Debris Flow References (Updated January 9, 2002) Also see listings in Hillslope References

- Addison, K., 1987, Debris flow during intense rainfall in Snowdonia, North Wales, a preliminary study: Earth Surface processes and Landforms, v. 12, p. 561-566.
- Alger, C.S., and Ellen, S.D., 1987, Zero-order basins shaped by debris flows, Sunol, California, USA: in Erosion and Sedimentation in the Pacific Rim, Proceedings of the Corvallis Symposium, International Association of Hydrological Sciences, Publication 165, p. 111-119.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):h
- Alger, C.S., Mark, R.K., and Wieczorek, G.F., 1985, Hydraulic monitoring at a debris flow site: EOS, v. 66, p. 911.
- Apman, R.P., 1973, Estimating discharge from super-elevation in bends, American Society of Civil Engineers, Hydraulics Division Journal, v. 99, No. HY1, p. 65-79.
- Bagnold, R.A., 1954, Experiments on a gravity-free dispersion of large solid spheres in a Newtonian fluid under shear: Proceedings of the Royal Society of London, Series A, v. 225, p. 49-63.
- Bathurst, J.C., Burton, A., and Ward, T.J., 1997, Debris flow run-out and landslide sediment delivery model tests: Journal of Hydraulic Engineering, American Society of Civil Engineers, v. 123, p. 410-419.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h
- Beaty, C.B., 1990, Anatomy of a White Mountains debris-flow: The making of an alluvial fan, in Rachocki, A.H., and Church, M.,eds., Alluvial Fans: A Field Approach: Wiley, New York, p. 69-89.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):l-m
- Benda, L., 1990, The influence of debris flows on channels and valley floors in the Oregon Coast Range, U.S.A.: Earth Surface Processes and Landforms, v. 15, p. 457-466.
- On file (Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Benda, L., and Dunne, T., 1987, Sediment routing by debris flow, in Erosion and Sedimentation in the Pacific Rim, Proceedings of the Corvallis Symposium, International Association of Hydrological Sciences, Publication 165, p. 213-223.
- On file (Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Benda, L., and Dunne, T., 1997, Stochastic forcing of sediment supply to channel networks from landsliding and debris flow: Water Resources Research, v. 33, no. 12, p. 2849-2863.
- Beverage, J.P., and Culbertson, J.K., 1964, Hyperconcentrations of suspended sediment: Journal of the Hydraulics Division, American Society of Civil Engineers, v. 90, HY6, p. 117-126.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h

Blackwelder, E., 1928, Mudflow as a geologic agent in semiarid mountains: Geological Society of America Bulletin, v. 39, p. 465-484.

(classic early debris flow paper)

Blijenberg, H.M., Degraff, P.J., Hendriks, M.R., Deruiter, J.F., and Vantetering A.A., 1996, Investigation of infiltration characteristics and debris flow initiation conditions in debris flow source areas using a rainfall simulator: Hydrological Processes, v. 10, p. 1527-1543.

Abstract on File from Current Contents: Get this article!!!

- Blong, R.J., 1973, A numerical classification of selected landslides of the debris slide-avalanche-flow type: Engineering Geology, v. 7, p. 999-114.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h
- Bovis, M.J., and Dagg, B.R., 1988, A model for debris accumulation and mobilization in steep mountain streams: Hydrological Sciences Journal, v. 33, p. 589-604.
- On file(Y/N):y Read(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Buchanon, P., Savigny, K.W., and DeVries, J., 1990, A method for modeling water tables at debris avalanche headscarps: Journal of Hydrology, v. 113, p. 61-88.
- Caine, N., 1980, The rainfall intensity-duration control of shallow landslides and debris flows: Geografiska Annaler, v. 62A, p. 23-27.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h
- Campbell, R.H., 1975, Soil slips, debris flows, and rainstorms in the Santa Monica Mountains, southern California: U.S. Geological Survey Professional Paper 851, 53 p.
- On file(Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Church, M., and Miles, M.J., 1987, Meteorological antecedents to debris flows in southwestern British Columbia; some case studies, in Costa, J.E., and Wieczorek, G.F., Debris flows/avalanches: Process, Recognition, and Mitigation: Geological Society of America Reviews in Engineering Geology, 7, p. 63-79.
- Costa, J.E. 1984. Physical geomorphology of debris flows: in Costa, J. E., and Fleisher, P. J., eds., Developments and Applications of Geomorphology, Berlin, Springer-Verlag, p. 268-317.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):l-m
- Costa, J.E., 1997, Hydraulic modeling for lahar hazards at Cascades volcanoes: Environmental and Engineering Geoscience: v. 3, p. 21-30.
- Abstract on File from Current Contents: Get this article!!!
- Costa, J.E., and Jarrett, R.D., 1981, Debris flows in small mountain stream channels of Colorado and their hydrologic implications: Association of Engineering Geologists Bulletin, v. 18, p. 309-322.

