

DAFTAR PUSTAKA

- Agisoft. 2018. *Orthophoto and DEM Generation with Agisoft PhotoScan Professional*. <http://www.agisoft.com/index.php?id=28>
- Arif, I. 2016. *Geoteknik Tambang*. Gramedia Pustaka Utama
- Al - Rawabdeh, A., Moussa, A., Foroutan, M., El-Sheimy, N., Ayman, H. 2017. *Time Series UAV Image-Based Point Clouds for Landslide Progression Evaluation Applications*. Sensors 17(10) · October 2017
- Al-Wassai, F.A., Kalyankar, N.V. 2013. *Major Limitations of Satellite images*. Journal of Global Research in Computer Science, 4 (5), May 2013, 51-59
- Azizi, M., A., Kramadibrata, S., Wattimena, R.K., Djati, I. 2012. *Analisis Risiko Kestabilan Lereng Tambang Terbuka (Studi Kasus Tambang Mineral X) Geotechnical Superintendent PT Newmont Nusa Tenggara*. Prosiding Simposium dan Seminar Nasional Geomekanik Ke – 1
- Azizi, M.A., Kramadribrata, S., Wattimena, R.K., Sidi, I.D. 2014. *Risk Assessment of Open Pit Slope Design at PT Adaro Indonesia*. Indonesian Mining Journal Vol 17, No 3
- Bao, N., Lechner, A., Fletcher, A. 2014. *SPOTing long-term changes in vegetation over short-term variability*. Int J Surf Min Reclam Environ 28(1):2–24
- Baolong, Z., Wen, F. 2015. *The Influence of Cross Section Geometric Shape on the Slope Stability*. Advanced Materials Research Vols. 1065-1069
- Beretta, F., Shibata, H., Cordova, R., Peroni, R, Azambuja, J., Costa, J. 2018. *Topographic modelling using UAVs compared with traditional survey methods in mining*. International Engineering Journal, 71(3), 463-470
- Bowles, 1991. *Sifat-sifat Fisis dan Geoteknis Tanah*. Penerbit Erlangga, Jakarta
- Bronto, S., Muzani, M., Putra, R., Sayudi, D. S., 2012. *Stratigraphy of The 2010 Pyroclastic Deposits at Gendol River, Merapi Volcano, Yogyakarta*. Proceeding PIT IAGI Yogyakarta 2012, The 41st IAGI Annual Convention and Exhiition

- Chaudhary, K., Domingos, V.H., Gilson, G., Fredlund, M., & Lu, H. 2016. *Three Dimensional Slope Stability: Geometry Effects*. Tailings and Mine Waste
- Dandois, J.P., Olano, M., Ellis, E.C. 2015. *Optimal Altitude, Overlap, and Weather Conditions for Computer Vision UAV Estimates of Forest Structure*. Remote Sensing 2015, 7(10), 13895-13920
- Danzi, M., Crescenzo, G., Ramondini, M., Santo, A. 2013. *Use of unmanned aerial vehicles (UAVs) for photogrammetric surveys in rockfall instability studies*. Società Geologica Italiana, Roma
- Dávid, L., Karancsi, Z. 1999. *Analysis of anthropogenic effects of quarries in a Hungarian basalt volcanic area*. 2nd International Conference of PhD Students, University of Miskolc, Miskolc, 91-100, 1999
- de Lange, M. 2016. *Structured slope monitoring in the mining industry*. EE Publishers
- d'Oleire-Oltmanns, S., Marzolff, I., Peter, K.D., Ries, J.B. 2012. *Unmanned Aerial Vehicle (UAV) for Monitoring Soil Erosion in Morocco*. Remote Sens. 2012, 4, 3390-3416
- de Vries, J. 2016. *Landslide stability analysis using UAV remote sensing and in situ observations*. Utrecht University. Thesis
- Eberhardt, E. 2003. *Rock Slope Stability Analysis—Utilization of Advanced Numerical Techniques*. University of British Columbia
- Francioni, M., Salvini, R., Stead, D., Giovannini, R., Riccucci, S., Vanneschi, C., Gulli, D. 2015. *An integrated remote sensing-GIS approach for the analysis of an open pit in the Carrara marble district, Italy: Slope stability assessment through kinematic and numerical methods*. Computers and Geotechnics 67 (2015) 46–63
- Fredlund, D.G., Krahn, J. 1977. *Comparison of slope stability methods of analysis*. Canadian Geotechnical Journal, 1977, 14(3): 429-439
- Gomez, P., Diaz, M., Lorig, L. 2002. *Stability analysis of waste dumps at Chuquicamata Mine, Chile*. Felsbau Rock Mechanics Journal, vol. 20, no. 6. pp. 61–689

