

## References

- Aaheim, A. and Schjolden, A., 2004: An approach to utilise climate change impacts studies in national assessments. *Global Environmental Change*, 14: 147-600.
- Abaurrea, J. and Asin, J., 2005: Forecasting local daily precipitation patterns in a climate change scenario. *Climate Research*, 28: 183-197.
- Adger, W.N., Brooks, N., Bentham, G., Agnew, A. and Eriksen, S., 2004: New indicators of vulnerability and adaptive capacity. 7, Tyndall Centre for Climate Change Research.
- Adger, W.N. and Kelly, P.M., 1999: Social vulnerability to climate change and the architecture of entitlements. *Mitigation and Adaptation Strategies for Global Change*, 4: 253-266.
- Agnew, M. and Palutikof, J.P., 1997: Retailing and Manufacturing. In: J.P. Palutikof, S. Subak and M. Agnew (Editors), *Economic impacts of the hot summer and unusually warm year of 1995*. University of East Anglia, Norwich.
- Agnew, M.D. and Palutikof, J.P., 2000: GIS-based construction of baseline climatologies for the Mediterranean using terrain variables. *Climate Research*, 14(2): 115-127.
- Ahrens, C.D., 1991: *Meteorology Today*. West Publishing, 473 pp.
- Ahrens, C.D., 1998: *Essentials of Meteorology: An Introduction to the atmosphere*. Wadsworth Press, Belmont.
- Al-Zayer, J. and Al-Ibrahim, A.A., 1996: Modelling the impact of temperature on electricity consumption in the Eastern Province of Saudi Arabia. *Journal of Forecasting*, 15: 97-106.
- Alberdi, J.C., Diaz, J., Montero Rubio, J.C. and Miron Perez, I.J., 1998: Daily mortality in Madrid community, 1986-1992: relationship with meteorological variables. *European Journal of Epidemiology*, 14: 571-578.
- Alexander, C.O., 2001: *Market models: A guide to financial data analysis*. John Wiley and Sons.
- Alexandersson, H. and Moberg, A., 1997: Homogenization of Swedish temperature data. Part I: Homogeneity test for linear trends. *International Journal of Climatology*, 17: 25-34.
- Alley, W.M., 1984: The Palmer Drought Severity Index: Limitations and assumptions. *Journal of Climate and Applied Meteorology*, 23: 1100-1109.
- Alonso, S., Portela, A. and Ramis, C., 1994: 1st Considerations on the Structure and Development of the Iberian Thermal Low-Pressure System. *Annales Geophysicae-Atmospheres, Hydrospheres and Space Sciences*, 12(5): 457-468.
- Alpert, P., Ben-Gai, T., Baharad, A., Benjamini, Y., Yekutieli, D., Colacino, M., Diodato, L., Ramis, C., Homar, V., Romero, R., Michaelides, S., Manes, A., 2002: The paradoxical increase of Mediterranean extreme daily rainfall in spite of a decrease in total values. *Geophysical Research Letters*, 29(11): art. no.-1536.
- Alpert, P. and Neeman, B.U., 1992: Cold Small-Scale Cyclones over the Eastern Mediterranean. *Tellus Series a-Dynamic Meteorology and Oceanography*, 44A(2): 173-179.
- Alpert, P., Neeman, B.U. and Shayel, Y., 1990: Intermonthly Variability of Cyclone Tracks in the Mediterranean. *Journal of Climate*, 3(12): 1474-1478.
- Alpert, P. and Ziv, B., 1989: The Sharav cyclone - Observations and some theoretical

- considerations. *Journal of Geophysical Research-Atmospheres*, 94(D15): 18495-18514.
- Amato, A.D., Ruth, M., Kirshen, P. and Horwitz, J., 2005: Regional energy demand responses to climate change: Methodology and application to the commonwealth of Massachusetts. *Climatic Change*, 71: 175-201.
- Anagnostopoulou, C., Maheras, P., Karacostas, T., Vafiadis, M., 2003: Spatial and temporal analysis of dry spells in Greece. *Theoretical and Applied Climatology*, 74: 77-91.
- Anagnostopoulou, C., Tolika, K., Flocas, H.A. and Maheras, P., 2006: Cyclones in the Mediterranean region: present and future climate scenarios derived from a general circulation model (HadAM3P). *Advances in Geosciences*, 7: 9-14.
- Anderberg, M.R., 1973: Cluster analysis for applications. Academic Press, New York.
- Anderson, K.P., 1973: Residential demand for electricity: Econometric estimates for California and the United States). *Journal of Business*, 46: 526-553.
- Anderson, T.W. and Hsiao, C., 1982: Formulation and estimation of dynamic models using panel data. *Journal of Econometrics*, 18: 47-82.
- Auliciems, A. and Frost, D., 1989: Temperature and cardiovascular deaths in Montreal. *International Journal of Biometeorology*, 33(3): 151-156.
- Badr, E.A. and Nasr, G.E., 2001: On the relationship between electrical energy consumption and climate factors in Lebanon: Co-integration and error-correction models. *International Journal of Energy Research*, 25: 1033-1042.
- Balderi, M., Tamburro, A., Sabatinelli, G., Romi, R., Severini, C., Cuccagna, G., Fiorilli, G., Allegri, M.P., Buriani, C., Toti, M., 1998: Malaria in Maremma, Italy. *Lancet*, 351: 1246-1247.
- Baldi, M., Crisci, A., Dalu, A., Maracchi, G., Meneguzzo, F. and Pasqui, M., 2003: Mediterranean summer climate and the monsoon regimes. *Geophysical Research Abstracts*, 5: 12042.
- Ballester, D.F., Corella, D., Perez-Hoyos, S., Saez, M. and Hervas, A., 1997: Mortality as a function of temperature. A study in Valencia, Spain, 1991-1993. *International journal of epidemiology*, 26: 551-561.
- Baric, A. and Gasparovic, F., 1992: Implications of climatic change on the socio-economic activities in the Mediterranean coastal zones. In: L. Jelic, J.D. Milliman and G. Sestini (Editors), *Climatic change and the Mediterranean*. United Nations Environment Program.
- Barnston, A.G. and Livezey, R.E., 1987: Classification, seasonality and persistence of low-frequency atmospheric circulation patterns. *Monthly Weather Review*, 115(6): 1083-1126.
- Barreto, H. and Howland, F.M., 2006: *Introductory econometrics: Using monte carlo simulation with Microsoft Excel*. Cambridge University Press.
- Barry, R.G. and Chorley, R.J., 1998: *Atmosphere, weather and climate*. Routledge Press, London/New York.
- Bartzokas, A., Lolis, C.J. and Metaxas, D.A., 2003: The 850 HPA relative vorticity centres of action for winter precipitation in the Greek area. *International Journal of Climatology*, 23(7): 813-828.
- Bartzokas, A. and Metaxas, D.A., 1991: Climatic fluctuation of temperature and air circulation in the Mediterranean. *Environment and quality of life, climate and global change*, European School of Climatology and Natural Hazards course, Arles/Rhone, France.
- Baur, F., 1947: *Musterbeispiele Europischer grosswetterlagen*, Institute Meteorologie FU, Berlin.

- Beccali, M., Cellura, M., Lo Brano, V. and Marvuglia, A., 2004: Forecasting daily urban electric load profiles using artificial neural networks. *Energy conversion and management*, 45: 2879-2900.
- Bechtold, P., Bazile, E., 2001: The 12-13 November 1999 flash flood in southern France. *Atmospheric Research*, 56(1): 171-189.
- Beersma, J.J., Rider, K.M., Komen, G.J., Kaas, E. and Kharin, V.V., 1997: An analysis of extra-tropical storms in the North Atlantic region as simulated in a control and 2xCO<sub>2</sub> time-slice experiment with a high-resolution atmospheric model. *Tellus Series a-Dynamic Meteorology and Oceanography*, 49(3): 347-361.
- Bell, W. and Drexhage, J., 2005: Climate change and the international carbon market, International Institute for Sustainable Development, Winnipeg.
- Belmonte, A., Beltran, F.S., 2001: Flood events in Mediterranean ephemeral streams (ramblas) in Valencia region, Spain. *Catena*, 45(3): 229-249.
- Beniston, M., 2004: The 2003 heat wave in Europe: A shape of things to come? An analysis based on Swiss climatological data and model simulations. *Geophysical Research Letters*, 31(2): art. no.-L02202.
- Beniston, M., 2005: Warm winter spells in the Swiss Alps: Strong heat waves in a cold season? A study focusing on climate observations at the Saentis high mountain site. *Geophysical Research Letters*, 32: doi: 10.1029/2004GL021478.
- Beniston, M., Rebetez, M., Giorgi, F. and Marinucci, M.R., 1994: An analysis of regional climate-change in Switzerland. *Theoretical and Applied Climatology*, 49(3): 135-159.
- Bentham, C.G., 1997: Health. In: J.P. Palutikof, S. Subak and M. Agnew (Editors), *Economic impacts of the hot summer and unusually warm year of 1995*. University of East Anglia, Norwich.
- Berz, G., 2001: Climatic change: Effects on and possible responses by the insurance industry. In: J.L. Lozan, H. Grassl and P. Hupfer (Editors), *Climate of the 21st century: Changes and risks*, Hamburg.
- Bigano, A., Hamilton, J.M., Lau, M., Tol, R.S.J. and Zhou, Y., 2004: A global database of domestic and international tourist numbers at national and subnational level. FNU-58, Research Unit Sustainability and Global Change, Hamburg.
- Bigg, G.R., 1994: An ocean General-Circulation Model view of the glacial Mediterranean thermohaline circulation. *Paleoceanography*, 9(5): 705-722.
- Bigg, G.R., 2003: *The oceans and climate*. Cambridge.
- Bindi, M. and Howden, M., 2004: Challenges and opportunities for cropping systems in a changing climate, 4th International Crop Science Congress, Brisbane, Australia.
- Bishop, C.M., 1995: *Neural networks for pattern recognition*. Clarendon Press, Oxford.
- Blaikie, P., Cannon, T., Davis, I. and Wisner, B., 1994: *At risk: Natural hazards, people's vulnerability, and disasters*. Routledge, London.
- Bloomfield, P. and Davis, J.M., 1994: Orthogonal rotation of complex principal components. *International Journal of Climatology*, 14: 759-775.
- Bolle, H.J., 2003: Climate, climate variability, and impacts in the Mediterranean area: An overview. In: H.J. Bolle (Editor), *Mediterranean climate: Variability and trends*. Springer-Verlag, Berlin/Heidelberg/New York.
- Bordi, I., Frigio, S., Parenti, P., Speranza, A. and Sutera, A., 2001: The analysis of the Standardized Precipitation Index in the Mediterranean area: regional patterns. *Annali Di Geofisica*, 44(5-6): 979-993.
- Bordi, I. and Sutera, A., 2001: Fifty years of precipitation: Some spatially remote teleconnections. *Water Resources Management*, 15(4): 247-280.

- Bordi, I. and Sutera, A., 2002: An analysis of drought in Italy in the last fifty years. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 25(2): 185-206.
- Bouchama, A., 2004: The 2003 European heat wave. *Intensive Care Med.*, 30: 1-3.
- Bourke, A., 1984: Impact of climate fluctuations on European agriculture. In: H. Flohn and R. Fantechi (Editors), *The climate of Europe: Past, present, and future*. D. Reidel Publishing company.
- Bower, J., 2003: A review of European electricity statistics. *Journal of Energy Literature*, 9: 43-59.
- Bradley, R.S., Kelly, P.M., Jones, P.D., Goodess, C.M. and Diaz, H.F., 1985: A Climatic data bank for northern hemisphere land areas, 1851-1980, United States Department of Energy, Washington, D.C.
- Brandt, C.J. and Thornes, J.B. (Editors), 1996: *Mediterranean desertification and land use*. Wiley, Chichester.
- Brazdil, R., Budikova, M., Auer, I., Bohm, R., Cegnar, T., Fasko, P., Lapin, M., GajicCapka, M., Zaninovic, K., Koleva, E., Niedzwiedz, T., Ustrnul, Z., Szalai, S., Weber, R. O., 1996: Trends of maximum and minimum daily temperatures in central and southeastern Europe. *International Journal of Climatology*, 16(7): 765-782.
- Briffa, K.R., Jones, P.D. and Wigley, T.M.L., 1983: Climate reconstruction From tree rings: Part 1, basic methodology and preliminary results for England. *Journal of Climatology*, 3: 233-242.
- Briffa, K.R., Jones, P.D., Wigley, T.M.L., Pilcher, J.R. and Baillie, M.G.L., 1986: Climate reconstructions from tree rings: Part 2, spatial reconstruction of summer mean sea-level pressure patterns over Great Britain. *Journal of Climatology*, 6(1): 1-16.
- Broomhead, D.S. and Lowe, D., 1988: Multivariable function interpolation and adaptive networks. *Complex Systems*, 2: 321-355.
- Brunetti, M., Buffoni, L., Mangianti, F., Maugeri, M. and Nanni, T., 2004: Temperature, precipitation and extreme events during the last century in Italy. *Global and Planetary Change*, 40(1-2): 141-149.
- Brunetti, M., Buffoni, L., Maugeri, M. and Nanni, T., 2000a: Trends of minimum and maximum daily temperatures in Italy from 1865 to 1996. *Theoretical and Applied Climatology*, 66(1-2): 49-60.
- Brunetti, M., Buffoni, L., Maugeri, M. and Nanni, T., 2000b: Precipitation intensity trends in northern Italy. *International Journal of Climatology*, 20(9): 1017-1031.
- Brunetti, M., Colacino, M., Maugeri, M. and Nanni, T., 2001: Trends in the daily intensity of precipitation in Italy from 1951 to 1996. *International Journal of Climatology*, 21(3): 299-316.
- Brunetti, M., Mangianti, F., Maugeri, M. and Nanni, T., 2000c: Urban heat island bias in Italian air temperature series. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 23(4): 423-431.
- Brunetti, M., Maugeri, M. and Nanni, T., 2001: Changes in total precipitation, rainy days and extreme events in northeastern Italy. *International Journal of Climatology*, 21(7): 861-871.
- Brunetti, M., Maugeri, M. and Nanni, T., 2002: Atmospheric circulation and precipitation in Italy for the last 50 years. *International Journal of Climatology*, 22(12): 1455-1471.
- Brunetti, M., Maugeri, M., Nanni, T. and Navarra, A., 2002b: Droughts and extreme events in regional daily Italian precipitation series. *International Journal of*

