

The U.S. Climate Change Science Program for FY 2009

THE U.S. CLIMATE CHANGE SCIENCE PROGRAM FOR FY 2009 CHAPTER REFERENCES

- 1) **IPCC**, 2007: Summary for Policymakers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- 2) **NSTC** Joint Subcommittee on Ocean Science and Technology, 2007: *Charting the Course for Ocean Science in the United States for the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy*. Washington, DC, 84 pp. Available at <ocean.ceq.gov/about/docs/orppfinal.pdf>.
- 3) **Meehl**, G.A., C. Covey, T. Delworth, M. Latif, B. McAvaney, J.F.B. Mitchell, R.J. Stouffer, and K.E. Taylor, 2007: The WCRP CMIP3 multi-model dataset: A new era in climate change research. *Bulletin of the American Meteorological Society*, **88(9)**, 1383-1394, doi:10.1175/BAMS-88-9-1383.
- 4) **Meehl**, G. A., W. M. Washington, B. D. Santer, W. D. Collins, J. M. Arblaster, A. Hu, D. Lawrence, H. Teng, L. E. Buja, and W. G. Strand, 2006: Climate change projections for twenty-first century and climate change commitment in the CCSM3. *Journal of Climate*, **19**, 2597-2616.
- 5) **Thompson**, L.G., E. Mosley-Thompson, H. Brecher, M. Davis, B. León, D. Les, P.-N. Lin, T. Mashioita, and K. Mountain, 2006: Abrupt tropical climate change: Past and present. *Proceedings of the National Academy of Sciences*, **103**, 10536-10543, doi:10.1073/pnas.0603900103.
- 6) **Lyman**, J.M., J.K. Willis, and G.C. Johnson, 2006: Recent cooling of the upper ocean. *Geophysical Research Letters*, **33(18)**, L18604, doi:10.1029/2006GL027033.
- 7) **Willis**, J.K., J.M. Lyman, G.C. Johnson, and J. Gilson, 2007: Correction to “Recent cooling of the upper ocean.” *Geophysical Research Letters*, **34(16)**, L16601, doi:10.1029/2007GL030323.
- 8) **CCSP**, 2007: *Temperature Trends in the Lower Atmosphere: Steps for Understanding and Reconciling Differences*. A Report by the Climate Change Science Program and the Subcommittee on Global Change Research [Karl, T.R., S.J. Hassol, C.D. Miller, and W.L. Murray (eds.)]. Department of Commerce, National Oceanic and Atmospheric Administration, Washington, DC, 164 pp.
- 9) **Vinnikov**, K.Y., N.C. Grody, A. Robock, R.J. Stouffer, P.D. Jones, and M.D. Goldberg, 2006: Temperature trends at the surface and in the troposphere. *Journal of Geophysical Research*, **111**, D03106, doi:10.1029/2005jd006392.
- 10) **Sherwood**, S.C., J. Lanzante, and C. Meyer, 2005: Radiosonde daytime biases and late 20th century warming. *Science*, **309**, 1556-1559.
- 11) **Stroeve**, J., M. Serreze, S. Drobot, S. Gearheard, M. Holland, J. Maslanik, W. Miere, and T. Scambos, 2008: Arctic sea ice extent plummets in 2007. *EOS Transactions of the American Geophysical Union*, **89(2)**, 13-14.
- 12) **Luthcke**, S.B., H.J. Zwally, W. Abdalati, D.D. Rowlands, R.D. Ray, R.S. Nerem, F.G. Lemoine, J.J. McCarthy, and D.S. Chinn, 2006: Recent Greenland ice mass loss by drainage system from satellite gravity observations. *Science*, **314**, 1286-1289, doi:10.1126/science.1130776.
- 13) **Lockwood**, M. and C. Frohlich, 2007: Recent oppositely directed trends in solar climate forcings and the global mean surface air temperature. *Proceedings of the Royal Society A*, **463**, 2447-2460, doi:10.1098/rspa.2007.1880.
- 14) **Svensmark**, H., 2007: Cosmoclimatology: a new theory emerges. *Astronomy and Geophysics*, **48(1)**, 18-24.
- 15) **McConnell**, J.R., R. Edwards, G.L. Kok, M.G. Flanner, C.S. Bender, E.S. Saltzman, J.R. Banta, D.R. Pasteris, M.M. Carter, and J.D.W. Kahl, 2007: 20th-century industrial black carbon emissions altered arctic climate forcing. *Science*, **317**, 1381-1384.
- 16) **Ramanathan**, V., M.V. Ramana, G. Roberts, D. Kim, C. Corrigan, C. Chung, and D. Winker, 2007: Warming trends in Asia amplified by brown cloud solar absorption. *Nature*, **448**, 575-578.
- 17) **Eck**, T.F., B.N. Holben, J.S. Reid, A. Sinyuk, O. Dubovik, A. Smirnov, D. Giles, N.T. O'Neill, S.-C. Tsay, Q. Ji, A. Al Mandoos, M. Ramzan Khan, E.A. Reid, J.S. Schafer, M. Sorokine, W. Newcomb, and I. Slutsker, 2008: Spatial and temporal variability of column-integrated aerosol optical properties in the southern Arabian Gulf and United Arab Emirates in summer. *Journal of Geophysical Research*, **113**, D01204, doi:10.1029/2007JD008944.