- Giordan, D., Manconi, A., Remondino, F., Nex, F. 2017. *Use of unmanned aerial vehicles in monitoring application and management of natural hazards*. Geomatics, Natural Hazards and Risk 8(1):1-4
- Guang, Y., Weili, J. 2011. *Research on Impact of Ground Control Point Distribution on Image Geometric Rectification Based on Voronoi Diagram*. Procedia Environmental Sciences 11 (2011) 365 – 371
- Gultom, M., Sentiko, D., Fransiswantonny, Edra, F. 2015. *Karakteristik Kemantapan Lereng Tambang Batubara*. Jurnal ESDM, Volume 7, Nomor 2, Nopember 2015, hal. 100-116
- Grazzini, J., Soille, P. 2007. *Improved morphological interpolation of elevation contour data with generalised geodesic propagations*. Computer Analysis of Images and Patterns pp 742-750
- Hardiyatmo, H.C. 2010. *Mekanika Tanah*. Gadjah Mada University Press.
- Hawkins, S. 2016. *Using a Drone And Photogrammetry Software To Create Orthomosaic Images And 3D Models of Aircraft Accident Site*. ISASI 2016 Seminar, Reykjavik, Iceland
- Juan, L., Yong, C. 2011. *Environmental and Engineering Geology Volume IV; Geological Hazards: Earthquakes, Tsunamis, and Landslides*. Eolss Publishers, United Kingdom.
- Kompas 2017. *Longsor di Lereng Merapi, 3 Tewas*. <https://kompas.id/baca/nusantara/2017/05/06/longsor-di-lereng-merapi-3-tewas/>
- Kompas. 2018. *Longsor di Lereng Merapi, 2 Tewas dan 4 Luka*. <https://kompas.id/baca/utama/2018/04/02/longsor-di-lereng-merapi-2-tewas-dan-4-luka/>
- Kriswati, E. 2011. *Remote Sensing Untuk Pemantauan Deformasi Gunungapi Seri Pertama: Interferometric Synthetic-Aperture Radar (InSAR)*. Bulletin Vulkanologi dan Bencana Geologi, Volume 6 Nomor 1, April 2011 : 31-37
- Lei, G. 2018. *Numerical experimental study on the effect of excavation on the stability of loess slope*. Materials Science and Engineering 392 (2018)

- Luke, W., Arko, L., Malenovsky, Z. 2016. *Assessment of forest structure using two UAV techniques: a comparison of airborne laser scanning and structure from motion (SfM) point clouds*. Forests 7(12):62–77
- Makineci, H.B., Karabörk, H. 2016. *Evaluation Digital Elevation Model Generated by Synthetic Aperture Radar Data*. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLI-B1, 2016, pp.57-62
- Mancini, F., Dubbini, M., Gattelli, M., Stecchi, F., Fabbri, S., Gabbianelli, G. 2013. *Using Unmanned Aerial Vehicles (UAV) for High-Resolution Reconstruction of Topography: The Structure from Motion Approach on Coastal Environments*. Remote Sensing 5(12):6880-6898
- Masini, N., Coluzzi, R., Lasaponara, R. 2011. *On the Airborne Lidar Contribution in Archaeology: from Site Identification to Landscape Investigation*. Laser Scanning, Theory and Applications
- McCormack, H., Thomas, A., Solomon, I. 2011. *The capabilities and limitations of satellite InSAR and terrestrial radar interferometry*. Fugro NPA, United Kingdom
- Mckenna, P., Erskine, P.D., Lechner, A. 2017. *Measuring fire severity using UAV imagery in semi-arid central Queensland, Australia*. Int J Remote Sens 38 (14):4244–4264
- Meeks, C., Bonneau, D.A., Hutchinson, D.J. Gauthier, D. 2017. *The Use of Unmanned Aerial Vehicles (UAVs) for Slope Stability Assessment*. Conference: GeoOttawa
- Mondol, A.M., Quamruzzaman, C., Kabir, S.M., Hossain S.M. 2013. *Open Pit Slope Design of Barapukuria Coal Mine Using Limit Equilibrium*. International Journal of Emerging Technology and Advanced Engineering. Volume 3, Issue 12
- Moore I.D., Grayson, R.B., Ladson, A.R. 1991. *Digital Terrain Modelling: A Review of Hydrological, Geomorphological and Biological Applications*. Hydrological Processes, Vol. 5, pp. 3-30.

