



## REFERENCES

UNIVERSITAS  
GADJAH MADA

- Abidin, Hasanuddin Z. Kusuma, M.A. Setyadji, B. Andreas, H. Gamal, M., 2006. GPS-based Deformation Monitoring of Mud Volcano in Sidoarjo, East Java. (Published-local).
- Alkema, D. Jetten, V.G. Van Asch, Th.W.J., 2006. Physical aspects of Slope Stability., ITC – Enschede The Netherlands., Lecture notes. (unpublished)
- Arattano, M., Franzi, L., Marchi, L., 2006. Influence of rheology on debris-flow simulation., *Nat. Hazards Earth Syst. Sci.*, 6, 519–528.
- Arattano, M., Franzi, L., 2003. On the evaluation of debris flows dynamics by means of mathematical models. *Natural Hazards and Earth System Sciences*. 3, 539-544.
- Atkinson, P.M. Lloyd, C.D. 2007., Non-stationary variogram models for geostatistical sampling optimization: An empirical investigation using elevation data., *Computers & Geosciences* 33., 1285-1300.
- Bachtiar, Andang. 2006., BANJARPANJI “MUD VOLCANO in the Making” Tinjauan Geologi Lumpur Porong., (Published-local).
- Balıka, F., Alkışa, A., Kurucub, Y., Alkış, Z., Validation of Radargrammetric DEM Generation from Radarsat Images in High Relief Areas in Edremit Region of Turkey.
- Blomgren, Sten., 1998., A digital elevation model for estimating flooding scenarios at the Falsterbo Peninsula., *Environmental Modeling & Software* 14., 579–587.
- Bowles, Frederick A., Faas, Richard W., Vogt, Peter R., Sawyer, William B., Stephens, Kevin., 2003., Sediment properties, flow characteristics, and depositional environment of submarine mudflows, Bear Island Fan., *Marine Geology*, 197 pp 63-74.
- Chen, Pengyu., 2007. Flood Impact Assessment using Hydrodynamic Modeling in Bangkok, Thailand. MSc. Thesis ., International Institute for Geo-information Science and Earth Observation, Enschede, The Netherlands.
- Davies, RJ., Swarbrick, RE., Evans, RJ., Huuse, M., 2007. Birth of a mud volcano: East Java, 29 May 2006. *GSA Today*: vol. 17, no. 2.
- Demirhan, M., Ozpinar, A., and Ozdamar, L., 2003. Performance evaluation of spatial interpolation methods in presence of noise. *International Journal of Remote Sensing* 24:1237-1258.
- D’Ambrosio, D., Di Gregorio, S., Iovine, G., Lupiano, V., Rongo, R., Spataro, W., 2003. First simulations of the Sarno debris flows through Cellular Automata modeling. *Geomorphology*. 54, 91–117.
- Geospatial Positioning Accuracy Standards Part 3., National Standard for Spatial Data Accuracy Subcommittee for Base Cartographic Data., Federal Geographic Data Committee. 1998.
- Guntoro., 2007. Sidoarjo Mudflow Hypothesis in Geological - Expert Discourse., LUSI MEDIA CENTER, XI Edition, January 2007., (Published-local).
- Habib, E. M. Kim, M. Morgan, I. Couloigner. Dem Generation from High Resolution Satellite Imagery Using Parallel Projection Model.
- Hengl, T. Gruber, S. Shrestha, D.P., 2003., Digital Terrain Analysis in ILWIS., Lecture notes and user guide. International Institute for Geo-information Science and Earth Observation, Enschede, The Netherlands.



