Curriculum Vitae

Personal Information

Name: Shiyu Wang

Address at work: SMHI, Rossby Centre
Folkborgsvägen 17
SE-60176 Norrköping, Sweden

Telecommunication: Tel: +46 11 4958269
Email:shiyu.wang@smhi.se

Education

1996-2001 Ph.D. candidate in Department of Atmospheric Sciences, Nanjing University, Nanjing, China. Thesis : Diagnostic Analysis of Summer Monsoon and Numerical Studies of Regional Climate Change in East Asia. Degree earned on June, 2001.

1992-1996 B.S., Majored in climatology, Department of Atmospheric Sciences, Nanjing University, Nanjing, China

Research Experiences

2010.10 – Present Climate Researcher, Rossby Centre, Swedish Meteorological and Hydrological Institute, Norrköping, Sweden

2009.12 – 2010.10 Computational scientist, Irish Centre for High-End Computing, National University of Ireland Galway, Ireland

2008.1 – 2009.11 Climate researcher, University College Dublin , Dublin, Ireland

2003.7 – 2007.12 Climate modeller for Community Climate Change Consortium for Ireland (C4I) Project, Dublin Institute for Advanced Studies (based in Met Eireann), Ireland

2001.7 – 2003.7 Post-Doctoral Researcher, National Key Laboratory of Numerical Modeling for Atmospheric Sciences and Geophysical Fluid Dynamics (LASG), Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China (based in Research Center for Numerical Meteorological Prediction, Chinese Academy of Meteorological Sciences, Beijing, China)

1996.9 – 2001.6 Research Assistant, Department of Atmospheric Sciences, Nanjing University, Nanjing, China

1997.7 – 1997.8 Visiting Researcher, National Climate Center, Chinese Meteorology Administration, Beijing, China.

1997.9 – 1998.1 Teaching Assistant, Department of Atmospheric Sciences, Nanjing University, Nanjing, China

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., Hordoir, 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

15. Qian, Y., **S. Wang**, H. Shao, A possible mechanism effecting the earlier onset of South weasterly monsoon in the South China Sea compared to the Indian monsoon, ***Metero. & Atmos. Physics***, Vol.76, No.3-4: 237-250, 2001

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

22. **Wang, S.,** Y. Zhang, Numerical simulation of Properties of summer quasi stationary circulation systems with their intramonthly evolutions in East Asia, ***Scientia Meteorologica Sinica***, (in Chinese) Vol.18, No.1, 20-27,1998

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., Bärring, 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

6. McGrath R., E. Nishimura, P. Nolan, J.V. Ratnam,T. Semmler,C. Sweeney, **S. Wang**, Community climate change consortium for Ireland (C4I) 2004 annual report, Met Eireann, Dublin, Ireland, 1-118, 2004
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
8. **Wang, S.**, Y. Qian, Basic features of regional heating field before and after the onset of South China Sea monsoon in 1998, *The onset and evolution of the SCS monsoon and its interaction with the sea*, Meteorology Press, Beijing, China, 247-253,1999