

International CLIVAR Climate of the 20th Century Project
Relevant Papers
(updated December 2009)

- Allan, R., and T. Ansell, 2006: a new globally complete monthly historical gridded mean sea level pressure dataset (HadSLP2): 1850–2004. *J. Climate*, **19**, 5816–5842.
- Ansell, T.J., P.D. Jones, R.J. Allan, D. Lister, D.E. Parker, M. Brunet, A. Moberg, J. Jacobeit, P. Brohan, N.A. Rayner, E. Aguilar, H. Alexandersson, M. Barriendos, T. Brandsma, N.J. Cox, P.M. Della-Marta, A. Drebs, D. Founda, F. Gerstengarbe, K. Hickey, T. Jónsson, J. Luterbacher, O. Nordli, H. Oesterle, M. Petrakis, A. Philipp, M.J. Rodwell, O. Saladie, J. Sigro, V. Slonosky, L. Srnec, V. Swail, A.M. García-Suárez, H. Tuomenvirta, X. Wang, H. Wanner, P. Werner, D. Wheeler, and E. Xoplaki, 2006: Daily Mean Sea Level Pressure Reconstructions for the European–North Atlantic Region for the Period 1850–2003. *J. Climate*, **19**, 2717–2742.
- Baines, P. and C.K. Folland, 2007: Evidence for a rapid global climate shift across the late 1960s. *J. Climate*, **12**, 2721–2744. *Also News Focus item in Science 10 Aug 2007 (Kerr)*
- Bosilovitch, M., S. Schubert and G. Walker 2005: Global changes of the water cycle intensity. *J. Climate*, **18**, 1591–1608.
- Bracco, A., F. Kucharski, R. Kallummal and F. Molteni 2004: Internal variability, external forcing and climate trends in multi-decadal AGCM ensembles. *Climate Dyn.*, **23**, 659–678.
- Brohan, P., Kennedy, J., Harris, I., Tett, S.F.B., and Jones, P.D. 2006: Uncertainty estimates in regional and global observed temperature changes: a new dataset from 1850. *J. Geophys. Res. (Atmospheres)*, **111**, D12106, doi:10.1029/2005JD006548.
- Cash, B. A., X. Rodó and J. L. Kinter III, 2008a: Links between tropical Pacific SST and the regional climate of Bangladesh: Role of the eastern and central tropical Pacific. *J. Climate*, **21**, 4647–4663.
- Cash, B. A., X. Rodó and J. L. Kinter III, 2008b: Links between tropical Pacific SST and the regional climate of Bangladesh: Role of the western tropical and central extratropical Pacific. *J. Climate* (in press).
- Caminade C. and L. Terray, 2006: Influence of increased greenhouse gases and sulphate aerosols concentration upon diurnal temperature range over Africa at the end of the 20th century. *Geophys. Res. Lett.*, **33**, L15703, doi:10.1029/2006GL026381.
- Folland, C.K., 2005: Assessing bias corrections in historical sea surface temperature using a climate model. *Int. J. Climatol.* (Special issue, CLIMAR II Conference), **25**, 895 - 911.
- Folland, C.K., Colman, A., Rowell, D.P., and M.K. Davey, 2001: Predictability of North East Brazil rainfall and real-time forecast skill, 1987–1998. *J. Climate*, **14**, 1937–1958.
- Folland, C. and J. L. Kinter III, 2002: The Climate of the Twentieth Century Project. *CLIVAR Exchanges*, **7(2)**, 37–39.
- Folland, C.K., Knight, J., Linderholm, H., Fereday, D., Ineson, S., and J. Hurrell, 2009: The summer North Atlantic Oscillation: past, present and future. *J. Climate* DOI: 10.1175/2008JCLI2459.1 (in press, on line version available)
- Folland, C.K., J.A. Renwick, M.J. Salinger and A.B. Mullan, 2002: Relative influences of the Interdecadal Pacific Oscillation and ENSO on the South Pacific Convergence Zone. *Geophys. Res. Lett.*, **29** (13): 10.1029/2001GL014201.
- Grainger, S., C. S. Frederiksen, X. Zheng, D. Fereday, C. K. Folland, E. K. Jin, J. L. Kinter III, J. R. Knight, S. Schubert, J. Syktus, 2009: Modes of variability of Southern Hemisphere atmospheric circulation estimated by AGCMs. *Climate Dyn.*, doi 10.1007/s00382-009-0720-7.
