science – Cairo University

Research Projects

1. **PI** - Italian/ Egyptian, Current and future climate, supported by Egyptian academy of Science, 2007-2009.

2. **PI** - Building advanced numerical weather prediction model - ID372, Supported by US Egypt fund, 2009-2012.
3. **PI** - French/Egyptian, Aerosol chemistry effects on Climate supported by Egyptian academy of science, 2011-2013.
4. **PI** - Implementation, calibration and training for rainfall forecasting model in Ethiopia and Sudan, supported by ENTRO Nile Basin Ethiopia, 2008-2009.
5. **PI** - Environmental impacts from Nuclear Power Plant ID1352, supported by STDF, 2010-2012.
6. **PI** - Impact of drying SUDD region on hydrology of Nile Basin MWR Egypt, 2011-2013.
7. **PI** - Characterization of North Africa Aerosols and Precipitation Patterns Influencing Egyptian Climatology, ID 2738, supported by US Egypt fund, 2011-2013.
8. **PI** –Optimizing water management for cultivated lands through remote sensing analysis and climate change scenarios Eranetmed-218-now

Membership

1. World environmental agency since 1982.
2. American Meteorological Society since 1982.
3. Consultant with the International Center for Theoretical Physics, Trieste, Italy since 1986 -1996.
4. Senior Associate International center for theoretical physics 1996 Up Now.

Teaching Courses teaching:

1. Climatology and climate change,
2. Air pollution,
3. Atmospheric physics and chemistry,
4. Atmospheric modeling.

Prizes: Cairo University appreciation prize in interfering science 2005.

Kuwait aviation authority prize 2010.

Cairo University Excellency prize 2018.

Current Research

- 1- Forecasting Climate Change over Nile Basin,
- 2- Analysis of Aerosols physical and chemical properties over EGYPT,
- 3- Influence of Meteorological Factors on Some Crops Production
- 4- Enhancement and training in Numerical models for ENTRO countries.
- 5- Environmental safety from nuclear power plants.

Languages Capabilities

	Excellent	Good	Fair
Arabic (native speaker)			
English	X		
Russian		X	

List of publications

H-index 16 by Scopus

1. **Abdel-Wahab, M. M:** Conservation of adiabatic invariance as criteria for evaluation of barotropic schemes. Academic of science, USSR Vol.8, 1976.

2. **Abdel-Wahab, M. M.**: A further expression for pressure tendency equation (1). Proceedings of the Mathematical and Physical Society of Egypt No. 49, January 1980.
4. **Abdel-Wahab, M. M.**: Conservation of potential vorticity at medium level. Fifth International Congress for Statistics and Computer Science, 29 March - 3 April 1980, Cairo.
5. **Abdel-Wahab, M. M.** and N. A. Khalil: Ozone and atmospheric circulation. Fifth International Congress for Statistics and Computer Science, 29 March- 3 April 1980, Cairo.
6. **Abdel- Wahab, M. M.** and Z. Metwally: Solar activity and tropospheric circulations. J. of Astronomical Society of Egypt. Vol.2, 1980.
7. Hassanin, A.; **Abdel-Wahab, M. M.** and Z. Metwally: preliminary study of the lower tropospheric inversions statistics over Cairo. Met. Res. Bull. Vol. 8#2, 1980.
8. **Abdel-Wahab, M. M.**: On the calculation of vertical motion. Indian j. of Meteorology and Hydrology. Vol. 32, 1981.
9. **Abdel-Wahab, M. M.** and A. KH. Khrugan: Association between the solar activity and total ozone of the atmospheric. Moscow Univ., Vestnik, ser. 3, Fizika, astronomy 21 (6), 1980.
10. **Abdel-Wahab, M. M.**:12 Hour prediction of horizontal wind components. Indian J. of Meteorology and hydrology. Vol.33, 1982.
11. **Abdel- Wahab, M. M.** and A. A. Salah El - Din: Cyclogenesis activity in desert depressions (khamadin Type) Seventh International Congress for Statistics and Computer Science, 27 March- 1 April 1982, Cairo.
12. Davies, J. and **Abdel- Wahab, M. M.**: Evaluation of solar radiation models simulating solar radiation incident on horizontal surfaces. Report no. OISE.KM60I- 1-2489, Dec.1982.
13. **Abdel-Wahab, M. M.**: A simple approach to verification of numerical models. Indian Journal of Meteorology and Hydrology (Mausam). Vol.34, 1983.
14. Davies, **Abdel-Wahab, M M.** and D. Mckay: Estimating irradiance on horizontal surface. International J. of Solar Energy. Vol.2, 1984.
15. Davies, **Abdel-Wahab, M. M.** and J. Howard: Error analysis of numerical model for solar irradiance. Solar Energy. Vol.2, 1984.
16. Davies, J.; **Abdel- Wahab, M. M.**: Evaluation of models for simulating solar radiation incident on horizontal surface. Report No. OSE81- 00243, 1984.
17. Davies, J.; **Abdel- Wahab, M. M.** and j. Howard: Cloud transmissivities for Canada. Monthly Weather Review. Vol. 113, 3, 1985.
18. **Abdel-Wahab, M. M.**: Simple model for estimating global solar radiation, Solar and Wind, Vol.2, 1, 1985.

