

Referencias

- [1] Abbott, M.B., Damsgaard, A., Rodenhuis, G.S. *System 21 Jupiter (A design system for two-dimensional nearly-horizontal flows)*. J. Hydr. Res. Vol 11, No. 1. 1972
- [2] Abbott, M.B., Cunge, J.A. *Two dimensional Modelling of Tidal Deltas and Estuaries. 18th Chapter in Unsteady Flow in Open Channels (Vol II)* by Mahmood, K., Yevjevich, V. Water Resources Publication. Fort Collins, Colorado, USA. 1975.
- [3] Abbott, M.B. *Computational Hydraulics*. Pitman, London, 1979.
- [4] Abbott, M.B. *Hydroinformatics. Information technology and the aquatic environment*. Averbury Technical. Billing & Sons Ltf. Worcester, 1991.
- [5] Alcrudo, F. *Esquemas de alta resolución de variación total decreciente para el estudio de flujos discontinuos de superficie libre*. Tesis Doctoral. Facultad de Ciencias de la Universidad de Zaragoza. Septiembre de 1992.
- [6] Alcrudo, F., García-Navarro, P., Sáviron, J.M. *Flux difference splitting for 1D channel flow equations*. Int. J. Num. Meth. Fluids. Vol 14, 1009-1018, 1992(a).
- [7] Alcrudo, F., García-Navarro, P. *A TVD Scheme in finite volumes for the Simulation of 2D Discontinuous Flow*. Jornadas de encuentro trilateral para el estudio de la hidráulica de las ondas de submersión. Zaragoza, 10-11 de Septiembre de 1992 (b).
- [8] Alcrudo, F., García-Navarro, P. *A High Resolution Godunov Type Scheme in Finite Volumes for the 2D Shallow water equations*. Int. J. Num.. Meth. Fluids, Vol 16, 489-505 1993.
- [9] Alcrudo, F., García-Navarro, P. *Computing Two dimensional Flood Propagation with a High Resolution extension of McCormack's Method*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [10] Aleán Rocha, C.M. *Modelación numérica de flujo a superficie libre. Método de las características (x,y,t). Aplicación en el sistema lagunar de Nichup-té, Qna. ROO*, México. Tesis doctoral para obtener el grado de Maestro en Ingeniería (Hidráulica). Ciudad Universitaria, México D.F. Septiembre de 1997.
- [11] Ambrosi, D. Saleri, F. *A 2D numerical simulation of the Po river delta flow*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [12] Aral, M. M., Zhang, Y., Jin, S. *Application of Relaxation Scheme to Wave-Propagation Simulation in Open-Channel Networks*. J. Hydr. Engng, Vol. 124, No. 11, November, 1998.
- [13] Bateman, A. *Formación y propagación de frentes de onda en canales. Estudio numérico experimental*. Tesis doctoral. ETSECCPB, Universitat Politècnica de Catalunya. Barcelona, septiembre de 1993.
- [14] Bates, P.D., Anderson, M.G., Hervouet, J.-M., *Initial Comparison of two two-dimensional finite element codes for river flood simulation*. Proc. Instn. Civ. Engrs. Wat. Marit. & energy, 112, Sept. 1995.
- [15] Bechteler, W., Hartmann, S., Otto, A.J. *Coupling of 1D and 2D models and integration into GIS*. 2nd International Conference on River Flood Hydraulics. York, England, March 1994.
- [16] Bechteler, W., Nujic, M., Otto, A.J. *Calculation of 2D flood propagation using the program package FLODISM*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [17] Beffa, C. Feah, R. *Flood Propagation on Mobile Beds under Mountainous flow conditions*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.

- [18] Benkhaldoun, F. *An Adaptive Nine-point Finite volume Roe Scheme for Two-dimensional Saint-Venant Equations*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [19] Berezowsky, M. *Cálculo de turbulencia en flujos a superficie libre*. Sección de Ing. Hidráulica e Hidrológica. ETSECCPB, Universitat Politècnica de Catalunya, septiembre de 1993.
- [20] Bijvelds, M.D.J.P., Kranenburg, C., Stelling, G.S. *3D Numerical Simulation of Turbulent Shallow-Water Flow in Square Harbour*. J. Hydr. Engrg., Vol.125, No. 1, January, 1999.
