

Dr. ABDULLA AHMED AL MANDOUS



Director General of the National Center of Meteorology, and Permanent Representative of UAE with WMO.
Member, Executive Council, World Meteorological Organization
President, WMO Regional Association II (Asia).



POSITIONS:



المركز الوطني للإرصاد
National Center of Meteorology

Director General of the National Center of Meteorology, and Permanent Representative of United Arab Emirates with WMO.



President, WMO Regional Association II (Asia).
Permanent Representative of the United Arab Emirates - World Meteorological Organization.



Past Chairman of Permanent Committee for Meteorology of League of Arab States, the Council of Arab Ministers concerned with meteorological affairs



Chairman of the Meteorological Advisors Committee - Abu Dhabi Polytechnic.

MEMBERSHIPS:



Member of the executive council of the organization - World Meteorological Organization.



وزارة شؤون الرئاسة
MINISTRY OF PRESIDENTIAL AFFAIRS

Member of the Board of the National Center of Meteorology.



Member of the National Authority for Emergency, Crisis and Disaster Management Committee.



Member of the Permanent Committee of Meteorology and Climate in the Cooperation Council for the Arab States of the Gulf.



Member of the educational committee - University of Sharjah.



Member of the advisory board of the College of Science - United Arab Emirates University.

ACADEMIC QUALIFICATIONS:



Ph.D. Meteorology, The University of Belgrade, Serbia, 2012.



M. Sc. Meteorology, The University of Witwatersrand, South Africa, 2005.



B. Sc. Meteorology, the University of Saint Louis, USA, 1989.

KEY PROFESSIONAL ACHIEVEMENTS:

Augmented NCM Capability of High Performance (HPC) Computing System of 2.8 petaflops speed and 5.7 Petaflop storage capacity

01

The Science Dome to showcase science in an innovative and simplified manner

02

Modernization of NCM'S Infrastructure and Enhancement of National Meteorological and Seismological Networks

03

Arabian Peninsula Integrated Radar Observing System contributing to GANP-ICAO, Disaster Risk reduction and WIGOS

04

UAE Rain Enhancement Program & Weather Modification Programme

05

National Integrated Observing System through NCM's National Legal Legislation Federal Law Decree No (6)

06

Development and Implementation of NCMS Strategic and Operating Plan

07

Capacity building of National Data Processing and Forecasting system (High accuracy Numerical Weather Prediction System) contributing to GDPFS-WMO

08

Establishment of the Seismic Data & Information Network Center contributing to Disaster Risk Reduction

09

Establishment of Legal Instrument Framework for the provision of Meteorological & Seismological services in UAE (Federal Decree Law)

10

Web portal for RA II Members.
www.ra2.asia

11

Web portal for GCC members
www.gccmet.com

12

Quality Management ISO Certification for the Meteorological Service provision

13



WORK EXPERIENCE:

2021- 2025

President of RA II ASIA with WMO (Re-elected)

2017- 2021

President of RA II ASIA with WMO

2022 – Current

Director General of the NCMS and PR of UAE with WMO;

2008 – 2022

Executive Director of the NCMS and PR of UAE with WMO;

2004 - 2007

Director, Atmospheric Studies;

2000 -2004

Deputy Director, Water Resources Studies Department;

Deputy Director, National Project of UNDP for Water Sources Studies;

Director, Precipitation Enhancement Program;

1999 -2000

Chief of Weather Forecaster

1990 - 1999

Weather Forecaster



HONORS & CERTIFICATES OF APPRECIATION:

- ★ Middle East Executive Award for High level Executive Leadership
- ★ The Emirates Award Certificate of Appreciation from HH Sheikh Mansour bin Zayed for Enhanced and improved Weather and climate services at UAE
- ★ Kuwait Liberation Medal Recipient from Emir of Kuwait
- ★ Certificate of Appreciation from the National Center of Atmospheric Research, NCAR,USA for UAE Rain Enhancement Project
- ★ Certificate Appreciation from National committee for Crisis and Emergencies
- ★ Certificate of Appreciation from UAE Embassy, USA for the dedication shown in the undergraduate study and research projects
- ★ Certificate of Excellence from the Air Force and Air Defence Institute
- ★ Certificate of Appreciation of Ministry of Social Affairs, UAE



“My mission as President of RA II ASIA to: Promote and implement the resolutions & decisions of WMO Congress and; to safeguard life and property from Meteorological and Hydrological disasters around the world”

INTERNATIONAL ENGAGEMENTS

- Agreement with EUMETSAT for Satellite Data Utilization
- Agreement with National Center for Atmospheric Science, USA
- Cooperation Agreement with Yemen, Bahrain, Pakistan, India and Kazakhstan
- Cooperation with GCC & League of Arab Members
- Numerical Weather Prediction Agreement with DWD, Germany
- Member's assistance for cloud seeding operations

➤ RESEARCH ENGAGEMENTS:

- Agreement with Sultan Qaboos University, OMAN
- Agreement with NCAR-USA for Rain Enhancement Study
- Agreement with Kandilli Observatory and Seismology Research Institute
- UAE RAIN Enhancement Program

UAE RESEARCH PROGRAM FOR RAIN ENHANCEMENT SCIENCE (UAERP):





Geneva signing ceremony of the host agreement for the 16th session of Regional Association II during 12 to 16 Feb 2017 with Professor Petteri Taalas, Secretary-General of the World Meteorological Organization.