19. Abdel- Moettay **Abdel-Wahab, M. M.** and: Computations of Tropopause height. Cairo Met. Res. Bull. Vol.13, 1985.
20. **Abdel- Wahab, M. M.**: Effect of random errors on estimating global solar radiation. Solar and Wind Technology. Vol.2, 1985.
21. Davies, J.A., Luciani, G., **AbdelWahab, M.**, Estimating solar radiation with the Mc Master model, proceeding of the Biennial Congress of the Int. Solar Energy society Montreal, Canada, 23-29 June, 1985.
22. **Abdel-Wahab, M. M.**: Modeling diffuse solar radiation ASRE86. Vol.1, No. 5, March 23-26, 1986, Cairo, Egypt.
23. **Abdel- Wahab, M. M.**: Modeling radiation on south- facing slopes. Journal of Climatology. Vol.7, 1987.
24. **Abdel- Wahab, M. M.**: Predicting global radiation from a satellite and numerical model a comparative study. Solar and Wind Technology. Vol. 4, No3, 1987.
25. **Abdel-Wahab, M. M.**: Effect of adiabatic heating on the change of surface pressure, Mausam. Vol.38, 1, 1987.
26. Davies, J.; D. Mckay and **Abdel- Wahab, M. M.**: Validation of models for estimating solar radiation on horizontal surfaces. Vol.1, 2, 3 International Energy Agency Task 1 June 1988.
27. **Abdel-Wahab, M. M.**: On the modification of the dynamics in the environment of severe thunderstorms. Theoretical and Applied Climatology 44 (34), pp. 201. 1991.
28. **Abdel-Wahab, M. M.**: A new approach to estimate Angstrom coefficients. Solar Energy. Vol.32, 1992.
29. **Abdel Wahab, M.**, New approach to estimate Ångström coefficients, Solar Energy 51(4), pp. 241, 1993.
30. **Abdel-Wahab, M. M.** and M. El – Menshawy: Forecasting thunderstorms using thermodynamic indices. Meteorological Magazine, Vol.122, 1993.
31. **Abdel-Wahab, M. M.**: Effect of Qataara depression on Mesoscale climate change of Egypt. Sixth WMO conference on weather modification. Italy, 1994.
32. **Abdel-Wahab, M. M.** and M. Omran: The role of Aerosols in climate of Cairo City. Journal of Theoretical and applied climatology, 1995.
33. **Abdel Wahab, M.**, Sharif, T.A., Estimation of precipitable water at different locations using surface dewpoint, Theoretical and Applied Climatology 51 (3), pp. 153, 1995.
34. **Abdel-Wahab, M. M.** and Abdel Basst: Energy budget Quantities associated with Quasi-stationary cyclones in the Mediterranean. WMO international symposium Palma de Mallorca Spain 14-17 April 1997.

