

References

- Allen, M. R., and Smith, L. A. (1997) Optimal filtering in singular spectrum analysis. *Physics Letters A* **234**, 419-428
- Allen, M. R., and Tett, S. F. B. (1999) Checking for model consistency in optimal fingerprinting. *Climate Dynamics* **15**, 419-434
- Allen, M. R., Stott, P. A., Mitchell, J. F. B., Schnur, R., and Delworth, T. L. (2000) Quantifying the uncertainty in forecasts of anthropogenic climate change. *Nature* **407**, 617-620
- Allen, M. R., Gillett, N. P., Kettleborough, J. A., Hegerl, G., Schnur, R., Stott, P. A., Boer, G., Covey, C., Delworth, T. L., Jones, G. S., Mitchell, J. F. B., and Barnett, T. P. (2001) Quantifying anthropogenic influence on recent near-surface temperature change. Accepted by *Surveys in Geophysics*
- Allen, M. R., and Stott, P. A. (2001) Estimating signal amplitudes in optimal fingerprinting, Part 1: Theory. Submitted to *Climate Dynamics*
- Angell, J. K. (1988) Variations and trends in tropospheric and stratospheric global temperatures, 1958-87. *Journal of Climate* **1**, 1296-1313
- Angell, J. K. (2000) Difference in radiosonde temperature trend for the period 1979-1998 of MSU data and the period 1959-1998 twice as long. *Geophysical Research Letters* **27**, 2177-2180
- Bard, E., Raisbeck, G., Yiou, F., and Jouzel, J. (2000) Solar irradiance during the last 1200 years based on cosmogenic nucleides. *Tellus series B - Chemical and physical meteorology* **52**, 985-992
- Barnett, T. P., Hegerl, G. C., Santer, B. D., and Taylor, K. (1998) The potential effect of GCM uncertainties and internal atmospheric variability on anthropogenic signal detection. *Journal of Climate* **11**, 659-675
- Barnett, T. P., Hasselmann, K., Chelliah, M., Delworth, T., Hegerl, G., Jones, P., Rasmusson, E., Roeckner, E., Ropelewski, C., Santer, B., and Tett, S. (1999) Detection and attribution of recent climate change: A status report. *Bulletin of the American Meteorological Society* **80**, 2631-2659
- Barnett, T. P., Hegerl, G., Knutson, T., and Tett, S. (2000) Uncertainty levels in predicted patterns of anthropogenic climate change. *Journal of Geophysical Research* **105**, 15525-15542
- Barnett, T. P., Pierce, D. W., and Schnur, R. (2001) Detection of Anthropogenic Climate Change in the World's Oceans. *Science* **292**, 270-274
- Bell, T. L. (1982) Optimal weighting of data to detect climatic-change – application to the carbon-dioxide problem. *Journal of Geophysical Research* **87**, 1161-1170

- Bell, T. L. (1986) Theory of optimal weighting of data to detect climatic-change. *Journal of the Atmospheric Sciences* **43**,1694-1710
- Bengtsson, L., Roeckner, E., and Stendel, M. (1999) Why is global warming proceeding much slower than expected? *Journal of Geophysical Research* **104**, 3864-3876
- Berliner, L. M., Levine, R. A., and Shea, D. J. (2000) Bayesian climate change assessment. *Journal of climate* **13**, 3805-3820
- Brown, S. J., Parker, D. E., Folland, C. K., and Macadam, I. (2000) Decadal variability in the lower-tropospheric lapse rate. *Geophysical Research Letters* **27**, 997-1000
- CARDS webpage
http://www.ncdc.noaa.gov/cards/cards_homepage.html
- Carlin, B. P., and Louis, T. A. (2000) Bayes and empirical Bayes methods for data analysis, Second edition. Chapman and Hall / CRC
- Chase, T. N., Pielke, R. A., Knaff, J. A., Kittel, T. G. F., and Eastman, J. L. (2000) A comparison of regional trends in 1979-1997 depth-averaged tropospheric temperatures. *International Journal of Climatology* **20**, 503-518
- Christy, J. R. (1995) Temperature above the surface layer. *Climatic change* **31**, 455-474
- Christy, J. R., Spencer, R. W., and Lobl, E. S. (1998) Analysis of the merging procedure for the MSU daily temperature time series. *Journal of Climate* **11**, 2016-2041
- Christy, J. R., Spencer, R. W., and Braswell, W. D. (2000) MSU tropospheric temperatures: Dataset construction and radiosonde comparisons. *Journal of atmospheric and oceanic technology* **17**, 1153-1170
- Collins, M., Tett, S. F. B., and Cooper, C. (2001) The internal climate variability of HadCM3, a version of the Hadley Centre coupled model without flux adjustments. *Climate Dynamics* **17**, 61-81
- Corti, S., Molteni, F., and Palmer, T. N. (1999) Signature of recent climate change in frequencies of natural atmospheric circulation regimes. *Nature* **398**, 799-802
- Eskridge, R. E., Alduchov, O. A., Chernykh, I. V., Panmao, Z., Polansky, A. C., and Doty, S. R. (1995) A comprehensive aerological reference data set (CARDS) – rough and systematic errors. *Bulletin of the American Meteorological Society* **76**, 1759-1775
- Fligge, M., and Solanki, S. K. (2000) The solar spectral irradiance since 1700. *Geophysical Research Letters* **27**, 2157-2160

