Joint Centre for Hydro-Meteorological Research: Publications

2009 2008 2007 2006 2005 2004 2003 2002 2001 2000	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
---	------	------	------	------	------	------	------	------	------	------

(publications are listed alphabetically within each year's output)

2009

Allen, M.R.; Frame, D.J.; Huntingford, C., Jones, C.D., Lowe, J.A., Meinshausen, M., Meinshausen, N. 2009. Warming caused by cumulative carbon emissions towards the trillionth tonne, Nature, 458 (7242), 1163-1166. doi: **10.1038/nature08019**

Bell, V.A., Davies, H.N., Dadson, S.J. and Moore, R.J.
2009. River flow and flooding forecasts for military
deployed areas. Final Report. Contract Report to the Met
Office, Centre for Ecology & Hydrology, Wallingford, UK,
71pp.

Blyth, E.M. 2009. Process that impact runoff generation in Northern Latitudes. WATCH Technical Report No. 16, on the **EU WATCH website**.

Blyth, E.M. 2009. Methodology for atmospheric analysis and feedback correction. WATCH Technical Report No. 15, on the **EU WATCH website**.

Blyth, E.M., Clark, D.B., Sitch, S. and Pryor, M. 2009. Benchmarking the JULES model for use in a GCM. Presentation at the GEWEX/iLEAPS conference on Water in a Changing Climate.

Blyth, E.M., Harding, R.J. and Shuttleworth, W.J. 2009. Global land surface evaporation and climate. Presentation at the GEWEX / iLEAPS conference on Water in a Changing Climate.

Centre for Ecology & Hydrology 2009. A guide to the PACK snowmelt model. Centre for Ecology & Hydrology, Wallingford, UK, 10pp.

Cole, S.J., Howard, P.J. and Moore, R.J. 2009. Hydrological modelling for the Rivers Lavant and Ems. Contract Report to the Environment Agency Southern Region, Centre for Ecology & Hydrology, Wallingford, UK, 109pp.

Cole, S.J. and Moore, R.J. 2009. Distributed hydrological modelling using weather radar in gauged and ungauged basins. Advances in Water Resources, 32, 1107-1120.

Cole, S.J. and Moore, R.J. 2009. Hydrological modelling for the rivers Lavant and Ems: Interim Report. Centre for Ecology & Hydrology, Version 1.1, June 2009, 52pp.

Cole, S. J., Robson, A.J., Bell, V.A. and Moore, R.J. 2009. Model initialisation, data assimilation and probabilistic flood forecasting for distributed hydrological models. Geophysical Research Abstracts, 11, EGU2009-8048-3.

Davies, H.N and Bell, V.A. 2009. Assessment of methods for extracting low resolution river networks from high resolution digital data. Hydrol. Sci. J., 54(1), 17-28

de Rosnay, P., Drusch, M., Boone, A., Balsamo, G., Decharme, B., Harris, P., Kerr, Y., Pellarin, T., Polcher, J., Wigneron, J.-P. 2009. AMMA Land Surface Model Intercomparison experiment coupled to the Community Microwave Emission Model: ALMIP-MEM. Journal of Geophysical Research, 114 (D05108), 18 pp., doi: 10.1029/2008JD010724

Houldcroft, C.J., Grey, W.M.F., Barnsley, M.J., Taylor, C.M. and Los, S.O. 2009. New vegetation albedo parameters and global fields of background albedo derived from MODIS for use in a climate model, J. Hydromet., 10, 183-198.

Huntingford, C., Lowe, J.A., Booth, B.B.B., Jones, C.D., Harris, G.R., Gohar, L.K., Meir, P. 2009. Contributions of carbon cycle uncertainty to future climate projection spread. Tellus B, 61B, 355-360. **10.1111/j.1600-0889.2009.00414.x**

Kay, A.L., Davies, H.N., Bell, V.A. and Jones, R.G. 2009. Comparison of uncertainty sources for climate change impacts: flood frequency in England. Climatic Change, 92(1-2), 41-63, doi: **10.1007/s10584-008-9471-4**. Lowe, J.A., Huntingford, C., Raper, S.C.B., Jones, C.D., Liddicoat, S. K., Gohar, L.K. 2009. How difficult is it to recover from dangerous levels of global warming? Environmental Research Letters, 4, 014012. 9, pp. doi: **10.1088/1748-9326/4/1/014012**

Mahli, Y., Aragao, L., Galbraith, D., Huntingford, C.,
Fisher, R., Zelazowski, P., Sitch, S., McSweeney, C., Meir,
P. 2009. Exploring the likelihood and mechanism of a climate-change induced dieback of the Amazon rainforest.
PNAS, doi: 10.1073/pnas.0804619106

Mercado, L.M., Bellouin, N., Sitch, S., Boucher, O., Huntingford, C., Wild, M. and Cox, P.M. 2009. Impact of changes in diffuse radiation on the global land carbon sink, Nature, 458, 1014-1017. doi: **10.1038/nature07949**

Mercado, L.M. Lloyd, J., Dolman, A.J., Sitch, S. and Patiño, S. 2009. Modelling basin-wide variations in Amazon forest productivity – Part 1: Model calibration, evaluation and upscaling functions for canopy photosynthesis. Biogeosciences, 6, 1247-1272.

Piao, S., Fang, J., Ciais, P., Peylin, P., Huang, Y., Sitch, S., Wang, T. 2009. The carbon balance of terrestrial ecosystems in China. Nature, 458, 1009-1013 (23 April 2009) doi: **10.1038/nature07944** Letter

Roberts, N., Cole, S.J., Forbes, R., Moore, R.J. and Boswell, D. 2009. Use of high-resolution NWP rainfall and river flow forecasts for advanced warning of the Carlisle flood. Meteorol. Appl., 16, 23-24. doi: **10.1002/met.94**

Robson, A.J. and Moore, R.J. 2009. Midlands Catchment Runoff Model: Model Description and User Guide. Version 1.0, February 2009, Centre for Ecology & Hydrology, Wallingford, UK, 31pp.

Sene, K., Weerts, A., Beven, K., Moore, R.J., Whitlow, C. and Young, P. 2009. Risk-based probabilistic fluvial flood forecasting for integrated catchment models. Phase 1 Report. Environment Agency Science Report – SR SC080030, Research Contractors: Atkins Ltd, Deltares, Lancaster University, Centre for Ecology & Hydrology, Edenvale Young. Environment Agency, Bristol, UK, 181pp.

Timouk, F., Kergoat, L., Mougin, E., Lloyd, C.R., Ceschia,
E. Cohard, J.-M., de Rosnay, P., Hiernaux, P., Demarez,
V. and Taylor, C.M. 2009. Response of heat and radiation fluxes to water regime and vegetation development in a Sahelian landscape. J. Hydrol., 375, 178-189

back to top

2008

Bell, V. A., Moore, R.J., Cole, S.J., Kay, A. L., Davies, H.
N., Jones, R.G. and Reynard, N.S., 2008. Estimation of extreme river flows over the UK using rainfall and potential evaporation estimates from both a Regional Climate Model and observations. *Geophysical Research Abstracts*, 10, EGU2008-A-08250.

Cole, S.J. and Moore, R.J., 2008. Initialisation and data assimilation of a distributed flood forecasting model. *Geophysical Research Abstracts*, 10, EGU2008-A-10119.

Cole, S.J., Moore, R.J., Roberts, N. and Boswell, D. 2008. Using high-resolution numerical weather prediction models in flood forecasting: an extreme event case study. *Geophysical Research Abstracts*, 10, EGU2008-A-09412.

