

Annual report 2020 for domain MENA

Scientific highlights

- First common publication effort from the MENA-CORDEX:

Zittis G., Hadjinicolaou P., Almazroui M., Bucchignani E., Driouech F., El Rhaz K., Kurnaz L., Nikulin G., Ntoumos A., Ozturk T., Proestos Y., Zaaboul R., Lelieveld J. (2020) Business-as-usual will lead to ultra-extreme heatwaves in the Middle East and North Africa. *npj Climate and Atmospheric Science* (under review: NPJCLIMATSCI-00486)

- Several publications by domain participants separately: as listed below

- Website updated: <http://mena-cordex.cyi.ac.cy/>

Summary of each workshop/activity held during the year

Title, date, short description, location, website, links	Responsible person/-s	Funder

Domain related publications during the year

Title, journal and link to publication	Author/-s	Date
Assessing Future Changes of Climate Extreme Events in the CORDEX-MENA Region Using Regional Climate Model ALADIN-Climate. <i>Earth Systems and Environment</i> , 4(3), 477–492. https://doi.org/10.1007/s41748-020-00169-3	Driouech, F., ElRhaz, K., Moufouma-Okia, W., Arjdal, K., & Balhane, S.	2020
Summer maximum temperature over the gulf cooperation council states in the twenty-first century: multimodel simulations overview. <i>Arabian Journal of Geosciences</i> , 13(12). https://doi.org/10.1007/s12517-020-05537-x	Almazroui, M.	2020
Updated Assessment of Temperature Extremes over the Middle East–North Africa (MENA) Region from Observational and CMIP5 Data. <i>Atmosphere</i> , 11(8), 813. https://doi.org/10.3390/atmos11080813	Ntoumos, A., Hadjinicolaou, P., Zittis, G., & Lelieveld, J.	2020
Future Global Meteorological Drought Hot Spots: A Study Based on CORDEX Data. <i>Journal of Climate</i> , 33(9), 3635–3661. https://doi.org/10.1175/jcli-d-19-0084.1	Spinoni, J., Barbosa, P., Bucchignani, E., Cassano, J., Cavazos, T., Christensen, J. H., Christensen, O. B., Coppola, E., Evans, J., Geyer, B., Giorgi, F., Hadjinicolaou, P., Jacob, D., Katzfey, J., Koenigk, T., Laprise, R., Lennard, C. J., Kurnaz, M. L., Li, D., ... Dosio, A.	2020
Sensitivity of simulated climate over the MENA region related to different land surface schemes in the WRF model. <i>Theoretical and Applied Climatology</i> , 141(3–4), 1431–1449. https://doi.org/10.1007/s00704-020-03258-5	Constantinidou, K., Hadjinicolaou, P., Zittis, G., & Lelieveld, J.	2020

Performance of Land Surface Schemes in the WRF Model for Climate Simulations over the MENA - CORDEX Domain. Earth Systems and Environment, 2014. https://doi.org/10.1007/s41748-020-00187-1	Constantinidou, K., Hadjinicolaou, P., Zittis, G., & Lelieveld, J.	2020
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Planned activities for next year

- One-to-one meetings between POC and domain participants for update and feedback regarding future of MENA-CORDEX activity
- MENA-CORDEX Group meeting to discuss plans for CORDEX Phase II and downscaling with CMIP6

Additional relevant information

If more space is needed just add rows in the table.

The report should be sent to ipoc@cordex.org before the 15th December each year.