**Spatial modeling and element of risk assessment of Sidoarjo mud volcanic flow**

Rachman Rifai, Dr. Junun Sartohadi, M.Sc., Prof. Dr. V.G. (Victor) Jetten

Universitas Gadjah Mada, 2008 | Diunduh dari <http://etd.repository.ugm.ac.id/>

- Hensen, C., Nuzzo, M., Hambrook, E., Piniello, L.V., Beck, B., Magalhaes, V.H., Bruckmann, W., 2006. Sources of mud volcano fluids in the Gulf of Cadiz—indications for hydrothermal imprint. *Geochimica et Cosmochimica Acta*, 71, 1232–1248.
- IKATAN AHLI GEOLOGI INDONESIA., 2006., Evaluasi Semburan Lumpur Berair di Permukaan. (Published local)
- Indonesian Association of Geologist (IAGI)., 2006., Mudflow Geology and Geophysics Studies in Porong, Sidoarjo – East Java. (Published local)
- Istadi, Bambang. 2006. LUSI – Mud Volcano in the Making (Case: Banjarpanji-1 Exploration Drilling)., Lapindo Brantas Inc. (Published-local).
- Jacob, Mathias. Hungr, Oldrich., 2006., Debris flow hazards and related phenomena., Springer Published in association eith praxis publishing, chichester, UK.
- Jordana, Gyozo., 2007., Adaptive smoothing of valleys in DEMs using TIN interpolation. from ridgeline elevations: An application to morphotectonic aspect analysis., *Computers & Geosciences* 33, pp573–585.
- Kadar, Adi P. Kadar, Darwin. Aziz, Fachroel., 2006. Pleistocene Stratigraphy of Banjarpanji - 1 Well and the Surrounding Area., (Published-local).
- Kidner, D.B. 2003. Higher-order interpolation of regular grid digital elevation models. *International Journal of Remote Sensing* 24:2981 - 2987.
- Kusumastuti, Arse., Darmoyo, Agung B., Suwarlan, Wahyudin., Sosromihardjo, S.P.C., 1999. The Wunut Field: Pleistocene Volcaniclastic Gas Sands in East Java., *Proceedings, INDONESIA PETROLEUM ASSOCIATION Twenty Seventh Annual Convention & Exhibition, October 1999*
- Li, Zhe., Zhang, Juntao., 2001. Calculation of Field Manning's Roughness Coefficient., *Agricultural Water Management*, 49 : 153-161.
- Main Report., 2007., Exploration Well Banjarpanji-1., LUSI MEDIA CENTER, XI Edition.
- Malet, Jean-Philippe. Remaître, Alexandre. Maquaire, Olivier. 2004., Runout modeling and extension of the threatened area associated with muddy debris flows., *Géomorphologie : relief, processus, environnement*. 3, p. 195-210.
- Martini, P., Carniello, L., and Avanzi, C., 2004. Two dimensional modeling of flood flows and suspended sediment transport: the case of the Brenta River, Veneto (Italy). *Natural Hazards and Earth System Sciences*, 4: 165–181.
- Mikoš, M., Fazarinc, R., Majes, B., Rajar, R., Zagar, D., Krzyk, M., Hojnik, T., Četina, M. 2006. Numerical simulation of debris flows triggered from the Strug rock fall source area,WSlovenia. *Nat. Hazards Earth Syst. Sci.* 6, 261–270.
- Murton, BJ., Biggs, J., 2003. Numerical modeling of mud volcanoes and their flows using constraint from the Gulf of Cadiz. *Marine Geology*. 195, 223-236.
- Naef, D., Rickenmann, D., Rutschmann, P., McArdell, B. W., 2006. Comparison of flow resistance relations for debris flows using a one-dimensional finite element simulation model., *Nat. Hazards Earth Syst. Sci.*, 6, 155–165.
- Nawangsi, D., 2007. Engineering look at Banjarpanji I accident : In search of theory on flow mechanism of wild mud blow., (Published-local).
- Otieno., Jennifer. A., 2004. Scenario study for Flood Hazard Assessment in the Lower Bicol Floodplain The Philippine using A 2D flood model Based on the 1988 flood event



