



MICHAEL R. DUNCAN, PH.D.
CHAIR, VISUALIZATION SCIENCES

Publications (Partial List)

Popular Technical Journal

Duncan, Mike R., 2004. Column - "Virtual reality shows new way to view urban planning", The Ontario Technologist, Volume 46, Issue 5

Duncan, Mike R., 2004. Column - "The nuts and bolts of putting together a VR presentation", The Ontario Technologist, Volume 46, Issue 6 (In Press)

Journal

Duncan, M.R., S. Lovejoy, and D. Schertzer, 2004. "The Universal Multifractal Nature of Radar Echo Fluctuations", in preparation.

Lovejoy, S., M.R. Duncan, D. Schertzer, 1996. "Scalar multifractal radar observer's problem.", Journal of Geophysical Research, 101 (D21), 26,479-26,491.

Duncan, M.R., B.Austin, F.Fabry, and G.L. Austin, 1993. "The Effect of Gauge Sampling Density on Streamflow Prediction for Rural Catchments.", Journal of Hydrology, 142, 445-476.

Fabry, F., A. Bellon, M.R.Duncan, and G.L. Austin, 1993. "High Resolution Rainfall Measurement by Radar for Very Small Basis: The Sampling Problem Reexamined.", Journal of Hydrology.

Bellon, A., M.R. Duncan, and G.L. Austin, 1993. "A Radar Based Gauge Interpolation Scheme Applied to the Montreal Rainstorm of 14 July, 1987.", Atmosphere-Ocean, 31(1), 27-56.



Duncan M.R., P.H. Shuepp, 1992. "A Method to Delineate Extreme Structures Within Airborne Flux Traces over the FIFE Site.", *Journal of Geophysical Research*, 97(D17), 18,487-18,498.

Saucier, A., M.R. Duncan, and G.L. Austin, 1992. "Mean Flux Estimation and Cospectra of Airborne Carbon Dioxide and Water Vapour Eddy Flux Measurement in the Planetary Surface Layer.", *Boundary-Layer Meteorology*, 55, 227-254.

Conference Proceedings, Technical Reports, and Documentation Omitted.

Research Support

January, 2003. Ontario Innovation Trust (OIT). "Virtual Reality Technologies for Land Use Planning". Grant Amount \$343,635. Total Project \$962,313. 1 Year.

April, 2003. Communication and Information Technology Ontario – CITO. "Real-Time Collaborative Visualization System (cVis)". Grant Amount: \$94,893. Total Project: \$213,243. 1 Year.

August, 2004. Community Information Support Program (CISP). With the City of Welland. "Advanced Visualization Investment Touring Aid (AVITA)". Grant Amount: \$65,000. Continuation of a 2002 PEMD grant to the City of Welland. 1 Year

September, 2004. NSERC. "Supporting Smart Growth Through the Use of VR Technologies in Land Use Decision Making". Grant Amount: \$800,000. Total Project: \$900,000. 3 Years.

September, 2004. OIT. "Human and Traffic Flow Simulation in Land Use Planning Scenarios". Grant Amount: \$118,863. Total Project: \$394,847. 1 Year.