- Kang, I.-S., E. K. Jin, K.-H. An, 2006: Secular increase of seasonal predictability for the 20th century. *Geophys. Res. Lett.*, **33**, doi 10.1029/2005GL024499.
- Kiktev, D., Sexton D., Alexander, L. and C.K. Folland, 2003: Comparison of modelled and observed trends in indicators of daily climate extremes. *J. Climate*, **16**, 3560–3571.

- King, M. P. and F. Kucharski 2006: Observed decadal connections between the tropical oceans and the North Atlantic Oscillation in the 20th century. *J. Climate*, **19**, 1032-1041.
- Kinter III, J. L., M. J. Fennessy, V. Krishnamurthy and L. Marx, 2004: An evaluation of the apparent interdecadal shift in tropical divergent circulation in the NCEP-NCAR reanalysis. *J. Climate*, **17**, 349-361.
- Knight, J., Allan R.J., Folland, C.K., Vellinga, M. and M.E. Mann, 2005: Natural variations in the thermohaline circulation and future surface temperature. *Geophys. Res. Lett.*, **32**, L20708, doi: 10.1029/2005GL024233.
- Knight, J.R., Folland, C.K. and A.A. Scaife, 2006: Climatic impacts of the Atlantic Multidecadal Oscillation. *Geophys. Res. Lett.*, **33**, L17706. doi: 10.1029/2006GL026242.
- Kucharski, F., Bracco, A., Yoo, J. H., Molteni, F., 2007: Low-frequency variability of the Indian Monsoon-ENSO relation and the Tropical Atlantic: The 'weakening' of the '80s and 90s. *J. Climate*, **20**, 4255-4266, doi: 10.1175/JCLI4254.1.
- Kucharski, F., Bracco, A., Yoo, J. H., Molteni, F., 2008: Atlantic forced component of the Indian monsoon interannual variability. *Geophys. Res. Lett.*, **35**, doi:10.1029/2007GL033037.
- Kucharski F., F. Molteni and A. Bracco 2006: Decadal interactions between the western tropical Pacific and the North Atlantic Oscillation. *Climate Dyn.*, **26**, 79-91, doi: 10.1007/s00382-005-0085-5.
- Kucharski F., F. Molteni, and J. H. Yoo, 2006: SST forcing of decadal Indian monsoon rainfall variability'. *Geophys. Res. Lett.*, **33**, L03709, doi: 10.10029/2005GL025371.
- Kucharski, F., A. A. Scaife, J. H. Yoo, C. K. Folland, J. L. Kinter III, J. Knight, D. Fereday, A. M. Fischer, E. K. Jin, J. Kroger, N.-C. Lau, T. Nakaegawa, M. J. Nath, P. Pegion, E. Rozanov, S. Schubert, P. V. Sporyshev, J. Syktus, A. Voldoire, J. H. Yoon, N. Zeng, & T. Zhou, 2008: The CLIVAR C20C Project. Skill of simulating Indian monsoon rainfall on interannual to decadal timescales. Does GHG forcing play a role? *Climate Dyn.*, doi :10.1007/s00382-008-0462-y.
- Kusunoki, S., K. Matsumaru, T. Nakaegawa, I. Yagai and O. Arakawa, 2004: East Asian monsoon in climate simulation with the AGCM "MJ98". *Gross Wetter*, **42**, 38-56. (in Japanese)
- Kusunoki, S., T. Nakaegawa and O. Arakawa, 2005: Reproducibility of the East Asian summer monsoon by an AGCM. In "Cool Summer of 2003 in Japan", *Kisho-Kenkyu Note*, **210**, 171-180. (in Japanese)
- Kusunoki, S., T. Nakaegawa and O. Arakawa, 2009: Simulation of land-surface air temperature and land precipitation in the 20th century by the MJ98 AGCM. *J. Meteor. Soc. Japan*, **87**, 473-495
- Kusunoki, S., T. Nakaegawa, O. Arakawa and I. Yagai, 2006: Land-surface air temperature and land-only precipitation in the twentieth century climate simulations by an atmospheric general circulation model. *J. Meteor. Soc. Japan* (submitted).
- Kusunoki, S., T. Nakaegawa, O. Arakawa, and I. Yagai, 2009: Simulations of land-surface air temperature and land precipitation in the twentieth century by the MJ98 AGCM. *J. Meteor. Soc. Japan*, **87**, 473-495. http://www.jstage.jst.go.jp/article/jmsj/87/3/87_473/article
- Lau, N-C., and M. J. Nath, 2003: Atmosphere-ocean variations in the Indo-Pacific sector during ENSO episodes. *J. Climate*, **16**, 3-20.