- On file (Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Costa, J.E. and Wieczorek, G.F., eds., Debris Flows/Avalanches: Process, Recognition and Mitigation: Geol. Soc. of America Reviews in Engineering Geology Vol VII, 240 p.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):h
- Costa, J.E., and Williams, G.P., 1984, Debris flow dynamics (videotape): U.S. Geological Survey Open-File Report 84-606, 22.5 min.
- Coussot, P., and Meunier, M., 1996, Recognition, classification and mechanical description of debris flows: Earth Science Reviews, v. 40, p. 209-227.
- Abstract on File from Current Contents: Get this article!!!
- DeGraff, J.V., 1994, The geomorphology of some debris flows in the southern Sierra Nevada, California: Geomorphology, v. 10, p. 231-252.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):m
- Dott, R.H., 1963, Dynamics of subaqueous gravity depositional processes: American Association of Petroleum Geologists Bulletin, v. 47, p. 104-129.
- On file (Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Enos, P., 1977, Flow regimes in debris flows: Sedimentology, v. 24, p. 133-142.On file(Y/N):yRead?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Fisher, R.V., 1966, Mechanism of deposition from pyroclastic flows: American Journal of Science, v. 264, p. 350-363.
- Fisher, R.V., 1971, Features of coarse-grained, high concentrations fluids and their deposits: Journal of Sedimentary Petrology, v. 41, p. 916-927.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l
- Gottesfeld, A.S., Mathewes, R.W., and Gottesfeld, L.M.J., 1991, Holocene debris flows and environmental history, Hazelton area, British Columbia: Canadian Journal of Earth Sciences, v. 28, p. 1583-1593.
- Hampton, M.A., 1975, The competence of fine-grained debris flows: Journal of Sedimentary Petrology, v. 45, p. 834-844.
- On file (Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Hampton, M.A., 1979, Buouancy in debris flows: Journal of Sedimentary Petrology, v. 49, p. 753-758.
- On file(Y/N):y Read(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Han, G.Q, and Wang, D.G., 1996, Numerical modeling of Anhui debris flow: Journal of Hydraulic Engineering, American Society of Civil Engineers, v. 122, p. 262-265.
- **Abstract on File from Current Contents**

- Hogg, S.E., 1982, Sheetfloods, sheetwash, sheetflow, or ...?: Earth Science Reviews, v. 18, p. 59-76.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):m
- Hutter, K., Svendsen, B., and Rickenmann, D., 1996, Debris flow modeling A review: Continuum Mechanics and Thermodynamics, v. 8, p. 1-35.

Abstract on File from Current Contents: Get this article!!!

- Innes, J.L., 1983, Debris flows: Process in Physical Geography, v. 7, p. 469-501.

 On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l-m
- Innes, J.L., 1985, Magnitude-frequency relations of debris flows in northwest Europe: Geografiska Annaler, v. 67A, p. 23-32.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):m
- Iverson, R.M., 1985, A constitutive equation for mass-movement behavior: Journal of Geology, v. 93, p. 143-160.
- Iverson, Richard M et al, 1998 Objective delineation of lahar-inundation hazard zones, in Geological Society of America Bulletin v.110, no. 8; p. 972-984.

On File

Iverson, R.M., 1997, Stream flows, debris flows and grain flows: Crucial effects of convective accelerations: EOS Transactions of the American Geophysical Union, v. 78, no. 46, Fall Meeting Supplement, p. F 257.