Cox, P.M., Harris, P.P., Huntingford, C., Betts, R.A., Collins, M., Jones, C.D., Jupp, T.E., Marengo, J.A. and Nobre, C.A. 2008. Increasing risk of Amazonian drought due to decreasing aerosol pollution. *Nature*, 453, 212-215. doi: **10.1038/nature06960**

Harris, P.P., Huntingford, C. and Cox, P.M. 2008. Amazon basin climate under global warming: the role of sea surface temperature. *Phil. Trans. Royal Soc. B*, 363(1498), 1753-1759. doi: **10.1098/rstb.2007.0037**

House, J.I., Huntingford, C., Knorr, W., Cornell, S.E., Cox, P.M., Harris, G.R., Jones, C.D., Lowe, J.A., Prentice, I.C. 2008. What do recent advances in quantifying climate and carbon cycle uncertainties mean for climate policy?

Environmental Research Letters, 3(044002), 6pp. doi: **10.1088/1748-9326/3/4/044002**

Huntingford, C., Fisher, R.A., Mercado, L., Booth, B.B.B., Sitch, S., Harris, P.H., Cox, P.M., Jones, C.D., Betts, R.A., Malhi, Y., Harris, G.R., Collins, M. and Moorcroft, P., 2008. Towards quantifying uncertainty in predictions of Amazon 'dieback'. *Phil. Trans. R. Soc. B.*, 363, 1857-1864. doi: **10.1098/rstb.2007.0028**

Huntingford, C. and Fowler, D. 2008. Climate change: seeking balance in media reports. *Environmental Research Letters*, 3(2), 4pp. doi: **10.1088/1748-9326/3/2/021001**

Marsham, J.H., Parker, D.J., Grams, C.M., Taylor, C. M. and Haywood, J.M. 2008. Uplift of Saharan dust south of the intertropical discontinuity. *Journal of Geophysical Research*, 113(D21102). doi: **10.1029/2008JD009844**

Moore, R.J., Cole, S.J. and Bell, V.A., 2008. Extreme rainfall and flood response in a changing climate. British-Russian Conference on "Hydrological Impact of Climate Change", 13-15 June 2007, Institute for Water and Environmental Problems, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia, 1-10.

Sitch, S., Huntingford, C., Gedney, N., Levy, P.E., Lomas, M., Piao, S., Betts, R., Ciais, P., Cox, P., Friedlingstein, P., Jones, C.D., Prentice, I.C. and Woodward, F. I., 2008. Evaluation of the terrestrial carbon cycle, future plant geography, and climate-carbon cycle feedbacks using 5 Dynamic Global Vegetation Models (DGVMs). *Global Change Biology*, in press.

Taylor, C.M. 2008. Intraseasonal land-atmosphere coupling in the West African Monsoon. *Journal of Climate*, 21(24), 6636-6648.

Villarini, G., Mandapaka, P.V., Krajewski, W.F. and Moore, R.J., 2008. Rainfall and sampling uncertainties: a rain gauge perspective. *J. Geophys. Res. - Atmospheres*, 113, D11102, doi: **10.1029/2007JD009214**.

back to top

2007

Balzter, H., Gerard, F., Weedon, G.P., Grey, W.M.F., Combal, B., Bartholome, E., E., Bartalev, S., and Los, S.O., 2007. Coupling of vegetation growing season anomalies and fire activity with hemispheric and regional scale climate patterns in Central and East Siberia. J. Clim., 20, 3713-3729

Bell, V.A., Kay, A.L., Jones, R.G. and Moore, R.J., 2007. Development of a high resolution grid-based river flow model for use with regional climate model output. Hydrol. Earth System Sci., 11(1), 532-549.

Bell, V.A., Kay, A.L., Jones, R.G. and Moore, R.J., 2007. Use of a grid-based hydrological model and regional climate model outputs to assess changing flood risk. Int. J. Climatol., 27, 1657-1671. doi: **10.1002/joc.1539**

Betts, R.A., Boucher, O., Collins, M., Cox, P.M., Falloon, P.D., Gedney, N., Hemming, D.L., Huntingford, C., Jones, C.D., Sexton, D.M.H. and Webb, M.J., 2007. Projected increase in continental runoff due to plant responses to increasing carbon dioxide. Nature, 448, 1037-U5

Centre for Ecology & Hydrology, 2007. Bibliography on Hydrological Applications of Weather Radar in the United Kingdom. Sixth Edition (publications notified up to June 2007). Inter-Agency Committee on the Hydrological Use of Weather Radar, Centre for Ecology & Hydrology, Wallingford, UK, 50pp.

Centre for Ecology & Hydrology, 2007. Inter-Agency Committee on the Hydrological Use of Weather Radar. Sixth Report 2005 to 2007. Inter-Agency Committee on the Hydrological Use of Weather Radar, Centre for Ecology & Hydrology, Wallingford, UK, 47pp.

Cole, S.J. and Moore, R.J., 2007. Hydrological modelling at gauged and ungauged locations using radar- and raingauge-based rainfall estimators. Geophysical Research Abstracts, 9, 08075, European Geosciences Union. Available on NORA. Cole, S.J., Moore, R.J. and Roberts, N., 2007. Using high resolution numerical weather prediction models to reduce and estimate uncertainty in flood forecasting. Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract H52A-03.

Huntingford, C., Hemming, D., Gash, J.H.C., Gedney, N. and Nuttall, P.A., 2007. Impact of climate change on health: what is required of climate modellers? Transactions of the Royal Society of Tropical Medicine and Hygiene, 101, 97-103.

Huntingford, C. and Lowe, J., 2007. Overshoot scenarios and climate change. Science, 316, Issue 5826.

Moore, R.J., 2007. The PDM rainfall-runoff model. Hydrol. Earth System Sci., 11(1), 483-499.

Moore, R.J., Bell, V.A. and Cole, S.J., 2007. Flood forecasting for ungauged locations: what approach is best? Geophysical Research Abstracts, 9, 10189, European Geosciences Union.

Moore, R.J., Bell, V.A. and Cole, S.J., 2007. Flood forecasting for ungauged locations: what approach is best? Earth: Our Changing Planet, Proc. **IUGG XXIV General Assembly**, 2-13 July, Perugia, Italy, IAHS, HW2005, 4684.

Moore, R.J., Bell, V.A., Cole, S.J. and Jones, D.A., 2007. Rainfall-runoff and other modelling for ungauged/lowbenefit locations. Science Report SC030227/SR1, Research Contractor: Centre for Ecology & Hydrology. Environment Agency, Bristol, UK, 249pp. **Available on NORA**.

Moore, R.J., Bell, V.A., Cole, S.J. and Jones, D.A., 2007. Rainfall-runoff and other modelling for ungauged/lowbenefit locations: Operational Guidelines. Science Report SC030227/SR2, Research Contractor: Centre for Ecology & Hydrology. Environment Agency, Bristol, UK, 37pp. Available on NORA.

Moore, R.J., Cole, S.J. and Bell, V.A., 2007. Parameter estimation, model initialisation and data assimilation

issues for distributed flood forecasting models. Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract H13I-01.

Pope, V., Brown, S., Clark, R., Collins, M., Collins, W., Dearden, C., Gunson, J., Harris, G., Jones, C., Keen, A., Lowe, J., Ringer, M., Senior, C., Sitch, S., Webb, M. and Woodward, S., 2007. The Met Office Hadley Centre climate modelling capability: the competing requirements for improved resolution, complexity and dealing with uncertainty. Phil. Trans. R. Soc. A, 365, 2635-2657. doi: **10.1098/rsta.2007.2087**

Singleton, A.T., and Reason, C.J.C., 2007: Variability in the characteristics of cut-off low pressure systems over subtropical southern Africa. Int. J. Climatol., doi: **10.1002/joc.1399**.