- Climatology, 22(5): 543-558.
- Buffoni, L., Maugeri, M. and Nanni, T., 1999: Precipitation in Italy from 1833 to 1996. *Theoretical and Applied Climatology*, 63(1-2): 33-40.
- Buishand, T.A., 1982: Some methods of testing the homogeneity of rainfall records. *Journal of Hydrology*, 58: 11-27.
- Butterfield, R.E., Gawith, M.J., Harrison, P.A., Lonsdale, K.G. and Orr, J., 2000: Modelling climate change impacts on wheat, potato, and grapevine in Great Britain. In: E.C. Institute (Editor), *Climate change, climate variability and agriculture in Europe: An integrated assessment*. University of Oxford.
- Buzzi, A. and Tibaldi, S., 1978: Cyclogenesis in the lee of the Alps: A case study. *Quarterly Journal of the Royal Meteorological Society*, 104(440): 271-287.
- Cacho, I., Grimalt, J.O., Canals, M., Sbaffi, L., Shackleton, N.J., Schonfeld, J. and Zahn, R., 2001: Variability of the western Mediterranean Sea surface temperature during the last 25,000 years and its connection with the Northern Hemisphere climatic changes. *Paleoceanography*, 16(1): 40-52.
- Cantelaube, P. and Terres, J.-M., 2005: Seasonal weather forecasts for crop yield modelling in Europe. *Tellus*, 57A.
- Carnell, R.E. and Senior, C.A., 1998: Changes in mid latitude variability due to increasing greenhouse gases and sulphate aerosols. *Climate Dynamics*, 14(5): 369-383.
- Cartalis, M., Synodinou, A., Proedrou, M., Tsangrassoulis, A. and Santamouris, M., 2001: Modifications in energy demand in urban areas as a result of climate changes: an assessment for the southeast Mediterranean region. *Energy conservation and management*, 42: 1647-1656.
- Caspary, H., 2004: The August 2000 flood in central and eastern Europe and results from the EU "STARDEX" project. 2, STARDEX.
- Cassardo, C., Loglisci, N., Gandini, D., Qian, M.W., Niu, G.Y., Ramieri, P., Pelosini, R. and Longhetto, A., 2002: The flood of November 1994 in Piedmont, Italy: A quantitative analysis and simulation. *Hydrological Processes*, 16(6): 1275-1299.
- Castellari, S., Pinardi, N. and Leaman, K., 1998: A model study of air-sea interactions in the Mediterranean Sea. *Journal of Marine Systems*, 18(1-3): 89-114.
- Castro, M., Gallardo, C. and Calabria, S., 2004: Regional IPCC projections until 2100 in the Mediterranean area. In: A. Marquina (Editor), *Environmental challenges in the Mediterranean 2000-2050*. Kluwer Academic, Dordrecht/Boston/London.
- Cavazos, T., 1997: Downscaling large-scale circulation to local winter rainfall in north-eastern Mexico. *International Journal of Climatology*, 17: 1069-1082.
- Cavazos, T., 1999: Large-scale circulation anomalies conducive to extreme events and deviation of daily rainfall in northeastern Mexico and southeastern Texas. *Journal of Climate*, 12: 1506-1523.
- Cavazos, T., 2000: Using self-organizing maps to investigate extreme climate events: An application to wintertime precipitation in the Balkans. *Journal of Climate*, 13(10): 1718-1732.
- CENTREL, 2001: CENTREL Annual Report.
- Chandler, C., Cheney, C., Thomas, P., Trabaud, L. and Williams, D., 1983: *Fire in forestry: Forest fire behaviour and effects*, 1. John Wiley, New York.
- Chen, C.C., McCarl, B.A. and Schimmelpfennig, D.E., 2004: Yield variability as influenced by climate: A statistical investigation. *Climatic Change*, 66: 239-261.
- Chen, S.T., Yu, D.C. and Moghaddamjo, A.R., 1992: Weather sensitive short-term load forecasting using nonfullyconnected artificial neural network. *IEEE Transactions on Power Systems*, 7: 1098-1105.

- Chessa, P.A. and Delitala, A.M.S., 1997: Objective analysis of daily extreme temperatures of Sardinia (Italy) using distance from the sea as independent variable. *International Journal of Climatology*, 17(13): 1467-1485.
- Choi, O. and Fisher, A., 2003: The impacts of socioeconomic development and climate change on severe weather catastrophe losses: mid-Atlantic region (MAR) and the U.S. *Climatic Change*, 58: 149-170.
- Ciattaglia, L., 1983: Interpretation of atmospheric CO<sub>2</sub> measurements at Mt. Cimone, Italy: 1979-1985. *Journal of Geophysical Research*, 88: 1331-1338.
- Climate Change Impacts Review Group, 1991: The potential effects of climate change in the United Kingdom, HMSO, London.
- Colacino, M. and Conte, M., 1993: Greenhouse-effect and pressure patterns in the Mediterranean basin. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 16(1): 67-76.
- Colacino, M. and Conte, M., 1995: Heat Waves in the Central Mediterranean - a synoptic climatology. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 18(3): 295-304.
- Comrie, A.C., 1992: A Procedure for removing the synoptic climate signal from environmental data. *International Journal of Climatology*, 12(2): 177-183.
- Connell, R. and Willows, R., 2003: Climate adaptation: risk, uncertainty and decision-making, UKCIP.
- Conrad, V.a.P., C., 1950: *Methods In climatology*. HARvard University Press, Cambridge, MA, 459pp.
- Conte, M., Giuffrida, A. and Tedesco, S., 1989: The Mediterranean Oscillation. Impact on precipitation and hydrology in Italy, *Climate Water*. Publications of the Academy of Finland, Helsinki.
- Conti, S., Meli, P., Minelli, G., Solimini, R., Toccaceli, V., Vichi, M., Beltrano, C. and Perini, L., 2005: Epidemiologic study of mortality during the Summer 2003 heat wave in Italy. *Environmental Research*, 98(3): 390-399.
- Cook, E.R., Briffa, K.R. and Jones, P.D., 1994: Spatial regression methods in dendroclimatology: a review and comparison of two techniques. *International Journal of Climatology*, 14: 379-402.
- Cornford, D. and Thornes, J.E., 1996: A comparison between spatial winter indices and expenditure on winter road maintenance in Scotland. *International Journal of Climatology*, 16: 339-357.
- Corte-Real, J., Qian, B., DaCamara, C., 2000: Rainfall in southern Portugal: Trends and variability. In: P. Balabanis, Peter, D., Ghazi, A., Tsogas, M. (Editor), *Mediterranean desertification research results and policy implications*. Proceedings of the International Conference. European Commission, Crete, Greece, pp. 121-128.
- Corte-Real, J., Qian, B. and Xu, H., 1999a: Circulation patterns, daily precipitation in Portugal and implications for climate change simulated by the second Hadley Centre GCM. *Climate Dynamics*, 15(12): 921-935.
- Corte-Real, J., Qian, B.D. and Xu, H., 1998a: Regional climate change in Portugal: Precipitation variability associated with large-scale atmospheric circulation. *International Journal of Climatology*, 18(6): 619-635.
- Corte-Real, J., Sorani, R. and Conte, M., 1998b: Climate change. In: P. Mairota, J.B. Thornes and N. Geeson (Editors), *Atlas of Mediterranean environments in Europe: The desertification context*. John Wiley & Sons, Chichester.
- Corte-Real, J., Xu, H. and Qian, B.D., 1999b: A weather generator for obtaining daily precipitation scenarios based on circulation patterns. *Climate Research*, 13(1):

- 61-75.
- Corte-Real, J., Zhang, X.B. and Wang, X.L., 1995: Large-scale circulation regimes and surface climatic anomalies over the Mediterranean. *International Journal of Climatology*, 15(10): 1135-1150.
- Cover, T., 1965: Geometrical and statistical properties of systems of linear inequalities with applications in pattern recognitions. *IEEE Transactions on Electron. Comput.*, 14: 326-334.
- Crowley, C. and Joutz, F.L., 2005: Weather effects on electricity loads: Modelling and forecasting, UESPA.
- Cundari, V., Colombo, T. and Ciattaglia, L., 1995: Thirteen years of atmospheric carbon dioxide measurements at Mt. Cimone Station, Italy. *Il Nuovo Cimento*, 18C: 33-47.
- Dai, A., Trenberth, K.E. and Karl, T.R., 1998: Global variations in droughts and wet spells: 1900-1995. *Geophysical Research Letters*, 25(17): 3367-3370.
- DEFRA, 2005: A vision for the Common Agricultural Policy, HM Treasury, London.
- Del Trono, F., 1965: Tipi di circolazione media stagionale e loro fisionomia fenomenica sull'Italia. *Ricerca Scientifica*, 35: 331-334.
- Delitala, A.M.S., Cesari, D., Chessa, P.A. and Ward, M.N., 2000: Precipitation over Sardinia (Italy) during the 1946-1993 rainy seasons and associated large-scale climate variations. *International Journal of Climatology*, 20(5): 519-541.
- Delrieu, G., Ducrocq, V., Gaume, E., Nicol, J., Payrastre, O., Yates, E., Kirstetter, P. E., Andrieu, H., Ayrat, P. A., Bouvier, C., Creutin, J. D., Livet, M., Anquetin, S., Lang, M., Neppel, L., Obled, C., Parent-du-Chatelet, J., Saulnier, G. M., Walpersdorf, A., Wobrock, W., 2005: The catastrophic flash-flood event of 8-9 September 2002 in the Gard region, France: A first case study for the Cevennes-Vivarais Mediterranean Hydrometeorological Observatory. *Journal of Hydrometeorology*, 6(1): 34-52.
- Deser, C. and Wallace, J.M., 1987: El-Nino events and their relation to the Southern Oscillation - 1925-1986. *Journal of Geophysical Research-Oceans*, 92(C13): 14189-14196.
- Diaz, J., Jordan, A., Garcia, R., Lopez, C., Alberdi, J., Hernandez, E. and Otero, A., 2002: Heat waves in Madrid 1986-1997: effects on the health of the elderly. *International Archives of Occupational and Environmental Health*(75): 163-170.
- Douguédroit, A., 1980: Les topoclimats de la Haute-Vésubie (Alpes-Maritimes, France). *Méditerranée*, 4: 3-11.
- Dunkeloh, A. and Jacobeit, J., 2003: Circulation dynamics of Mediterranean precipitation variability 1948-98. *International Journal of Climatology*, 23(15): 1843-1866.
- Easterling, D.R., Horton, B., Jones, P. D., Peterson, T. C., Karl, T. R., Parker, D. E., Salinger, M. J., Razuvayev, V., Plummer, N., Jamason, P., Folland, C. K., 1997: Maximum and minimum temperature trends for the globe. *Science*, 277(5324): 364-367.
- Easterling, D.R., Meehl, G.A., Parmesan, C., Changnon, S.A., Karl, T.R. and Mearns, L.O., 2000: Climate extremes: Observations, modeling, and impacts. *Science*, 289(5487): 2068-2074.
- Ebi, K.L., Burton, I. and Menne, B., 2006: Policy implications for climate change-related health risks. In: B. Menne and K.L. Ebi (Editors), *Climate change and adaptation strategies for human health*. World Health Organisation.
- EEA, 2004: Impacts of Europe's changing climate. An indicator based assessment. 2, European Environment Agency.

- Efron, B., 1983: Estimating the error rate of a prediction rule: Improvement on cross-validation. *Journal of the American Statistical Association*, 78: 316-331.
- Egger, J., Alpert, P., Tafferner, A. and Ziv, B., 1995: Numerical experiments on the genesis of Sharav cyclones: Idealised simulations. *Tellus Series a-Dynamic Meteorology and Oceanography*, 47: 162-174.
- Egozcue, J.J. and Ramis, C., 2001: Bayesian hazard analysis of heavy precipitation in eastern Spain. *International Journal of Climatology*, 21(10): 1263-1279.
- EM-DAT, 2006: The OFDA/CRED international disaster database. Universite Catholique de Louvain, Brussels.
- Encyclopaedia Britannica, 2006: Encyclopaedia Britannica Premium Service.
- Enfield, D.B. and Mayer, D.A., 1997: Tropical Atlantic sea surface temperature variability and its relation to El Nino Southern Oscillation. *Journal of Geophysical Research-Oceans*, 102(C1): 929-945.
- Eshel, G. and Farrell, B.F., 2000: Mechanisms of eastern Mediterranean rainfall variability. *Journal of the Atmospheric Sciences*, 57(19): 3219-3232.
- Esteban, P., Jones, P.D., Martin-Vide, J. and Mases, M., 2005: Atmospheric circulation patterns related to heavy snowfall days in Andorra, Pyrenees. *International Journal of Climatology*, 25(3): 319-329.
- Esteban-Parra, M.J., Rodrigo, F.S. and Castro-Diez, Y., 1998: Spatial and temporal patterns of precipitation in Spain for the period 1880-1992. *International Journal of Climatology*, 18(14): 1557-1574.
- Estrela, M.J., Penarrocha, D. and Millan, M., 2000: Multi-annual drought episodes in the Mediterranean (Valencia region) from 1950-1996. A spatio-temporal analysis. *International Journal of Climatology*, 20(13): 1599-1618.
- Eurostat, 2006a: Structural and Euro indicators data.
- Eurostat, 2006b: European regional and urban statistics, European Commission, Luxembourg.
- Fankhauser, S., 1995: Valuing climate change. Earthscan, London.
- Fantechi, R., Peter, D., Balabanis, P. and Rubio, J.L. (Editors), 1995: Desertification in a European context: Physical and socio-economic aspects. European Commission, Brussels.
- FAO, 2004: Food and Agriculture Organisation FAOSTAT data.
- Faunt, J.D., Wilkinson, T.J., Aplin, P., Henscke, P., Webb, M. and Penhall, R.K., 1995: The effete in the heat: heta related hospital presentations during a ten day heatwave. *Australian and New Zealand journal of medicine*, 25: 117-121.
- Favero, C.A., Marcellino, M. and Neglia, F., 2005: Principal components at work: the empirical analysis of monetary policy with large data sets. *Journal of Applied Econometrics*, 20: 603-620.
- Feinberg, E.A. and Genethliou, D., 2005: Load Forecasting. In: J.H. Chow, F.F. Wu and J.J. Momoh (Editors), *Applied MAThematics for restructured electric power systems: Optimization, control, and computational analysis*. Springer.
- Flocas, H.J. and Karacostas, T.S., 1996: Cyclogenesis over the Aegean Sea: Identification and synoptic categories. *Meteorological Applications*, 3: 53-61.
- Folland, C.K., Karl, T.R., Vinnikov, K.Y.A. and Parker, D.E., 1990: Observed climate variations and change. In: J.T. Houghton, G.J. Jenkins and J.J. Ephraums (Editors), *Climate change. The IPCC scientific assessment*. Cambridge University Press, Cambridge.
- Fomby, T.B., Carter Hill, R. and Johnson, S.R., 1984: *Advanced econometric methods*. Springer-Verlag.
- Font Tullot, I., 1983: *Climatologia de Espana y Portugal*. Apartado 285, 28071, Instituto