THE U.S. CLIMATE CHANGE SCIENCE PROGRAM FOR FY 2009 CHAPTER REFERENCES (CONTINUED)

- 18) **Quinn**, P.K., G. Shaw, E. Andrews, E.G. Dutton, T. Ruoho-Airola, and S.L. Gong, 2007: Arctic haze: current trends and knowledge gaps. *Tellus*, **59B(1)**, 99-114.
- 19) **Sorooshian**, A., M.-L. Lu, F.J. Brechtel, H. Fonsson, G. Feingold, R.C. Flagan, and J.H. Seinfeld, 2007: On the source of organic acid aerosol layers above clouds. *Environmental Science and Technology*, **41**, 4647-4654.
- 20) **Xue**, H., G. Feingold, and B. Stevens, 2008: Aerosol effects on clouds, precipitation, and the organization of shallow cumulus convection. *Journal of Atmospheric Science*, **65**, 392-406, doi:10.1175/2007JAS2428.1.
- 21) **Cooper**, O.R., M. Trainer, A.M. Thompson, S.J. Oltmans, D.W. Tarasick, J.C. Witte, A. Stohl, S. Eckhardt, J. Lelieveld, M.J. Newchurch, B.J. Johnson, R.W. Portmann, L. Kalnajs, M.K. Dubey, T. Leblanc, I.S. McDermid, G. Forbes, D. Wolfe, T. Carey-Smith, G.A. Morris, B. Lefer, B. Rappenglück, E. Joseph, F. Schmidlin, J. Meagher, F.C. Fehsenfeld, T.J. Keating, R.A. Van Curen, and K. Minschwaner, 2007: Evidence for a recurring eastern North America upper tropospheric ozone maximum during summer. *Journal of Geophysical Research*, **112**, D23304, doi:10.1029/2007JD008710.
- 22) **Dong**, X., B. Xi, and P. Minnis, 2006: Observational evidence of changes in water vapor, clouds, and radiation at the ARM SGP site. *Geophysical Research Letters*, **33**, L19818, doi:10.1029/2006GL027132.
- 23) **Jiang**, J.H., N.J. Livesey, H. Su, L. Neary, J.C. McConnell, and N.A.D. Richards, 2007: Connecting surface emissions, convective uplifting, and long-range transport of carbon monoxide in the upper troposphere: New observations from the Aura Microwave Limb Sounder. *Geophysical Research Letters*, **34**, L18812, doi:10.1029/2007GL030638.
- 24) **Tao**, Z., A. Williams, H.-C. Huang, M. Caughey, and X.-Z. Liang, 2007: Sensitivity of U.S. surface ozone to future emissions and climate changes. *Geophysical Research Letters*, **34**, L08811, doi:10.1029/2007GL029455.
- 25) **Newman**, P.A., J.S. Daniel, D.W. Waugh, and E.R. Nash, 2007. A new formulation of equivalent effective stratospheric chlorine (EESC). *Atmospheric Chemistry and Physics*, **7**, 4537-4552.
- 26) **LeMone**, M.A., F. Chen, J.G. Alfieri, M. Tewari, B. Geerts, Q. Miao, R.L. Grossman, and R.L. Coulter, 2007: Influence of land cover and soil moisture on the horizontal distribution of sensible and latent heat fluxes in southeast Kansas during IHOP_2002 and CASES-97. *Journal of Hydrometeorology*, **8(1)**, 68-87.
- 27) **Magnani**, F., M. Mencuccini, M. Borghetti, P. Berbigier, F. Berninger, S. Delzon, A. Grelle, P. Hari, P.G. Jarvis, P. Kolari, A.S. Kowalski, H. Lankreijer, B.E. Law, A. Lindroth, D. Loustau, G. Manca, J.B. Moncrieff, M. Rayment, V. Tedeschi, R. Valentini, and J. Grace, 2007: The human footprint in the carbon cycle of temperate and boreal forests. *Nature*, **447(7146)**, 849-851.
- 28) **CCSP**, 2007. *The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle*. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research [King, A.W., L. Dilling, G.P. Zimmerman, D.M. Fairman, R.A. Houghton, G. Marland, A.Z. Rose, and T.J. Wilbanks (eds.)]. National Oceanic and Atmospheric Administration, National Climatic Data Center, Asheville, NC, USA, 242 pp.
- 29) **Bamber**, J.L., R.B. Alley, and I. Jouighin, 2007: Rapid response of modern day ice sheets to external forcing. *Earth and Planetary Science Letters*, **257(1-2)**, 1-13.
- 30) **Francis**, J.A., and E. Hunter, 2007: Drivers of declining sea ice in the Arctic winter: A tale of two seas. *Geophysical Research Letters*, **34**, L17503, doi:10.1029/2007GL030995.
- 31) **Meier**, M.F., M.B. Dyurgerov, U.K. Rick, S. O'Neil, W.T. Pfeffer, R.S. Anderson, S. Anderson, and A.F. Glazovsk, 2007: Glaciers dominate eustatic sea-level rise in the 21st century. *Science*, **317(5841)**, 1064-1067.
- 32) **Rahmstorf**, S., 2007: A semi-empirical approach to projecting future sea-level rise. *Science*, **315(5810)**, 368-370.
- 33) **Walter**, K.M., S.A. Zimov, J.P. Chanton, D. Verbyla, and F.S. Chapin, 2006: Methane bubbling from Siberian thaw lakes as a positive feedback to climate warming. *Nature*, **443(7107)**, 71-75.