- Folland, C. K., Sexton, D. M. H., Karoly, D. J., Johnson, C. E., Rowell, D. P., and Parker, D. E. (1998), Influences of anthropogenic and oceanic forcing on recent climate change. *Geophysical Research Letters* **25**, 353-356
- Folland, C. K., Rayner, N. A., Brown, S. J., Smith, T. M., Shen, S. S., Parker, D. E., Macadam, I., Jones, P. D., Jones, R. N., Nicholls, N., and Sexton, D. M. H. (2001) Global temperature change and its major uncertainties since 1861. *Geophysical Research Letters* **28**, 2621-2624
- Gaffen, D. J. (1994) Temporal inhomogeneities in radiosonde temperature records. *Journal of Geophysical Research* **99**, 3667-3676
- Gaffen, D. J. (1996) A digitized metadata set of global upper-air station histories. NOAA Technical Memorandum ERL ARL-211
- Gaffen, D. J., Santer, B. D., Boyle, J. S., Christy, J. R., Graham, N. E., and Ross, R. J. (2000) Multidecadal changes in the vertical temperature structure of the tropical troposphere. *Science* **287**, 1242-1245
- Gaffen, D. J., Sargent, M. A., Habermann, R. E., and Lanzante, J. R. (2000a) Sensitivity of tropospheric and stratospheric temperature trends to radiosonde data quality. *Journal of Climate* **13**, 1776-1796
- Gibson, J. K., Kållberg, P., Uppala, S., Hernandez, A., Nomura, A., and Serrano, E. (1997) ERA Description. ECMWF Report ERA PRS1
- Gillett, N. P., Allen, M. R., and Tett, S. F. B. (2000) Modelled and observed variability in atmospheric vertical temperature structure. *Climate Dynamics* **16**, 49-61
- Gillett, N. P., Hegerl, G. C., Allen, M. R., and Stott, P. A. (2000a) Implications of changes in the Northern Hemisphere circulation for the detection of anthropogenic climate change. *Geophysical Research Letters* **27**, 993-996
- Gillett, N. P., Hegerl, G. C., Allen, M. R., Stott, P. A., and Schnur, R. (2001) Reconciling two approaches to the detection of anthropogenic influence on climate. Submitted to *Journal of Climate*
- Gordon, C., Cooper, C., Senior, C. A., Banks, H., Gregory, J. M., Johns, T. C., Mitchell, J. F. B., and Wood, R. A. (2000) The simulation of SST, sea ice extents and ocean heat transports in a version of the Hadley Centre coupled model without flux adjustments. *Climate Dynamics* **16**, 147-168
- GUAN webpage
<http://www.met-office.gov.uk/research/hadleycentre/guan/>
- Hansen, J., Ruedy, R., Glascoe, J., and Sato, M. (1999) GISS analysis of surface temperature change. *Journal of Geophysical Research* **104**, 30997-31022
- Hasselmann, K. (1976) Stochastic climate models. Part 1. Theory. *Tellus* **28**, 473-485

Hasselmann, K. (1997) Multi-pattern fingerprint method for detection and attribution of climate change. *Climate Dynamics* **13**, 601-611

Hasselmann, K. (1998) Conventional and Bayesian approach to climate-change detection and attribution. *Quarterly Journal of the Royal Meteorological Society* **124**, 2541-2565