- Nacional de Meteorología, Madrid.
- Fotiadi, A.K., Metaxas, D.A. and Bartzokas, A., 1999: A statistical study of precipitation in northwest Greece. *International Journal of Climatology*, 19(11): 1221-1232.
- Fowler, A., 2005: Sea-level pressure composite mapping in dendroclimatology: advocacy and an *Agathis australis* (kauri) case study. *Climate Research*, 29: 73-84.
- Frakes, B. and Yarnal, B., 1997: A procedure for blending manual and correlation-based synoptic classifications. *International Journal of Climatology*, 17(13): 1381-1396.
- Frei, C. and Schar, C., 2001: Detection probability of trends in rare events: Theory and application to heavy precipitation in the Alpine region. *Journal of Climate*, 14(7): 1568-1584.
- Frich, P., Alexander, L.V., Della-Marta, P., Gleason, B., Haylock, M., Tank, A.M.G.K. and Peterson, T., 2002: Observed coherent changes in climatic extremes during the second half of the twentieth century. *Climate Research*, 19(3): 193-212.
- Furlan, D., 1977: The climate of south east Europe. In: C.C. Wallen (Editor), *Climates of central and southern Europe*. World survey of climatology. Elsevier Publishing Company, Amsterdam/Oxford/New York.
- Gacic, M., Hopkins, T.S. and Lascaratos, A., 1992: Aspects of the response of the Mediterranean Sea to long term trends in atmospheric forcing. In: L. Jetric, J.D. Milliman and G. Sestini (Editors), *Climatic change and the Mediterranean*. Edward Arnold, London.
- Galeotti, M., Gorla, A., Mombrini, P. and Spantidaki, E., 2004: Weather impacts on natural, social and economic systems (WISE) Part 1: Sectoral analysis of climate impacts in Italy, Fondazione Eni Enrico Mattei.
- Garcia-Herrera, R., Paredes, D., Trigo, R.M., Trigo, I.F., Hernandez, E., Barriopedro, D. and Mendes, M.A., 2006: The outstanding 2004-2005 drought in the Iberian Peninsula: Impacts and associated atmospheric circulation. *Journal of hydrometeorology*, in press.
- Gardner, M.W. and Dorling, S.R., 1998: Artificial Neural Networks (the multilayer perceptron) - a review of applications in the atmospheric sciences. *Atmospheric Environment*, 32: 2627-2636.
- Geeson, N., Brandt, C.J. and Thornes, J.B. (Editors), 2002: *Mediterranean desertification: a mosaic of processes and responses*. Wiley, Chichester.
- Giannakopoulos, C., Bindi, M., Moriondo, M., LeSager, P. and Tin, T., 2005a: Climate change impacts in the Mediterranean resulting from a 2C global temperature rise, WWF.
- Giannakopoulos, C. and Psiloglou, B.E., 2005: Trends in energy load demand for Athens, Greece: Weather and non-weather related factors. submitted to *Climate Research*.
- Giannakopoulos, C., Psiloglou, B.E. and Majithia, S., 2005b: Weather and non-weather related factors affecting energy load demand: a comparison of the two cases of Greece and England. *Geophysical Research Abstracts*, 7(06969).
- Giles, B.D. and Balafoutis, C.J., 1990: The Greek heat-waves of 1987 and 1988. *International Journal of Climatology*, 10(5): 505-517.
- Gitay, H., Brown, S., Easterling, W., Jallow, B., Antle, J., Apps, M., Beamish, R., Chapin, T., Cramer, W., Frangi, J., Laine, J., Erda, L., Magnuson, J., Noble, I., Price, J., Prowse, T., Root, T., Schulze, E., Sirotenko, O., Sohngen, B., Soussana, J., Bugmann, H., Egorov, C., Finlayson, M., Fleming, R., Fraser, W.,

- Hahn, L., Hall, K., Howden, M., Hutchins, M., Ingram, J., Hui, J., Masters, G., Megonigal, P., Morgan, J., Myers, N., Neilson, R., Page, S., Parmesan, C., Reilly, J., Roulet, N., Takle, G., van Minnen, J., Williams, D., Williamson, T., Wilson, K., 2001: Ecosystems and their goods and services, *Climate Change 2001: Impacts, Adaptation, and Vulnerability*.
- Glass, R.T. and Zack, M.M.J., 1979: Increase in deaths from ischemic heart disease after blizzards. *Lancet*, 8114(1): 485-487.
- Golub, G.H. and Van Loan, C.F., 1996: *Matrix computations*. The Johns Hopkins University Press, Baltimore.
- Gonzalez-Hidalgo, J.C., De Luis, M., Raventos, J. and Sanchez, J.R., 2001: Spatial distribution of seasonal rainfall trends in a western Mediterranean area. *International Journal of Climatology*, 21(7): 843-860.
- González-Rouco, J.F., Luis Jiménez, J., Quesada, V., Valero, F., 2001: Quality control and homogeneity of precipitation data in the southwest of Europe. *Journal of Climate*, 14: 964-978.
- Goodess, C.M., 2000: The construction of daily rainfall scenarios for Mediterranean sites using a circulation-type approach to downscaling, University of East Anglia, Norwich.
- Goodess, C.M., Anagnostopoulou, C., Bardossy, A., Frei, C., Harpham, C., Haylock, M.R., Hundecha, Y., Maheras, P., Ribalaygua, J., Schmidli, J., Schmith, T., Tolika, K., Tomozeiu, R., Wilby, R.L., 2006: An intercomparison of statistical downscaling methods for Europe and European regions- assessing their performance with respect to extreme weather events and the implications for climate change applications. In press.
- Goodess, C.M. and Jones, P.D., 2002: Links between circulation and changes in the characteristics of Iberian rainfall. *International Journal of Climatology*, 22(13): 1593-1615.
- Goodess, C.M. and Palutikof, J.P., 1998: Development of daily rainfall scenarios for southeast Spain using a circulation-type approach to downscaling. *International Journal of Climatology*, 18(10): 1051-1083.
- Goosens, C., 1985: Principal component analysis of Mediterranean rainfall. *Journal of Climatology*, 5: 379-388.
- Goosens, C., 1986: Regionalisation of the Mediterranean climate. *Theoretical and Applied Climatology*, 37(1): 74-83.
- Goria, A., 1999: Impacts of climate change on mitigation in the Mediterranean basin: environmental dimension of South-North migration and directions for future policies, *Impacts of Climate Change on the Mediterranean Area: Regional Scenarios and Vulnerability Assessment*, Venice, Italy.
- Griffiths, J.F., 1972: *Climates of Africa*. World Survey of Climatology, 10. Elsevier Publishing Company, Amsterdam/London/New York.
- Groves, D.G. and Hunt, L.M., 1980: *Ocean world encyclopedia*. McGraw Hill Book Company, New York.
- Guerrieri, L., 2002: Adaptation strategies for improved flood management in the Mediterranean, *Water, Wetlands, and Climate Change: Building Linkages for their Integrated Management*. Mediterranean Regional Roundtable, Athens, Greece.
- Guiot, J., 1985: The extrapolation of recent climatological series with spectral regression. *Journal of Climatology*, 5: 325-335.
- Gujarati, D.N., 2003: *Basic econometrics*. McGraw-Hill, New York.
- Guttman, N.B., Wallis, J.R., Hosking, J.R.M., 1992: Spatial comparability of the Palmer

- Drought Severity Index. *Water Resources Bulletin*, 28: 1111-1119.
- Guttman, N.B., 1997: Comparing the Palmer Drought Index and the Standardized Precipitation Index. *Journal of the American Water Resources Association*, 34: 113-121.
- Guttman, N.B., 1998: Comparing the Palmer Drought Severity Index and Palmer's Z-Index to their calibration coefficients including potential evapotranspiration. *Journal of Climate and Applied Meteorology*, 25: 77-86.
- Hamilton, J.M., Maddison, D.J. and Tol, R.S.J., 2005: Effects of climate change on international tourism. *Climate research*, 29: 245-254.
- Harpham, C., 2005: Development of a novel radial basis function network using genetic algorithms, University of Derby.
- Harpham, C. and Wilby, R.L., 2005: Multi-site downscaling of heavy daily precipitation occurrence and amounts. *Journal of Hydrology*, 312: 235-255.
- Harrison, P.A. and Butterfield, R.E., 2000: Modelling climate change impacts on wheat, potato, and grapevine in Europe. In: T.E. Downing, P.A. Harrison, R.E. Butterfield and K.G. Lonsdale (Editors), *Climate change, climate variability, and agriculture in Europe: An integrated assessment*. Research Report No. 21. Environmental Change Unit, University of Oxford.
- Harrison, P.A., Butterfield, R.E. and Gawith, M.J., 1995: Effects on winter wheat, sunflower, onion, and grassland in Europe. In: P.A. Harrison, R.E. Butterfield and T.E. Downing (Editors), *Climate change and agriculture in Europe: Assessment of Impacts and Adaptations*. Research Report No. 9. Environmental Change Unit, University of Oxford.
- Havenith, G., 2001: Individualised model of human thermoregulation for the simulation of heat stress response. *Journal of Applied Physiology*, 90: 1943-1954.
- Hayden, B.P. and Smith, W., 1982: Season-to-season cyclone frequency prediction. *Monthly Weather Review*, 110: 239.
- Haykin, S., 1999: *Neural networks: A comprehensive foundation*. Prentice Hall, New Jersey.
- Haylock, M., 2004: STARDEX diagnostic extremes indices software- user information.
- Haylock, M., Cawley, G.C., Harpham, C., Wilby, R.L. and Goodess, C.M., 2006: Downscaling heavy precipitation over the united kingdom: a comparison of dynamical and statistical methods and their future scenarios. *International Journal of Climatology*, 26: 1397-1415.
- Haylock, M. and Nicholls, N., 2000: Trends in extreme rainfall indices for an updated high quality data set for Australia, 1910-1998. *International Journal of Climatology*, 20(13): 1533-1541.
- Haylock, M.R. and Goodess, C.M., 2004: Interannual variability of european extreme winter rainfall and links with mean large-scale circulation. *International Journal of Climatology*, 24(6): 759-776.
- Healy, J.D., 2003: Excess winter mortality in Europe: a cross country analysis identifying key risk factors. *Journal of Epidemiology and Community Health*, 57: 784-789.
- Heddinghaus, T.R., Sabol, P., 1991: A review of the Palmer Drought Severity Index and where do we go from here?, 7th Conference on Applied Climatology. American Meteorological Society, Boston, MA, pp. 242-246.
- Heino, R., Brazdil, R. and Forland, E., 1999: Progress in the study of climatic extremes in northern and central Europe. In: T.R. Karl, N. Nicholls and A. Ghazi (Editors), *Weather and climate extremes: Changes, variations and a perspective from the insurance industry*. Kluwer Academic, Dordrecht/Boston/London.

- Hess, P. and Brezowsky, H., 1969: Neu bearbeitete und ergantze auflage, des Deutschen Wetterdienst.
- Hess, P. and Brezowsky, H. 1977: Katalog der Großwetterlagen Europas 1881–1976, Berichte des Deutschen Wetterdienstes, 113. Offenbach a. Main.
- Hewitson, B.C. and Crane, R.G., 1992: Large-scale atmospheric controls on local precipitation in tropical Mexico. *Geophysical Research Letters*, 19: 1835-1838.
- Hewitson, B.C. and Crane, R.G., 1996: Climate downscaling: techniques and application. *Climate Research*, 7: 85-95.
- Hoinka, K.P. and De Castro, M., 2003: The Iberian peninsula thermal low. *Quarterly Journal of the Royal Meteorological Society*, 129(590): 1491-1511.
- Homar, V., Romero, R., Stensrud, D.J., Ramis, C. and Alonso, S., 2003: Numerical diagnosis of a small, quasi-tropical cyclone over the western Mediterranean: Dynamical vs. boundary factors. *Quarterly Journal of the Royal Meteorological Society*, 129(590): 1469-1490.
- Horel, J.D., 1981: A rotated principal component analysis of the interannual variability of the northern hemisphere 500 mb height field. *Monthly Weather Review*, 109(4): 2080-2092.
- Horton, E.B., Follan, C.K., Parker, D.E., 2001: The changing incidence of extremes in worldwide and Central England temperatures to the end of the twentieth century. *Climate Change*, 50: 267-295.
- Huet, P., Martin, X., Prime, J.L., Foinj, P., Laurain, C., Cannard, P., 2003: Retour d'experience des crues de septembre 2002 dans les departements du Gard, de l'Herault, du Vaucluse, des Bouches du Rhone, de l'Ardeche et de la Drome (Post-flood investigation on the 8-9 September flood in the Gard, Herault, Vaucluse, Bouches-du-Rhone, Ardeche and Drome departments, Ministere de l'Ecologie et du Developement Durable, Republique Francaise.
- Hulme, M., Mitchell, J., Ingram, J., Lowe, J., Johns, T., New, M. and Viner, D., 1999: Climate change scenarios for global impacts studies. *Global environmental change*, 9: S3-S19.
- Hunt, B.G., 2004: The stationarity of global mean climate. *International Journal of Climatology*, 24: 795-806.
- Hurrell, J.W., 1995: Decadal trends in the North-Atlantic Oscillation - regional temperatures and precipitation. *Science*, 269(5224): 676-679.
- Hurrell, J.W. and VanLoon, H., 1997: Decadal variations in climate associated with the north Atlantic oscillation. *Climatic Change*, 36(3-4): 301-326.
- Huynen, M., Martens, P., Schram, D., Weijenberg, M.P. and Kunst, A.E., 2001: The impact of heat waves and cold spells on mortality rates in the dutch population. *Environmental health perspectives*, 109: 463-470.
- Iglesias, E., Garrido, A. and Gómez-Ramos, A., 2003: Evaluation of drought management in irrigated areas. *Agricultural economics*, 29: 211-229.
- IPCC, 1995: Climate change 1995: The science of climate change. Contribution of Working Group 1 to the second assessment report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
- IPCC, 2001: Climate change 2001: The scientific basis. Contribution of working group 1 to the third assessment report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
- James, I.N., 1995: Introduction to circulating atmospheres. Cambridge University press, Cambridge.
- Jansa, A., Genoves, A., Campins, J. and Picornell, M.A., 1995: Mediterranean cyclones and Alpine heavy-rain flood events. *MAP Newsletter*, 3: 35-37.