- Mossa, J., James, L.A. 2013. *Impacts of Mining on Geomorphic Systems*. In: John F. Shroder (ed.) *Treatise on Geomorphology*, Volume 13, pp. 74-95. San Diego: Academic Press.
- Murthy, V.N.S. 2003. *Geotechnical engineering: principles and practices of soil mechanics and foundation engineering*. New York: Marcel Dekker: Basel.
- Nelson, S.A. 2013. *Slope Stability, Triggering Events, Mass Movement Hazards*. Natural Disasters EENS 3050. Tulane University
- Nex, F., Remondino, F. 2014. *UAV for 3D mapping applications: A review*. Applied Geomatics
- Octory, O., Cahyono, A.B. 2015. *Foto Udara Menggunakan Wahana UAV Jenis Fix Wing*. GEOID Vol. 01 No. 01 Agustus 2015 (29-33)
- Pamungkasari, F.P., Prasetyo, Y., Sukmono, A. 2019. *Analisis Konfigurasi Optimum Kerangka GCP Untuk Survei Pemetaan Luasan Besar Menggunakan Unmanned Aerial Vehicle (UAV)*. Jurnal Geodesi Undip Vol 8 No 1
- Pei, H.F., Yin, J.H., Zhu, H.H., Hong, C.Y., Jin, W., Xu, D.S. 2012. *Monitoring of lateral displacements of a slope using a series of special fibre Bragg grating-based in-place inclinometers*. Measurement Science and Technology, Volume 23, Number 2
- Peila, D., Patrucco, M., Falancesca, M., 2011. *Quantification and Management of Rockfall Risk in Opencast Quarrying Activities*. Environ. Eng. Geosci. 17, 39–51.
- Pereira, T.D.S., Robaina, A.D., Peiter, M.X., Braga, F.D., Rosso, R.B. 2016. *Performance of Analysis Methods of Slope Stability For Different Geotechnical Classes Soil on Earth Dams*. Eng. Agric. vol.36 no.6 Jaboticabal Oct./Dec. 2016
- Petrasawacana, 2011. *Rekonstruksi Akses dan Kontrol Lahan Terhadap Penghidupan Masyarakat Pasca Bencana Erupsi Gunung Merapi 2010*. Universitas Gadjah Mada. Tesis

- Purwanto, T.H. 2017. *Pemanfaatan Foto Udara Format Kecil untuk Ekstraksi Digital Elevation Model dengan Metode Stereoplotting*. Majalah Geografi Indonesia, Vol. 31 No.1, Maret 2017 : 73 – 89
- Rajagukguk, O.C., Turangan, Monintja, S. 2014. *Analisis Kestabilan Lereng dengan Metode Bishop (Studi Kasus: Kawasan Citraland sta.1000m)*. Jurnal Sipil Statik Vol.2 No.3, Maret 2014
- Ren, H., Zhao, Y., Xiao, W., Hu, Z. 2019. *A review of UAV monitoring in mining areas: current status and future perspectives*. Int J Coal Sci Technol
- Rossi, P., Mancini, F., Dubbini, M. 2017. *Combining nadir and oblique UAV imagery to reconstruct quarry topography: methodology and feasibility analysis*. Eur J Remote Sens 50(1):211–221
- Rossi, G., Tanteri, L., Tofani, V., Vannocci, P., Moretti, S., Casagli, N. 2018. *Multitemporal UAV surveys for landslide mapping and characterization*. Landslides, Volume 15, Issue 5, pp 1045–1052
- Salvini, R., Mastrococco, G., Esposito, G., Di Bartolo, S., Coggan, J., Vanneschi, C. *Use of a remotely piloted aircraft system for hazard assessment in a rocky mining area (Lucca, Italy)*. Nat. Hazards Earth Syst. Sci., 18, 287–302
- Settles, E., Schafer., T. 2008. *Slope Monitoring Methods A State of the Art Report*. The ClimChAlp partnership
- Sheng, Y. 2005. *Theoretical Analysis of the Iterative Photogrammetric Method to Determining Ground Coordinates from Photo Coordinates and a DEM*. Photogrammetric Engineering & Remote Sensing
- Srinivasan, V., Kumar, A., Mishra, A.K. 2016. *Status and Developments of Slope Monitoring Techniques in Opencast Mines*. Conference: INDOROCK2016, At IIT Bombay, Powai
- Stal, C., Bourgeois, J., De Maeyer, P., De Mulder, G., De Wulf, A., Goossens, R., Hendrickx, M., Nuttens, T., Stichelbaut B. 2012. *Test case on the quality analysis of structure from motion in airborne applications*. In: Proceedings of the 32nd EARSeL symposium: ‘advances in geosciences’ Mykonos, Greece