Hegerl, G. C., Von Storch, H., Hasselmann, K., Santer, B. D., Cubasch, U., and Jones, P. D. (1996) Detecting greenhouse-gas-induced climate change with an optimal fingerprint method. *Journal of Climate* **9**, 2281-2310

Hegerl, G. C., Hasselmann, K., Cubasch, U., Mitchell, J. F. B., Roeckner, E., Voss, R., and Waskewitz, J. (1997) Multi-fingerprint detection and attribution analysis of greenhouse gas, greenhouse gas-plus-aerosol and solar forced climate change. *Climate Dynamics* **13**, 613-634

Hegerl, G. C., and North, G. R. (1997) Comparison of statistically optimal approaches to detecting anthropogenic climate change. *Journal of Climate* **10**, 1125-1133

Hegerl, G. C., Stott, P. A., Allen, M. R., Mitchell, J. F. B., Tett, S. F. B., and Cubasch, U. (2000) Optimal detection and attribution of climate change: Sensitivity of results to climate model differences. *Climate Dynamics* **16**, 737-754

Hegerl, G. C., Jones, P. D., and Barnett, T. P. (2001) Effect of observational sampling error on the detection of anthropogenic climate change. *Journal of Climate* **14**, 198-207

Hill, D. C., Allen, M. R., and Stott, P. A. (2001) Allowing for solar forcing in the detection of human influence on tropospheric temperatures. *Geophysical Research Letters* **28**, 1555-1558

Hoyt, D. V., and Schatten, K., H. (1993) A discussion of plausible solar irradiance variations, 1700-1992. *Journal of Geophysical Research* **98**, 18895-18906

Huang, S. P., Pollack, N. H., and Shen, P. Y. (2000) Temperature trends over the past five centuries reconstructed from borehole temperatures. *Nature* **403**, 756-758

Hurrell, J. W., and Trenberth, K. E. (1997) Spurious trends in satellite MSU temperatures from merging different satellite records. *Nature* **386**, 164-167

Hurrell, J. W., and Trenberth, K. E. (1998) Difficulties in obtaining reliable temperature trends: Reconciling the surface and satellite microwave sounding unit records. *Journal of Climate* **11**, 945-967

Hurrell, J. W., Brown, S. J., Trenberth, K. E., and Christy, J. R. (2000) Comparison of tropospheric temperatures from radiosondes and satellites: 1979-98. *Bulletin of the American Meteorological Society* **81**, 2165-2177

- Johns, T. C., Carnell, R. E., Crossley, J. F., Gregory, J. M., Mitchell, J. F. B., Senior, C. A., Tett, S. F. B., and Wood, R. A. (1997) The second Hadley Centre coupled ocean atmosphere GCM: model description, spinup and validation. *Climate Dynamics* **13**, 103-134
- Jones, G. S., Stott, P. A., and Tett, S. F. B. (2001) Detection and attribution of anthropogenic and natural effects in the near surface and free atmosphere temperature record, 1960-2000. Manuscript in preparation
- Jones, P. D. (1994) Hemispheric surface air temperature variations: A reanalysis and an update to 1993. *Journal of Climate* **7**, 1794-1802
- Jones, P. D. (1995) Land surface temperatures - is the network good enough? *Climatic Change* **31**, 545-558
- Jones, P. D., Osborn, T. J., Wigley, T. M. L., Kelly, P. M., and Santer, B. D. (1997) Comparisons between the microwave sounding unit temperature record and the surface temperature record from 1979 to 1996: Real differences or potential discontinuities? *Journal of Geophysical Research* **102**, 30135-30145
- Jones, P. D., Osborn, T. J., and Briffa, K. R. (1997a) Estimating sampling errors in large-scale temperature averages. *Journal of climate* **10**, 2548-2568
- Jones, P. D., and Hegerl, G. C. (1998) Comparisons of two methods of removing anthropogenically related variability from the near-surface observational temperature field. *Journal of Geophysical Research* **103**, 13777-13786
- Jones, P. D., New, M., Parker, D. E., Martin, S., and Rigor, I. G. (1999) Surface air temperature and its changes over the past 150 years. *Review of Geophysics* **37**, 173-199
- Jones, P. D., Osborn, T. J., Briffa, K. R., Folland, C. K., Horton, E. B., Alexander, L. V., Parker, D. E., and Rayner, N. A. (2001) Adjusting for sampling density in grid box land and ocean surface temperature time series. *Journal of Geophysical Research* **106**, 3371-3380
- Kalnay, E., Kanamitsu, M., Kistler, R., Collins, W., Deaven, D., Gandin, L., Iredell, M., Saha, S., White, G., Woolen, J., Zhu, Y., Chelliah, M., Ebisuzaki, W., Higgins, W., Janowiak, J., Mo, K. C., Ropelewski, C., Wang, J., Leetmaa, A., Reynolds, R., Jenne, R., and Joseph, D. (1996) The NCEP/NCAR 40-year reanalysis project. *Bulletin of the American Meteorological Society* **77**, 437-471
- Karoly, D. J., Cohen, J. A., Meehl, G. A., Mitchell, J. F. B., Oort, A. H., Stouffer, R. J., and Wetherald, R. T. (1994) An example of fingerprint detection of greenhouse climate change. *Climate Dynamics* **10**, 97-105
- Kotz, S., Johnson, N. L., and Read, C. B. (1983) Encyclopedia of statistical sciences, Vol. 3, 673-677