Abstract on File

- Iverson, R.M., 1997, The physics of debris flows: Reviews of Geophysics, v. 35, p. 245-296. On file(Y/N):y

 Read?(Y/N):yX-ref(Y/N):n/a

 Applicability(0,low,m,high):h
- Iverson, R.M., Costa, J.E., and LaHusen, R.g., 1992, Debris-flow flume at H.J. Andrews Experimental Forest, Oregon: U.S. Geological Survey Open-File Report 920483, 2 p.
- Iverson, R.M, and Denlinger, R.P., 1987, The physics of debris flows a conceptual assessment, in Erosion and Sedimentation in the Pacific Rim, Proceedings of the Corvallis Symposium, International Association of Hydrological Sciences, Publication 165, p. 155-165.
- On file (Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Iverson, R.M., LaHusen, R.G., Major, J.J., and Zimmerman, C.L., 1994, Debris flow against obstacles and bends: dynamics and deposits: EOS, Transactions of the American Geophysical Union, v. 75, p. 274.
- Iverson, R.M., and Major, J.J., 1986, Groundwater seepage vectors and the potential for hillslope failure and debris flow mobilization: Water Resources Research, v. 22, p. 1543-1548.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h

- Iverson, R.M., Reid, M.E., and LaHusen, R.G., 1997, Debris-flow mobilization from landslides: Annual Review of Earth and Planetary Sciences, v. 25, p. 85-138.
- On file(Y/N):y Read?(Y/N):y Applicability(0,low,m,high):m-h
- Jackson, L.E., Kostaschuk, R.A., and MacDonald, G.M., 1987, Identification of debris flow hazard on alluvial fans in the Canadian Rocky Mountains, in Costa, J. E., and Wieczorek, G.F., eds., Debris Flows/Avalanches: Process, Recognition, and Mitigation, Reviews in Engineering Geology Volume VII, Boulder, Colorado, Geological Society of America, p.115-124.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l-m
- Johnson, A.M., 1970, Physical Processes in Geology: Freeman, Cooper, San Francisco, 577 p. On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l-m
- Johnson, A.M., 1984, Debris Flow, in Brunsden, D., and Prior, D.B., eds., Slope Instability, p. 257-361.
- Johnson, A.M., and Rahn, P.H.,1970, Mobilization of debris flows: Zeitschrift fur Geomorphologie Supplementband, v. 9, p. 168-186.
- On file (Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Johnson, A.M., and Rodine, J.R., 1984, Debris flow, in in Brunsden, D., and Prior, D.B., Slope Instability: New York, John Wiley, p. 257-361.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):h
- Larsson, S., 1982, Geomorphological effects on the slopes of Longyear Valley, Spitsbergen, after a heavy rainstorm in July 1972: Geografiska Annaler, v. 67, p. 105-125.
- On file(Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Lawson, D.E., 1982, Mobilisation, movement nad deposition of active subaerial sediment flows, Matanuska glacier, Alaska: Alaskan Journal of Geology, v. 90, p. 279-300.
- Liu, X., 1996, Size of a debris flow deposition: Model experiment approach: Environmental Geology, v. 28, p. 70-77.

Abstract on File from Current Contents

Lu, Z.Y., and Cruden, D.M., 1996, Two debris flow modes on Mount Cayley, British Columbia, Canadian Geotechnical Journal, v. 33, p. 123-139.

Abstract on File from Current Contents

- Major, J.J., 1997, Depositional processes in large-scale debris-flow experiments: Journal of Geology, v. 105, p. 345-366.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n/a Applicability(0,low,m,high):h Abstract on File from Current Contents: Get this article!!!... o.k.