- [21] Bladé, E., Gómez, M., Dolz, J. *Quasi-two dimensional modelling of flood routing in rivers and flood plains by means of storage cells*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [22] Bonillo, J.J., Vázquez, M.E., Suárez, J., Puertas, J. *Estudio numérico experimental del flujo bidimensional y del transporte de contaminantes en lámina libre*. IAHR XVIII Congreso Latinoamericano de hidráulica. Oxaca, México, Octubre, 1998.
- [23] Boss International, Inc. and Brigham Young University. *SMS Reference Manual*. Brigham Young University – Engineering Computer Graphics Laboratory, 1997.
- [24] Braschi, G. Dadone, F., M. Gallati. *Plain flooding: near and far field simulations*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [25] Brufau, P. *Simulación bidimensional de flujos hidrodinámicos transitorios en geometrías irregulares*. Tesis doctoral. Universidad de Zaragoza, 2000.
- [26] Burguete, J. García-Navarro, P. *Efficient construction of high-resolution TVD conservative schemes for equations with source terms: application to shallow water flows*. Int. J. Numer. Meth. Fluids 37:209-248, 2001.
- [27] Burguete, J. García-Navarro, P. *Improving simple explicit methods for unsteady open channel and river flow*. Int. J. Numer. Meth. Fluids 45; 125-156, 2004.
- [28] Casulli, V. *A semi-implicit numerical method for free-surface flows on unstructured grids*. Numerical modelling of hydrodynamic systems. Zaragoza, June 1999.
- [29] Cetina, M., Rajar., R. *Two-Dimensional Dam Break FlowSimulation in Sudden Enlargement*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [30] Chaudhry, M.H. *Open Channel Flow*. Prentice Hall, New Jersey , 1993.
- [31] Clifford, N.J., French, J.R., Hardisty, J. *Turbulence. Perspectives on flow and sediment transport*. John Wiley & Sons.
- [32] Courant, R., Hilbert, D. *Methods of mathematical Physics*. Interscience Publ. New York, 1962.
- [33] Cubells, R. *Construcció d'un model hidrològic a partir de la resolució de les equacions completes de Saint Venant en dues dimensions*. Tesina d'Especialitat. E.T.S. d'Enginyers de Camins, Canals i Ports de Barcelona. UPC. Juliol de 2004.
- [34] Cunge, J.A. *Two-dimensional modelling of flood plains*. En Mahmood, K, Yevjevich, V. *Unsteady Flow in Open Channels*. W.P.R. Fort collins, 1975.
- [35] Cunge, J.A. *Practical aspects of computational river hydraulics*. Pitman, London 1980.
- [36] Cunge, J.A. *Review of recent developments in river modelling*. In Hydraulic and Environmental Modelling of Coastal, Estuarine and River Waters. Proceedings of the International Conference. R.A. Falconer, P. Goodwin and R.G.S. Mattew editors. University of Bradford, 19-21 September 1989
- [37] Danish Hydraulics Institute. <http://www.dhisoftware.com/>

- [38] D'Alpaos, L. Defina, A. *2D Finite element modelling of flooding due to river bank collapse*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [39] DEHMA. Secció d'Enginyeria Hidràulica i Hidrològica. ANHELL. Anàlisi hidràulica del tram final del riu Llobregat. Barcelona, 1995.
- [40] DEHMA. Sección de Ingeniería Hidráulica e Hidrológica. *Estudio en modelo reducido de las obras de recuperación medioambiental del tramo final del cauce del río Besò*. Estudio realizado por encargo de Taller d'Enginyeries y Barcelona Regional. Barcelona, Marzo de 1999.
- [41] DEHMA. Sección de Ingeniería Hidráulica e Hidrológica. *Estudio en modelo físico a escala reducida del comportamiento hidráulico de las obras de emergencia de desvío del río Cardener a la altura del meandro de LacCoromina (T.M. de Cardona)*. Estudio realizado por encargo de Técnica y Proyecto S.A. Barcelona, Febrero de 2000.
- [42] DEHMA. Sección de Ingeniería Hidráulica e Hidrológica. *Estudio hidráulico en modelo reducido del tramo final del río Francolí*. Estudio realizado por encargo de la Agència Catalana de l'Aigua. Barcelona, Febrero de 2002.
- [43] DEHMA. Sección de Ingeniería Hidráulica e Hidrológica. *Estudio hidráulico del río Segre en el entorno del canal de eslalon de Ponts (Noguera)*. Estudio realizado por encargo de Gaena Environment S.L. Barcelona, junio de 2003.