35. **Abdel-Wahab, M.M.:**some Radiative climatic consequences of the increasing of atmospheric dust particles submitted to Journal of Theoretical and Applied Climatology 1997.
36. **Abdel-Wahab, M. M.** and K. Essa: Effect of Kuwait Oil well fires on Radiation climate over Egypt submitted to solar energy 1997.
37. **Abdel-Wahab, M. M,** K.S.M.Essa: Extrapolation of Solar Irradiation Measurements: Case Study over Egypt, Renewable Energy, Vol. 14, Nos. 1-4, pp. 229-239, 1998.
38. **Abdel Wahab, M.,** Some intercomparison of solar radiation codes, Renewable Energy 14(1-4), pp. 205, 1998.
39. **Abdel-Wahab, M.M and** H.M.Hasanean: Contrasting of two tropical summers from satellite observations, Atmospheric Research, 50,1999,P105-117.
40. **Abdel-Wahab, M.M,** Basset, H. Abdel, Baset: Energy exchanges for Mediterranean weather systems. Meteorol. Atmos. Phys, June 1999.
41. **Wahab, M.A.,** Hasanean, H.M., Association between longwave radiation and planetary albedo, Atmosfera 13 (4), pp. 245, 2000.
42. **Abdel-Wahab M.M** and H. Abdel Basset: The Effect of Moisture on the Kinetic Energy Budget of a Mediterranean Cyclone, Theoretical And Applied Climatology, Vol.65,No.1-2,2000,pp.17-36.
43. **Wahab, M.A.,** Basset, H.A., Energy exchanges for Mediterranean weather systems, Meteorology and Atmospheric Physics 73 (12) , pp. 1, 2000.
44. **Abdel-Wahab M.M** et al, Enhancing the Effectiveness of MFS of the Nile River- Final report FAO. Phase III, Dec. 2001.
45. **Wahab, M.A.,** Basset, H.A., Lasheen, A.M., On the mechanism of winter cyclogenesis in relation to vertical axis tilt, Meteorology and Atmospheric Physics 81 (12) , pp. 103, 2002.
46. **Abdel-Wahab M.M** et al, developing Eastern desert of Egypt: Rainfall study, Final Report, UNDP, March 2003.
47. **Abdel-Wahab M.M** and Hassanean H.: The relationship between thermal calculation and surface albedo, atmosphere 11, 2003.
48. A.S.Zakey, **Abdel-Wahab M.M.,** PA. Makar: Atmospheric turbidity over Egypt, Atm.Env.2004.
49. Alfaro, S. C. and **Abdel-Wahab, M. M.:** Extreme variability of aerosol optical properties: The Cairo aerosol characterization experiment case study, NATO. Sec. Sci., 2006, 285–299, doi: 10.1007/978-1- 4020-5090-9 18, 2006.
50. **Abdel-Wahab M.M:** Impact of climate change on rice production over Egypt, International Journal of Meteorology, Dec. 2006.