- Jansa, A., Genoves, A., Picornell, M.A., Campins, J., Riosalido, R. and Carretero, O., 2001: Western Mediterranean cyclones and heavy rain. Part 2: Statistical approach. *Meteorological Applications*, 8(1): 43-56.
- Jansa, A., Genoves, A., Riosalido, R. and Carretero, O., 1996: Mesoscale cyclones vs. heavy rain and MCS in the Western Mediterranean. *MAP Newsletter*, 5: 24-25.
- Jáuregui, E., Nwafor, J., Satterthwaite, D., Wanasignhe, Y.A.D.S., Willbanks, T., Yoshino, M. and Kelkar, U., 2001: Human settlements, energy, and industry. In: L. Mortsch and J. Skea (Editors), *IPCC Third Assessment Report*, working group 2.
- Jessamy, V., 2003: An integrated framework for natural hazard mitigation and development planning in the Eastern Caribbean, University of East Anglia, Norwich.
- Johnston, J., 1972: *Econometric methods*. McGraw-Hill, New York.
- Jolliffe, I.T., 1990: *Principal component analysis: a beginners's guide. I Introduction and applications*. *Weather*, 45: 375-382.
- Jones, P.D., Horton, E.B., Folland, C.K., Hulme, M., Parker, D.E. and Basnett, T.A., 1999a: The use of indices to identify changes in climatic extremes. *Climatic Change*, 42(1): 131-149.
- Jones, P.D., Hulme, M. and Briffa, K.R., 1993: A comparison of Lamb circulation types with an objective classification derived from grid-point mean sea-level pressure data. *International Journal of Climatology*, 13: 655-663.
- Jones, P.D., Jonsson, T. and Wheeler, D., 1997: Extension to the North Atlantic Oscillation using early instrumental pressure observations from Gibraltar and south west Iceland. *International Journal of Climatology*, 17: 1433-1450.
- Jones, P.D. and Mann, M.E., 2004: Climate over past millenia. *Reviews of Geophysics*, 42(2003RG000143).
- Jones, P.D. and Moberg, A., 2003: Hemispheric and large-scale surface air temperature variations: An extensive revision and an update to 2001. *Journal of Climate*, 16(2): 206-223.
- Jones, P.D., New, M., Parker, D.E., Martin, S. and Rigor, I.G., 1999b: Surface air temperature and its changes over the past 150 years. *Reviews of Geophysics*, 37(2): 173-199.
- Jones, P.D. and Salmon, M., 2005: Preliminary reconstructions of the north atlantic oscillation and the southern oscillation index from measures of wind strength and direction taken during the CLIWOC period. *Climatic change*, 73: 131-154.
- Jones, P.D., Wigley, T.M.L. and Briffa, K.R., 1987: Monthly mean pressure reconstructions for Europe (back to 1780) and North America (to 1858), United States Department of Energy, Washington, D.C.
- Kadioglu, M., Sen, Z. and Gultekin, L., 2001: Variations and trends in Turkish seasonal heating and cooling degree-days. *Climatic Change*, 49: 209-223.
- Kadioglu, M., Tulunay, Y. and Borhan, Y., 1999: Variability of Turkish precipitation compared to El Nino events. *Geophysical Research Letters*, 26(11): 1597-1600.
- Kalkstein, L.S. and Davis, R.E., 1989: Weather and human mortality: An evaluation of demographic and interregional responses in the United States. *Annals of the Association of American Geographers*, 79: 44-64.
- Kalkstein, L.S. and Greene, J.S., 1997: An evaluation of climate/mortality relationships in large U.S. cities and the possible impacts of a climate change. *Environmental health perspectives*, 105: 84-93.
- Kallos, G., Kassomenos, P. and Pielke, R.A., 1993: Synoptic and mesoscale weather conditions during air pollution episodes in Athens, Greece. *Boundary-Layer*

- Meteorology, 62: 163-184.
- Kalnay, E., Kanamitsu, M., Kistler, R., Collins, W., Deaven, D., Gandin, L., Iredell, M., Saha, S., White, G., Woollen, J., Zhu, Y., Chelliah, M., Ebisuzaki, W., Higgins, W., Janowiak, J., Mo, K. C., Ropelewski, C., Wang, J., Leetmaa, A., Reynolds, R., Jenne, R., Joseph, D., 1996: The NCEP/NCAR 40-year reanalysis project. *Bulletin of the American Meteorological Society*, 77(3): 437-471.
- Karabork, M.C. and Kahya, E., 2003: The teleconnections between the extreme phases of the southern oscillation and precipitation patterns over Turkey. *International Journal of Climatology*, 23(13): 1607-1625.
- Karaca, M., Deniz, A. and Tayanc, M., 2000: Cyclone track variability over Turkey in association with regional climate. *International Journal of Climatology*, 20: 1225-1236.
- Karacostas, T.S., Flocas, A., Flocas, E., Kakagliagou, O. and Rizou, C., 1992: On the study of the synoptic situations over the area of the eastern Mediterranean, 1st Panellenic conference of meteorology and climatology, Thessaloniki.
- Karalis, J., 1969: Weather types in the Greek region, University of Athens, Athens, Greece, 82pp pp.
- Karavitis, C.A., 1998: Drought and urban water supplies: the case of metropolitan Athens. *Water Policy*, 1(5): 505-534.
- Karcher, M., Gerdes, R., Kauker, F., Koberle, C. and Yashayaev, I., 2005: Arctic Ocean change heralds North Atlantic freshening. *Geophysical Research Letters*, 32(L21606): doi:10.1029/2005GL023861.
- Karl, T.R., Nicholls, N, Ghazi, A., 1999: CLIVAR/GCOS/WMO workshop on indices and indicators for climate extremes. Workshop summary. *Climate Change*, 42: 3-7.
- Karl, T.R. and Easterling, D.R., 1999: Climate extremes: Selected review and future research directions. *Climatic Change*, 42: 309-325.
- Karl, T.R., Jones, P. D., Knight, R. W., Kukla, G., Plummer, N., Razuvayev, V., Gallo, K. P., Lindsey, J., Charlson, R. J., Peterson, T. C., 1993: A new perspective on recent global warming - asymmetric trends of daily maximum and minimum temperature. *Bulletin of the American Meteorological Society*, 74(6): 1007-1023.
- Karl, T.R. and Knight, R.W., 1998: Secular trends of precipitation amount, frequency, and intensity in the United States. *Bulletin of the American Meteorological Society*, 79(2): 231-241.
- Karl, T.R., Knight, R.W. and Baker, B., 2000: The record breaking global temperatures of 1997 and 1998: Evidence for an increase in the rate of global warming? *Geophysical Research Letters*, 27(5): 719-722.
- Karl, T.R., Knight, R.W. and Plummer, N., 1995: Trends in high-frequency climate variability in the 20th-century. *Nature*, 377(6546): 217-220.
- Karl, T.R., Kukla, G., Razuvayev, V.N., Changery, M.J., Quayle, R.G., Heim, R.R., Easterling, D.R. and Fu, C.B., 1991: Global warming - evidence for asymmetric diurnal temperature-change. *Geophysical Research Letters*, 18(12): 2253-2256.
- Kassomenos, P.A., Sindosi, O.A. and Lolis, C.J., 2003: Seasonal variation of the circulation types occurring over southern Greece: a 50 yr study. *Climate Research*, 24(1): 33-46.
- Katsoulis, B.D., Kambetzidis, H.D., 1988: Analysis of the long term precipitation series at Athens, Greece. *Climatic Change*, 14: 263-290.
- Katsouyanni, K., Trichopoulos, D., Zavitsanos, X. and Toulomi, G., 1988: The 1987 Athens heat wave [letter]. *Lancet*, ii: 573.

- Katz, R.W., 1999: Extreme value theory for precipitation: sensitivity analysis for climate change. *Advances in Water Resources*, 23(2): 133-139.
- Katz, R.W. and Acero, J.G., 1994: Sensitivity analysis of extreme precipitation events. *International Journal of Climatology*, 14(9): 985-999.
- Katz, R.W. and Brown, B.G., 1992: Extreme events in a changing climate - variability Is more important than averages. *Climatic Change*, 21(3): 289-302.
- Katz, R.W. and Brown, B.G., 1994: Sensitivity of extreme events to climate-change - the case of autocorrelated time-series. *Environmetrics*, 5(4): 451-462.
- Katz, R.W. and Zheng, X., 1996: Mixture model for overdispersion of precipitation. *Journal of Climate*, 12: 2528-2537.
- Kennedy, P., 2003: *A guide to econometrics*. MIT press.
- Key, J.R. and Chan, A.C.K., 1999: Multidecadal global and regional trends in 1000 mb and 500 mb cyclone frequencies. *Geophysical Research Letters*, 26(14): 2053-2056.
- Kimball, B.A., Mauney, F.S., Nakayama, F.S. and Idso, S.B., 1993: Effects of elevated CO<sub>2</sub> and climate variables on plants. *Journal of soil water conservation*, 48: 9-14.
- Kistler, R., Kalnay, E., Collins, W., Saha, S., White, G., Woollen, J., Chelliah, M., Ebisuzaki, W., Kanamitsu, M., Kousky, V., van den Dool, H., Jenne, R., Fiorino, M., 2001: The NCEP-NCAR 50-year reanalysis: Monthly means CD-ROM and documentation. *Bulletin of the American Meteorological Society*, 82(2): 247-267.
- Klein Tank, A.M.G., J. B. Wijngaard, G. P. Können, R. Böhm, G. Demarée, A. Gocheva, M. Mileta, S. Pashiardis, L. Hejkrlik, C. Kern-Hansen, R. Heino, P. Bessemoulin, G. Müller-Westermeier, M. Tzanakou, S. Szalai, T. Pálsdóttir, D. Fitzgerald, S. Rubin, M. Capaldo, M. Maugeri, A. Leitass, A. Bukantis, R. Aberfeld, A. F. V. van Engelen, E. Forland, M. Miletus, F. Coelho, C. Mares, V. Razuvaev, E. Nieplova, T. Cegnar, J. Antonio López, B. Dahlström, A. Moberg, W. Kirchhofer, A. Ceylan, O. Pachaliuk, L. V. Alexander, P. Petrovic, 2002: Daily dataset of 20th-century surface air temperature and precipitation series for the European Climate Assessment. *International Journal of Climatology*, 22: 1441-1453.
- Klein Tank, A.M.G., G. P. Können, 2003: Trends in indices of daily temperature and precipitation extremes in Europe, 1946-99. *Journal of Climate*, 16: 3665-3680.
- Klein Tank, A.M.G. and Konnen, G.P., 2003: Trends in indices of daily temperature and precipitation extremes in Europe, 1946-99. *Journal of Climate*, 16(22): 3665-3680.
- Knippertz, P., Ulbrich, U., Marques, F. and Corte-Real, J., 2003: Decadal changes in the link between El Nino and springtime North Atlantic oscillation and European-North African rainfall. *International Journal of Climatology*, 23(11): 1293-1311.
- Knowles, S., 2005: Inequality and economic growth: The empirical relationship reconsidered in the light of comparable data. *The Journal of Development Studies*, 41: 135-159.
- Koppe, C., Kovats, S. and Jendritzky, G., 2004: *Heat-waves: Risks and responses*. 2, World Health Organisation, Copenhagen.
- Köppen, W., 1931: *Grundriss der klimakunde*. De Gruyter, Berlin.
- Köppen, W. and Geiger, W., 1936: *Handbuch der klimatologie*, 1. Borntrager, Berlin.
- Kostopoulou, E., 2003: *The relationships between atmospheric circulation patterns and surface climatic elements in the eastern Mediterranean*, University of East Anglia, Norwich.