Sitch, S., Cox, P.M., Collins, W.J. and Huntingford, C., 2007. Indirect radiative forcing of climate change through ozone effects on the land-carbon sink. Nature, 448, 791-U4.

Sitch, S., McGuire, A.D., Kimball, J., Gedney, N., Gamon, J., Engstrom, R., Wolf, A., Zhuang, Q., Clein, J. and McDonald, K.C., 2007. Assessing the carbon balance of circumpolar Arctic tundra using remote sensing and process modelling. Ecological Applications, 17, 213-234.

Zaehle, S., Bondeau, A., Carter, T., Cramer, W., Erhard, M., Prentice, I.C., Reginster, I., Rounsevell, M.D.A., Sitch, S., Smith, B., Smith, P.C. and Sykes, M., 2007. Projected changes in terrestrial carbon storage in Europe under climate and land-use change, 1990-2100. Ecosystems, doi: 10.1007/s10021-007-9028-9.

back to top

2006

Bell, V.A., George, D.G., Moore, R.J. and Parker, J., 2006. Using a 1-D mixing model to simulate the vertical flux of heat and oxygen in a lake subject to episodic mixing. Ecological Modelling, 190, 41-54. Bell, V.A., Moore, R.J., Kay, A.L. and Jones, R.G., 2006. A high resolution grid-based river flow model for use with regional climate model output. Geophysical Research Abstracts, 8, 07080, European Geosciences Union.

Bell V.A., Dadson, S. J. and Davies, H. N., 2006. River Flow Modelling for Regional Climate Models: Progress Report to the Met Office (Hadley Centre). Centre for Ecology & Hydrology, 32pp.

Bowler, N., Pierce. C.E., Seed, A., 2006. STEPS: A probabilistic precipitation forecast scheme which merges an extrapolation nowcast with downscaled NWP. Q. J. R. Meteorol. Soc., 620 Part A, 2107-2125.

Cole, S.J. and Moore, R.J., 2006. Spatio-temporal rainfall datasets and their use in evaluating the extreme event performance of hydrological models. The Extremes Dataset. R&D Project Report FD2208/PR, Joint Defra/EA Flood and Coastal Erosion Risk Management, Research Contractor: Centre for Ecology & Hydrology, 60pp. **Available on NORA**.

Cole, S.J., Moore, R.J., Bell, V.A. and Jones, D.A., 2006. Storm and catchment controls on extreme flood genesis: a methodological framework. Geophysical Research Abstracts, 8, 07861, European Geosciences Union.

Dadson, S., Bell, V. and Jones, R., 2006. Predictions of river flow in NW Europe using a coupled hydrological and regional climate model. Geophysical Research Abstracts, 8, 04891, European Geosciences Union.

Gedney, N., Cox, P.M., Betts, R., Boucher, O., Huntingford, C. and Stott, P.A., 2006. Detection of a direct carbon dioxide effect in continental river runoff records. Nature, 439, February, doi: **10.1038/nature04504**.

George, D.G., Bell, V.A., Parker, J. and Moore, R.J., 2006. Using a 1-D mixing model to assess the potential impact of year-to-year changes in weather on the habitat of vendace (Coregonus albula) in Bassemthwaite Lake, Cumbria. Freshwater Biology, 51, 1407-1416. Golding, B.W., Hand, W.H., Dent, J., Dale, M., Collier,
C.G., Moore, R.J., Cole, S.J., Bell, V.A. and Jones, D.A.,
2006. Extreme Event Recognition Phase 2. R&D
Technical Report FD2208, Report to the Environment
Agency and Defra, Centre for Ecology & Hydrology, 29pp.

HR Wallingford, 2005. Flooding in Boscastle and North Cornwall, August 2004. Phase 2, February 2005. (CEH contribution: Section 3. Hydrological analysis and interpretation, 33-67.)

Jones, R.G., Bell, V.A., Kay, A.L., Dadson, S.J. and Davies, H.N., 2006. Report describing the performance of the improved procedure using MOSES 2 to predict river flows. Summary analysis of the hydrological drivers of recent flooding events in the UK. Report to the UK Department for Environment, Food and Rural Affairs, Milestone 15.06.05, Met Office Hadley Centre, March 2006, 54pp

Kay, A.L., 2006. Catchment modelling with data from an RCM driven by ERA-40 boundary conditions. Report to Met Office Hadley Centre, Annex 15a, Centre for Ecology & Hydrology, January 2006, 27pp.

Kay, A.L., Bell, V.A. and Davies, H.N., 2006. Model quality and uncertainty for climate change impacts. Report to Met Office Hadley Centre, Annex 2, Centre for Ecology & Hydrology, March 2006, 42pp.

Kay, A.L., Jones, R.G. and Reynard, N.S., 2006. RCM rainfall for UK flood frequency estimation. II. Climate change results. J. Hydrol., 318, 163-172.

Kay, A.L., Reynard, N.S. and Jones, R.G., 2006. RCM rainfall for UK flood frequency estimation. I. Method and validation. J. Hydrol., 318, 151-162.

Moore, R.J., 2006. The PDM rainfall-runoff model. Geophysical Research Abstracts, 8, 10629, European Geosciences Union.

Moore, R.J., 2006. Book Review: Watershed Models. Edited by V.P. Singh and D.K. Frevert. CRC Press, Taylor & Francis, Boca Raton. Experimental Agriculture, 42(3), 370.

Moore, R.J., 2006. Operational use of radar in hydrological modelling for flood forecasting: UK experience. In: A. Rossa. M. Bruen, D. Frühwald, B. Macpherson, I. Holleman, D. Michelson and S. Michaelides (eds.), Use of Radar Observations in Hydrological and NWP Models: Final Report, Cost Action 717, EUR 21954, Section 5.2.5, 32-33, EC, Luxembourg.

Moore, R.J., 2006. Status and perspectives on using radar data in hydrological and NWP models in Europe: United Kingdom (R. Moore). In: A. Rossa. M. Bruen, D. Fruhwald, B. Macpherson, I. Holleman, D. Michelson and S. Michaelides (eds.), Use of Radar Observations in Hydrological and NWP Models: Final Report, Cost Action 717, EUR 21954, Section 11.22, 233-235, EC, Luxembourg.

Moore, R.J., Bell, V.A., Cole, S.J. and Jones, D.A., 2006. Rainfall-runoff and other modelling for ungauged/lowbenefit locations. R&D Project W5-113, Report to the Environment Agency and Defra, Centre for Ecology & Hydrology 249pp.

Moore, R.J., Bell, V.A., Cole, S.J. and Jones, D.A., 2006. Rainfall-runoff and other modelling for ungauged/lowbenefit locations: Operational Guidelines. R&D Project W5-113, Report to the Environment Agency and Defra, Centre for Ecology & Hydrology, 37pp.

Moore, R.J., Bell, V.A., Cole, S.J. and Jones, D.A., 2006. Spatio-temporal rainfall datasets and their use in evaluating the extreme event performance of hydrological models. R&D Project Report FD2208/PR, Joint Defra/Environment Agency Flood and Costal Erosion Risk Management, Research Contractor: Centre for Ecology & Hydrology, Defra, 259pp. Available on NORA.