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THE U.S. CLIMATE CHANGE SCIENCE PROGRAM FOR FY 2009 CHAPTER REFERENCES (CONTINUED)

- 34) **Johansson**, T., and D. Lesnic, 2006: Reconstruction of a stationary flow from incomplete boundary data using iterative methods. *European Journal of Applied Mathematics*, **17**(6), 651-663.
- 35) **Seager**, R., 2007: The turn of the century North American drought: Global context, dynamics, and past analogs. *Journal of Climate*, **20**(22), 5527-5552.
- 36) **Bates**, N.R., and A.J. Peters, 2007: The contribution of acid deposition to ocean acidification in the subtropical North Atlantic Ocean. *Marine Chemistry*, **107**, 547-558.
- 37) **Doney**, S.C., N. Mahowald, I. Lima, R.A. Feely, F.T. Mackenzie, J.-F. Lamarque, and P.J. Rasch, 2007: The impact of anthropogenic atmospheric nitrogen and sulfur deposition on ocean acidification and the inorganic carbon system. *Proceedings of the National Academy of Sciences*, **104**, 14580-14585, doi:10.1073/pnas.0702218104.
- 38) **CCSP**, 2007: *Effects of Climate Change on Energy Production and Use in the United States*. A Report by the U.S. Climate Change Science Program and the subcommittee on Global Change Research [Wilbanks, T. J., V. Bhatt, D.E. Bilello, S.R. Bull, J. Ekmann, W.C. Horak, Y.J. Huang, M.D. Levine, M.J. Sale, D.K. Schmalzer, and M.J. Scott (authors)]. Department of Energy, Office of Biological and Environmental Research, Washington, DC, USA, 160 pp.
- 39) **Bradley**, R.S., M. Vuille, H.F. Diaz, and W. Vergara, 2006: Threats to water supplies in the tropical Andes. *Science*, **312**(5781), 1755-1756.
- 40) **CCSP**, 2007: *Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations (Part A) and Global-Change Scenarios: Their Development and Use (Part B)*. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research [Clarke, L., J. Edmonds, J. Jacoby, H. Pitcher, J. Reilly, R. Richels, E. Parson, V. Burkett, K. Fisher-Vanden, D. Keith, L. Mearns, C. Rosenzweig, M. Webster (authors)]. Department of Energy, Office of Biological and Environmental Research, Washington, DC, USA, 260 pp.
- 41) **Snower**, A.K., L. Whitley Binder, J. Lopez, E. Willmott, J. Kay, D. Howell, and J. Simmonds, 2007: *Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments*. In association with and published by ICLEI – Local Governments for Sustainability, Oakland, CA. Available at <www.cses.washington.edu/cig/fpt/guidebook.shtml>.