- Nakaegawa, T. and M. Hosaka, 2006: A study of potential predictability of seasonal prediction of river discharge in tropical Asian monsoon based on a dynamical ensemble method. *Ann. J. Hydraul. Eng.*, **50**, 523-528. (in Japanese with English abstract).
- Nakaegawa, T. and M. Hosaka, 2006: Potential predictability of seasonal mean river discharge in dynamical ensemble prediction using MRI/JMA GCM. *SOLA*, **2**, 112-115.
- Nakaegawa, T., M. Sugi and K. Matsumaru, 2003: A Long-term numerical study of the potential predictability of seasonal mean fields of water resource variables using MRI/JMA-AGCM. *J. Meteor. Soc. Japan*, **81**, 1041-1056.
- Parker, D.E., Folland C.K., A.A. Scaife, A. Colman, J. Knight, D. Fereday, P. Baines and D. Smith, 2007: Decadal to interdecadal climate variability and predictability and the background of climate change. Special Issue of *J. Geophys. Res. (Atmos)*, **112**, D18115 doi 10.1029/2007JD008411.

- Power, S., Casey, T., Folland, C.K., Colman, A and V. Mehta, 1999: Inter-decadal modulation of the impact of ENSO on Australia. *Climate Dynamics*, **15**, 319-323
- Rayner, N.A., Parker, D.E., Horton, E.B., Folland, C.K., Alexander, L.V., Rowell, D.P., Kent, E.C., and A. Kaplan, 2003: Global analyses of sea surface temperature, sea ice, and night marine air temperature since the late nineteenth century. *J. Geophys. Res.*, **108**, D14, 4407, doi: 10.1209/2002JD002670. (29pp + 8 supplementary colour pages). (THIS IS THE HADISST PAPER)
- Rodwell, M.J., Rowell, D.P. and C.K. Folland, 1999: Oceanic forcing of the wintertime North Atlantic Oscillation and European climate. *Nature*, **398**, 320-323.
- Rodwell, M.J. and C.K. Folland, 2002: Atlantic air-sea interaction and seasonal predictability. *Q. J. Roy. Met. Soc.*, **128**, 1413-1443.
- Rodwell, M.J. and C.K. Folland, 2003: Atlantic air-sea interaction and model validation. *Annals of Geophysics. Special Issue for results of EU SINTEX project*, **46**, 47-56.
- Sajani, S., T. Nakazawa, A. Kitoh and K. Rajendran, 2006: Ensemble simulation of Indian summer monsoon rainfall by an atmospheric general circulation model. *J. Meteor. Soc. Japan*, **85**, 213-231.
- Scaife, A.A., C.K. Folland, L.V. Alexander, A. Moberg, and J.R. Knight, 2008: European climate extremes and the North Atlantic Oscillation. *J. Climate*, **21**, 72–83.
- Scaife, A., J. Knight, G. Vallis and C. K. Folland, 2005: A stratospheric influence on the winter NAO and North Atlantic surface climate. *Geophys. Res. Lett.* **32**, L18715, doi: 10.1029/2005GL023226.
- Scaife, A., F. Kucharski, C. Folland, J. Kinter III, D. Fereday, A. Fischer, S. Grainger, E. Jin, I. Kang, J. Knight, S. Kusunoki, N. Lau, M. Nath, T. Nakaegawa, P. Pegion, S. Schubert, P. Sporyshev, J. Syktus, J. Yoon, N. Zeng, & T. Zhou, 2008: The CLIVAR C20C Project: Selected 20th century climate events. *Climate Dyn.*, **31**, doi:10.1007/s00382-008-0451-1.
- Schneider, E. K., L. Bengtsson, and Z.-Z. Hu, 2003: Forcing of Northern Hemisphere climate trends. *J. Atmos. Sci.*, **60**, 1504-1521.
- Schneider, E. K., 2006: Stochastic forcing of surface climate. *COLA Tech. Rep.*, **224**, 43 pp.
- Schubert, S. D. M. J. Suarez, P.J. Pegion, R. D. Koster, and J.T. Bacmeister, 2004: Causes of long-term drought in the U.S. Great Plains. *J. Climate*, **17**, 485-503
- Schubert, S. D., M. J. Suarez, P. J. Pegion, R. D. Koster, and J. T. Bacmeister, 2004: On the cause of the 1930s Dust Bowl. *Science*, **33**, 1855-1859.