Moore, R.J., Cole, S.J., Bell, V.A. and Jones, D.A., 2006. Issues in flood forecasting: ungauged basins, extreme floods and uncertainty. In: I. Tchiguirinskaia, K. N. N. Thein & P. Hubert (eds.), Frontiers in Flood Research, 8th Kovacs Colloquium, UNESCO, Paris, June/July 2006, IAHS Publ. 305, 103-122.

Morales, P., Sykes, M. T., Prentice, I. C., Smith, P., Smith, B., Bugmann, H., Zierl, B. Friedlingstein, P., Viovy, N., Sabaté, S., Sánchez, A., Pla, E., Gracia, C. A., Sitch, S., Arneth, A. and Ogee, J., 2005. Comparing and evaluating process-based ecosystem model predictions of carbon and water fluxes in major European forest biomes. Global Change Biology, doi **10.1111/j.1365-2486.2005.01036.x**

Pierce, C., Bowler, N., Seed, A., Jones, D.A. and Moore, R.J., 2005. Towards stochastic fluvial flood forecasting: quantification of uncertainty in very short range QPFs and its propagation through hydrological and decision making models. **ACTIF 2nd Workshop, Quantification, reduction and dissemination of uncertainty in flood forecasting**, 22-23 November 2004, Delft, 12pp.

Singleton, A.T., and Reason, C.J.C., 2006. Numerical simulations of a severe rainfall event over the Eastern Cape coast of South Africa: sensitivity to sea surface temperature and topography. Tellus A, 58, 355-367.

Smith, R.N.B., Blyth, E.M., Finch, J.W., Goodchild, S., Hall, R.L. and Madry, S., 2006. Soil state and surface hydrology diagnosis based on MOSES in the Met Office Nimrod nowcasting system. Meteorol. Appl., 13, 89-109.

back to top

2005

Bell, V.A., Blyth, E.M. and Moore, R.J. 2005. Investigating the utility of soil moisture estimates from a land-surface model for flood forecasting (ELDAS Workplan 5100: UK Flooding). CEH contribution to ELDAS Final Report, 22pp.

Bell, V.A., Blyth, E.M. and Moore, R.J., 2005. The use of soil moisture in hydrological forecasting. ECMWF/ELDAS Workshop on Land Surface Assimilation, 8-11 November 2004, ECWMF, Shinfield, UK, 147-151.

Bell, V.A., Davies, H.N., Dadson, S.J., Kay, A.L. and Clarke, D.B. 2005. River Flow Modelling for Regional Climate Models: Progress Report to March 2005. Report to the Hadley Centre, Centre for Ecology & Hydrology, 37pp.

Best, M.J., Beljaars, A., Polcher, J. and Viterbo, P. 2004. A proposed structure for coupling tiled surfaces with the planetary boundary layer. J. Hydrometeorol., 5, 1271-1278.

Best, M.J. 2005. Representing urban areas within operational numerical weather prediction models. Boundary-Layer Meteorol., 114, 91-109.

Best, M.J., Cox, P.M. and Warrilow, D. 2005. Determining the optimal soil temperature scheme for atmospheric modelling applications. Boundary-Layer Meteorol., Vol. 114, pp 111-142.

Centre for Ecology & Hydrology, 2005. Bibliography on Hydrological Applications of Weather Radar in the United Kingdom. Fifth Edition (publications notified to end of 2004). Centre for Ecology & Hydrology, Wallingford, UK, 46pp.

Centre for Ecology & Hydrology, 2005. Inter-Agency Research Committee on the Hydrological Use of Weather Radar. Fifth Report. 2003 to 2005. Report published on behalf of the Committee by Centre for Ecology & Hydrology, Wallingford, UK, 64pp.

CEH Wallingford, 2005. PDM Rainfall-Runoff Model. Version 2.2, Centre for Ecology & Hydrology, Wallingford. (Includes Guide, Practical User Guides, User Manual and Training Exercises).

Centre for Ecology & Hydrology, 2005. PSM Rainfall-Runoff Model. Version 2.2, Centre for Ecology & Hydrology, Wallingford. (Includes Guide, Practical User Guides, User Manual and Training Exercises)

Centre for Ecology & Hydrology 2005. KW Channel Flow Routing Model. Version 2.2, Centre for Ecology & Hydrology, Wallingford. (Includes Guide, Practical User Guides, User Manual and Training Exercises). Elliott, J.A., Thackeray, S.J., Huntingford, C. and Jones, R.G., 2005. Combining a regional climate model with a phytoplankton community model to predict future changes in phytoplankton in lakes. Freshwater Biology, 50, 1404-1411.

Golding, B. (Ed.) 2005. Boscastle and North Cornwall Post Flood Event Study - Meteorological Analysis of the Conditions Leading to Flooding on 16 August 2004. Forecasting Research Technical Report No. 459. Available at Met Office Publications Archive.

Harris, P.P., 2005. Modelling South American Climate and Climate Change. PhD thesis, Univ. of Reading.

HR Wallingford, 2005. Flooding in Boscastle and North Cornwall, August 2004. Phase 2, February 2005. (CEH contribution: Section 3. Hydrological analysis and interpretation, 33-67.)

Huntingford, C. and Gash, J.H.C., 2005. Climate equity for all. Science, 309, 1789.

Lambert, F.H., Gillett, N.P., Stone, D.A. and Huntingford, C., 2005. Attribution studies of observed land precipitation changes with nine coupled models. Geophysical Res. Lett., 32, L18704.

May, B.C., Clark, P.A., Cooper, A.M., Forbes, R., Golding, B.W., Hand, W., Lean, H., Pierce, C.E., Roberts, N. and Smith, R.N.B. 2005. Flooding at Boscastle, Cornwall on 16 August 2004 - A study of Met Office Forecasting Systems. **Met Office Forecasting Research Technical Report No.** 429.

Moore, R.J., Bell, V.A. and Jones, D.A. 2005. Forecasting for flood warning. C. R. Geoscience, 337, 203-217.

Morales, P., Sykes, M. T., Prentice, I. C., Smith, P., Smith, B., Bugmann, H., Zierl, B. Friedlingstein, P., Viovy, N., Sabaté, S., Sánchez, A., Pla, E., Gracia, C. A., Sitch, S., Arneth, A. and Ogee, J. 2005. Comparing and evaluating process-based ecosystem model predictions of carbon and water fluxes in major European forest biomes. Global Change Biology, doi 10.1111/j.1365-2486.2005.01036.x Pierce, C., Bowler, N., Seed, A., Jones, D.A., Moore, R.J. 2005. Towards stochastic fluvial flood forecasting: quantification of uncertainty in very short range QPFs and its propagation through hydrological and decision making models. **ACTIF 2nd Workshop, Quantification, reduction and dissemination of uncertainty in flood forecasting**, 22-23 November 2004, Delft, 12pp.

Pierce, C., Seed, A., Bowler, N. 2005. Development of a stochastic precipitation nowcast scheme for flood forecasting and warning. In: Proc. World Weather Research Programme Symp. on Nowcasting and Very Short Range Forecasting, Toulouse, France, 5-9 September 2005.

Pierce, C., Bowler, N., Seed, A., Jones, A., Jones, D. and Moore, R., 2005. Use of a stochastic precipitation nowcast scheme for fluvial flood forecasting and warning. Atmos. Science Letters, 6(1), 78-83.

Pierce, C., Bowler, N., Seed, A., Jones, D. and Moore, R. 2005. Towards stochastic fluvial flood forecasting: quantification of uncertainty in very short range QPFs and its propagation through hydrological and decision making models. Quantification, reduction and dissemination of uncertainty in flood forecasting. Proc. ACTIF II Workshop, Delft, 23-24 November 2004.