- [44] DEHMA. Sección de Ingeniería Hidráulica e Hidrológica. *Comportamiento hidráulico de los ríos Llierca y Fluvià y su relación con el nuevo puente y enlace previstos en la duplicación de la N-260*. Estudio realizado por encargo de la Demarcación de Carreteras del estado en Cataluña. Barcelona, julio de 2004.
- [45] Di Giammarco, P. Todini, E. *A control volume finite element method for the solution of 2-D overland flow problems*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [46] Elliot, R.C., Chaudhry, m.H. *A wave propagation model for two-dimensional dam-break flows*. J. Hydr. Research, Vol. 30, No. 28, 1993.
- [47] Espino, M. *Estabilización de la superficie libre en la solución de ecuaciones Shallow-Water por elementos finitos.* Tesis doctoral. Universitat Politècnica de Catalunya. Barcelona. 1994.
- [48] Faeh, R. *Erosion-based dambreak simulation*. Hydroinformatics 96, Müller(ed). Balkema, Rotterdam, 1996.
- [49] Fennema, R.J., Chaudhry, M.H. *Implicit methods for two-dimensional unsteady free-surface flows*. J. Hydr. Research, Vol.27, No.3, 1989.
- [50] Fennema, R.J., Chaudhry, M.H. *Explicit Methods for 2-D Transient Free-Surface Flows*. J. Hydr. Engrg., Vol.116, No.8, August 1990.
- [51] Ferziger, J.H. Peric, M. *Computational Methods for fluid Dynamics*. Springer, 1996.
- [52] Fox, J.A. *Transient Flow in Pipes, Open Channels and Sewers*. Ellis Horwood Series in Civil Engineering, Chichester, West Sussex, England, 1989.
- [53] Fracarollo, L., Toro. E.F. *Experimental and numerical assessment of the shallow water model for two-dimensional dam-break type problems*. J. Hydr. Research, Vol. 33, No. 6, 1995.
- [54] Franco, A. B. *Modelação uni e bidimensional de cheias provocadas por roturas de barragens em vales naturais*. En Jornadas de encuentro trilateral para el estudio de la hidráulica de las ondas de submersión. Zaragoza, 10-11 de Septiembre de 1992.

- [55] Franco, A. B. *Modelação computacional e experimental de escoamentos provocados por roturas de barragens.* Tese submetida para obtenção do grau de Doutor em Engenharia Civil pela Universidade Técnica de Lisboa. Setembro de 1996
- [56] García, M.A. Contribución al estudio de la circulación marina mediante el método de los elementos finitos. Tesis doctoral. Universitat Politècnica de Catalunya. Barcelona. 1990.
- [57] García-Navarro, P., Alcrudo, F. *High Resolution Schemes for Unsteady Open Channel Flow Simulation.* En Jornadas de encuentro trilateral para el estudio de la hidráulica de las ondas de submersión. Zaragoza, 10-11 de Septiembre de 1992
- [58] García-Navarro, P., Hubbard, M.E., Priestley, A. *Genuinely Multidimensional Upwinding for the 2D Shallow water Equations.* Journal of Computational Physics 121, 79-93, 1995.
- [59] Glaister, P. *Approximate Riemann solutions of the Shallow water equations.* J. Hydr. Research. Vol. 26, No. 3, 1988.
- [60] Godunov, S.K. *A Finite Difference Method for the Computation of Discontinuous Solutions of the Equations of fluid Dynamics.* Mat. Sb., 47:537-393, 1959.
- [61] Gómez, M. *Contribución al Estudio del Movimiento Variable en Lámina Libre, en las Redes de Alcantarillado. Aplicaciones.* Tesis Doctoral. Universitat Politècnica de Catalunya, 1988.
- [62] Goussebaile, J., Lepeintre, F. *A method to solve the one-dimensional water equations using characteristics and flux splitting.* In Hydraulic and Environmental Modelling of Coastal, Estuarine and River Waters. Proceedings of the International Conference. R.A. Falconer, P. Goodwin and R.G.S. Mattew editors. University of Bradford, 19-21 September 1989
- [63] Harten, A. *On a class of high-resolution total-variation-stable finite-difference schemes.* SIAM J. Num. Analysis, Vol.21, 1-23, 1984.
- [64] Harten, A. *High resolution Schemes for Hyperbolic Conservation Laws.* J. Comp. Physics 49.,357 ,1982.