51. Khalaf Y, **Abdel-Wahab M. M.** and Awad A.: Analysis and forecasting of dust storms, The International Journal of Meteorology, Nov. 2008.
52. ElMetwally, M., Alfaro, S.C., **Abdel Wahab, M.**, Chatenet, B., Aerosol characteristics over urban Cairo: Seasonal variations as retrieved from Sun photometer measurements, Journal of Geophysical Research Atmospheres 113 (14), 2008.
53. O. Favez, H. Cachier, Sciare, S. C. Alfaro, T. M. El-Araby , M. A. Harhash and **M.M. Abdel-Wahab, M. M.** : Seasonality of major aerosol species and their transformations in Cairo mega city. Atmospheric Environment 42 (2008) 1503-1516.
54. A.S. Zakey, **Abdel-Wahab, M. M.**, J.B.C.Pettersson , M.J.Gatari and M.Hallquist: Seasonal and spatial variation of atmospheric particulate matter in a developing mega city, Cairo, Egypt. Atmosfera 21 (2) 171-189 (2008).
55. K.F. Mahmoud, S.C. Alfaro, O. Favez, **Abdel-Wahab, M. M.** and J. Sciare: Origin of black carbon concentration peaks in Cairo (Egypt), Vol 89, Atmospheric Research (2008).
56. O. Favez, Jean Sciare, H. Cachier, S. Alfaro, **Abdel Wahab, M. M.**: Significant Formation of Water –insoluble Secondary Organic Aerosols in Semi arid Urban Environment, Geophysical Research Letters 35(15), 2008.
57. El-Metwally, M., S. C. Alfaro, **Abdel Wahab, M. M.**, and B. Chatenet, Aerosol characteristics over urban Cairo: Seasonal variations as retrieved from Sun photometer measurements, Journal Geophysical Research, 113, D14219, 2008.
doi:10.1029/2008JD009834.
58. Alghifari, Y.H., **Abdel Wahab, M.**, Awad, A., Forecasting for dust storms over Saudi Arabia from numerical models, International Journal of Meteorology 33 (332) , pp. 255, 2008.
59. Rochon, G.L., **Wahab, M.**, El Afandi, G., DanIsa, A., Sithole, H., Kganyago, K., Fall, S., Quansah, J., Antelo, J.P., Overcoming bandwidth and satellite communications limitations to accelerate applications of remote sensing and high performance computing for sustainable African development: Contributions from Egypt, Nigeria and South Africa, International Geoscience and Remote Sensing Symposium (IGARSS) 3 (1), 2008.
60. Favez O., Alfaro S.C., Sciare J., Cachier H., **Abdel Wahab M.M.** Ambient measurements of light-absorption by agricultural waste burning organic aerosols, Journal of Aerosol Science, 40 (7), pp. 613-620, 2009.
61. **AbdelWahab, M.**, Essa, K.S.M., Embaby, M., Elsaid, S.E.M., Ground level concentrations on area sources, Mausam 60 (4), pp., 544, 2009.
62. Altay, G., Ersoy, O., **Wahab, M.A.**, Afandi, G.E., Shokr, M., Ghazawi, T.E., Mohamed, M.A., Eleithy, B., Fall, S., Deployment of real time satellite remote sensing infrastructure to support disaster mitigation: A NATO science for peace collaboration project with research universities in Turkey, Egypt and the USA, RAST 2009 Proceedings of 4th International Conference on Recent Advances Space Technologies, pp. 18, 2009.
63. Rochon, G., **Wahab, M.A.**, El Afandi, G.S., Altay, G., Ersoy, O., Song, X.C., Zhao, L., Niyogi, D., El Ghazawi, T., The Kamal Ewida earth observatory: A NATO supported real-

time remote sensing receiving station being established in Egypt with HPC enabled near-real time data products for mitigation of environmental & public health disasters, International Geoscience and Remote Sensing Symposium (IGARSS) 4, 2009.