- Lean, J., Beer, J., and Bradley, R. (1995) Reconstruction of solar irradiance since 1610 - Implications for climate-change. *Geophysical Research Letters* **22**, 3195-3198
- Legates, D. R., and Davies, R. E. (1997) The continuing search for an anthropogenic climate change signal: Limitations of correlation-based approaches. *Geophysical Research Letters* **24**, 2319-2322
- Levine, R. A., and Berliner, L. M. (1999) Statistical principles for climate change studies. *Journal of Climate* **12**, 564-574
- Levitus, S., Antonov, J. I., Wang, J., Delworth, T. L., Dixon, K. W. and Broccoli, A. J. (2001) Anthropogenic Warming of Earth's Climate System. *Science* **292**, 267-270
- Luers, J. K., and Eskridge, R. E. (1998) Use of radiosonde temperature data in climate studies. *Journal of climate* **11**, 1002-1019
- Mann, M. E. (2001) Climate during the past millennium. *Weather* **56**, 91-102
- Mardia, K. V., Kent, J. T., and Bibby, J. M. (1979) *Multivariate Analysis*. Academic Press
- Mitchell, J. F. B., Johns, T. C., Gregory, J. M., and Tett, S. F. B. (1995) Climate response to increasing levels of greenhouse gases and sulphate aerosols. *Nature* **376**, 501-504
- Mitchell, J. F. B., and Johns, T. C. (1997) On modification of global warming by sulfate aerosols. *Journal of Climate* **10**, 245-267
- Mitchell, J. F. B., Karoly, D. J., Hegerl, G. C., Zweirs, F. W., Allen, M. R., and Marengo, J. (2001) Detection of Climate Change and attribution of causes. In: *Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change* [Houghton, J. T., Ding, Y., Griggs, D. J., Noguer, M., van der Linden, P. J., Dai, X, Maskell, K., and Johnson, C. A. (eds.)] Cambridge University Press
- Nakicenovic, N. J. et al. (2000) *Special report on emissions scenarios*. Cambridge University Press
- North, G. R., Kim, K. Y., Shen, S. S. P., and Hardin, J. W. (1995) Detection of forced climate signals. 1. Filter theory. *Journal of Climate* **8**, 401-408
- North, G. R., and Stevens, M. J. (1998) Detecting climate signals in the surface temperature record. *Journal of Climate* **11**, 563-577
- NRC (National Research Council) (2000) *Reconciling observations of global temperature change*. National Academy Press, Washington, D.C., 85pp.
- Osborn, T. J. (1997) Areal and point precipitation intensity changes: Implications for the application of climate models. *Geophysical Research Letters* **24**, 2829-2832