- [65] Harten, A., Hyman, P. *Selfadjusting grid methods for one-dimensional hyperbolic conservation laws.* J. Comp.. Physics 50, 235-269, 1983.
- [66] Harten, A., Lax, P.D., Van Leer, B. *Upstream differencing and Godunov-Type Schemes for Hyperbolic conservation Laws.* SIAM Review, 25(1):35-61, 1983.
- [67] Harten, A., Osher, O., *Uniformly High-Order Accurate Nonoscillatory Schemes. I,* SIAM Journal of Numerical Analysis. Vol. 24, No. 2, 1987.
- [68] Henderson, F.M. *Open Channel flow.* Macmillan Publishing Co., Inc. New York 1966.
- [69] Hervouet, J.-M., Janin, J.-M. *Finite element Algorithms for Modelling Flood Propagation.* Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [70] Hicks, F.E., Steffler, P.M. *Characteristic Dissipative Galerkin Scheme for Open-Channel Flow.* J. Hydr. Engrg. Vol 118, No. 2, February 1992.
- [71] Hirsh, Ch. *Numerical Computation of internal and external Flows. Volume 2, Computational Methods for Inviscid and Viscous Flows,* John Wiley & Sons, Chichester, 1990.
- [72] Holt, M. *Numerical methods in Fluid Dynamics.* Springer-Verlag, New York / Berlin 1977.
- [73] Hon Y. C., Cheung, K.F., Mao, X. Z., Kansa, E.J. *Multiquadric Solution for Shallow Water Equations.* J. Hydr. Engrg. Vol 125, No. 5, May 1999.

- [74] M.E.Hubbard, *Multidimensional slope limiters for MUSCL-type finite volume schemes on unstructured grids*, J. Comput. Phys. 155:54--74, 1999.
- [75] Hubbard, M.E., García-Navarro, P. *Flux difference Splitting and the Balancing of Source Terms and Flux Gradients*. Journal of Computational Physics 165, 89-125, 2000.
- [76] Hudson, J. *Numerical Techniques for the Shallow Water*. Numerical analysis Report 2/99. The University of Reading, February 1999.
- [77] Jeffrey, A. *Quasilinear Hyperbolic Systems and Waves*. Research Notes in Mathematics no.5, Pitman, 1976.
- [78] Jha, A.K., Akiyama, J., Ura, M. *First- and Second-Order Flux Difference Splitting Schemes for Dam-Break Problem*. J. Hydr. Engrg. Vol. 121, No. 12, December 1995.
- [79] Jha, A.K., Akiyama, J., Ura, M. *A fully conservative Beam and Warming scheme for transient open channel flows*. J. Hydr. Research, Vol. 34, No. 5, 1996.
- [80] Jiménez, O.F., Chaudhry, M.H. *Computation of Supercritical Free-Surface Flows*. J. Hydr. Engrg, Vol.114, No. 4, April, 1987.
- [81] Katopodes, N.D., Strelkoff, T. *Computing two-dimensional dam-break flood waves*. J. Hydr. Division No. 104 HY9:1269-88, 1978.
- [82] Katopodes, N.D. *A dissipative Galerkin Scheme for Open-Channel Flow*. J. Hydr. Engrg. Vol 110, No. 4, April 1984.
- [83] Katopodes, N.D. *Two dimensional surges and shoks in Open Channels*. J. Hydr. Engrg. Vol 110, No. 6, June 1984.
- [84] Katopodes, N.D. *Control of shallow water flow and transport*. Numerical modelling of hydrodynamic systems. Zaragoza, June 1999.
- [85] Kuipers, J., Vreughdenhil, C.B. *Calculations of Two-Dimensional Horizontal Flows*. Report S 163-I, Delft Hydraulics Laboratory, Delft, the Netherlands, Oct, 1973.
- [86] Leclerc, M. *A finite element model of estuarian and river flows with moving boundaries*. Adv. Water Resources, Vol. 13, No. 4, 1990.
- [87] Lendertsee, J.J. *Aspects of a Computational Model for Long-Period Water Wave Propagation*. RM-2594-PR, The Rand corporation, Santa Monica, Calif., May 1967.
- [88] LeVeque, R.J. *Balancing source terms and source gradients in high-resolution Godunov methods: The quasi-steady wave propagation algorithm*. Journal of Computational Physics 146(1), 346, 1998.
- [89] MacDonald, I. *Analysis and computation of steady open channel flow*. Ph. Thesis. University of Reading, 1996.