64. Rochon, G.L., Araya, B., Biehl, L.L., Grant, D., Ersoy, O., Quansah, J., Altay, G., **Wahab, M.M.A.**, Sithole, H., Acquisition, analysis and distribution of real-time multisensor satellite data, in a high performance computing environment, for disaster mitigation applications: Case studies from the NATO science for peace funded kamal ewida earth observatory in Egypt, the electronic Geophysical Year (eGY) Africa and the US, Geological Survey supported AmericaView, Proceedings of IEEE Sensors , pp. 1020, 2009.
65. **Abdel Wahab, M. M.**, El-Metwally M., Hassan R., Lefèvre M., Oumbe A., and Wald L, Assessing surface solar irradiance in Northern Africa desert climate and its long-term variations from Meteosat images . International Journal of Remote Sensing, 31, 261-280, 2010.
66. El-Metwally M., Alfaro S.C., **Abdel Wahab, M. M.**, Zakey A.S., and B. Chatenet, Seasonal and inter-annual variability of the aerosol content in Cairo (Egypt) as deduced from the comparison of MODIS aerosol retrievals with direct AERONET measurements, Atmospheric Research, 97, 14-25, 2010.
67. El-Metwally M., Alfaro S.C., **Abdel Wahab, M. M.**, Mohamed Z., and B. Chatenet, Aerosol optical properties and radiative effects over Cairo (Egypt) by using AERONET dataset, Atmospheric Research., 2010.
68. Corinne M. Frey, E.Parlow, R.Vogt, M.Harhash and **Abdel Wahab, M. M.**: Flux measurements in Cairo. Part 1: In situ measurements and their applicability for comparison with satellite data, International Journal of Climatology 31(2) , pp. 218., 2011.
69. El-Metwally M., Alfaro S.C., **Abdel Wahab M.**, Mohamed Z., and B. Chatenet, Aerosol properties and associated radiative effects over Cairo (Egypt) by using AERONET dataset, Atmospheric Research 99, 263-276, 2011.
70. El-hameed, Somia, Elhelow, Khaled, Youssef, I.K., **Abdel Wahab M. M.** : Rainfall events prediction using Rule-Based fuzzy inference system, Atmospheric Research, 2011.
71. Abd ElRahman, H.A., Salih, S.A., **Abd El Wahab, M. M.**, Effect of phosphoric acid on the performance of low antimony grid of Pb acid cell under constant current charging and discharging, Material wissenschaft und Werkstofftechnik 42(9), pp. 784, 2011.
72. AbdelTawab A.A. Shalaby, **Abdel Wahab M. M.**, R.O.Anyah: Non-hydrostatic Hybrid-Coordinate Modelling: Simulation of extreme weather event on 20-22 April 2005 in Cairo, Egypt, Atmospheric research, 2012.
73. **M. Abdel wahab**, KHALED S. M. ESSA, M. EMBABY and SAWSAN E. M. ELSAID: Some characteristic parameters of Gaussian plume model, MAUSAM, 63, 1, 123-128, January 2012.
74. El Fadli, K.I., Cerveny, R.S., Burt, **Abdel Wahab, M.M.**, Pace, M.B: World meteorological organization assessment of the purported world record 58°C temperature extreme at el

Azizia, Libya (13 September 1922) Bulletin of the American Meteorological Society, 2013.