- Palmer, T. N. (1999) A non-linear dynamical perspective on climate prediction. *Journal of Climate* **12**, 575-591
- Parker, D. E., and Cox, D. I. (1995) Towards a consistent global climatological rawinsonde database. *International Journal of Climatology* **15**, 473-496
- Parker, D. E., Gordon, M., Cullum, D. P. N., Sexton, D. M. H., Folland, C. K., and Rayner, N. (1997) A new global gridded radiosonde temperature data base and recent temperature trends. *Geophysical Research Letters* **24**, 1499-1502
- Peterson, T.C., Gallo, K. P., Lawrimore, J., Owen, T. W., Huang, A., and McKittrick (1999) Global rural temperature trends. *Geophysical Research Letters* **26**, 329-332
- Pope, V. D., Gallani, M. L., Rowntree, P. R., Stratton, R. A. (2000) The impact of new physical parameterizations in the Hadley Centre climate model: HadAM3 *Climate Dynamics* **16**, 123-146
- Press, W. H., S. A., Teukolsky, W. T. Vetterling, and B. P. Flannery (1992) Numerical recipes in Fortran, the art of scientific computing, second edition. Cambridge University Press, 116-117
- Quayle, R. G., Peterson, T. C., Basist, A. N., and Godfrey, C. S. (1999) An operational near real time global temperature index. *Geophysical Research Letters* **26**, 333-336
- Russel, G. L., Miller, J. R., Rind, D., Reudy, R. A., Schmidt, G. A., and Sheth, S. (2000) Comparison of model and observed regional temperature changes during the past 40 years. *Journal of Geophysical Research* **105**, 14891-14898
- Santer, B. D., Wigley, T. M. L., Schlesinger, M. E., and Jones, P. D. (1991) Multi-variate methods for a detection of greenhouse-gas induced climate change. In: Schlesinger, M. E. (ed) Greenhouse-gas induced climatic change: a critical appraisal of simulations and observations. Elsevier, Amsterdam, 511-536
- Santer, B. D., Wigley, T. M. L., and Jones, P. D. (1993) Correlation methods in fingerprint detection studies. *Climate Dynamics* **8**, 265-276
- Santer, B. D., Bruggemann, W., Cubasch, U., Hasselmann, K., Hock, H., Maier-Reimer, E., and Mikolajewicz, U. (1994) Signal-to-noise analysis of time-dependent greenhouse warming experiments. Part 1: pattern analysis. *Climate Dynamics* **9**, 267-285
- Santer, B. D., Taylor, K. E., Wigley, T. M. L., Penner, J. E, Jones, P. D., and Cubasch, U. (1995) Towards the detection and attribution of an anthropogenic effect on climate. *Climate Dynamics* **12**, 77-100

Santer, B. D., Wigley, T. M. L., Barnett, T. P., and Anyamba, E. (1996) Detection of Climate Change and Attribution of Causes. 407-443 In: Climate change 1995 The Science of Climate Change. Houghton, J. T., and Meira Filho, L. G., and Callander, B. A., and Harris, N., and Kattenberg, A., and Maskell, K. eds., Cambridge University Press

Santer, B. D., Taylor, K. E., Wigley, T. M. L., Johns, T. C., Jones, P. D., Karoly, D. J., Mitchell, J. F. B., Oort, A. H., Penner, J. E., Ramaswamy, V., Schwarzkopf, M. D., Stouffer, R. J., and Tett, S. (1996a) A search for human influences on the thermal structure of the atmosphere. *Nature* **382**, 39-46

Santer, B. D., Hnilo, J. J., Wigley, T. M. L., Boyle, J. S., Doutriaux, C., Fiorino, M., Parker, D. E., and Taylor, K. E. (1999) Uncertainties in observationally based estimates of temperature change in the free atmosphere. *Journal of Geophysical Research* **104**, 6305-6333

Santer, B. D., Wigley, T. M. L., Gaffen, D. G., Doutriaux, C., Boyle, J. S., Esch, M., Hnilo, J. J., Jones, P. D., Meehl, G. A., Roeckner, E., Taylor, K. E., and Wehner, M. (2000) Interpreting differential temperature trends at the surface and in the lower troposphere. *Science* **287**, 1227-1232

Santer, B. D., Wigley, T. M. L., Boyle, J. S., Gaffen, D. J., Hnilo, J. J., Nychka, D., Parker, D. E., and Taylor, K. E. (2000a) Statistical significance of trends and trend differences in layer-average atmospheric temperature time series. *Journal of Geophysical Research* **105**, 7337-7356

Santer, B. D., Wigley, T. M. L., Doutriaux, C., Boyle, J. S., Hansen, J. E., Jones, P. D., Meehl, G. A., Roeckner, E., Sengupta, S., and Taylor, K. E. (2001) Accounting for the effects of volcanoes and ENSO in comparisons of modeled and observed temperature trends. Submitted to *Journal of Geophysical Research*