- [90] Mahmood, K. Yevjevich, V. *Unsteady Flow and Open Channels*. Water Resources Publications. Fort Collins, Colorad, 1975.
- [91] Martín, J.P. *Estudio Hidráulico de la Propagación del Resalto Móvil*. Tesis Doctoral. Universitat Politècnica de Catalunya, 1989.
- [92] Martín-Vide, J.P., López, S., Martín, P. *Improving 1-D modelling of open channel flow in compound channels*. IAHR 2nd International Conference on Fluvial Hydraulics. Naples, 2004.
- [93] Menéndez, A.N. *Simulación numérica de flujos Cuasi-Bidimensionales a Superficie Libre*. Informe LHA-INCYTH 55-016-85 Argentina, 1985.

- [94] Menéndez, A.N. *Sistema Hidrobid II para simular corrientes en cuencos*. Revista Internacional de Métodos Numéricos para Cálculo y diseño en Ingeniería. Vol6, 1, 25-36, 1990.
- [95] Mohammadi, B., Pironneau, O. *Analysis of the K-Epsilon Turbulence Model*. Jhon Wiley & Sons, 1994.
- [96] Molinaro, P. *Un modello matematico per la simulazione delle inundazioni di vaste aree a topografia complessa. Aspetti teorici, informatici ed applicativi*. Centro di Ricerca idraulica e strutturale, ENEL, 4514 PM-ADF-FF, settembre 1992.
- [97] Molinaro, P., Di Filippo, A., Ferrari, F. *Modelling of Flood Wave Propagation Over flat Dry Areas of complex Topography in Presence of different Infrastructures*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [98] Molinaro, P., Pacheco, R. *Sul calcolo della portata transitante attraverso singolarità presenti in un alveo naturale*. Centro di Ricerca idraulica e strutturale, ENEL, Rel 4840, Marzo 1994.
- [99] Molinaro, P. *Mathematical modelling of free-surface flows: A state of the art*. Hydroinformatics'96, Müller (ed.). Balkema, Rotterdam, 1996.
- [100] Monsó, J.L. *Modelado numérico del flujo en zonas costeras*. Tesis doctoral. Universitat Politècnica de Catalunya. Barcelona. 1986.
- [101] Montefusco, L. Valiani, A. *A comparison between computed and measured bed evolution in a river bend*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [102] Molls, T., Chaudhry, M.H. *Depth-Averaged Open-Channel Flow Model*. J. Hydr. Engrg, 453-465. June 1995.
- [103] Naaim, M., Brugnot, G. *Free surface flow modelling on complex topography*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [104] Nania Escobar, L. S. *Metodología numérico-experimental para el análisis del riesgo asociado a la escorrentía pluvial en una red de calles*. Tesis doctoral. Sección de Ingeniería Hidráulica e Hidrológica. Depto. de Ing. Hidráulica, M. y A. UPC. Barcelona, agosto 1999.
- [105] Neary, v.S., Sotiropoulos, F., Odgaard, J. *Three-Dimensional Numerical Model of Lateral-Intake Inflows*. J. Hydr. Engrg, Vol.125, No. 2, February, 1999.
- [106] Nezu, I., Nakagawa, H. *Turbulence in Open Channel Flows*. IAHR Monograph. A.A. Balkema, Rotterdam, 1993.
- [107] Nujic, M. *Efficient Implementation of Non-Oscillatory Schemes for the computational of free surface flows*. J. Hydr. Research, Vol. 33, No. 1, 1995.
- [108] Osher, S., Solomon, F. *Upwind Difference schemes for Hyperbolic Systems of Conservation Laws*. Mathematics of Computation, 38 (158), 339-374, 1982.
- [109] Osuna, A. Hidráulica. *Hidráulica técnica y mecánica de fluidos*. Servicio de Publicaciones del Colegio de Ing. de Caminos, C. y P. Madrid 1993.
- [110] Paquier, A. *New Methods for Modelling Dam-Break Wave*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [111] Pender, G. *Maintaining numerical stability of flood plain calculations by time increment splitting*. Proc., Instn Civ. Engrs Wat., Marit & Energy, 96, Mar. 1992.
- [112] Ponce, V.M., Yabusaki, S.B. *Modeling circulation in Depth-Averaged Flow*. ASCE J. Hydr. Division 107 (HY11) November 1991.