- Kostrowicki, J., 1991: Trends in the transformation of European agriculture. In: F.M. Brower, A.J. Thomas and M.J. Chadwick (Editors), *Land use changes in Europe*. The GeoJournal Library. Kluwer Academic Publishers, Dordrecht.
- Kotz, S., and Johnson, N.L. (Editor), 1983: *Icing the tails - limit theorems*. Encyclopedia of Statistical Sciences, 4. Wiley Interscience.
- Kovats, R.S. and Jendritzky, G., 2006: Heat waves and human health. In: B. Menne and K.L. Ebi (Editors), *Climate change and adaptation strategies for human health*. World Health Organisation.
- Kovats, S., Ebi, K.L., Menne, B., Lendrum, D.C., Canziana, O.F., Kuhn, K., Sueur, D.L., Martens, P., McMichael, A.J., Moreno, A.R., Patz, J., Riedel, D., Scheraga, J., Seymour, E., Sharpe, M., Street, R., 2003: *Methods of assessing human health vulnerability and public health adaptation to climate change*, WMO and UNEP, Copenhagen.
- Krichak, S.O., Tsidulko, M. and Alpert, P., 2000: Monthly synoptic patterns associated with wet/dry conditions in the Eastern Mediterranean. *Theoretical and Applied Climatology*, 65(3-4): 215-229.
- Kundzewicz, Z.W. et al., 2001: Europe. In: M.J. de Seixas and S. Kellomäki (Editors), *Climate Change 2001: Impacts, Adaptation and Vulnerability*.
- Kunkel, K., Andsager, K. and Easterling, DR, 1999a: Long-term trends in extreme precipitation over continuous United states and Canada. *Journal of Climate*, 12: 2515-2527.
- Kunkel, K.E., Pielke, R.A. and Changnon, S.A., 1999b: Temporal fluctuations in weather and climate extremes that cause economic and human health impacts: A review. *Bulletin of the American Meteorological Society*, 80(6): 1077-1098.
- Kunst, A.E., Looman, C.W. and Mackenbach, J.P., 1993: Outdoor air temperature and mortality in the Netherlands: a time series analysis. *American Journal of Epidemiology*, 137: 331-341.
- Kutiel, H., 1985: The multimodality of the rainfall course in Israel as reflected by the distribution of dry spells. *Archives for meteorology, geophysics, and bioclimatology, Series B*, 36: 15-27.
- Kutiel, H. and Benaroch, Y., 2002: North Sea-Caspian Pattern (NCP) - an upper level atmospheric teleconnection affecting the Eastern Mediterranean: Identification and definition. *Theoretical and Applied Climatology*, 71(1-2): 17-28.
- Kutiel, H. and Kay, P.A., 1992: Recent variations in 700 Hpa geopotential heights in summer over Europe and the Middle-East, and their influence on other meteorological factors. *Theoretical and Applied Climatology*, 46(2-3): 99-108.
- Kutiel, H. and Maheras, P., 1998: Variations in the temperature regime across the Mediterranean during the last century and their relationship with circulation indices. *Theoretical and Applied Climatology*, 61(1-2): 39-53.
- Kutiel, H., Maheras, P. and Guika, S., 1996a: Circulation indices over the Mediterranean and Europe and their relationship with rainfall conditions across the Mediterranean. *Theoretical and Applied Climatology*, 54(3-4): 125-138.
- Kutiel, H., Maheras, P. and Guika, S., 1996b: Circulation and extreme rainfall conditions in the eastern Mediterranean during the last century. *International Journal of Climatology*, 16(1): 73-92.
- Kutiel, H., Maheras, P., Turkes, M. and Paz, S., 2002: North Sea Caspian Pattern (NCP) - an upper level atmospheric teleconnection affecting the eastern Mediterranean - implications on the regional climate. *Theoretical and Applied Climatology*, 72(3-4): 173-192.
- Kutiel, H. and Paz, S., 1998: Sea level pressure departures in the Mediterranean and



- their relationship with monthly rainfall conditions in Israel. *Theoretical and Applied Climatology*, 60(1-4): 93-109.
- Kysely, J., 2002: Temporal fluctuations in heat waves at Prague-Klementinum, the Czech Republic, from 1901-97, and their relationships to atmospheric circulation. *International Journal of Climatology*, 22(1): 33-50.
- Lagouvardos, K., Kotroni, V., Dobricic, S., Nickovic, S. and Kallos, G., 1996: The storm of October 21-22, 1994, over Greece: Observations and model results. *Journal of Geophysical Research-Atmospheres*, 101(D21): 26217-26226.
- Lagouvardos, K., Kotroni, V. and Kallos, G., 1998: An extreme cold surge over the Greek peninsula. *Quarterly Journal of the Royal Meteorological Society*, 124(551): 2299-2327.
- Lamb, H.H., 1972: British Isles weather types and a register of the daily sequence of circulation patterns, 1861-1971. *Met. Office Geophysical Memoirs*, 116.
- Lambert, S.J., 1995: The effect of enhanced greenhouse warming on winter cyclone frequencies and strengths. *Journal of Climate*, 8(5): 1447-1452.
- Lana, X., Martinez, M.D., Burgueno, A., Serra, C., Martin-Vide, J. and Gomez, L., 2006: Distributions of long dry spells in the Iberian peninsula, years 1951-1990. *International Journal of Climatology*, 26: 1999-2001.
- Lana, X., Serra, C. and Burgueno, A., 2001: Patterns of monthly rainfall shortage and excess in terms of the standardized precipitation index for Catalonia (NE Spain). *International Journal of Climatology*, 21(13): 1669-1691.
- Lau, N.C. and Nath, M.J., 2001: Impact of ENSO on SST variability in the North Pacific and North Atlantic: Seasonal dependence and role of extratropical sea-air coupling. *Journal of Climate*, 14(13): 2846-2866.
- Leathers, D.J. and Ellis, A.W., 1996: Synoptic mechanisms associated with snowfall increases to the Lee of Lakes Erie and Ontario. *International Journal of Climatology*, 16(10): 1117-1135.
- Levinson, D.H. and Waple, A.M., 2004: State of climate in 2003. *Bulletin of the American Meteorological Society*, 85(6): S1-S72.
- Light, W.A., 1992: Some aspects of radial basis function approximation. In: S.P. Singh (Editor), *Approximation theory, spline functions and applications*. Kluwer, Dordrecht, pp. 163-190.
- Lilljequist, R., Ligtenberg, H., 2005: Advice to the European Commission on reducing the risk from natural hazards- The role of geosciences, Brussels.
- Lindh, G., 1992: Hydrological and water resources impacts of climate change. In: L. Jeftic, J.D. Milliman and G. Sestini (Editors), *Climatic change and the Mediterranean*. UNEP.
- Lines Escardo, A., 1977: The climate of the Iberian peninsula. In: C.C. Wallen (Editor), *Climates of central and southern Europe*. World survey of climatology. Elsevier Publishing Company, Amsterdam/Oxford/New York.
- Lines Escardo, A., 1981: Perturbaciones típicas que afectan a la península Ibérica y precipitaciones asociadas, Spanish Meteorological Institute, Madrid, Spain.
- Lins, H.a.S., JR, 1999: Streamflow trends in the United States. *Geophysical Research Letters*, 26: 227-230.
- Liu, X.Q., Ang, B.W. and Goh, T.N., 1991: Forecasting of electricity consumption: a comparison between an econometric model and a neural network model, *IEEE International Joint Conference on Neural Networks*, Singapore, pp. 1254-1259.
- Llasat, M.C. and Puigcerver, M., 1994: Meteorological factors associated with floods in the north-eastern part of the Iberian Peninsula. *Natural Hazards*, 9(81-93).
- Llasat, M.D., Rigo, T. and Barriendos, M., 2003: The 'Montserrat-2000' flash-flood

- event: A comparison with the floods that have occurred in the northeastern Iberian Peninsula since the 14th century. *International Journal of Climatology*, 23(4): 453-469.
- Lloyd-Hughes, B. and Saunders, M.A., 2002: A drought climatology for Europe. *International Journal of Climatology*, 22(13): 1571-1592.
- Lolis, C.J., Bartzokas, A. and Katsoulis, B.D., 2002: Spatial and temporal 850 hPa air temperature and sea-surface temperature covariances in the Mediterranean region and their connection to atmospheric circulation. *International Journal of Climatology*, 22(6): 663-676.
- Lolis, C.J., Bartzokas, A. and Katsoulis, B.D., 2004: Relation between sensible and latent heat fluxes in the Mediterranean and precipitation in the Greek area during winter. *International Journal of Climatology*, 24(14): 1803-1816.
- Lorenz, E.N., 1956: Empirical orthogonal functions and statistical weather prediction, Statistical Report No. 1, Massachusetts Institute of Technology, Department of Meteorology, Cambridge, Massachusetts.
- Loukas, A. and Vasillades, L., 2004: Probabilistic analysis of drought spatiotemporal characteristics in Thessaly region, Greece. *Natural Hazards and Earth System Sciences*, 4: 7119-731.
- Lund, I.A., 1963: Map-pattern classification by statistical methods. *Bulletin of the American Meteorological Society*, 43(12): 673-&.
- López Muñoz', L., 1998: Grazalema (Cadiz). Un claro ejemplo de precipitación orográfica, Instituto Nacional de Meteorología, Madrid.
- Luterbacher, J., Dietrich, D., Xoplaki, E., Grosjean, M. and Wanner, H., 2004: European seasonal and annual temperature variability, trends and extremes since 1500. *Science*(303): 1499-1503.
- Maheras, P., 1979: *Climatology de la mer Egée et des ses marges continentales. Etude de climatology descriptive ét de climatology dynamique*, Université de Dijon, France, 665pp pp.
- Maheras, P., 1984: Weather-type classification by factor-analysis in the Thessaloniki area. *Journal of Climatology*, 4(4): 437-443.
- Maheras, P., 1985: A factorial analysis of Mediterranean precipitation. *Archives for Meteorology Geophysics and Bioclimatology Series B-Theoretical and Applied Climatology*, 36(1): 1-14.
- Maheras, P., Flocas, H.A., Patrikas, I. and Anagnostopoulou, C., 2001: A 40 year objective climatology of surface cyclones in the Mediterranean region: Spatial and temporal distribution. *International Journal of Climatology*, 21(1): 109-130.
- Maheras, P. and Kolyva-machera, F., 1990: Temporal and spatial characteristics of annual precipitation over the Balkans in the 20th-century. *International Journal of Climatology*, 10(5): 495-504.
- Maheras, P. and Kutiel, H., 1999: Spatial and temporal variations in the temperature regime in the Mediterranean and their relationship with circulation during the last century. *International Journal of Climatology*, 19(7): 745-764.
- Maheras, P., Patrikas, I., Karacostas, T. and Anagnostopoulou, C., 2000: Automatic classification of circulation types in Greece: methodology, description, frequency, variability and trend analysis. *Theoretical and Applied Climatology*, 67(3-4): 205-223.
- Maheras, P., Tolika, K., Anagnostopoulou, C., Vafiadis, M., Patrikas, I. and Flocas, H.A., 2004: On the relationships between circulation types and changes in rainfall variability in Greece. *International Journal of Climatology*, 24: 1695-1712.

- Maheras, P., Xoplaki, E., Davies, T., Martin-Vide, J., Bariendos, M. and Alcoforado, M.J., 1999a: Warm and cold monthly anomalies across the Mediterranean basin and their relationship with circulation; 1860-1990. *International Journal of Climatology*, 19(15): 1697-1715.
- Maheras, P., Xoplaki, E. and Kutiel, H., 1999b: Wet and dry monthly anomalies across the Mediterranean basin and their relationship with circulation, 1860-1990. *Theoretical and Applied Climatology*, 64(3-4): 189-199.
- Mairota, P., Thornes, J.B. and Geeson, N., 1998: Atlas of Mediterranean environments in Europe: The desertification context. John Wiley and Sons, Chichester.
- Malchaire, J., Kampmann, B., Mehnert, P., Gebhardt, H., Pietter, A., Havenith, G., Holmer, I., Parsons, K., Alfano, G., Griefahn, B., 2002: Assessment of the risk of heat disorders encountered during work in hot conditions. *International Archives of Occupational and Environmental Health*, 75: 153-162.
- Malilay, J., 1997: Floods. In: E. Noji (Editor), *The public health consequences of disasters*. Oxford University Press, New York.
- Manera, M. and Marzullo, A., 2003: Modelling the load curve of aggregate electricity consumption using principal components. 95, Fondazione Eni Enrico Mattei, Milan.
- Mann, M.E., Bradley, R.S. and Hughes, M.K., 1999: Northern hemisphere temperatures during the past millennium: Inferences, uncertainties, and limitations. *Geophysical Research Letters*, 26(6): 759-762.
- Mann, M.E. and Jones, P.D., 2003: Global surface temperatures over the past two millennia. *Geophysical Research Letters*, 30(15): -.
- Mann, M.E. and Rutherford, S., 2002: Climate reconstruction using 'Pseudoproxies'. *Geophysical Research Letters*, 29(10): 139.
- Manton, M.J., Della-Marta, P. M., Haylock, M. R., Hennessy, K. J., Nicholls, N., Chambers, L. E., Collins, D. A., Daw, G., Finet, A., Gunawan, D., Inape, K., Isobe, H., Kestin, T. S., Lefale, P., Leyu, C. H., Lwin, T., Maitrepierre, L., Ouprasitwong, N., Page, C. M., Pahalad, J., Plummer, N., Salinger, M. J., Suppiah, R., Tran, V. L., Trewin, B., Tibig, I., Yee, D. , 2001: Trends in extreme daily rainfall and temperature in Southeast Asia and the South Pacific: 1961-1998. *International Journal of Climatology*, 21(3): 269-284.
- Maracchi, G., Sirotenko, O. and Bindi, M., 2005: Impacts of present and future climate variability on agriculture and forestry in the temperate regions: Europe. *Climatic Change*, 70: 117-135.
- Marrachi, G., Crisci, A., Grifoni, D., Gozzini, B., Meneguzzo, F. and Zipoli, G., 2000: Some features of climate variation in central Italy: Need for Mediterranean cooperation, 3rd European conference on Applied Climatology, Pisa, Italy.
- Marshall, J., Kushner, Y., Battisti, D., Chang, P., Czaja, A., Dickson, R., Hurrell, J., McCartney, M., Saravanan, R., Visbeck, M., 2001: North Atlantic climate variability: Phenomena, impacts and mechanisms. *International Journal of Climatology*, 21(15): 1863-1898.
- Martin, M.L., Luna, M.Y., Morata, A. and Valero, F., 2004: North atlantic teleconnection patterns of low-frequency variability and their links with springtime precipitation in the western Mediterranean. *International Journal of Climatology*, 24(2): 213-230.
- Martin-Vide, J., 2004: Spatial distribution of a daily precipitation concentration index in peninsular Spain. *International Journal of Climatology*, 24: 959-971.
- Martin-Vide, J. and Gomez, L., 1999: Regionalization of peninsular Spain based on the length of dry spells. *International Journal of Climatology*, 19(5): 537-555.