Roberts, N. 2005. An investigation of the ability of a storm scale configuration of the Met Office NWP model to predict flood-producing rainfall. Final scientific report from the storm scale modeling project. **Met Office Forecasting Research Technical Report No. 455**.

Svensson, C. and Jones, D. A. 2005a. Dependence between extreme sea surge, river flow and precipitation: a study in south and west Britain. Defra/Environment Agency R&D Technical Report FD2308/TR3, 62 pp. + appendices.

Svensson, C. and Jones, D. A. 2005b. Climate change impacts on the dependence between sea surge, precipitation and river flow around Britain. Proc. 40th Defra Flood and Coastal Management Conference, 5-7 July 2005, University of York, UK, 6A.3.1-6A.3.9.

Taylor, C. M., Parker, D. J., Lloyd, C. R. and Thorncroft, C. D. 2005. Observations of synoptic scale land surface variability and its coupling with the atmosphere. Q. J. R. Meteorol. Soc., 131, 913-938.

back to top

2004

Bell, V. Kay, A., Jones, R.G. and Moore, R.J. 2004. Simulation of observed river flows for 1960-2000. Report to Defra, MS–RAND–CPP–PROG0306, Centre for Ecology & Hydrology and Hadley Centre for Climate Prediction and Research., 52pp.

Bell, V.A., Kay, A.L., Jones, R.G. and Moore, R.J. 2004. Flow routing for Regional Climate Models. Annex 15a subcontract report to Defra, Centre for Ecology & Hydrology, 124pp.

Bell, V.A. and Moore, R.J. 2004. A flow routing and flood inundation facility for Nimrod/CMetS. Report to the Met Office, Centre for Ecology & Hydrology, 56 pp.

Bell V.A., Moore R.J., Jones R.G. 2004. Flow Routing for Regional Climate Models: UK application. Final report to the Hadley Centre, Centre for Ecology & Hydrology, 124pp.

Bowler, N., Pierce, C.E. and Seed, A. 2004. A probabilistic precipitation forecasting scheme which merges an extrapolation nowcast with downscaled NWP. 6th Int. Symp. on Hydrological Applications of Weather Radar, 2-4 February 2004, Melbourne, Australia, 8pp.

Bowler, N., Pierce, C.E. and Seed, A. 2004. A probabilistic precipitation forecasting scheme that blends an extrapolation nowcast with downscaled NWP. Forecasting Research Technical Report No. 433, Met Office, UK, 44 pp.

Cole, S.J., Bell, V.A., Robson, A.J., Moore, R.J. 2004. Use of Nimrod in Flood Forecasting. Contract Report to the

Environment Agency and the Met Office, Centre for Ecology & Hydrology, 136pp.

Clark, D. B., Taylor, C. M. and Thorpe, A. J. 2004. Feedback between the land surface and rainfall at convective length scales. Journal of Hydrometeorology, 5, 625-639

Fox, N.I., Webb, R., Bally, J., Sleigh, M.W., Pierce, C.E., Sills, D.M.L., Joe, P.I., Wilson, J. and Collier, C.G. 2004. The Impact of Advanced Nowcasting Systems on Severe Weather Warning during the Sydney 2000 Forecast Demonstration Project: 3 November 2000, Weather and Forecasting, 19-1, 97–114.

Gedney N., Cox P.M. and Huntingford, C. 2004. Climate feedback from wetland methane emissions. Geophys. Res. Letters, 31 (20): Art. No. L20503 Oct. 23, 2004

Jones, A.E., Jones, D.A., Moore, R.J. and Robson, A.J. 2004. Heavy Rainfall Warning Assessment Tool User Guide. Report to the Environment Agency and the Met Office, Centre for Ecology & Hydrology, 65pp.

Kay, A., Bell, V., Jones, R.G., and Moore, R.J. 2004. Assessment of the Autumn 2000 floods in the context of the precipitation record from 1958 to present. Report to Defra, MS–RAND–CPP–PROG0306, Centre for Ecology & Hydrology and Hadley Centre for Climate Prediction and Research., 15pp.

Kay, A.L., Reynard, N.S. and Jones, R.G. 2004. RCM rainfall for UK flood frequency estimation. I. Method and validation. Submitted to the Journal of Hydrology.

Kay, A.L., Jones, R.G. and Reynard, N.S. 2004. RCM rainfall for UK flood frequency estimation. II. Climate change results. Submitted to the Journal of Hydrology.

Koster, R. D., Dirmeyer, P. A., Guo, Z. C., Bonan, G.,
Chan, E., Cox, P., Gordon, C. T., Kanae, S., Kowalczyk,
E., Lawrence, D., Liu, P., Lu, C. H., Malyshev, S.,
McAvaney, B., Mitchell, K., Mocko, D., Oki, T., Oleson, K.,
Pitman, A., Sud, Y. C., Taylor, C. M., Verseghy, D., Vasic,
R., Xue, Y. K. and Yamada, T. 2004. Regions of strong

coupling between soil moisture and precipitation. Science, 305, 1138-1140

Moore, R.J., Bell, V.A., Cole, S.J. and Jones, D.A. 2004. Spatio-temporal rainfall datasets and their use in evaluating the extreme event performance of hydrological models. Inception Report. Report to Defra, Research Contract FD2208, Centre for Ecology & Hydrology, 58pp.

Moore, R.J., Jones, A.E., Jones, D.A., Black, K.B. and Bell, V.A. 2004. Weather radar for flood forecasting: some UK experiences. 6th Int. Symp. on Hydrological Applications of Weather Radar, 2-4 February 2004, Melbourne, Australia, 11pp.

Pierce, C.E., Ebert, E., Seed, A.W., Sleigh, M., Collier, C.G., Fox, N.I., Donaldson, N., Wilson, J.W., Roberts, R. and Mueller, C.K. 2004. The Nowcasting of Precipitation during Sydney 2000: An Appraisal of the QPF Algorithms, Weather and Forecasting, 19-1, 7–21.

Pierce, C.E., Bowler, N., Seed, A., Jones, A., Jones, D. and Moore, R.J. 2004. Use of a stochastic precipitation nowcast scheme for fluvial flood forecasting and warning, 6th Int. Symp. on Hydrological Applications of Weather Radar, 2-4 February 2004, Melbourne, Australia, 11pp.

Parker, D. J., Burton, R. R., Diongue, A., Ellis, R. J.,Felton, M., Taylor, C. M., Thorncroft, C. and Bessemoulin,P. 2004. The Diurnal Cycle of the West African MonsoonCirculation. Q. J. R. Meteorol. Soc.

Pierce, C.E., Bowler, N., Seed, A. 2004. Development of a stochastic precipitation forecasting scheme for fluvial flood forecasting and warning. Flood Risk Assessment. Proc. conference held by the Institute of Mathematics and its Applications, 7-8 September 2004, University of Bath, UK, 199-207.

Roberts, N. 2004. Measuring the fit of rainfall analyses and forecasts to radar: Strategy for evaluation. Forecasting Research Technical Report No. 432, Met Office, UK. Smith, R.N.B., Blyth, E.M., Finch, J.W., Goodchild, S., Hall, R.L. and Madry, S. 2004. Soil state and surface hydrology diagnosis based on MOSES in the Met Office Nimrod nowcasting system. Forecasting Research Technical Report No. 428. **Available in Met Office Publications Archive.** Also submitted to Meteorol. Appl.

Vehviläinen, B., Cauwenberghs, M.K., Cheze, J.L., Moore, R.J., Salek, M., Jurczyk, A. and Szturc, J. 2004. Weather radar in hydrological forecasting systems. Third European Conference on Radar Meteorology and Hydrology (ERAD), ERAD3-A-00157.