- Major, J.J., and Pierson, T.C., 1992, Debris flow rheology: Experimental analysis of fine-grained slurries: Water Resources Research, v. 28, p. 841-857.
- Manville, V. et al., 2000, Dynamic interactions between lahars and stream flows: A case study from Ruapehu volcano, New Zealand: Discussion and reply discussion, in Geological Society of America Bulletin v.112, no. 7; p. 1149-1152

On File

- Mathewson, C.C., and Keaton, J.R., 1986, Role of bedrock groundwater in the initiation of debris flow [abstract]: Association of Engineering Geologists, 29th annual Meeting, p. 56.
- Mills, H.H., 1984, Clast orientation in Mount St. Helens debris-flow deposits, North Fork Toutle River, Washinton: Journal of Sedimentary Petrology, v. 54, p. 626-634.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l-m
- Mizuyama, T., Yazawa, A., and Ido, K., 1987, Computer simulation of debris flow depositional processes: International Association of Hydrological Sciences, Publication No. 165, p. 179-190.
- Nordin, C.F., 1964, Study of channel erosion and sediment transport: Journal of the Hydraulics Division, American Society of Civil Engineers, v. 90, p. 173-192.
- Okuda, S., Suwa, H., Okunishi, K., Yokoyama, K., and Nakano, M., 1980, Observations on the motion of a debris flow and its geomorphological effects: Zeitschrift fur Geomorphologie Supplementband 35, p. 142-163.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):m
- Pareschi, M.T., et al., 2000, May 5, 1998, debris flows in circum-vesuvian areas (southern Italy): Insights for hazard assessment, in Geology v. 28; no 7 p. 639-642.

On File

- Parrett, C., 1987, Fire-related debris flows in the Beaver Creek drainage, Lewis and Clark County, Montana: U.S. Geological Survey, Water-Supply Paper 2330, p. 57-67.
- Phillips, C.J., and Davies, T.R., 1991, Determining rheological parameters of debris flow material: Geomorphology, v. 4, p. 101-110.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):m
- Pierson, T.C., 1980, Erosion and deposition by debris flows at Mt. Thomas, North Canterbury, New Zealand: Earth Surface Processes, Vol. 5, p. 227-247.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):l
- Pierson, T.C., 1980, Debris Flows an important process in high country gully erosion: Journal of the Tussock Grasslands and Mountain Lands Institute, Review 39, p. 3-14.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l-m
- Pierson, T.C., 1981, Dominant particle support mechanisms in debris flows at Mt. Thomas, New

- Zealand, and implications for flow mobility: Sedimentology, v. 28, p. 49-60.
- On file (Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Pierson, T.C., 1986, Flow behavior of channelized debris flows, Mount St. Helens, Washington, in Abrahams, A.D., Hillslope Processes: Winchester, MA, Allen & Unwin, Papers from the 16th Annual Binghamton Symposium, p. 269-296.
- On file (Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Pierson, T.C., and Costa, J.E., 1987, A rheologic classification of subaerial sediment-water flows, in Debris flows, avalanches: Process, recognition, and mitigation, Costa, J.E., and Wieczorek, G.F., eds., Geological Society of America, Reviews in Engineering Geology, v. 7, p. 1-12.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):h Paper Located in fluvial subheading
- Pierson, T.C., and Scott, K.M., 1985, Downstream dilution of a lahar: Transition from debris flow to hyperconcentrated streamflow: Water Resources Research, v. 21, p. 1511-1524.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h
- Rapp, A., and Nyberg, R., 1981, Alpine debris flows in northern Scandinavia: Geografiska Annaler, v. 67, p. 183-196.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h
- Reneau, S.L., and Dietrich, W.E., 1987, The importance of hollows in debris flow studies; Examples from Marin County, California, in Costa, J.E., and Wieczorek, G.F., Debris flows/avalanches: Process, Recognition, and Mitigation: Geological Society of America Reviews in Engineering Geology, v. 7, p. 63-79.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n/a Applicability(0,low,m,high):m-
- Rickenmann, D., and Zimmermann, M., 1993, The 1987 debris flows in Switzerland: documentation and analysis: Geomorphology, v. 8, p. 175-189.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):m
- Rodine, J.R., and Johnson, A.M., 1976, The ability of debris, heavily freighted with coarse clastic materials to flow on gentle slopes: Sedimentology, v. 23, p. 213-234.
- On file(Y/N):y Read(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Rodine, J.R., 1974, Analysis of mobilization of debris flows: Unpublished Ph.D. Dissertation, Stanford University, Palo Alto, California, 226 p.
- Scott, K.M., 1988, Origins, behavior, and sedimentology of lahars and lahar-runout flows in the Toutle-Cowlitz River system: U.S. Geological Survey, Professional Paper 1447-A, 74 p.
- On file (Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Southard, J.B., 1971, Lift forces on suspended sediment particles in laminar flow: Experiments and sedimentological interpretation: Journal of Sedimentary Petrology, v. 41, p. 320-324.