- Mata-Porrás, M., 1995: The influence of the Common Agricultural Policy (CAP) on socio-economy and land degradation. In: R. Fantechi, P. Balabanis and J.L. Rubio (Editors), Desertification in a European context, physical and socio-economic aspects. European Commission, Brussels.
- Matzarakis, A. and Mayer, H., 1991: The extreme heat wave in Athens in July 1987 from the point of view of human biometeorology. *Atmospheric environment*, 25: 203-211.
- McCabe, G.J., Clark, M.P. and Serreze, M.C., 2001: Trends in Northern Hemisphere surface cyclone frequency and intensity. *Journal of Climate*, 14(12): 2763-2768.
- McCulloch, W.S. and Pitts, W.H., 1943: A logical calculus of the ideas imminent in nervous activity. *Bulletin of Mathematical Biophysics*, 5: 115-133.
- McGinnis, D.L., 1994: Predicting snowfall from synoptic circulation: a comparison of linear regression and neural network. In: B.C. Hewitson and R.G. Crane (Editors), *Neural nets: applications in geography*. Kluwer Academic, Dordrecht, pp. 79-99.
- McIlveen, R., 1992: *Fundamentals of weather and climate*. Chapman and Hall, London.
- McKee, T.B., Doesken, N.J., Kleist, J., 1993: The relationship of drought frequency and duration of time scales, Eighth Conference on Applied Climatology. American Meteorological Society, Anaheim, CA, pp. 179-186.
- McKee, T.B., Doesken, N.J., Kleist, J., 1995: Drought monitoring with multiple time scales, Ninth conference on Applied Climatology. American Meteorological Society, Dallas, TX, pp. 233-236.
- McMichael, A., Githeko, A., Akhtar, R., Carcavallo, R., Ghubler, D., Haines, A., Kovats, R.S., Martens, P., Patz, J., Sasaki, A., Ebi, K.L., Focks, D., Kalkstein, L., Lindgren, E., Lindsay, S., Sturrock, R., 2001: Human health. In: U. Conaloneri and A. Woodward (Editors), *Climate Change 2001: Impacts, Adaptation, and Vulnerability*.
- Mearns, L.O., Giorgi, F., Whetton, P., Pabon, D., Hulme, M. and Lal, M., 2003: Guidelines for use of climate scenarios developed from regional climate model experiments, Data Distribution Centre of the IPCC.
- Mendelsohn, R., Nordhaus, W.D., Shaw, D., 1994: The impact of global warming on agriculture: A Ricardian analysis. *The American Economic Review*, 84(4): 753-771.
- Mendelsohn, R. and Sohngen, B., 1996: *Timber values and climate*. Yale, FES. New Haven, Connecticut.
- Mendelsohn, R., Nordhaus, W., and Shaw, D., 1999: The impact of climate variation on U.S. agriculture. In Mendelsohn, R. and Neumann, J. (eds.), *The economic impact of climate change on the U.S. economy*. Cambridge University Press, Cambridge, U.K.
- Mendelsohn, R., Morrison, W., Schlesinger, M.E., and Aandronova, N.G., 2000: Country-specific market impacts of climate change. *Climatic Change* 45: 553-569.
- Menne, B. and Ebi, K.L., 2006: *Climate change and adaptation strategies for human health*. World Health Organisation.
- Mestas-Nuñez, A.M., 2000: Orthogonality properties of rotated empirical modes. *International Journal of Climatology*, 20(12): 1509-1516.
- Metaxas, D.A., Bartzokas, A. and Vitsas, A., 1991: Temperature-fluctuations in the Mediterranean area during the last 120 Years. *International Journal of Climatology*, 11(8): 897-908.
- Micchelli, C.A., 1986: Interpolation of scattered data: distance matrices and

- conditionally positive data functions. *Constructive Approximations*, 2: 11-22.
- Michaelson, J., 1987: Cross-validation in statistical climate forecast models. *Journal of Applied Meteorology*, 26(11): 1589-1600.
- Millan, M.M., Estrela, M. J., Sanz, M. J., Mantilla, E., Martin, M., Pastor, F., Salvador, R., Vallejo, R., Alonso, L., Gangoiti, G., Ilardia, J. L., Navazo, M., Albizuri, A., Artinano, B., Ciccioli, P., Kallos, G., Carvalho, R. A., Andres, D., Hoff, A., Werhahn, J., Seufert, G., Versino, B., 2005: Climatic feedbacks and desertification: The Mediterranean model. *Journal of Climate*, 18(5): 684-701.
- Millan, M.M., Salvador, R., Mantilla, E. and Kallos, G., 1997: Photooxidant dynamics in the Mediterranean basin in summer: Results from European research projects. *Journal of Geophysical Research-Atmospheres*, 102(D7): 8811-8823.
- Millbank, N., 1989: Building design and use: response to climate change. *Architect. Journal*, 96: 59-63.
- Milliman, J.D., Jeftic, L. and Sestini, G., 1992: The Mediterranean sea and climate change - An overview. In: L. Jeftic, J.D. Milliman and G. Sestini (Editors), *Climate change and the Mediterranean*. UNEP.
- Mitchell, T.D., and Jones, P.D., 2005: An improved method of constructing a database of monthly climate observations and associated high-resolution grids. *International Journal of Climatology*, 25: 693-712.
- Moody, J.E. and Darken, C.J., 1989: Fast learning in networks of locally-tuned processing units. *Neural Computation*, 1: 281-294.
- Moriondo, M. and Bindi, M., 2006: Comparison of temperatures simulated by GCMs, RCMs and statistical downscaling: potential application in studies of future crop development. *Climate Research*, 30: 149-160.
- Morrison, W., and Mendelsohn, R., 1998: Measuring the impact of climate on commercial and residential energy expenditures. In Mendelsohn, R. and Neumann, J. (eds.), *The economic impact of climate change on the U.S. economy*. Cambridge University Press, Cambridge, U.K.
- Munich Re, 2000: Topics 2000. Natural catastrophes - the current position, Munich.
- Munich Re, 2003: NatCat Service. A guide to the Munich Re database for natural catastrophes, Munich.
- Munich Re, 2004: Annual review: Natural catastrophes 2003.
- Murphy, J., 1999: An evaluation of statistical and dynamical techniques for downscaling local climate. *Journal of Climate*, 12: 2256-2284.
- National Climatic Data Center, 2004: Global and US hazards / climate extremes.
- Navone, H.D. and Ceccatto, H.A., 1999: Predicting Indian monsoon rainfall: a neural network approach. *Climate Dynamics*, 10: 305-312.
- Nemani, R.R., Keeling, C.D., Hashimoto, H., Jolly, W.M., Piper, S.C., Tucker, C.J., Myneni, R.B. and Running, S.W., 2000: Climate driven increases in global terrestrial net primary production from 1982-1999. *Science*, 300: 1560-1563.
- Nguyen, T.H., 1994: 'Impact of a cold snap on daily system load shapes'. *Energy*, 19(9): 933-946.
- Nicholls, N. and Murray, W., 1999: Workshop on indices and indicators for climate extremes, Asheville, NC, USA, 3-6 June 1997 - Breakout Group B: Precipitation. *Climatic Change*, 42(1): 23-29.
- Oladipio, E.O., 1985: A comparative performance analysis of 3 meteorological drought indexes. *Journal of Climatology*, 5(6): 655-664.
- Oliveira, I.T., 2006: Portuguese fertility transition and the multiple response system. *Journal of Family History*, 31: 413-421.
- Osborn, T., 2004: Simulating the winter North Atlantic Oscillation: the roles of internal

- variability and greenhouse gas forcing. *Climate Dynamics*, 22: 605-623.
- Ozsoy, T. and Saydam, A.C., 2001: Iron speciation in precipitation in the North-Eastern Mediterranean and its relationship with Sahara dust. *Journal of Atmospheric Chemistry*, 40(1): 41-76.
- Palmer, W.C., 1965: *Meteorological Drought*. Research Paper No. 45, U.S. Department of Commerce Weather Bureau, Washington, D.C.
- Palmieri, S., Siani, A.M., Casale, G.R. and Meloni, D., 2001: *Climate fluctuations in the Mediterranean*, Candriai summer school, Roma.
- Palutikof, J.P., Winkler, J.A., Goodess, C.M., Andresen, J.A., 1997: The simulation of daily temperature time series from GCM output. Part I: Comparison of model data with observations. *Journal of Climate*, 10: 2497-2513.
- Palutikof, J.P., 2003: Analysis of Mediterranean climate data: measured and modelled. In: H.J. Bolle (Editor), *Mediterranean climate: Variability and trends*. Springer-Verlag, Berlin.
- Palutikof, J.P., Conte, M., Casimiro Mendes, J., Goodess, C.M. and Espirito Santo, F., 1996: Climate and climate change. In: C.J. Brandt and Thorned (Editors), *Mediterranean desertification and land use*. John Wiley and Sons, London.
- Palutikof, J.P. and Holt, T., 2004: Climate change and the occurrence of extremes: Some implications for the Mediterranean Basin. In: A. Marquina (Editor), *Environmental challenges in the Mediterranean 2000-2050*. Kluwer Academic, Dordrecht/Boston/London.
- Panagiotopoulos, F., Shahgedanova, M., Hannachi, A. and Stephenson, D.B., 2005: Observed trends and teleconnections of the Siberian high: A recently declining center of action. *Journal of Climate*, 18(9): 1411-1422.
- Panagiotopoulos, F., Shahgedanova, M. and Stephenson, D.B., 2002: A review of Northern Hemisphere winter-time teleconnection patterns. In: C. Boutron (Editor), *European Research Course on Atmospheres*. EDP Sciences, in press.
- Pao, H.T., 2006: Comparing linear and nonlinear forecasts for Taiwan's electricity consumption. *Energy*, 31: 2129-2141.
- Papalexopoulos, A.D., Hao, S. and Peng, T.M., 1994: An implementation of a Neural Network based load forecasting model for the EMS. *IEEE Transactions on Power Systems*, 9: 1956-1962.
- Pardo, A., Meneu, V. and Valo, E., 2002: Temperature and seasonality influences on Spanish electricity load. *Energy economics*, 24: 55-70.
- Parry, M. and Duncan, R., 1995: *The economic implications of climate change in Britain*. Earthscan, London.
- Pauli, F. and Rizzi, L., 2006: The cost of climate change: does higher temperature imply higher mortality and morbidity? Evidence from Lombardia main cities, FEEM newsletter.
- Pauling, A., Luterbacher, J. and Wanner, H., 2003: Evaluation of proxies for European and North Atlantic temperature. *Geophysical Research Letters*, 30(15): 2.
- Pavan, V., Molteni, F., Brankovic, C., 2000: Wintertime variability in the Euro-Atlantic region in observations and in ECMWF seasonal ensemble experiments. *Quarterly Journal of the Royal Meteorological Society*, 126(567): 2143-2173.
- Pavan, V., Doblas-Reyes, F.J., 2000: Multi-model seasonal hindcasts over the Euro-Atlantic: skill scores and dynamic features. *Climate Dynamics*, 16: 611-625.
- Peiris, D.R., Crawford, J.W., Grashoff, C., Jefferies, R.A., Porter, J.R. and Marshall, B., 1996: A simulation study of crop growth and development under climate change. *Agric. Forest Meteorol.*, 79: 271-287.
- Peirson, J.D. and Henley, A., 1994: *Electricity Load and Temperature: Issues in*

- dynamic specification. *Energy Economics*, 16: 235-243.
- Pelaez, R.F., 2006: Using neural nets to forecast the unemployment rate. *Business economics*, 41: 37-44.
- Pelosini, R., Gandini, D., Minguzzi, E., Muraro, M., 2001: Analysis and simulation of the severe flood (13-16 October, 2000) in Piedmont region (Italy), *European Geophysical Society Plinius Conference*, Baja, Sardinia.
- Pérez, C., Sicard, M., Jorba, O., Comeron, A. and Baldasano, J.M., 2004: Summertime re-circulations of air pollutants over the north-eastern Iberian coast observed from systematic EARLINET lidar measurements in Barcelona. *Atmospheric Environment*, 38(24): 3983-4000.
- Perry, A.H., 2000a: Impacts of climate change on tourism in the Mediterranean: Adaptive responses, Fondazione Eni Enrico Mattei, Milan, Italy.
- Perry, M., 2000b: Assessment of potential effects and adaptations for climate change in Europe: The Europe Acacia project. University of East Anglia, Norwich.
- Pesic, R., 2003: Climate protection policy framework, The Ministry for Protection of Natural Resources and Environment, Republic of Serbia.
- Peterson, T.C., Folland, C., Gruza, G., Hogg, W., Mokssit, A., Plummer, N., 2001: Report of the activities of the Working Group on Climate Change Detection and related rapporteurs. 1071, World Meteorological Institution, Geneva.
- Peterson, T.C., Easterling, D. R., Karl, T. R., Groisman, P., Nicholls, N., Plummer, N., Torok, S., Auer, I., Boehm, R., Gullett, D., Vincent, L., Heino, R., Tuomenvirta, H., Mestre, O., Szentimrey, T., Salinger, J., Forland, E. J., Hanssen-Bauer, I., Alexandersson, H., Jones, P., Parker, D., 1998: Homogeneity adjustments of in situ atmospheric climate data: A review. *International Journal of Climatology*, 18(13): 1493-1517.
- Pettitt, A.N., 1979: A non-parametric approach to the change-point detection. *Applied Statistics*, 28: 126-135.
- Pfister, C. et al., 1999: Documentary evidence on climate in sixteenth century Europe. *Climatic Change*, 43: 55-110.
- Piccarreta, M., Capolongo, D. and Boenzi, F., 2004: Trend analysis of precipitation and drought in Basilicata from 1923 to 2000 within a southern Italy context. *International Journal of Climatology*, 24(7): 907-922.
- Piervitali, E. and Colacino, M., 2001: Evidende of drought in western sicily during the period 1565-1915 from liturgical offices. *Climatic Change*, 49: 225-238.
- Piervitali, E., Colacino, M. and Conte, M., 1997: Signals of climatic change in the central-western Mediterranean basin. *Theoretical and Applied Climatology*, 58(3-4): 211-219.
- Piervitali, E., Colacino, M. and Conte, M., 1998: Rainfall over the Central-Western Mediterranean basin in the period 1951-1995. Part I: Precipitation trends. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 21(3): 331-344.
- Piervitali, E., Conte, M. and Colacino, M., 1999: Rainfall over the Central-Western Mediterranean basin in the period 1951-1995. Part II: Precipitation scenarios. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 22(5): 649-661.
- Pinna, M., 1970: Contributto alla classificazione del clima d'Italia. *Rivista Geografica Italiana*, LXXVII: 24pp.
- Piñol, J., Terradas, J. and Lloret, F., 1998: Climate warming, wildfire hazard, and wildfire occurrence in coastal eastern Spain. *Climatic Change*, 38(3): 345-357.
- Pirazzoli, P.A., 2005: Recent changes in surface air pressure and wind activity on the