- [113] Rajar, R., Cetina, M. *Two-dimensional Modelling of flow in the River Sava*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [114] Riccardi, G.A. *Modelación matemática bidimensional en problemas de hidráulica fluvial*. XVI Congreso Latinoamericano de Hidráulica. Santiago, Chile, noviembre de 1994.
- [115] Richardson, E.V., Simons, D.B., Julien, P.Y. *Highways in the river environment*. U.S. Department of Transportation. Federal Highways Administration. 1984.
- [116] Rodi, W. *Turbulence Models and their Application in Hydraulics*. State-of-the-Art Paper. IAHR 1980.
- [117] Roe, P.L. *Approximate Riemann Solvers, Parameter Vectors and Difference Schemes*. J. Comp. Physics, 43, 357-372, 1981.
- [118] Scarati, J.R. *Escoamento bidimensional – Modelo de diferenças finitas implícito*. AIHR XIV Congresso Latinoamericano de Hidráulica, 1993.
- [119] Schmitz, G., Seus, G.J. *Simulating Flood Flows by Coupled 1-D and 2-D Models*. F.E. in Water Resources. 5th Int. Conf. Burlington. Ed. Laible, Brebbia, Gray, Pinder, Springer Verlag 1984.
- [120] SOGREAH Consultants. <http://www.telemacsystem.com/>
- [121] Shettar, A.S., Murthy, K.K. *A numerical study of division flow in open channels*. J. Hydr. Research, Vol. 34, No. 5, 1996.
- [122] Shu, C., Osher, S. *Efficient Implementation of Essentially Non-oscillatory shock capturing schemes*. J. Comp. Physics, 77, 439-471, 1986.
- [123] Steger, J.L., Warming, R.F. *Flux vector splitting of inviscid gas dynamic equations with application to finite-difference methods*. J. Comp. Phys., 40 263-293 (1981).
- [124] Sweby, P.K. *High resolution schemes using flux limiters for hyperbolic conservation laws*. SIAM. J. Numer. Anal, 21, 1984.
- [125] Szymkiewicz, R. *Oscillation-Free Solution of Shallow Water Equations for Nonstaggered Grid*. J. Hydr. Engrg, Vol. 119, No. 10, October 1993.
- [126] Tan, W. *Shallow Water Hydrodynamics*. Naging Research Institute of Hydrology and Water Resources. Elsevier Science Publishers, Amsterdam, 1992.
- [127] TASE Software Corporation Inc.. TASE/SWAN Plus version 2.1.
- [128] Tayfur, G., Kavaas, M.L., Govindaraju, R.S., Storm, D.E. *Applicability of St. Venant Equations for Two-dimensional Overland Flows over Rough Infiltrating Surfaces*. J. Hydr. Engrg, Vol 119, No. 1, January 1993.
- [129] Tchamen G.W, Kahawita, R. *The numerical simulation of wetting and drying areas using Riemann Solvers*. Modelling of Flood Propagation Over Initially Dry Areas. Speciality Conference. ASCE-ENEL. Milan 1994.
- [130] Tchamen G.W, Kahawita, R. *On the use of Riemann Solvers for the modelling of SWE*. a) Submitted to the Int. J. for Num. Meth. Fluids. Buscat però no existeix.
- [131] Tingsanchali, T., Chirananont, B. *Investigation of flow circulation in a channel side pool*. Environmental Hydraulics, Lee & Cheung (eds). Balkema, Rotterdam 1991
- [132] Toro, E.F. *Riemann Solvers and Numerical Methods for Fluid Dynamics*. A Practical Introduction. Springer- Verlag Berlin Heidelberg 1997.

- [133] Trento, A.E., Borche, A., Vinzón, S., Alvarez, A., Venturini, V. *Aplicación de un modelo 2D-H con fuertes gradientes batimétricos*. IAHR XVI Congreso Latinoamericano de Hidráulica. Santiago, Chile, 1994.
- [134] Tseng, M. *Improved treatment of source terms in TVD scheme for shallow water equations* Advances in water resources 27 617-629, 2004.
- [135] Unami, K., Kawachi, T., Munir Babar, M. Itagaki, H. *Two-Dimensional Numerical Model of Spillway Flow*. J. Hydr. Engrg, Vol.125, No. 4, April, 1999.
- [136] Urban, C. Zielke, W. *Steady-State solution For Twodimensional Flows in Rivers with Flood Plains*. 2nd International Conference on the Hydraulics of Floods and Control. Cambridge, England: 24-26 september,1985.