INTERNATIONAL PARTICIPATIONS

MAJOR CONSTITUENT BODY MEETINGS OF WMO:

- ▀ WMO Congress sessions of World Meteorological Organization
- ▀ Regional Association II-ASIA sessions

EXECUTIVE COUNCIL & SUBSIDIARY BODY MEETINGS OF WMO

- ▀ Executive Council Meetings of WMO
- ▀ High Level Bureau Meetings of WMO (meets twice/ thrice in a year)
- ▀ Joint President of Regional Associations and Presidents of Technical Commissions of WMO, Geneva, Switzerland, EC Working Group on Strategic & Operational Planning meetings, Geneva.
- ▀ Presidents of all six Regional Association's Meetings of WMO
- ▀ TCC/PAC Meetings of WMO

OTHER INTERNATIONAL SESSIONS:

- ▀ COP meetings of UNFCCC
- ▀ GCC Meteorology Council Meetings
- ▀ League of Arab States Meteorology Council Meetings

CHAIRING SESSIONS AS PRESIDENT OF RA II ASIA

- ▀ Management Group Meetings of RA II ASIA
 - ▀ RA II consultation meetings during WMO Congress
 - ▀ RA II Subsidiary body meetings
-

RESEARCH PUBLICATIONS

☞ Wehbe, Y., Ghebreyesus, D., Temimi, M., Milewski, A. and Al Mandous, A., 2017. Assessment of the consistency among global precipitation products over the United Arab Emirates. *Journal of Hydrology: Regional Studies*, 12, pp.122-135.

🌐 <https://doi.org/10.1016/j.ejrh.2017.05.002>

☞ Wehbe, Y., Temimi, M., Weston, M., Chaouch, N., Branch, O., Schwitalla, T., Wulfmeyer, V., Zhan, X., Liu, J. and Al Mandous, A., 2019. Analysis of an extreme weather event in a hyper-arid region using WRF-Hydro coupling, station, and satellite data. *Natural Hazards and Earth System Sciences*, 19(6), pp.1129-1149.

🌐 <https://doi.org/10.5194/nhess-19-1129-2019>

☞ Al Hosari, T., Al Mandous, A., Wehbe, Y., Shalaby, A., Al Shamsi, N., Al Naqbi, H., Al Yazeedi, O., Al Mazroui, A. and Farrah, S., 2021. The UAE cloud seeding program: A statistical and physical evaluation. *Atmosphere*, 12(8), p.1013.

🌐 <https://doi.org/10.3390/atmos12081013>

☞ Yousef, L.A., Temimi, M., Wehbe, Y. and Al Mandous, A., 2019. Total cloud cover climatology over the United Arab Emirates. *Atmospheric Science Letters*, 20(2), p.e883.

🌐 <https://doi.org/10.1002/asl.883>

☞ Yousef, L.A., Temimi, M., Molini, A., Weston, M., Wehbe, Y. and Al Mandous, A., 2020. Cloud cover over the Arabian Peninsula from global remote sensing and reanalysis products. *Atmospheric Research*, 238, p.104866.

🌐 <https://doi.org/10.1016/j.atmosres.2020.104866>

☞ Steinhoff, D.F., Bruintjes, R., Hacker, J., Keller, T., Williams, C., Jensen, T., Al Mandous, A. and Al Yazeedi, O.A., 2018. Influences of the monsoon trough and Arabian heat low on summer rainfall over the United Arab Emirates. *Monthly Weather Review*, 146(5), pp.1383-1403.

🌐 <https://doi.org/10.1175/MWR-D-17-0296.1>

☞ Abshaev, M.T., Abshaev, A.M., Zakinyan, R.G., Zakinyan, A.R., Wehbe, Y., Yousef, L., Farrah, S. and Al Mandous, A., 2020. Investigating the feasibility of artificial convective cloud creation. *Atmospheric Research*, 243, p.104998.

🌐 <https://doi.org/10.1016/j.atmosres.2020.104998>

☞ Abshaev, M.T., Zakinyan, R.G., Abshaev, A.M., Al-Owaidi, Q.S.K., Kulgina, L.M., Zakinyan, A.R., Wehbe, Y., Yousef, L., Farrah, S. and Al Mandous, A., 2019. Influence of atmosphere near-surface layer properties on development of cloud convection. *Atmosphere*, 10(3), p.131.