- Atlantic coasts of France and Ireland. *Journal of Coastal Research*: 236-252.
- Pirazzoli, P.A., Regnaud, H. and Lemasson, L., 2004: Changes in storminess and surges in western France during the last century. *Marine Geology*, 210(1-4): 307-323.
- Pirazzoli, P.A. and Tomasin, A., 1999: Recent abatement of easterly winds in the northern Adriatic. *International Journal of Climatology*, 19(11): 1205-1219.
- Pirazzoli, P.A. and Tomasin, A., 2003: Recent near-surface wind changes in the central Mediterranean and Adriatic areas. *International Journal of Climatology*, 23(8): 963-973.
- Plummer, N., Salinger, M.J. and Nicholls, N., 1999: Changes in climate extremes over the Australian region and New Zealand during the twentieth century. In: T.R. Karl, N. Nicholls and A. Ghazi (Editors), *Weather and climate extremes*. Kluwer Academic, Dordrecht/Boston/London.
- Poulos, S.E., Drakopoulos, P.G. and Collins, M.B., 1997: Seasonal variability in sea surface oceanographic conditions in the Aegean Sea (Eastern Mediterranean): an overview. *Journal of Marine Systems*, 13(1-4): 225-244.
- Powell, M.J.D., 1987: Radial basis functions for multivariate interpolation: a review. In: J.C. Mason and M.G. Cox (Editors), *Algorithms for Approximation*. Oxford, pp. 143-167.
- Pozo-Vázquez, D., Esteban-Parra, M.J., Rodrigo, F.S. and Castro-Diez, Y., 2001: The association between ENSO and winter atmospheric circulation and temperature in the North Atlantic region. *Journal of Climate*, 14(16): 3408-3420.
- Preiesendorfer, R.W., 1988: *Principle component analysis in meteorology and climatology*. Elsevier, 425pp pp.
- Prezerakos, N.G., 1997: Dust Storms over Sahara desert leading to dust deposit or coloured rain in the south Balkans, First LAS/WMO International Symposium on Sand and Dust storms (ISSDS-I). WMO/TD, Damascus, Syrian Arab Republic., pp. 21-38.
- Prezerakos, N.G., 1998: Lower tropospheric structure and synoptic scale circulation patterns during prolonged temperature inversions over Athens, Greece. *Theoretical and Applied Climatology*, 60(1-4): 63-76.
- Prezerakos, N.G., Flocas, H.A. and Brikas, D., 2006: The role of the interaction between polar and subtropical jet in a case of depression rejuvenation over the Eastern Mediterranean. *Meteorology and Atmospheric Physics*, 92(1-2): 139-151.
- Price, C., Stone, L., Huppert, A., Rajagopalan, B. and Alpert, P., 1998: A possible link between El Nino and precipitation in Israel. *Geophysical Research Letters*, 25(21): 3963-3966.
- Qian, B.D., Corte-Real, J. and Xu, H., 2000: Is the North Atlantic Oscillation the most important atmospheric pattern for precipitation in Europe? *Journal of Geophysical Research-Atmospheres*, 105(D9): 11901-11910.
- Quadrelli, R., Pavan, V. and Molteni, F., 2001: Wintertime variability of Mediterranean precipitation and its links with large-scale circulation anomalies. *Climate Dynamics*, 17(5-6): 457-466.
- Quereda Sala, J., Olcina, A.G., Cuevas, A.P., Cantos, J.O., Amoros, A.R. and Chiva, E.M., 2000: Climatic warming in the Spanish Mediterranean: Natural trend or urban effect. *Climatic Change*, 46(4): 473-483.
- Radinovic, D., 1987: *Mediterranean cyclones and their influence on the weather and climate*. PSMP Rep Series, 24. WMO, Geneva, Switzerland.
- Raicich, F., Pinardi, N. and Navarra, A., 2003: Teleconnections between Indian



- monsoon and Sahel rainfall and the Mediterranean. *International Journal of Climatology*, 23(2): 173-186.
- Ramis, C., Romero, R., Homar, V., Alonso, S. and Alarcon, M., 1998: Diagnosis and numerical simulation of a torrential precipitation event in Catalonia (Spain). *Meteorology and Atmospheric Physics*, 69(1-2): 1-21.
- Reddaway, J.M. and Bigg, G.R., 1996: Climatic change over the mediterranean and links to the more general atmospheric circulation. *International Journal of Climatology*, 16(6): 651-661.
- Reid, P.A., Jones, P.D., Brown, O., Goodess, C.M. and Davies, T.D., 2001: Assessments of the reliability of NCEP circulation data and relationships with surface climate by direct comparisons with station based data. *Climate Research*, 17(3): 247-261.
- Repapis, C.C. and Philandras, C.M., 1988: A Note on the air-temperature trends of the last 100 years as evidenced in the eastern Mediterranean time-series. *Theoretical and Applied Climatology*, 39(2): 93-97.
- Robock, A., Mu, M.Q., Vinnikov, K. and Robinson, D., 2003: Land surface conditions over Eurasia and Indian summer monsoon rainfall. *Journal of Geophysical Research-Atmospheres*, 108(D4): art. no.-4131.
- Rodo, X., 2001: Reversal of three global atmospheric fields linking changes in SST anomalies in the Pacific, Atlantic and Indian oceans at tropical latitudes and midlatitudes. *Climate Dynamics*, 18(3-4): 203-217.
- Rodo, X., Baert, E. and Comin, F.A., 1997: Variations in seasonal rainfall in southern Europe during the present century: Relationships with the North Atlantic Oscillation and the El Nino Southern Oscillation. *Climate Dynamics*, 13(4): 275-284.
- Rodo, X. and Comin, F.A., 2000: Links between large-scale anomalies, rainfall and wine quality in the Iberian Peninsula during the last three decades. *Global Change Biology*, 6(3): 267-273.
- Rodriguez-Puebla, C., Encinas, A.H., Nieto, S. and Garmendia, J., 1998: Spatial and temporal patterns of annual precipitation variability over the Iberian Peninsula. *International Journal of Climatology*, 18(3): 299-316.
- Rogers, J.C., 1984: The association between the North Atlantic Oscillation and the Southern Oscillation in the Northern Hemisphere. *Monthly Weather Review*, 112(10): 1999.
- Rogers, J.C., 1997: North Atlantic storm track variability and its association to the North Atlantic Oscillation and climate variability of northern Europe. *Journal of Climate*, 10(7): 1635-1647.
- Romero, R., Guijarro, J.A., Ramis, C. and Alonso, S., 1998a: A 30-year (1964-1993) daily rainfall data base for the Spanish Mediterranean regions: First exploratory study. *International Journal of Climatology*, 18(5): 541-560.
- Romero, R., Ramis, C. and Alonso, S., 1997: Numerical simulation of an extreme rainfall event in Catalonia: Role of orography and evaporation from the sea. *Quarterly Journal of the Royal Meteorological Society*, 123(539): 537-559.
- Romero, R., Ramis, C., Alonso, S., Doswell, C.A. and Stensrud, D.J., 1998b: Mesoscale model simulations of three heavy precipitation events in the western Mediterranean region. *Monthly Weather Review*, 126(7): 1859-1881.
- Romero, R., Ramis, C. and Guijarro, J.A., 1999: Daily rainfall patterns in the Spanish Mediterranean area: An objective classification. *International Journal of Climatology*, 19(1): 95-112.
- Rooney, C., McMichael, A.J., Kovats, R.S. and Coleman, M.P., 1998: Excess mortality

- in England and Wales, and in Greater London, during the 1995 heatwave. *Journal of Epidemiology and Community Health*, 52: 482-486.
- Ropelewski, C.F. and Halpert, M.S., 1987: Global and regional scale precipitation patterns associated with the El-Nino Southern Oscillation. *Monthly Weather Review*, 115(8): 1606-1626.
- Rosenzweig, C. and Liverman, D., 1992: Predicted effects of climate change on agriculture: A comparison of temperate and tropical regions. In: S.K. Majumdar (Editor), *Global climate change: Implications, challenges, and mitigation measures*. Pennsylvania Academy of Sciences.
- Ross, R.J. and Elliott, W.P., 2001: Radiosonde-based northern hemisphere tropospheric water vapour trends. *Journal of Climate*, 14(7): 1602-1612.
- Rowell, D.P., 2003: The impact of Mediterranean SSTs on the Sahelian rainfall season. *Journal of Climate*, 16(5): 849-862.
- Rubin, S., Paldor, N. and Ziv, B., 2005: Characterization of tropical Plumes that transport humidity from the Tropics to the eastern Mediterranean over Africa. *Geophysical Research Abstracts*, 7.
- Rudloff, W., 1981: *World climates*. Naturwissenschaftliche Rundschau. Wissenschaftliche Verlagsgesellschaft, Stuttgart.
- Rumelhart, D.E. and McClelland, J.L., 1986: *Parallel distributed processing: Explorations in the microstructure of cognitions*. MIT Press, Cambridge.
- Runcorn, S.K., 1967: *International dictionary of geophysics*. Pergamon Press, New York.
- Russo, G., Eva, C., Palau, C., Caneva, A. and Sacchini, A., 2000: The recent abrupt increase in the precipitation rate, as seen in an ultra-centennial series of precipitation. *Nuovo Cimento Della Societa Italiana Di Fisica C-Geophysics and Space Physics*, 23(1): 39-51.
- Rutherford, S., Mann, M.E., Delworth, T.L. and Stouffer, R.J., 2003: Climate field reconstruction under stationary and nonstationary forcing. *Journal of Climate*, 16: 462-479.
- Saaroni, H. and Ziv, B., 2000: Summer rain episodes in a Mediterranean climate, the case of Israel: Climatological-dynamical analysis. *International Journal of Climatology*, 20(2): 191-209.
- Sailor, D.J., 2001: Relating residential and commercial sector electricity loads to climate- evaluating state level sensitivities and vulnerabilities. *Energy*, 26: 645-657.
- Sailor, D.J. and Muñoz, J.R., 1997: Sensitivity of electricity and natural gas consumption to climate in the USA- methodology and results for eight states. *Energy*, 22: 987-998.
- Sarle, W.S., 2000: Frequently asked questions, comp.ai.neural-net user group.
- Schar, C., Vidale, P.L., Luthi, D., Frei, C., Haberli, C., Liniger, M.A. and Appenzeller, C., 2004: The role of increasing temperature variability in european summer heatwaves. *Nature*, 427: 332-336.
- Schmidli, J., Goodess, C.M., Frei, C., Haylock, M.R., Hurrell, J., Ribalaygua, J. and Schmith, T., 2006: Statistical and dynamical downscaling of precipitation: An evaluation and comparison of scenarios for the European Alps. In press.
- Schneider, S.H., Easterling, W.E. and Mearns, L.O., 2000: Adaptation: Sensitivity to natural variability, agent assumptions and dynamic climate changes. *Climatic Change*, 45(1): 203-221.
- Schneider, S.H., Sarukhan, J., Adejuwon, J., Azar, C., Baethgen, W., Hope, C., Moss, R., Leary, N., Richels, R., van Ypersele, J.P., Kuntz-Duriseti, K., Jones, R.N.,

- 2001: Overview of impacts, adaptation, and vulnerability to climate change, IPCC.
- Schönweise, C.D. and Rapp, J., 1997: Climate trend atlas of Europe based observations 1891-1990. Kluwer Academic, Dordrecht/Boston/London.
- Schönweise, C.D., Rapp, J., Fuchs, T. and Denhard, M., 1994: Observed climate trends in Europe 1891-1990. *Meteorologische Zeitschrift*, 3: 22-28.
- Schönweise, C.D., Staeger, T. and Trömel, S., 2004: The hot summer 2003 in Germany. Some preliminary results of a statistical time series analysis. *Meteorologische Zeitschrift*, In press.
- Schroeter, D., Metzger, M.J., Cramer, W. and Leemans, R., 2004: Vulnerability assessment- analysing the human-environment system in the face of global environmental change. *ESS Bulletin*, 2(2): 11-17.
- Sen, P., 1968: Estimates of the regression coefficient based on Kendall's tau. *Journal of the American Statistical Association*, 63: 1379-1389.
- Serra, C., Burgueno, A. and Lana, X., 2001: Analysis of maximum and minimum daily temperatures recorded at Fabra Observatory (Barcelona, NE Spain) in the period 1917-1998. *International Journal of Climatology*, 21(5): 617-636.
- Serra, C., Mills, G.F., Periago, M.C. and Lana, X., 1999: Winter synoptic weather types in Catalonia (NE Spain) and their linkage with minimum temperature anomalies. *International Journal of Climatology*, 19(15): 1675-1695.
- Serrano, A., Garcia, J.A., Mateos, V.L., Cancillo, M.L. and Garrido, J., 1999: Monthly modes of variation of precipitation over the Iberian peninsula. *Journal of Climate*, 12(9): 2894-2919.
- Serreze, M.C., Carse, F., Barry, R.G. and Rogers, J.C., 1997: Icelandic low cyclone activity: Climatological features, linkages with the NAG, and relationships with recent changes in the Northern Hemisphere circulation. *Journal of Climate*, 10(3): 453-464.
- Silverman, D. and Dracup, J.A., 2000: Artificial Neural Networks and long-range precipitation prediction in California. *Journal of Applied Meteorology*, 39(1): 57-66.
- Sioutas, M.V. and Flocas, H.A., 2003: Hailstorms in Northern Greece: synoptic patterns and thermodynamic environment. *Theoretical and Applied Climatology*, 75(3-4): 189-202.
- Smith, J.B., Schellnhuber, H.J., Monirul Qader Mirza, M., Fankhauser, S., Leemans, R., Erda, L., Ogallo, L., Pittock, B., Richels, R., Rosenzweig, C., Safriel, U., Tol, R.S.J., Weyant, J., Yohe, G., Bond, W., Bruckner, T., Iglesias, A., McMichael, A.J., Parmesan, C., Price, J., Rahmstorf, S., Root, T., Wigley, T. M. L., Zickfeld, K., 2001: Vulnerability to climate change and reasons for concern: a synthesis. In: C. Hope and S.K. Sinha (Editors), IPCC Third Assessment Report.
- Sorsa, P., 2006: Macroeconomic challenges with EU accession in Southeastern Europe: An Overview. WP/06/40, International Monetary Fund.
- Stanislowski, D., 1959: *The Individuality of Portugal*. University of Texas Press, Texas.
- Sumner, G., Homar, V. and Ramis, C., 2001: Precipitation seasonality in eastern and southern coastal Spain. *International Journal of Climatology*, 21(2): 219-247.
- Suppiah, R., Hennessy, K.J., 1998: Trends in total rainfall, heavy rain events and number of dry days in Australia. *International Journal of Climatology*, 10: 1141-1164.
- Sweeney, J.C. and Ohare, G.P., 1992: Geographical variations in precipitation yields and circulation types in Britain and Ireland. *Transactions of the Institute of British Geographers*, 17(4): 448-463.