- [137] U.S. Army Corps of Engineers – Waterways Experiment Station Hydraulics Laboratory. *Users Guide to RMA2 Version 4.3*. WexTech Systems Inc. New York, 1996.
- [138] U.S. Federal Highway Administration (FHWA) *Finite Element Surface Water Modeling System:2-Dimensional Flow in a Horizontal Plane* (FESWMS-2DH)
- [139] Van Leer, B. *Flux Vector Splitting of the Euler Equations*. Lecture Notes in Physics. Vol 170, 507-512. Springer-Verlag, New York/Berlin (1982).
- [140] Van Leer, B. *Towards the ultimate conservative difference scheme III. Upstream-Centered Finite-Difference Schemes for Ideal Compressible Flow*. J. Comp. Physics 23, (1977).
- [141] Van Leer, B. *Towards the ultimate conservative difference scheme V. A Secon-Order Sequel to Godunov's method*. J. Comp. Physics 32, 101-136 (1979).
- [142] Van Leer, B. *Towards the ultimate conservative difference scheme IV. A new approach to numerical convection*. J. Comp. Physics 23, (1977).
- [143] Valiani, A. *Rapid transients in free-surface flows with movable bed: a 2-D numerical solution*. Hydrocomp'92. Int. Conf. on Interaction of Comp. Methods and Measurements in Hydraulics and Hydrology. Budapest, May 1992.
- [144] Vázquez-Cendón, M.E. *Improved treatment of Source Terms in Upwind Schemes for the Shallow Water Equations in Channels with Irregular Geometry* J. Comput. Physuiscs 148, 497-526, 1999a.
- [145] Vázquez-Cendón, M.E. *Treatment of Source Terms in Upwind Schemes for the Shallow Water Equations in Channels* in Proceedings of the Int. Workshop on Numerical Modelling og Hydrodynamic Systems. Zaragoza, 1999b.
- [146] Vázquez-Cendón, M.E. *Implicit and Explicit Upwind Schemes for the 2D Shallow Water Equations* in Proceedings of the Int. Workshop on Numerical Modelling og Hydrodynamic Systems. Zaragoza, 1999c.
- [147] Versteeg, H.K., Malalaskera, W. *An introduction to computational fluid dynamics. The finite Volume Method*. Longman. Harlow, England, 1995.
- [148] Villanueva, I. *Estudio de regímenes transitorios y permanentes en ríos y canales*. Tesis doctoral. Universidad de Zaragoza, 1999.
- [149] Vionnet, C.A., Tassi, P.A., Martín Vide, J.P. *Estimates of flow resistance and eddy viscosity coefficients for 2D modelling on vegetated flood plains*. Hydrological Processes, 18, 2907-2926, 2004.
- [150] Vongvisessomjai, S., Tingsanchali., T., Chaiwat, C. *Bangkok Flood Plain Model*. “1st IAHR Congress, Melbourne, Australia, 1985.
- [151] Vreugdenhil, C.B., Wijbenga, J.H.A. *Computation of flow patterns in rivers*. ASCE J. Hydr. Division (HY11) Nov 1982.

- [152] Vreugdenhil, C.B. *Numerical Methods for Shallow-Water Flow*. Kluwer Academic Publishers, Dordrecht, The Netherlands, 1994.
- [153] Waterways Experiment Station. *HIVEL 2D Users Manual*. Coastal and Hydraulics Laboratory, 1997.
- [154] Yang, J.Y., Chang, S.H., Hsu, C.A. *Computations of free surface flows. Part1: One-dimensional dam-break flow*. J. Hydr. Research, Vol 31, No. 1, 1993.
- [155] Zhang, W., Cundy, T.W. *Modeling of Two-Dimensional Overland Flow*. Water Resources Research, Vol. 25, No. 9, September 1989.
- [156] Zhao, D.H., Shen, H.W., Lai, J.S., Tabios III, G.Q. *Approximate Riemann Solvers in FVM for 2D Hydraulics Shock Wave Modeling*. J. Hydr. Engrg., Vol. 122, No. 12, December, 1996.
- [157] Zhao, D.H., Shen, H.W., Tabios III, G.Q., Lai, J.S., Tan, W.T. *Finite-Volume Two-Dimensional Unsteady-Flow Model for River Basins*. J. Hydr. Engrg., Vol. 120, No. 7, July, 1994.