🌐 <https://doi.org/10.3390/atmos10030131>

☞ Abshaev, M.T., Abshaev, A.M., Aksenov, A.A., Fisher, I.V., Shchelyaev, A.E., Al Mandous, A., Wehbe, Y. and El-Khazali, R., 2022. CFD simulation of updrafts initiated by a vertically directed jet fed by the heat of water vapor condensation. *Scientific Reports*, 12(1), pp.1-24.

🌐 <https://doi.org/10.1038/s41598-022-13185-2>

☞ Abshaev, M.T., Zakinyan, R.G., Abshaev, A.M., Zakinyan, A.R., Ryzhkov, R.D., Wehbe, Y. and Al Mandous, A., 2022. Atmospheric conditions favorable for the creation of artificial clouds by a jet saturated with hygroscopic aerosol. *Atmospheric Research*, 277, p.106323.

🌐 <https://doi.org/10.1016/j.atmosres.2022.106323>

✉ Miller, S.D., Kuciauskas, A.P., Liu, M., Ji, Q., Reid, J.S., Breed, D.W., Walker, A.L. and Mandoos, A.A., 2008. Haboob dust storms of the southern Arabian Peninsula. *Journal of Geophysical Research: Atmospheres*, 113(D1).

🌐 <https://doi.org/10.1029/2007JD008550>

✉ Reid, J.S., Piketh, S.J., Walker, A.L., Burger, R.P., Ross, K.E., Westphal, D.L., Brientjes, R.T., Holben, B.N., Hsu, C., Jensen, T.L. and Kahn, R.A., 2008. An overview of UAE2 flight operations: Observations of summertime atmospheric thermodynamic and aerosol profiles of the southern Arabian Gulf. *Journal of Geophysical Research: Atmospheres*, 113(D14).

🌐 <https://doi.org/10.1029/2007JD009435>

✉ Reid, J.S., Reid, E.A., Walker, A., Piketh, S., Cliff, S., Al Mandoos, A., Tsay, S.C. and Eck, T.F., 2008. Dynamics of southwest Asian dust particle size characteristics with implications for global dust research. *Journal of Geophysical Research: Atmospheres*, 113(D14).

🌐 <https://doi.org/10.1029/2007JD009752>

✉ Eager, R.E., Raman, S., Wootten, A., Westphal, D.L., Reid, J.S. and Al Mandoos, A., 2008. A climatological study of the sea and land breezes in the Arabian Gulf region. *Journal of Geophysical Research: Atmospheres*, 113(D15).

🌐 <https://doi.org/10.1029/2007JD009710>

✉ Zibordi, G., Holben, B., Hooker, S.B., Mélin, F., Berthon, J.F., Slutsker, I., Giles, D., Vandemark, D., Feng, H., Rutledge, K. and Schuster, G., 2006. A network for standardized ocean color validation measurements. *Eos, Transactions American Geophysical Union*, 87(30), pp.293-297.

🌐 <https://doi.org/10.1029/2006EO300001>

✉ Eager, R.E., Raman, S., Holt, T.R., Westphal, D., Reid, J., Nachamkin, J., Liu, M. and Mandoos, A.A., 2007. A seasonal statistical evaluation of COAMPS® over the Arabian gulf region. In *Atmospheric and Oceanic* (pp. 1747-1764). Birkhäuser Basel.

🌐 https://doi.org/10.1007/978-3-7643-8493-7_17

✉ Kaku, K.C., Reid, J.S., Reid, E.A., Ross-Langerman, K., Piketh, S., Cliff, S., Al Mandoos, A., Broccardo, S., Zhao, Y., Zhang, J. and Perry, K.D., 2016. Investigation of the relative fine and coarse mode aerosol loadings and properties in the Southern Arabian Gulf region. *Atmospheric research*, 169, pp.171-182.

🌐 <https://doi.org/10.1016/j.atmosres.2015.09.029>


✉ Al Mandoos, A.A., 2012. Analysis of the cumulonimbus clouds characteristics and the efficiency of the precipitation enhancement over the eastern area of the UAE. Универзитет у Београду.


🌐 <http://dx.doi.org/10.2298/bg20120713almandoos>

✉ Eck, T.F., Holben, B.N., Reid, J.S., Sinyuk, A., Dubovik, O., Smirnov, A., Giles, D., O'Neill, N.T., Tsay, S.C., Ji, Q. and Al Mandoos, A., 2008. Spatial and temporal variability of column-integrated aerosol optical properties in the southern Arabian Gulf and United Arab Emirates in summer. *Journal of Geophysical Research: Atmospheres*, 113(D1).

🌐 <https://doi.org/10.1029/2007JD008944>

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