- Schubert, S.D., M.J. Suarez, P.J. Pegion, R.D. Koster, and J.T. Bacmeister, 2008: Potential predictability of long-term drought and pluvial conditions in the U.S. Great Plains. *J. Climate*, **21**, 802–816.
- Sporyshev P. V., V. P. Meleshko, T. V. Pavlova, V. A. Govorkova, V. A. Matyugin, 2003: The water cycle over the Caspian Sea drainage basin in observations and in simulations of atmospheric general circulation models. In: *Hydrological and Meteorological Problems of the Caspian Sea and its Drainage Basin*. I. A. Shiklomanov and A. S. Vasil'ev (ed.), "Gidrometeoizdat", St. Petersburg, 6-23 (in Russian).
- Toniazzo, T., Scaife, A. A., 2006: The influence of ENSO on winter North Atlantic climate. *Geophys. Res. Lett.* **33**, doi:10.1029/2006GL027881.
- White, W. B., Allan, R. J. and Ansell, T. J., 2006: The interdecadal Antarctic circumpolar wave: teleconnections with the interdecadal oscillation. *J. Geophys. Res. - Oceans* (submitted).
- Wu, R., J. L. Kinter III and B. P. Kirtman, 2005: Discrepancy of interdecadal changes in the Asian region between the NCEP-NCAR reanalysis and observations. *J. Climate*, **18**, 3048-3067.
- Zeng, N., 2003: Drought in the Sahel. *Science*, **15**, 3474-3487. [Abstract](#), [Full text](#)
- Zeng, N., K. Hales, and J. D. Neelin, 2002: Nonlinear dynamics in a coupled vegetation-atmosphere system and implications for desert-forest gradient. *J. Climate*, **15**, 3474-3487. [Abstract](#), [PDF](#)
- Zeng, N., A. Mariotti, and P. Wetzel, 2005: Terrestrial mechanisms of interannual CO₂ variability, *Global Biogeochem. Cycles*, **19**, GB1016, doi:10.1029/2004GB002273, [pdf](#)
- Zeng, N., J. D. Neelin, 2000: The role of vegetation-climate interaction and interannual variability in shaping the African savanna. *J. Climate*, **13**, 2665-2670. [Abstract](#), [pdf file of the paper](#)

- Zeng, N., J. D. Neelin, K.-M. Lau, and C. J. Tucker, 1999: Enhancement of interdecadal climate variability in the Sahel by vegetation interaction. *Science*, **286**, 1537-1540. [Abstract](#), [PDF file of the paper](#)
- Zeng, N., H. Qian, C. Roedenbeck, and M. Heimann, 2005: Impact of 1998-2002 midlatitude drought and warming on terrestrial ecosystem and the global carbon cycle. *Geophys. Res. Lett.*, **32**, L22709, doi:10.1029/2005GL024607. [pdf](#)
- Zeng, N., J. Yoon, J. Marengo, A. Subramaniam, C. Nobre, A. Mariotti, J. D. Neelin, 2008: Causes and impacts of the 2005 Amazon drought. *Environ. Res. Lett.*, **3**, doi:10.1088/1748-9326/3/1/014002.
- Zheng, X., D. M. Straus, C. S. Frederiksen, and S. Grainger, 2009: Potentially predictable patterns of extratropical tropospheric circulation in an ensemble of climate simulations with the COLA AGCM. *Quart. J. Roy. Meteor. Soc.* (accepted).
- Zhou, T. and R. Yu, 2006: 20th century surface air temperature over China and the globe simulated by coupled climate models. *J. Climate*, **19**, 5843-5858.
- Zhou, T. B. Wu, A. A. Scaife, S. Bronnimann, A. Cherchi, C. Deser, A. M. Fischer, C. K. Folland, K. E. Jin, J. Kinter III, F. Kucharsk, S. Kusunoki, N.-C. Lau, Lijuan Li, M. J. Nath, T. Nakaegawa, P. Pegion, E. Rozanov, S. Schubert, P. Sporyshev, A. Voltaire, & J.H. Yoon, 2008 : The CLIVAR C20C Project: Which components of the Asian-Australian Monsoon variability are forced and reproducible? *Climate Dyn.*, doi :10.1007/s00382-008-0501-8.