- Stock, J., and Dietrich, W.E., Valley incision by debris flows: evidence of topographic signature, *in* Water Resources Research, v. 39, no. 4, p. 1-24.
- Suwa, H., and Okuda, S., 1980, Dissection of valleys by debris flow: Zeitschrift fur Geomorphologie Supplementband, v. 35, p. 164-182
- On file (Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Takahashi, T., 1978, Mechanical characteristics of debris flow: American Society of Civil Engineers, Journal of the Hydraulics Division, v. 104, p. 1153-1169.
- On file (Y/N):y Read?(Y/N):n Applicability(0,low,m,high):h
- Takahashi, T., 1981, Debris flow: Annual Reviews of Fluid Mechanics, v. 13, p. 57-77.

 On file(Y/N):y

 Read?(Y/N):n

 X-ref(Y/N):n Applicability(0,low,m,high):m
- Takahashi, T., 1991, Debris flow: rotterdam, Balkema, 165 p.
- Takahashi, T., Ashida, K., and Sawai, K., 1981, Delineation of debris flow hazard areas: in Erosion and sediment transport in Pacific rim steeplands, Internation Association of Hydrological Scientists Publication 132, p. 589-603.
- Terranova, T., and Kochel, R.C., 1987, Multivariate analysis of factors related to debris avalanching in Nelson County, central Virginia: Geological Society of America Abstracts with Programs 9, no. 7, p. 866.
- VanDine, D.F., 1985, Debris flows and debris torrents in the southern Canadian Cordillera: Canadian Geotechnical Journal, v. 22, p. 44-68.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):m-h
- Vanoni, V.A., and Nomicos, G.N., 1960, Resistance properties of sediment-laden streams: Transactions of the American Society of Civil Envineers, v. 125, pt. I, p. 1140-1175.
- Vansteijn, H., 1996, Debris-flow magnitude-frequency relationships for mountainous regions of central and northwest Europe: Geomorphology, v. 15, p. 259-273.

Abstract on File from Current Contents

- Whipple, K.X., 1997, Open-channel flow of Bingham fluids: Applications in debris-flow research: Journal of Geology, v.105, p. 243-262.
- On file(Y/N):y Read?(Y/N):yX-ref(Y/N):y Applicability(0,low,m,high):l
- Whipple, K.X., and Dunne, T., 1992, The influence of debris flow rheology on fan morphology, Owens Valley, California: Geological Society of America Bulletin, v. 104, p. 887-900.
- On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n Applicability(0,low,m,high):h
- Wieczorek, G.F., 1987, Effect of rainfall intensity and duration on debris flows in central Santa

Cruz Mountains, California, in: Debris flows, avalanches: Process, recognition, and mitigation, Costa, J.E., and Wieczorek, G.F., eds., Geological Society of America, Reviews in Engineering Geology, v. 7, p. 93-104.

On file(Y/N):y Read?(Y/N):n X-ref(Y/N):n/a Applicability(0,low,m,high):m-h

Wohl, E.E., and Pearthree, P.P., 1991, Debris flows as geomorphic agents in the Huachuca Mountains of Southeastern Arizona: Geomorphology, Vol. 4, p. 273-292.

On file(Y/N):y Read?(Y/N):yX-ref(Y/N):n Applicability(0,low,m,high):l Paper located in fluvial subheading

Wood, S.H., and Meyer, G.A., 1997, High-velocity river-crossing debris flow triggered by Jan. 1, 1997 warm rains on heavy snowpack in the Payette River drainage of the southwestern Idaho mountains: EOS Transactions of the American Geophysical Union, v. 78, no. 46, Fall Meeting Supplement, p. F 219.

Abstract on File