**Spatial modeling and element of risk assessment of Sidoarjo mud volcanic flow**

Rachman Rifai, Dr. Junun Sartohadi, M.Sc.; Prof. Dr. V.G. (Victor) Jetten

Universitas Gadjah Mada, 2008 | Diunduh dari <http://etd.repository.ugm.ac.id/>

- caused by typhoon forcing, MSc. Thesis, International Institute for Geo-information Science and Earth Observation, Enschede, The Netherlands.
- Pieterse, N. M., Venterink, H. Olde., Schot, P.P., Verkroost, A.W.M. 1998., Streamflow, a GIS-based Environmental Assessment Tool for Lowland Streams., The Netherlands Centre for Geo-ecological Research (ICG), Functioning of Landscape Ecosystems Research Group., Department of Environmental Science, Utrecht University, Utrecht.
- Platte County, Missouri., 2004., Brush Creek Watershed Study.
- Portugues, S.B., Van Asch, T.W.J., A Numerical simulation of the propagation and deposition of mud and debris flows over complex terrain., Draft Paper.
- Rahman, M. Z. B. A. (2006) Digital Surface Model (DSM) Construction and Flood Hazard Simulation for Development Plans in Naga City, Philippines. MSc. Thesis., International Institute for Geo-information Science and Earth Observation, Enschede, The Netherlands.
- Rezel, Rohana., 2007., A 2D multi-resolution urban flood propagation model using simplified Navier-Stokes equations. MSc. Thesis., International Institute for Geo-information Science and Earth Observation, Enschede, The Netherlands.
- Sanders, Brett f. 2007., Evaluation of on-line DEMs for flood inundation modeling. *Advances in water resources* 30., 1831-1843.
- Simulating Mudflows, Flo-2D manual. Electronic Manual., [www.flo-2d.com](http://www.flo-2d.com). Accessed 20 June 2007.
- Soto, J.I, Comas, M.C., Talukder, A.R., 2003. Evolution of the Mud Diapirism in the Alboran Sea (Western Mediterranean), AAPG International Conference.
- Suyoto., Ecological Study of Sidoarjo Mud., (Published-local).
- Tennakoon, K.B.M., 2004. Parameterisation of 2D Hydrodynamic Models and Flood Hazard Mapping for Naga city, Philippines., MSc. Thesis ., International Institute for Geo-information Science and Earth Observation, Enschede, The Netherlands.
- Tomislav, H., Stephan, G., Dhruba, P.S., 2003. Digital Terrain Analysis in ILWIS. International Institute for Geoinformation Science and Earth Observation, Enschede.
- Van Noorden, R., 2006. Mud volcano floods Java, disaster plagued Indonesian island faces new threat., <http://www.nature.com/news>., accessed 19 June 2007.
- Van Westen, C., 2007., Introduction to risk assessment, , ITC-ADPC-UNU. Lecture note. (unpublished)
- Vicari, A., Alexis, H., Del Negro, C., Coltelli, M., Marsella, M., Proeitti, C., 2006. Modeling of the 2001 lava flow at Etna volcano by a Cellular Automata approach. *Environmental Modeling and Software*. 22, 1465-1471.
- Wechsler, Suzanne P., 2003., Perceptions of Digital Elevation Model Uncertainty by DEM Users., *URISA Journal* Vol. 15, No. 2.
- Wechsler, Suzanne P., Kroll, Charles N., 2006., Quantifying DEM Uncertainty and its Effect on Topographic Parameters., *Photogrammetric Engineering & Remote Sensing* Vol. 72, No. 9., pp. 1081-1090.
- Weng, Q. 2002. Quantifying uncertainty of digital elevation models derived from topographic maps. In: *Advances in Spatial Data Handling*, Springer-Verlag, New York, pp.403-418.
- Werner, M. G. F., 2001. Impact of Grid Size in GIS Based Flood Extent Mapping Using a 1D Flow Model., *Phys. Chem. Earth (B)*, 26, No. 7-8, pp. 517-522.



**Spatial modeling and element of risk assessment of Sidoarjo mud volcanic flow**

Rachman Rifai, Dr. Junun Sartohadi, M.Sc.; Prof. Dr. V.G. (Victor) Jetten

Universitas Gadjah Mada, 2008 | Diunduh dari <http://eid.repository.ugm.ac.id/>

Wilson, John P. 2000. *Geographic Information Systems: Principles, Techniques, and Application*. John Wiley & Sons, Inc.

Wise, S.M., 2007., Effect of differing DEM creation methods on the results from a hydrological model. *Computers & Geosciences* 33., 1351-1365.

Wood, J. 1996. *The Geomorphological Characterisation of Digital Elevation Models*. PhD, Leicester University, Leicester.