Wilson, J.W., Ebert, E.E., Saxen, T.R., Roberts, R.D., Mueller, C.K., Sleigh, M., Pierce, C.E. and Seed, A. 2004. Sydney 2000 Forecast Demonstration Project: Convective Storm Nowcasting, Weather and Forecasting, 19-1, 131– 150.

back to top

2003

Bell, V.A. and Moore, R.J. 2003. Development of a flow routing and flood inundation facility for Nimrod/CMetS: Preliminary formulation and results. Report to the Met Office, Centre for Ecology & Hydrology, 27pp.

Bell, V.A., Moore, R.J. and Jones, R.G. 2003. Development of a flow routing model coupled to a Regional Climate Model for Europe: Preliminary formulation and results. Annex 15a subcontract report to Defra, Centre for Ecology & Hydrology, 42pp.

Betts, R.A., Cox, P.M., Collins, M., Harris, P.P., Huntingford, C. and Jones, C.D.: 2003 The role of ecosystem-atmosphere interactions in simulated Amazonian precipitation decrease and forest dieback under global climate warming. Theoretical and Applied Climatology, accepted subject to revision.

Bolgov,M.V., Gottschalk,L., Krasovskaia,I., Moore,R.J. (eds.) 2002. Hydrological Models for Environmental Management. NATO Science Series, 2. Environmental Security – Vol. 79, Kluwer, 263pp. Bowler, N., Pierce, C.E. and Seed, A. 2003. Development of a precipitation nowcasting algorithm based upon optical flow techniques. Journal of Hydrology.

Bowler,N., Seed,A., Pierce,C.E. 2003. Work on the generation of probabilistic nowcasts of precipitation. Forecasting Research Technical Report, JCHMR, Met Office, .

Clark, D. B., Taylor, C. M., and Thorpe, A. J. 2003. Feedback between the land surface and rainfall at convective length scales. Journal of Hydrometeorology, .

Clark, D. B., Taylor, C. M., Thorpe, A. J., Harding, R. J. and Nicholls, M. E. 2003. The influence of spatial variability of boundary-layer moisture on tropical continental squall lines. Q. J. R. Meteorol. Soc., 129, 1101-1121

Cox, P.M., Betts, R.A., Collins, M., Harris, P.P., Huntingford, C. and Jones, C.D. 2004. Amazon dieback under climate-carbon cycle projections for the 21st Century. Theoretical and Applied Climatology, accepted subject to revision.

Essery, R. L. H., Best, M. J., Betts, R. A., Cox, P. M. and Taylor, C. M. 2003. Explicit representation of subgrid heterogeneity in a GCM land surface scheme. Journal of Hydrometeorology, 4, 530-543

Gedney N. and Cox P.M. 2003. The sensitivity of global climate model simulations to the representation of soil moisture heterogeneity. J. Hydrometeorol. 4(6), 1265-1275.

Hall,R.L., Huntingford,C., Harding,R.J., Lloyd,C.R. and Cox,P.M., 2003. An improved description of soil hydraulic and thermal properties of arctic peatland for use in a GCM. Hydrological Processes, .

Huntingford, C., Harris, P.P., Gedney, N. Cox, P.M., Betts, R.A., Marengo J. and. Gash, J.H.C. 2003. Investigating the potential for Amazon die-back in a future climate using a GCM analogue model. Theorectical and Applied Climatology, accepted. Huntingford, C., Jones, R.G., Prudhomme, C., Lamb, R., Gash, J.H.C. and. Jones D.A.2003. Regional climatemodel predictions of extreme rainfall for a changing climate. Q. J. R. Meteorol. Soc, 129, 1607-1621

Jones, D.A. 2003. Use of several indices of event severity for floods and drought. Hydrology and Earth System Sciences, 7(5), 642-651.

Jones, A.E., Jones, D.A. and Moore, R.J. 2003. Development of Rainfall Forecast Performance Monitoring Criteria. Phase 1: Development of Methodology and Algorithms. Report to the Environment Agency and the Met Office, Centre for Ecology & Hydrology, 291pp.

Jones, A.E., Jones, D.A. and Moore, R.J. 2003. Heavy Rainfall Warning Assessment Tool User Guide. Report to the Environment Agency and the Met Office, Centre for Ecology & Hydrology, 53pp.

Jones, C.D., Cox, P.M., and Huntingford, C. 2003. Uncertainty in climate-carbon cycle projection associated with the sensitivity of soil respiration to temperature. Tellus, 55, 642.

Kay, A.L. 2003. Estimation of UK flood frequencies using RCM rainfall: An further investigation. Met Office Annex15a Subcontract Report 2, Centre for Ecology & Hydrology, 48pp.

Pierce, C.E. 2003. Operational quantitative precipitation nowcasting in the Met Office. Floods in Scotland, A. Black, Ed., Institute of Civil Engineers & Royal Meteorological Society, 6-7.

Roberts, N. 2003. Results from high-resolution simulations of convective events. Forecasting Research Technical Report No. 402, Met Office, UK.

Roberts, N. 2003. The impact of a change to the use of the convection scheme in high-resolution simulations of convective events. Forecasting Research Technical Report No. 407, Met Office, UK. Roberts, N., 2003. Precipitation diagnostics for a high resolution modelling system. Forecasting Research Technical Report No. 423, Met Office, UK.

Taylor, C. M., Ellis, R. J., Parker, D. J., Burton, R. R. and Thorncroft, C. D. 2003. Linking boundary layer variability with convection - a case study from JET2000. Q. J. R. Meteorol. Soc., 129, 2233-2253

Taylor, C. M., Parker, D. J., Lloyd, C. R. and Thorncroft, C. D. 2003. Observations of synoptic scale land surface variability and its coupling with the atmosphere. Q. J. R. Meteorol. Soc..

Thorncroft, C. D., Parker, D. J., Burton, R. R., Diop, M., Ayers, J. H., Barjat, H., Devereau, S., Diongue, A., Dumelow, R., Kindred, D. R., Price, N. M., Saloum, M., Taylor, C. M. and Tompkins, A. M. 2003. The JET2000 project - Aircraft observations of the African easterly jet and African easterly waves. Bull. Am. Meteorol. Soc., 84, 337-351.

Thorncroft, C. D., Parker, D. J., Burton, R. R., Diop, M., Ayers, J. H., Barjat, H., Devereau, S., Diongue, A., Dumelow, R., Kindred, D. R., Price, N. M., Saloum, M., Taylor, C. M. and Tompkins, A. M. 2003. The JET2000 project - Aircraft observations of the African easterly jet and African easterly waves. *Bull. Am. Meteorol. Soc.*, 84, 337-351.

back to top

2002

Black, K. B., Parker, J., Jones, A. E., and Moore, R.J.2002. Hyrad User Guide. Hyrad Weather Radar System and Display Client Implementation Document Series.Produced for the Environment Agency NIWRDS project.Centre for Ecology & Hydrology, 54pp.

Bowler, N., Pierce, C. E. 2002. Development of a short range QPF algorithm based upon Optic Flow techniques. Forecasting Research Technical Report, Met Office. Borga, M., Tonelli, F., Moore, R.J. and Andrieu, H. 2002. Long-term assessment of bias adjustment in radar rainfall estimation. Water Resources Research, 38(11), 10.1029/2001WR000555.

Bowler, N., Seed, A. and Pierce, C. E. 2002. Preliminary work on the generation of probabilistic nowcasts of precipitation. Forecasting Research Technical Report, JCHMR, Met Office.