- Swiss Re, 2004: Natural catastrophes and man-made disasters in 2003: Many fatalities, comparatively moderate insured losses. 1, Swiss Re.
- Tangang, F.T., Tang, B., Monaham, A.H. and Hsieh, W.W., 1998: Forecasting ENSO events: a neural network-extended EOF approach. *Journal of Climate*, 11: 29-41.
- Thornes, J.E., 1997: Transport. In: J.P. Palutikof, S. Subak and M. Agnew (Editors), *Economic impacts of the hot summer and unusually warm year of 1995*. University of East Anglia, Norwich.
- Tibaldi, S., Molteni, F., 1990: On the operational predictability of blocking. *Tellus*, 42A: 343-365.
- Trenberth, K.E. and Hoar, T.J., 1997: El Nino and climate change. *Geophysical Research Letters*, 24(23): 3057-3060.
- Trenberth, K.E. and Owen, T.W., 1999: Workshop on Indices and Indicators for Climate Extremes, Asheville, NC, USA, 3-6 June 1997 - Breakout Group A: Storms. *Climatic Change*, 42(1): 9-21.
- Trewartha, G.T., 1961: *The Earth's problem climates*. University of Wisconsin press, Wisconsin.
- Trewartha, G.T. and Horn, L.H., 1968: *Introduction to climate*. McGraw Hill Book Company, New York.
- Trigo, I.F., 2000a: *A climatology of cyclones in the Mediterranean region*. Ph.D. Thesis, University of East Anglia, Norwich.
- Trigo, I.F., Bigg, G.R. and Davies, T.D., 2002a: Climatology of cyclogenesis mechanisms in the Mediterranean. *Monthly Weather Review*, 130(3): 549-569.
- Trigo, I.F., Davies, T.D. and Bigg, G.R., 1999: Objective climatology of cyclones in the Mediterranean region. *Journal of Climate*, 12(6): 1685-1696.
- Trigo, I.F., Davies, T.D. and Bigg, G.R., 2000a: Decline in Mediterranean rainfall caused by weakening of Mediterranean cyclones. *Geophysical Research Letters*, 27(18): 2913-2916.
- Trigo, R.M., 2000b: *Improving meteorological downscaling methods with artificial neural network models*, University of East Anglia, Norwich.
- Trigo, R.M. and DaCamara, C.C., 2000b: Circulation weather types and their influence on the precipitation regime in Portugal. *International Journal of Climatology*, 20(13): 1559-1581.
- Trigo, R.M., Osborn, T.J. and Corte-Real, J.M., 2002b: The North Atlantic Oscillation influence on Europe: climate impacts and associated physical mechanisms. *Climate Research*, 20(1): 9-17.
- Trigo, R.M. and Palutikof, J.P., 1999: Simulation of daily temperatures for climate change scenarios over Portugal: a neural network model approach. *Climate Research*, 13(1): 45-59.
- Tripoli, G., Pinori, S., Dietrich, S., Panegrossi, G., Mugnai, A., Smith, E., 2002: The 9-10 November, 2001 Algerian Flood: A polar low?, 4th EGS Plinius Conference, Mallorca, Spain.
- Tsimplis, M.N. and Baker, T.F., 2000: Sea level drop in the Mediterranean Sea: An indicator of deep water salinity and temperature changes? *Geophysical Research Letters*, 27(12): 1731-1734.
- Tsimplis, M.N. et al., 2005: Towards a vulnerability assessment of the UK and northern European coasts: the role of regional climate variability. *Philosophical Transactions of the Royal Society*, 363: 1329-1358.
- Tsonis, A.A., 1996: Widespread increases in low-frequency variability of precipitation over the past century. *Nature*, 382(6593): 700-702.
- Tudela, I.M., Mantecón, A.R. and Pena, A.E., 2005: Impacts on the agrarian sector. In:

- Rodriguez and Moreno (Editors), A preliminary assessment of the impacts in Spain due to the effects of global climate change. Ministry of the Environment of Spain.
- Tuduri, E. and Ramis, C., 1997: The environments of significant convective events in the western Mediterranean. *Weather and Forecasting*, 12(2): 294-306.
- Turato, B., Reale, O., Siccardi, F., 2004: Water vapor sources of the October 2000 Piedmont Flood. *Journal of Hydrometeorology*, 5(4): 693-712.
- Turkes, M. and Erlat, E., 2003: Precipitation changes and variability in turkey linked to the North Atlantic oscillation during the period 1930-2000. *International Journal of Climatology*, 23(14): 1771-1796.
- Turkes, M., Sumer, U.M. and Kilic, G., 2002: Persistence and periodicity in the precipitation series of Turkey and associations with 500 hPa geopotential heights. *Climate Research*, 21(1): 59-81.
- Turner, R.K., Pearce, D.W. and Bateman, I., 1993: *Environmental Economics: An elementary introduction*. Johns Hopkins University Press, Baltimore, Maryland.
- Ulbrich, U., Brucher, T., Fink, A.H., Leckesbusch, G.C., Kruger, A. and Pinto, J.G., 2003: The central European floods of August 2002: Part 2-Synoptic causes and considerations with respect to climate change. *Weather*, 58: 434-443.
- UNDP, 2001: *Human development report*, United Nations Development Program, New York.
- Valor, E., Meneu, V. and Caselles, V., 2001: Daily air temperature and electricity load in Spain. *Journal of Applied Meteorology*, 40: 1413-1421.
- Van Loon, H. and Rogers, J.C., 1978: The seesaw in winter temperatures between Greenland and Northern Europe, part I: General description. *Monthly Weather Review*, 107: 296-310.
- van Oldenborgh, G.J., Burgers, G. and Tank, A.K., 2000: On the El Nino teleconnection to spring precipitation in Europe. *International Journal of Climatology*, 20(5): 565-574.
- Verdecchia, M., Visconti, G., Giorgi, F. and Marinucci, M.R., 1994: Diurnal temperature-range for a doubled carbon-dioxide concentration experiment - analysis of possible physical-mechanisms. *Geophysical Research Letters*, 21(14): 1527-1530.
- Vincent, L.A., Gullett, D.W., 1999: Canadian historical and homogenous temperature datasets for climate change analysis. *International Journal of Climatology*, 19: 1375-1388.
- Vincent, L.A., Zhang, X., Bonsal, B.R., Hogg, W.D., 2002: Homogenization of daily temperatures over Canada. *Journal of Climate*, 15: 1322-1334.
- Viner, D. and Agnew, M., 1999: *Climate change and its impacts on tourism*, Climatic Research Unit.
- Vinnikov, K.Y., Groisman, P.Y. and Lugin, K.M., 1990: Empirical-data on contemporary global climate changes (temperature and precipitation). *Journal of Climate*, 3(6): 662-677.
- Von Neumann, J., 1941: Distribution of the ratio of the mean square successive difference to the variance. *Annals of Mathematical Statistics*, 13: 367-395.
- von Storch, H., Zorita, E. and Cubasch, U., 1993: Downscaling of global climate change estimates to regional scales: An application to Iberian rainfall in wintertime. *Journal of Climate*, 6: 1167-1171.
- von Storch, H. and Zwiers, F.W., 1999: *Statistical analysis in climate research*. Cambridge University Press.
- Vose, R.S., Williams, C.N., Peterson, T.C., Karl, T.R. and Easterling, D.R., 2003: An

- evaluation of the time of observation bias adjustment in the U.S. historical climatology network. *Geophysical Research Letters*, 30(20): DOI 10.1029/2003GL018111.
- Vrolijk, C. (Editor), 2002: Climate change and power: economic instruments for European electricity. Earthscan, London.
- Walker, G.T., 1923: Correlation in seasonal variation of weather, VIII, a preliminary study of world weather. *Mem. Indian Met. Dept.*(24): 75-131.
- Walker, G.T. and Bliss, E.W., 1932: World Weather V. *Mem.R. Meteorol. Soc.*, 4: 53-84.
- Wallace, J.M. and Gutzler, D.S., 1981: Teleconnections in the geopotential height field during the northern hemisphere winter. *Monthly Weather Review*, 109(4): 784-812.
- Wallen, C.C., 1970: Introduction. In: C.C. Wallen (Editor), *Climates of northern and western Europe*. World survey of climatology. Elsevier Publishing, Amsterdam/Oxford/New York.
- Watson, R.T., Zinyowera, M.C. and Moss, R.H., 1997: The Regional impacts of climate change: an assessment of vulnerability. Cambridge University Press, Cambridge.
- Watson, S.J. and Woods, J.C., 1997: Energy. In: J.P. Palutikof, S. Subak and M. Agnew (Editors), *Economic impacts of the hot summer and unusually warm year of 1995*. University of East Anglia, Norwich.
- Weber, R.O., 1998: Climatology of regional flow patterns around Basel. *Theoretical and Applied Climatology*, 59(1-2): 13-27.
- Weber, R.O., Talkner, P., Auer, I., Bohm, R., GajicCapka, M., Zaninovic, K., Brazdil, R. and Fasko, P., 1997: 20th-century changes of temperature in the mountain regions of Central Europe. *Climatic Change*, 36(3-4): 327-344.
- WHO, 2003a: Climate change and human health- risks and responses.
- WHO, 2003b: Register of databases in the WHO Regional Office for Europe.
- Wijngaard, J.B., Tank, A.M.G.K. and Konnen, G.P., 2003: Homogeneity of 20th century European daily temperature and precipitation series. *International Journal of Climatology*, 23(6): 679-692.
- Wilby, R.L., Wigley, T.M.L., Conway, D., Jones, P.D., Hewitson, B.C., Main, J. and Wilks, D.S., 1998: Statistical downscaling of general circulation model output: A comparison of methods. *Water Resources Research*, 34: 2995-3008.
- Wilks, D.S., 1995: *Statistical methods in the atmospheric sciences*. Academic Press, San Diego.
- Wolf, J. and van Diepen, C.A., 1995: Effects of climate change on grain maize yield potential in the European Community. *Climatic Change*, 29: 299-331.
- Wolfe, D.W., 2004: Climate change impacts on northeast agriculture. In: D.W. Wolfe (Editor), *Climate Change and northeast agriculture: developing an education outreach agenda*. Cornell University, Ithica, NY.
- Woodhouse, C.A., 1999: Artificial neural networks and dendroclimatic reconstructions: an example from the Front Range, Colorado, USA. *Holocen*, 9: 521-530.
- Woolen, J.S., 1991: New NMC operational OI quality control., Ninth Conference on Numerical Weather Prediction. American Meteorological Society, Denver, Colorado, pp. 24-27.
- World Bank, 2006: World Development Indicators data set.
- World Book, 2006: Agriculture and fishing in Europe., World Book Atlas. World Book, Inc.
- World Data Centre for Greenhouse Gases, 2006: WMO WDCGG Carbon Dioxide data.

- Xoplaki, E., 2002: Climate variability over the Mediterranean. Ph.D. Thesis, University of Bern, Switzerland.
- Xoplaki, E., Gonzalez-Rouco, J.F., Luterbacher, J. and Wanner, H., 2003: Mediterranean summer air temperature variability and its connection to the large-scale atmospheric circulation and SSTs. *Climate Dynamics*, 20(7-8): 723-739.
- Xoplaki, E., Gonzalez-Rouco, J.F., Luterbacher, J. and Wanner, H., 2004: Wet season Mediterranean precipitation variability: influence of large-scale dynamics and trends. *Climate Dynamics*, 23(1): 63-78.
- Xoplaki, E., Luterbacher, J., Burkard, R., Patrikas, I. and Maheras, P., 2000: Connection between the large-scale 500 hPa geopotential height fields and precipitation over Greece during wintertime. *Climate Research*, 14: 129-146.
- Xoplaki, E., Maheras, P. and Luterbacher, J., 2001: Variability of climate in meridional Balkans during the periods 1675-1715 and 1780-1830 and its impact on human life. *Climate Change*, 48: 581-615.
- Yan, Z., Jones, P.D., Davies, T.D., Moberg, A., Bergstrom, H., Camuffo, D., Cocheo, C., Maugeri, M., Demaree, G., Verhoeve, T., Thoen, E., Barriendos, M., Rodriguez, R., Martin-Vide, J., Yang, C., 2002: Trends of extreme temperatures in Europe and China based on daily observations. *Climatic Change*, 53(1-3): 355-392.
- Yarnal, B., 1993: *Synoptic climatology in environmental analysis*. Belhaven Press.
- Yarnal, B., Comrie, A.C., Frakes, B. and Brown, D.P., 2001: Developments and prospects in synoptic climatology. *International Journal of Climatology*, 21(15): 1923-1950.
- Yarnal, B. and Frakes, B., 1997: Using synoptic climatology to define representative discharge events. *International Journal of Climatology*, 17(3): 323-341.
- Yin, J.H. and Battisti, D.S., 2001: The importance of tropical sea surface temperature patterns in simulations of last glacial maximum climate. *Journal of Climate*, 14: 565-581.
- Zelenka, M.P., 1997: An analysis of the meteorological parameters affecting ambient concentrations of acid aerosols in Uniontown, Pennsylvania. *Atmospheric Environment*, 31(6): 869-878.
- Zhang, X., Harvey, K.D., Hogg, W.D. and Yuzyk, T.R., 2001: Trends in Canadian streamflow. *Water Resources Bulletin*.
- Zhang, X.B., Wang, X.L.L. and CorteReal, J., 1997: On the relationships between daily circulation patterns and precipitation in Portugal. *Journal of Geophysical Research-Atmospheres*, 102(D12): 13495-13507.
- Ziv, B., Saaroni, H. and Alpert, P., 2003: The summer regime over the Middle East and its inter-relation to the Asian and African monsoons. *Geophysical Research Abstracts*, 5(01263).