- Syafar, Z., Djamaluddin, Anshariah. 2016. *Analisis Kestabilan Lereng Dengan Metode Bishop Pada Penambangan Nikel*. Jurnal Geomine, Vol 4, No. 3: Desember 2016
- Tannant, D.D. 2015. *Review of Photogrammetry-Based Techniques for Characterization and Hazard Assessment of Rock Faces*. International Journal of Geohazards and Environment 76-87
- Templin, T., Popielarczyk, D., Kosecki, R. 2018. *Application of Low-Cost Fixed-Wing UAV for Inland Lakes Shoreline Investigation*. Pure and Applied Geophysics Volume 175, Issue 9, pp 3263–3283
- Trisatya, F.R., Surjandari, N.S., Djarwanti, N. 2015. *Analisis Stabilitas Lereng di DAS Tirtomoyo Wonogiri dengan Metode Simplified Bishop Akibat Hujan Periode Ulang*. e-Jurnal Matriks Teknik Sipil
- Turner, D., Lucieer, A., de Jong, S.M. 2015. *Time Series Analysis of Landslide Dynamics Using an Unmanned Aerial Vehicle (UAV)*. Remote Sens. 2015, 7, 1736-1757
- Vanneschi, C., Eyre, M., Francioni, M., Coggan, J. 2017. *The Use of Remote Sensing Techniques for Monitoring and Characterization of Slope Instability*. Procedia Engineering 191 (2017) 150 – 157
- Villanueva, J.K.S., Blanco, A.C. 2019. *Optimization of Ground Control Point (GCP) Configuration For Unmanned Aerial Vehicle (UAV) Survey Using Structure from Motion (SfM)*. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XLII-4/W12, 2019
- Wang, Z., Ding, J., Yang, G. 2012. *Risk analysis of slope instability of levees under river sand mining conditions*. Water Science and Engineering, 2012, 5(3): 340-349
- Wen, S.L., La, H.B., Wang, C.Z. 2013. *Analysis of Influence Factors of Slope Stability*. Applied Mechanics and Materials, Vols. 256-259, pp. 34-38, 2013
- Widijanto, E., Wattimena, R.K., Kramadibrata, S., Rai, M.A. 2017. *Geometry Effects on Slope Stability at Grasberg Mine Through the Transition from*

- Open Pit to Underground Block Cave Mining*. Electronic Journal of Geotechnical Engineering, 2017 (22.05), pp 1733-1745.
- Wierzbicki, D., Kedzierski, M., Fryskowska, A. 2015. *Assesment of The Influence of UAV Image Quality on Orthophoto Production*. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-1/W4, 2015
- Wines, D. 2016. *A comparison of slope stability analyses in two and three dimensions*. The Journal of Southern African Institute of Mining and Metallurgy Volume 116
- Wu, X.Z. 2014. *Development of fragility functions for slope instability analysis*. Landslide.
- Xiang, J., Chen, J., Sofa, G., Tian, Y., Tarolli, P. 2018. *Open-pit mine geomorphic changes analysis using multi-temporal UAV survey*. Environmental Earth Sciences (2018) 77:220
- Xiao, Y., Kamat, V.R., Lee, S. 2018. *Monitoring Excavation Slope Stability Using Drones*. Construction Research Congress 2018
- Yang, G., Li, C., Yu, H. 2015. *UAV based multi-load remote sensing technologies for wheat breeding information acquirement*. Trans Chin Soc Agric Eng 31(21):184–190
- Yang, K., Yan, L., Huang, G., Chen, C., Wu, Z. 2016. *Monitoring Building Deformation with InSAR: Experiments and Validation*. Sensors 16(12)
- Yang, P., Wang, N., Jiang, Z., Yang, Y., Yan, H. 2019. *Overview of Slope Monitoring Technology*. Conf. Series: Materials Science and Engineering 472 (2019)
- Ye, T., Xie, Q., Wang, Y., An, Y., Jin, J. 2018. *Analog modeling of sand slope stability with different precipitation conditions*. J. Mod. Transport. (2018) 26 (3): 200 – 208
- Yeh, F.H., Huang, C., Han, J., Ge, L. 2018. *Modeling Slope Topography Using Unmanned Aerial Vehicle Image Technique*. MATEC Web of Conferences 147, 07002 (2018)

- Yudhistira, Hidayat, W.K., Hadiyanto, A. 2011. *Kajian Dampak Kerusakan Lingkungan Akibat Kegiatan Penambangan Pasir di Desa Keningar Daerah Kawasan Gunung Merapi*. Jurnal Ilmu Lingkungan Volume 9, Issue 2: 76-84 (2011)
- Zhang, F., Liu, G., Chen, W., Liang, S., Chen, R., Han, W. 2012. *Human-induced landslide on a high cut slope: a case of repeated failures due to multi-excavation*. Journal of Rock Mechanics and Geotechnical Engineering. 2012, 4 (4): 367–374
- Zhang, Y., Guangqi, C., Zheng, L., Li, Y., Zhuang, X. 2013. *Effects of geometries on three-dimensional slope stability*. Canadian Geotechnical 50: 233–249 (2013)