75. **M.M Abdel-Wahab**, M., Essa, K.S.M., Embaby, M., Elsaid, S.E.M: Calculating isotope concentrations using different schemes of dispersion parameters Radiation Protection Dosimetry, 2013.
76. Ahmed Gahein, **M. M. Abdel Wahab**, Mohamed A. Gaheen, Zeinab Salah, Simulation of nuclear accident caesium-137 contamination Using FLEXPART model, International Journal of Advanced Research, Volume 1, Issue 8, 51 6-526, 2013.
77. **M.M Abdel-Wahab**, M.,Essa, K.S.M.,Embaby, M.,Elsaid, S.E.M.: Derivation of the schemes of lateral and vertical dispersion parameters: Application in Gaussian plume model, Open Journal of Air Pollution, Vol.2, PP. 19-24, 2013.
78. Khalil A.A, **M.M Abdel-Wahab**, M.K Hassanein, B. Ouldbdey, B. Katlan, and Y.H Essa:Drought Monitoring over Egypt by using MODIS Land Surface Temperature and Normalized Difference Vegetation Index. Nature and Science 2013; 11(11); 116-122, 2013.
79. Steiner, A.L.,Tawfik, A.B.,Shalaby, A.Zaky, **M.M Abdel Wahab**, F,Sollmn, S.,Zaveri, R.A.:Climtological simulations of ozone and atmospheric aerosols in the Greater Cairo region, Inter-Research Climate Research, Vol. 59, PP.207-228, 2014.
80. Ammar, K., El-Metwally, M., Almazroui, **M., Abdel Wahab**, A climatological analysis of Saharan cyclones , Climate Dynamics, 2014.
81. Essa, K. S. M., **M. M. Abdel-Wahab**, H. M. ELsaman, A. S. Soliman, S. M. ELGmmal, and A. A. Wheida, "The mathematical modeling of the atmospheric diffusion equation", International Journal of Environmental Monitoring and Analysis, 2014.
82. **Abdel-Wahab, M. M.**, Khaled. S. M. Essa, H. M. Elsmann, S. H. A. Soliman, S. M. Elgmmal, And A. A. Wheida, "Derivation of the Gaussian plume model in three dimensions", MAUSAM, vol. 65, pp. 83-92, 2014.
83. Shalaby, A., Zakey, A.S., **AbdelWahab, M.M.**, Salah, Z., Solmon, F., Sillman, S., Zaveri, R.A., Climatological simulations of ozone and atmospheric aerosols in the Greater Cairo region, Climate Research 59 (3), pp. 207, 2014.
84. Santoro, M.M., Hassan, F.A., **Wahab, M.M.A.**, Cerveny, R.S., Balling, R.C., An aggregated climate teleconnection index linked to historical Egyptian famines of the last thousand years, Holocene 25 (5), pp. 872, 2015.
85. Eissa, Y., Korany, M., Aoun, Y., Boraiy, M., **Wahab, M.M.A.**, Alfaro, S.C., Blanc, P., ElMetwally, M., Wald, L., Validation of the surface down welling solar irradiance estimates of the HelioClim3 database in Egypt, Remote Sensing 7 (7), pp. 9269, 2015.
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87. Khalil A.A., Y.H. Essa, and **M.M. Abdel-Wahab**: Evapotranspiration mapping over Egypt using MODIS / Terra satellite data. *International Journal of Advanced Research*, Volume 3, Issue 12, 512 – 522, 2015.
88. Essa Y.H; A.A. Khalil and **M. M. Abdel-Wahab**: Assessment of Agricultural Drought under Climate Change. *Research Journal of Fisheries and Hydrobiology* 11(6), p. 1-11, 2016.
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90. A. A. Abdallah1, M. M. Eid, **Abdel -Wahab M. M.** and F. M. El-Hussainy, A Simulated Climatology of North African Dust and its Impact on Meteorological Parameters Using WRF-CHEM Model, *International Journal of Advanced Research*, Volume 3, Issue1, p. 1011-1023, 2016.
91. S. A. Asklany, Khaled Elhelow, **M. Abd El-Wahab**, on using Adaptive Hybrid Intelligent Systems in PM10 Prediction, *International Journal of Soft Computing and Engineering (IJSCE)*, ISSN: 2231-2307, Volume-6 Issue-4, p. 54-59, 2016.
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94. M. Boraiy, M. Korany, Y. Aoun, S.C. Alfaro, M. El-Metwally, **M. M. Abdel Wahab**, P. Blanc, Y. Eissa, H. Ghedira, G. Siour, K. Hungershofer and L. Wald, including aerosol optical depth improves existing models for the retrieval in cloud-free conditions of the direct normal from the measured global irradiance in Egypt, *Meteorologische Zeitschrift*, <https://dx.doi.org/10.1127/metz/2017/0844>, 2017.
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96. Ali Wheida, Amira Nasser, Mostafa El Nazer, Agnes Borbon, Gehad A. Abo El Ata, **Abdel-Wahab, M. M.**, Stephane C. Alfaro, Tackling the mortality from long-term exposure to outdoor air pollution in megacities: Lessons from the Greater Cairo case study, *Environmental Research*, 160, 223–231, 2018.

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Evapotranspiration Environment Asia April 5, 2018
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dispersion modeling in support of Comprehensive Nuclear –Test –Ban Treaty monitoring
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Monem, **Abdel-Wahab, M. M.**, Validation of RegCM-CHEM4 model by comparison with
surface measurements in the Greater Cairo (Egypt) megacity, Environmental Science and
Pollution Research, 15 June, 2019, pp. 1-18.