Centre for Ecology & Hydrology 2002. KW Channel Flow Routing Model. Version 2.0, February 2002. (Incorporates: Practical User Guide, Guide, Practical User Guide to the Calibration Shell, User Manual, Training Exercises).

Centre for Ecology & Hydrology 2002. Bibliography on Hydrological Applications of Weather Radar in the United Kingdom. Fourth Edition (publications notified to end of 2002). Centre for Ecology & Hydrology, 46pp.

Jones, A.E., Bell, V.A., Folwell, S.S., Moore, R.J., Farquharson, F.A., Jones, D.A., 2002. PDM and KW Model Calibration for the Citanduy Basin. South Java Flood Control Sector Project. Contract Report to GISTEC, Centre for Ecology & Hydrology, 43pp plus appendices.

Kay, A.L., Bell,V.A., Moore,R.J., and Jones,R.G. 2002. Estimation of UK flood frequencies using RCM rainfall: An initial investigation. Met Office Annex 15a Subcontract Report 1, Centre for Ecology & Hydrology 40pp.

Khatibi, R., Moore, R.J., Booij, M.J., Cadman, D. and Boyce, G. 2002. Parsimonious catchment and river flow modelling. Proc. IEMSs 2002, Integrated Assessment and Decision Support, Proc 1st Bennial Meeting of the Int. Environmental Modelling and Software Society, A.E. Rizzoli and A.J. Jakeman (Eds.), 24-27 June, University of Lugano, Switzerland, Vol. 1, 399-404.

Moore, R.J. 2002. Aspects of uncertainty, reliability and risk in flood forecasting systems incorporating weather radar. In: J.J. Bogardi and Z.W. Kundzewicz (eds.), Risk, Reliability, Uncertainty and Robustness of Water Resources Systems, Cambridge University Press, 30-40. Moore, R.J. 2002. Book Reviews. Fractal river basins. Chance and self-organisation by Ignacio Rodriguez-Iturbe and Andrea Rinaldo. Hydrology & Earth System Sciences, 6(2), 295.

Moore, R.J. and Bell, V.A. 2002. Incorporation of groundwater losses and well level data in rainfall-runoff models illustrated using the PDM. Hydrology and Earth System Sciences, 6(1), 25-38.

Pierce, C. E. 2002. The implementation of a Nimrod system in Poland for IMGW. System specification document Part 1: Nimrod components and process descriptions. JCHMR, Met Office.

Pierce, C.E. 2002. The implementation of a Nimrod system in Poland for IMGW. System specification document Part 2: Nimrod input-output matrix and missing data functionality. JCHMR, Met Office.

Pierce, C.E. 2002. The implementation of a Nimrod system in Poland for IMGW. Specification of the Nimrod domain and projection. JCHMR, Met Office.

Pierce, C.E., Seed, A., Ebert, E.E., Fox, N., Sleigh, M., Collier, C.G., Donaldson, N., Wilson, J. W., Roberts, R., Mueller, C. 2002. The nowcasting of precipitation during Sydney 2000: an appraisal of the QPF algorithms. Weather and Forecasting, Special Issue.

Taylor, C.M., Lambin, E.F., Stephenne, N., Harding, R.J. and Essery, R.L.H., 2002. The influence of land use change on climate in the Sahel, Journal of Climate, 15(24): 3615-3629.

Wilson, J. W., Ebert, E., Saxen, T., Pierce, C. E., Sleigh,
M., Seed, A., Roberts, R., Mueller, C., 2002. Sydney 2000
Forecast Demonstration Project: Convective Storm
Nowcasting. Weather and Forecasting, Special Issue.

back to top

2001

Bell, V.A., Carrington, D.S. and Moore, R.J. 2001. Comparison of rainfall-runoff models for flood forecasting. Part 2: Calibration and evaluation of models. Environment Agency R&D Technical Report W242, Research Contractor: Institute of Hydrology, September 2001, Environment Agency, 239pp.

Bell, V.A. and Moore, R.J. 2001. PDM rainfall-runoff model extensions for use in the Demer Basin Operational Model,
Flanders, Belgium. Contract Report to Wallingford
Software for International Marine & Dredging Consultants
NV on behalf of AMINAL, Belgium. Centre for Ecology &
Hydrology, 53pp.

Borga, M., Tonelli, F., Moore, R.J., and Andrieu, H. 2002. Long-term assessment of bias adjustment in radar rainfall estimation. Water Resources Research, accepted for publication.

Centre for Ecology & Hydrology 2001. Rainfall Model Scientific Background. Real Time System. Andhra Pradesh Cyclone Hazard Mitigation Project. V1.0. Government of Andhra Pradesh/World Bank, 29pp.

Centre for Ecology & Hydrology 2001. Rainfall Model User Manual. Real Time System. Andhra Pradesh Cyclone Hazard Mitigation Project. V1.0. Government of Andhra Pradesh/World Bank, 28pp.

Centre for Ecology & Hydrology 2001. Rainfall Model System Administration Manual. Real Time System. Andhra Pradesh Cyclone Hazard Mitigation Project. V1.0. Government of Andhra Pradesh/World Bank, 9pp.

Centre for Ecology & Hydrology 2001. Hyrad Weather Radar System. Specification and Design. A National Interim Weather Radar Display System (NIWRDS) for the Environment Agency. Document version 1.0.000, 17 September 2001, Contract Report to the Environment Agency.

Centre for Ecology & Hydrology 2001. PDM Rainfall-Runoff Model. Version 2.0, March 2001. (Incorporates: Practical User Guide, Guide, Practical User Guide to the Calibration Shell, User Manual, Training Exercises). Centre for Ecology & Hydrology 2001. PSM Rainfall-Runoff Model. Version 2.0, March 2001. (Incorporates: Practical User Guide, Guide, Practical User Guide to the Calibration Shell, User Manual, Training Exercises).

Centre for Ecology & Hydrology 2001. Modelling, risk estimation and management of ecological systems subject to natural hazards. Interim Final Report to November 2001. CEH Integrating Fund Project, 6pp plus Appendices. Appendices include the draft papers:

Fox, N., Sleigh, M. and Pierce, C. 2001: Forecast Demonstration Project Sydney 2000: Part 1: An overview of the project and the participating systems. Weather, 56, 397-404.

Fox, N., Webb, R., Bally, J., Sleigh, M., Pierce, C. E., Sills, D., Wilson, J. W., Roberts, R., Joe, P., Collier, C.G., 2002. The impact of advanced nowcasting systems on severe weather warning: a case study of the 3 November 2000 Sydney supercell. Weather and Forecasting, Special Issue.

Goode, K., Bell, V.A., Jones, D.A., Moore, R. J. 2001. River Flow Forecasting System Model Network for the River Tees. Report for the Environment Agency, Centre for Ecology & Hydrology, 103pp, 2001 Revision.

Halcrow 2001. Tidal Thames – Hydrodynamic Modelling. Calculation of Defence Levels. November 2001. 35pp plus Appendices.

Jones, A.E. 2001. Raingauge rainfall estimation for realtime rainfall-runoff modelling. MSc Dissertation, Dept. of Meteorology, University of Reading, August 2001, 99pp.

Jones, D.A. 2001. Tidal Thames Probability Analysis. Contract Report to Halcrow for the Environment Agency, Centre for Ecology & Hydrology, 45pp.

Mecklenburg, S., Bell, V.A., Carrington, D.S., Cooper, A.M., Moore, R.J., AND Pierce, C.E. 2001. Applying COTREC-derived rainfall forecasts to the rainfall-runoff model PDM—estimating error sources. Abstract. 30th Int. Conf. on Radar Meteorology, Munich, Germany, 19-24 July 2001, AMS, Paper 1.7, 14-16.