Sato, M., Hansen, J. E., McCormick, M. P., and Pollack, J. B. (1993) Stratospheric aerosol optical depths (1850-1990). *Journal of Geophysical Research* **98**, 22987-22994

Solanki, S. K., and Fligge, M. (2000) Reconstruction of past solar irradiance. *Space science reviews* **94**, 127-138

Stendel, M., Christy, J. R., and Bengtsson, L. (2000) Assessing levels of uncertainty in recent temperature time series. *Climate Dynamics* **16**, 587-601

Stephenson, D. B. (1997) Correlation of spatial climate/weather maps and the advantages of using the Mahalanobis metric in predictions. *Tellus Series A-Dynamic meteorology and oceanography* **49**, 513-527

Stothers, R. B. (1996) Major optical depth perturbations to the stratosphere from volcanic eruptions: Pyrheliometric period, 1881-1960. *Journal of Geophysical Research* **101**, 3901-3920

- Stott, P. A., and Tett, S. F. B. (1998) Scale-dependent detection of climate change. *Journal of Climate* **11**, 3282-3294
- Stott, P. A., Tett, S. F. B., Jones, G. S., Allen, M. R., Mitchell, J. F. B., and Jenkins, G. J. (2000) External control of 20th Century temperature by natural and anthropogenic forcings. *Science* **290**, 2133-2137
- Stott, P. A., Tett, S. F. B., Jones, G. S., Allen, M. R., Ingram, W. J., and Mitchell, J. F. B. (2001) Attribution of twentieth century temperature change to natural and anthropogenic causes. *Climate Dynamics* **17**, 1-17
- Stott, P. A., Allen, M. R., and Jones, G. S. (2001a) Estimating signal amplitudes in optimal fingerprinting. Part II: Application to general circulation modelling. Submitted to *Climate Dynamics*
- Tett, S. F. B., Mitchell, J. F. B., Parker, D. E., and Allen, M. R. (1996) Human influence on the atmospheric vertical temperature structure: Detection and observations. *Science* **274**, 1170-1173
- Tett, S. F. B., Stott, P. A., Allen, M. R., Ingram, W. J., and Mitchell, J. F. B. (1999) Causes of twentieth-century change near the Earth's surface. *Nature* **399**, 569-572
- Tett, S. F. B., Jones, G. S., Stott, P. A., Hill, D. C., Mitchell, J. F. B., Allen, M. R., Ingram, W. J., Johns, T. C., Johnson, C. E., Jones, A., Roberts, D. L., Sexton, D. M. H., and Woodage, M. J. (2001) Estimation of natural and anthropogenic contributions to 20th Century temperature change. Accepted by *Journal of Geophysical Research*
- Thompson, D. W. J., and Wallace, J. M. (2000) Annular modes in the extratropical circulation Part I: Month to month variability. *Journal of Climate* **13**, 1000-1016
- Timmermann, A. (1999) Detecting the nonstationary response of ENSO to greenhouse warming. *Journal of the Atmospheric Sciences* **56**, 2313-2325
- Tol, R. S. J., and De Vos, A. F. (1998) A Bayesian statistical analysis of the enhanced greenhouse effect. *Climatic change* **38**, 87-112
- Uffink, J. (1995) Can the Maximum Entropy Principle be explained as a Consistency Requirement? *Studies in History and Philosophy of Modern Physics* **26B**, 223-261
<http://www.phys.uu.nl/~wwwgrnsl/jos/mep2def/mep2def.html>
- Von Storch, H., and Zwiers, F. W. (1999) Statistical analysis in climate research. Cambridge University Press
- Wentz, F. J., and Schabel, M. (1998) Effects of orbital decay on satellite-derived lower-tropospheric temperature trends. *Nature* **394**, 661-664
- Wigley, T. M. L., Jaumann, P. J., Santer, B. D., Taylor, K. E. (1998) Relative detectability of greenhouse-gas and aerosol climate change signals. *Climate Dynamics* **14**, 781-790

Wigley, T. M. L., Santer, B. D., and Taylor, K. E. (2000) Correlation approaches to detection. *Geophysical Research letters* **27**, 2973-2976

Willson, R. C. (1997) Total solar irradiance trend during solar cycles 21 and 22. *Science* **277**, 1963-1965

Zwiers, F. W. (1999) The detection of climate change.161-207 In: Anthropogenic climate change, Von Storch, H., and Floeser, G., eds., Springer-Verlag.