

Peer Reviewed Papers

1. Eyring, V., Righi, M., Lauer, A., Evaldsson, M., Wenzel, S., Jones, C., Anav, A., Andrews, O., Cionni, I., Davin, E. L., Deser, C., Ehbrecht, C., Friedlingstein, P., Gleckler, P., Gottschaldt, K.-D., Hagemann, S., Juckes, M., Kindermann, S., Krasting, J., Kunert, D., Levine, R., Loew, A., Mäkelä, J., Martin, G., Mason, E., Phillips, A. S., Read, S., Rio, C., Roehrig, R., Senftleben, D., Sterl, A., van Ulft, L. H., Walton, J., **Wang, S.**, and Williams, K. D.: ESMValTool (v1.0) – a community diagnostic and performance metrics tool for routine evaluation of Earth system models in CMIP, *Geosci. Model Dev.*, 9, 1747-1802, doi:10.5194/gmd-9-1747-2016, 2016.
2. **Wang, S.**, Dieterich, C., Döscher, R., Höglund, A., Hordoier, R., Meier, H., Samuelsson, P., & Schimanke, S, Development and evaluation of a new regional coupled atmosphere ocean model in the North Sea and Baltic Sea, *Tellus A*, **67**, 24284, <http://dx.doi.org/10.3402/tellusa.v67.24284>, 2015
3. Semmler, T. , McGrath, R. and **Wang, S.** (2012), The impact of Arctic sea ice on the Arctic energy budget and on the climate of the Northern mid-latitudes , *Climate Dynamics*, Springer . doi: 10.1007/s00382-012-1353-9
4. Nolan, P., Lynch, P., McGrath, R., Semmler, T. and **Wang, S.** (2011), Simulating climate change and its effects on the wind energy resource of Ireland. *Wind Energy*. doi: 10.1002/we.489
5. Hanafin, J., R. McGrath, T. Semmler, **S. Wang**, S. Dune, Air flow and stability indices in GCM future and control runs, *International Journal of Climatology*, 2010, DOI: 10.1002/joc.2125
6. Semmler, T., R. McGrath, S. Dune, J. Hanafin, P. Nolan, **S. Wang**, Influences of climate change on heating and cooling energy demand in Ireland, *International Journal of Climatology*,30:1502-1511, 2010
7. **Wang, S.**, McGrath, R .,Hanafin, J.A., Lynch, P.,Semmler, T., Nolan, P., The impact of climate change on storm surges over Irish waters, *Ocean Modelling*,2008, doi:10.1016/j.ocemod.2008.06.009
8. Semmler, T., S. Varghese, R. McGrath, P. Nolan, **S. Wang**, P. Lynch, C. O'Dowd, Regional model simulation of North Atlantic cyclones: Present climate and idealized response to increased sea surface temperature, *Journal of Geophysical Research.*, 113, D02107, doi:10.1029/2006JD008213, 2008
9. Semmler, T., S. Varghese, R. McGrath, P. Nolan, P., **S. Wang**, P. Lynch, C. O'Dowd , Regional climate model simulations of North Atlantic cyclones: frequency and intensity changes, *Climate Research*, 36,1-16,2008
10. Dune, S., P. Lynch, R. McGrath, T. Semmler, **S. Wang**, J. Hanafin, P. Nolan, The impacts of climate change on hydrology in Ireland, *Journal of Hydrology*, 356, 28-45,2008
11. **Wang, S.**, R. McGrath, T. Semmler, C. Sweeney, P. Nolan, the impact of the climate change on discharge of Suir River Catchment (Ireland) under different climate scenarios, *Natural Hazards and Earth System Sciences*, 6:387-395,2006
12. **Wang, S.**, R. McGrath, T. Semmler, C. Sweeney, Validation of simulated precipitation patterns over Ireland for the period 1961-2000, *International Journal of Climatology*, 26:251-266, 2006
13. McGrath, R., T. Semmler, C. Sweeney, **S. Wang**, Impact of Balloon Drift Errors in Radiosonde Data on Climate Statistics, *Journal of Climate*, 19, 3430-3442, 2006
14. **Wang, S.**, Y. Qian, Seasonal and Interannual Variation Simulation of the Regional Climate of East

