JAMES WARNER

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mobile number on request • *email on request*

Research Interests: Atmospheric Dynamics, Convection, Tropical Meteorology, Teleconnections, Numerical Weather Prediction, Process-based Evaluation

PROFESSIONAL ACCREDITATIONS

RMetS

Chartered Meteorologist

September 2023 - Present (0.8 years)

EMPLOYMENT

UK Met Office Total (4.4 years)

Senior Scientist - Regional Model Evaluation Scientist - Regional Model Evaluation January 2024 - Present (0.5 years) February 2020 - January 2024 (3.9 years)

University of Exeter

Total (3.4 years)

Research and Teaching Assistant

September 2016 - February 2020 (3.4 years)

EDUCATION

University of Exeter

September 2016 - February 2020

Ph.D. Mathematics

Thesis: Causality of the link between autumn Arctic sea ice and the winter extratropical atmosphere.

University of Leeds

September 2015 - September 2016

M.Res. Climate and Atmospheric Science (Distinction)

Thesis: Understanding changing climatology of extreme precipitation over Europe.

University of Reading

September 2012 - July 2015

B.Sc. Meteorology and Climate Science (1st Class Hons.)

Thesis: How do extratropical storm tracks respond to climate change forcings in a simple GCM?

PUBLICATIONS (SUBMITTED)

- Maybee et al. Wind shear effects on entrainment in convection-permitting models influence convective storm rainfall and forcing of tropical circulation. GRL.
- Warner. Local and remote drivers of Lake Victoria rainfall. QJ.

PUBLICATIONS (PUBLISHED)

[11] Warner, J. L. Munday, C., Engelstaedter, S., 2023. Resolving the Turkana Jet: Impact of Model Resolution in Simulating Channel Flow and Inversions. *JGR:Atmospheres*, In Production, doi:10.1029/2023JD040299

- [10] Munday, C., Engelstaedter, S., Washington, R., Ogutu, G., Olago, D., Ouma, G., Warner, J., Ongech, D., Nkatha, R., Ogalo, C. and Wanguba, B., 2023. The Turkana Jet diurnal cycle in observations and reanalysis. *Journal of Climate*, In Press, doi:10.1175/JCLI-D-23-0325.1
- [9] Jones, R.W., Sanchez, C., Lewis, H., Warner, J., Webster, S., Macholl, J., 2023. Impact of domain size on tropical precipitation within explicit convection simulations. *Geophysical Research* Letters, 50(17), doi:10.1029/2023GL104672
- [8] Warner, J.L., Screen, J., Scaife, A., Maidens, A., Knight, J., 2023. Tropical forcing of Barents-Kara sea ice during autumn. Geophysical Research Letters, 50(8), doi:10.1029/2023GL102768
- [7] Warner, J.L., Petch, J., Short, C., Bain, C., 2023. Assessing the impact of an NWP warm-start system on model spin-up over tropical Africa. QJ, 149(751), pp.621-636. doi:10.1002/qj.4429
- [6] Roberts, B., Clark, A.J., Jirak, I.L., Gallo, B.T., Bain, C., Flack, D.L.A., Warner, J., Schwartz, C.S., Reames, L.J., 2022. Model configuration vs. driving model: influences on next-day regional convection-allowing model forecasts during a real-time experiment. WAF, 38(1), pp.99-123. doi:10.1175/WAF-D-21-0211.1
- [5] Fletcher, J.K., Diop, C.A., Adefisan, E., Ahiataku, M., Ansah, S.O., Birch, C.E., Burns, H.L., Clarke, S.J., Gacheru, J., James, T.D., Ngetich Tuikong, C.K., Koros, D., Indasi, V.S., Lamptey, B.L., Lawal, K.A., Parker, D.J., Robers, A.J., Stein, T.H.M., Visman, E., Warner, J., Woodhams, B.J., Youds, L.H., Ajayi, V.O., Bosire, E.N., Cafaro, C., Camara, C.A.T., Chanzu, Dione, C., Gitau, W., Groves, D., Groves, J., Hill, P.G., Ishiyaku, I., Klein, C.M., Marhsam, J.H., Mutai, B.K., Ndiaye, P.N., Osei, M., Popoola, T.I., Talib, J., Taylor, C.M., Walker, D., 2022. Tropical Africa's first testbed for high-impact weather forecasting and nowcasting. BAMS, doi:10.1175/BAM S-D-21-0156.1
- [4] Siegert, M., Bacon, S., Barnes, D., Brooks, I., Burgess, H., Cottier, F., Depledge, D., Dodds, K., Edwards, M., Essery, R., Heywood, K., Hendry, K., Jones, V., Lea, J., Medly, I., Meredith, M., Screen, J., Steinberg, P., Tarling, G., Warner, J., Young, G. 2020. The Arctic and the UK: climate, research and engagement. *NORA*. doi:10.25561/80095
- [3] Warner, J.L., Screen, J.A., Scaife, A.A., 2019. Links Between Barents-Kara Sea Ice and the Extratropical Atmospheric Circulation Explained by Internal Variability and Tropical Forcing. *Geophysical Research Letters*, 47(1), 085679. doi:10.1029/2019GL085679
- [2] Warner, J.L, 2018. Arctic sea ice; a driver of the winter NAO? Weather, 73, pp.307-310. doi:10.1002/wea.3399
- [1] Gadian, A.M., Blyth, A.M., Bruyere, C.L., Burton, R.R., Done, J.M., Groves, J., Holland, G., Mobbs, S.D., Pozo, J.T.D., Tye, M.R., Warner, J.L., 2018. A case study of possible future summer convective precipitation over the UK and Europe from a regional climate projection. *International Journal of Climatology*, 38(5), pp.2314-2324. doi:10.1002/joc.5336

PEER REVIEWS COMPLETED

- 1 Atmospheric Research
- 3 Climate Dynamics
- 1 Environmental Research Letters
- **2** Frontiers in Climate
- 1 Geophysical Research Letters
- 3 Journal of Climate
- 1 Journal of Applied Meteorology and Climatology
- 1 Journal of Geophysical Research: Atmospheres
- 2 Quarterly Journal Of Meteorology