Mecklenburg, S., Bell, V.A., Carrington, D.S., Cooper, A.M., Moore, R.J., and Pierce, C.E. 2001. Interfacing COTREC-derived rainfall forecasts with the rainfall-runoff model PDM. Fifth Int. Symp. on Hydrological Applications of Weather Radar – Radar Hydrology, Proceedings, 19-22 November 2001, Heian-Kaikan, Kyoto Japan, 457-462.

Misumi, R., Bell, V.A., Moore, R.J. 2001. River flow forecasting using a rainfall disaggregation model incorporating small-scale topographic effects. Meteorol. Appl., 8(3), 297-305.

Moore, R.J. 2001. Book Reviews. Rainfall-Runoff Modelling: The Primer by K.J. Beven, Hydrology and Earth System Sciences, 5(1), 133-135.

Moore, R.J. and Bell, V.A. 2001. Comparison of rainfallrunoff models for flood forecasting. Part 1: Literature review of models. Environment Agency R&D Technical Report W241, Research Contractor: Institute of Hydrology, September 2001, Environment Agency, 94pp.

Pierce, C. E., 2001. Final report on the Met Office contribution to the World Weather Research Programme (WWRP) Forecast Demonstration Project (FDP) Sydney 2000. Forecasting Research Technical Report No. 351, Met Office, August 2001.

Pierce, C. E. and Cooper, A. M., 2001. Comparison of the performance of 2 km resolution Object-Oriented Model and Nimrod advection precipitation nowcast schemes. Forecasting Research Technical Report No. 350, Met Office, December 2000.

back to top

2000

Bell, V.A., Elliott, J.M., Moore, R.J. 2000. Modelling the effects of drought on the population of brown trout in Black Brows Beck. Ecological Modelling, 127, 141-159.

Bell, V.A., Carrington, D.S. and Moore, R.J. 2000.
Comparison of rainfall-runoff models for flood forecasting.
Part 2: Calibration and evaluation of models. Environment
Agency R&D Technical Report W242, Report prepared by
the Institute of Hydrology, 239pp.

Bell, V.A., Moore, R.J. 2000. Short period forecasting of catchment-scale precipitation. Part II: A water-balance storm model for short-term rainfall and flood forecasting. Hydrology and Earth Systems Sciences, 4(4), 635-651.

Bell, V.A., Moore, R.J. 2000. The sensitivity of catchment runoff models to rainfall data at different spatial scales. Hydrology and Earth System Sciences, 4(4), 653-667.

Bell, V.A. and Moore, R.J. 2000. Snowmelt forecasting for flood warning. Abstract. HS02/02 Evaluation of existing flood warning schemes, European Geophysical Society 2000, Nice.

Bell, V.A. and Moore, R.J. 2000. Development and assessment of snowmelt models for flood forecasting and warning, R&D Technical Report W227, Research Contractor: Institute of Hydrology, Environment Agency, 60pp.

Bell, V.A., Moore, R.J. and Brown, V. 2000. Snowmelt forecasting for flood warning in Upland Britain. In: M. Lees and P. Walsh (eds.), Flood forecasting: what does current research offer the practitioner? Occasional Paper No. 12, British Hydrological Society, 11-25.

Carrington, D.S., Bell, V.A. and Moore, R.J. 2000 Intercomparison of rainfall-runoff models for flood warning. Abstract. HS02/02 Evaluation of existing flood warning schemes, European Geophysical Society 2000, Nice,

Goode, K., Bell, V.A., Jones, D.A., Moore, R. J. 2000. River Flow Forecasting System Model Network for the River Derwent, Report for the Environment Agency, Centre for Ecology & Hydrology, 109pp.

Goode, K., Bell, V.A., Jones, D.A., Moore, R. J. 2000. River Flow Forecasting System Model Network for the River Tees. Report for the Environment Agency, Centre for Ecology & Hydrology, 101pp.

Goode, K., Moore, R. J. 2000. River Flow Forecasting System Model to the Leigh Barrier during Autumn 2000, Report for the Environment Agency, Centre for Ecology & Hydrology, 29pp.

Goode, K., Carrington, D.S., Bell, V.A. and Moore, R. J. 2000. Flood forecasting model for the Leigh Barrier, Report for the Environment Agency, Centre for Ecology & Hydrology, 38pp.

Goode, K., Bell, V.A., Jones, D.A. and Moore, R. J. 2000. Flood forecasting model for the Upper Rother, Report for the Environment Agency, Centre for Ecology & Hydrology, 57pp.

Jones, D.A., Moore, R.J., Cameron, D. 2000. River Flow Forecasting System Model Network for Northumbria, Report for the Environment Agency, Centre for Ecology & Hydrology, 13pp.

Mecklenburg, S., Bell, V.A., Carrington, D.S., Moore, R.J., Joss, J. 2000. Interfacing the radar echo tracking algorithm COTREC with the rainfall-runoff model PDM for real-time flood forecasting. 5th Int. Workshop on Precipitation in Urban Areas, From Precipitation Measurements to Design and Forecasting Modelling, 10-12 December, Pontresina, Switzerland, Preprints of Papers, P.Burlando and Th. Einfalt (eds.), IHP-V Technical Documents in Hydrology, UNESCO, Paris, 183-185.

Mecklenburg, S., Bell, V.A., Moore, R.J., Joss, J. 2000. Interfacing an enhanced radar echo tracking algorithm with a rainfall-runoff model for real-time flood forecasting. Phys. Chem. Earth (B), 25(10-12), 1329-1333.

Moore, R.J., Bell, V.A. and Carrington, D.S. 2000. Intercomparison of rainfall-runoff models for flood forecasting. In: M. Lees and P. Walsh (eds.), Flood forecasting: what does current research offer the practitioner? Occasional Paper No. 12, British Hydrological Society, 69-76.

Moore, R.J. and Bell, V.A. 2000 Comparison of rainfallrunoff models for flood forecasting. Part 1: Literature review of models. Report prepared by the Institute of Hydrology, Environment Agency R&D Technical Report W241, 94pp.

Moore, R.J., Jones, D.A., Cox, D.R. and Isham, V.S. (2000) Design of the HYREX raingauge network. Hydrology and Earth System Sciences, 4(4), 523-530.

Moore, R. J. (2000) Preface. Special Issue. HYREX: the HYdrological Radar Experiment. Hydrology and Earth System Sciences, 4(4), 521-522.

Moore, R.J. and Hall, M.J. eds. (2000) Special Issue. HYREX: the HYdrological Radar Experiment. Hydrology and Earth System Sciences, 4(4), 681pp.

Moore, R.J., Jones, D.A, Dent, Woods Ballard, B. 2000 Whole catchment modelling: progress and prospects. 35th MAFF Conference of River and Coastal Engineers, Keele University, 5-7 July 2000, 06.1.1-06.1.9.

Roberts, A.M., Cluckie, I.D., Gray, L., Griffith, R.J., Lane, A., Moore, R.J., Pedder, M.A. 2000. Data management and data archive for the Hydrological Radar Experiment (HYREX) Programme. Hydrology and Earth System Sciences, 4(4), 669-679.

Wood, S.J., Jones, D.A., Moore, R.J. 2000. Accuracy of rainfall measurement for scales of hydrological interest. Hydrology and Earth System Sciences, 4(4), 531-543.

Wood, S.J., Jones, D.A., Moore, R.J. (2000) Static and dynamic calibration of radar data for hydrological use. Hydrology and Earth System Sciences, 4(4), 545-554.

back to top