- Asia by a Nine-level P- σ Regional Climate Model, *Chinese Journal of Atmospheric Sciences*, 27(5), 798-810, 2003
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 16. **Wang, S.**, Y. Qian, The simulation of the 1998 East Asia summer monsoon precipitation, *Journal of Nanjing Institute of Meteorology* (in chinese), Vol.24,No.2,258-264, 2001
 17. **Wang, S.**, Y. Qian, The effects of vertical resolution on the climate simulation in a P- σ coordinate regional climate model, *Plateau Meteorology* (in Chinese),Vol.20,No.1,28-35,2001
 18. **Wang, S.**, Y. Qian, Modeling of the 1998 East Asian summer monsoon by a limited area model with P- σ coordinate, *Advances in Atmospheric Sciences*, Vol.18,No.2,209-224,2001
 19. **Wang, S.** , Y. Qian, Basic Characteristic of surface heat field in 1998 and the possible connections with the SCS summer monsoon onset, *Acta Meteor. Sinica* (in Chinese),Vol.59,No.1,31-40,2001
 20. **Wang, S.**, Y. Qian, A diagnostic of the apparent heat sources and moisture sinks in the South China Sea and its adjacent areas during the onset of 1998 SCS monsoon, *Advances in Atmospheric Sciences*, Vol.17, No.2,285-298,2000
 21. **Wang, S.**, Y. Zhang, Simulation of regional climate over Eastern China with different regional climate models, *Plateau Meteorology* (in Chinese), Vol.18,No.1,28-38,1999
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 23. Zhang, Y., Y. Qian, **S. Wang**, The validation and analyses of systematic errors of modeling summer climate with P- σ incorporated coordinate global model, *Plateau Meteorology*(in Chinese), Vol.16,No.3, 235-242, 1997

Other Publications

1. Strandberg, G., Barring, L., Hansson, U., Jansson, C., Jones, C., Kjellström, E., Kolax, M., Kupiainen, M., Nikulin, G., Samuelsson, P., Ullerstig, A. and **Wang, S.**, CORDEX scenarios for Europe from the Rossby Centre regional climate model RCA4. Reports Meteorology and Climatology, 116, SMHI, SE-60176 Norrköping, Sweden,1-84, 2014
2. Dieterich, C., Schimanke, S, **Wang, S.**, Väli, G, Liu, Y, Hordoir, R., Axell, L., Höglund, A., Meier, H.E.M. Evaluation of the SMHI coupled atmosphere-ice-ocean model RCA4-NEMO. SMHI Report Oceanography, 47,1-80, 2013
3. Dunne,S., J. Hanafin, P. Lynch, R. McGrath, E. Nishimura, P. Nolan, J.Venkata Ratnam, T. Semmer, C. Sweeney, **S. Wang**, Ireland in a warmer world: Scientific Predictions of the Irish climate in the twenty-first century, Editors: Ray McGrath and Peter Lynch, Community Climate Change Consortium for Ireland (C4I) final report, Met Eireann, Dublin, 1-109,2008
4. Semmler, T., **Wang, S.**, McGrath, R., Nolan, P., Regional climate ensemble simulations for Ireland – impact of climate change on river flooding. In: Proceedings of the National Hydrology Seminar, Tullamore, 27-37, 2006
5. McGrath R., E. Nishimura, P. Nolan,T. Semmler, C. Sweeney, **S. Wang**, Climate Change: Regional Climate Model Predictions for Ireland. Environmental Protection Agency, ERTDI Report Series No. 36, 1-45,2005

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7. McGrath R., J.V. Ratnam, **S. Wang**, C. Sweeney, E. Nishimura, Community climate change consortium for Ireland (C4I) 2003 annual report, Met Eireann, Dublin, Ireland, 1-63, 2003
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