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DAFTAR PUSTAKA

Anderson, K. R., Shea, T., Lynn, K. J., Montgomery-Brown, E. K., Swanson, D. A., Patrick, M. R., ... & Neal, C. A. (2024). The 2018 eruption of Kīlauea: Insights, puzzles, and opportunities for volcano science. *Annual Review of Earth and Planetary Sciences*, 52.

Ashari, A., Purwantara, A., Arif, N., & Widodo, E. (2021). Spatial evolution of the river valleys under the influence of active volcano: A case of Merapi volcanic plain. *Quaestiones Geographicae*, 40(3).

Atmoko, A. F. (2023). Merapi Muntahkan Awan Panas Pagi Ini. *Detik News*. https://news.detik.com/foto-news/d-6617549/merapi-muntahkan-awan-panas-pagi-ini

Avellán, D. R., Macías, J. L., Sosa-Ceballos, G., & Velásquez, G. (2014). Stratigraphy, chemistry, and eruptive dynamics of the 12.4 ka plinian eruption of Apoyeque volcano, Managua, Nicaragua. *Bulletin of Volcanology*, 76, 1-19.

Badan Pusat Statistik. (2024). *Kecamatan Ngebel dalam Angka 2023*. Badan Pusat Statistik.

Badan Standarisasi Nasional. (2020). *Beban desain minimum dan kriteria terkait untuk bangunan gedung dan struktur lain*. Standar Nasional Indonesia 1727.

Biass, S., Osman, S. J., Crummy, J., Thomas, M., & Carver, S. (2023). Laboratory tests to understand tephra sliding behaviour on roofs. *Journal of Applied Volcanology*, 12, 1–15.

Bleick, H. (2023). *Vulcanian Eruptions (U.S)*. National Park Service. Diakses 23 Mei 2025 dari https://www.nps.gov/articles/000/vulcanian-eruptions.htm

Blong, R. J. (2003). Building damage in Rabaul, Papua New Guinea, 1994 eruption. *Bulletin of Volcanology*, 65(1), 43–54.

Bogie, I., Lovelock, B., dan Greg, U., 2015. The Neutral High-Cl Thermal springs of Java. *Proceedings World Geothermal Congress 2015*, Melbourne, Australia, 7 h.

Bonadonna, C., Gonnermann, H. M., & Phillips, J. C. (1998). Sedimentation of tephra by volcanic plumes: A comparison of field data and a numerical

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
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Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

model. *Journal of Geophysical Research: Solid Earth*, 103(B11), 28,539–28,555.

Bonadonna, C., Cioni, R., & Pistolesi, M. (2008). Sedimentation of long-lasting wind-affected volcanic plumes: the example of the 2450 BP Plinian eruption of Pululagua volcano (Ecuador). *Journal of Volcanology and Geothermal Research*, 173(1-2), 141-156.

Bonadonna, C., & Costa, A. (2013). Plume height, volume, and classification of explosive volcanic eruptions based on the Weibull function. *Bulletin of Volcanology, 75*, 1-19.

Boudon, G., Komorowski, J.-C., Villemant, B., & Semet, M. P. (2008). Reconstruction and analysis of sub-Plinian tephra dispersal during the 1530 A.D. Soufrière (Guadeloupe) eruption: Implications for scenario definition and hazards assessment. *Journal of Volcanology and Geothermal Research*, 178(3), 474–490.

Cahyani, S. M., Wibowo, H. E., Moktikanana, M. L. A., & Fajarwati, A. (2022, August). *Estimation of volume and column height from pumiceous tephra-fall deposits of Mt. Raung, East Java, Indonesia*. Dalam IOP Conference Series: Earth and Environmental Science (Vol. 1071, No. 1, p. 012015). IOP Publishing.

Cas, R. A. F., & Wright, J. V. (1987). *Volcanic successions: Ancient and modern. Allen and Unin*, London.

Cashman, K. V., et al. (2010). The 2006 eruption of Mount St. Helens: Geologic and petrologic overview. *Bulletin of Volcanology*, 72(3).

Cashman, K. V., & Sparks, R. S. J. (2013). "How volcanoes work: A 25 year perspective." *Geological Society of America Bulletin*, 125(5-6), 664-690.

Carey, S., & Sigurdsson, H. (1985). The May 18, 1980 eruption of Mount St. Helens 2. Modeling of dynamics of the Plinian phase. *Journal of Geophysical Research: Solid Earth*, 90(B4), 2948–2958.

Carey, S., & Sparks, R. S. J. (1986). Quantitative models of the fallout and dispersal of tephra from volcanic eruption columns. *Bulletin of volcanology*, 48, 109-125.

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Carey, R. J., Houghton, B. F., Thordarson, T., & Larsen, G. (2010). Tephra dispersal and eruption dynamics of the great 1875 eruption of Askja Volcano, Iceland. *Bulletin of Volcanology*, 72(3), 259–278.

Civico, R., Ricci, T., Scarlato, P., Taddeucci, J., Andronico, D., Del Bello, E., et al. (2023). Temporal evolution of roof collapse from tephra fallout during the 2021 Tajogaite eruption (La Palma, Spain). *Frontiers in Earth Science*, 11, 1303330.

Comida, P. P., Ross, P. S., Dürig, T., White, J. D., & Lefebvre, N. (2022). Standardized analysis of juvenile pyroclasts in comparative studies of primary magma fragmentation: 2. Choice of size fraction and method optimization for particle cross-sections. *Bulletin of Volcanology*, 84, 1-24.

Craig, H., Wilson, T., Magill, C., Stewart, C., & Wild, A. J. (2021). Agriculture and forestry impact assessment for tephra fall hazard: fragility function development and New Zealand scenario application. *Volcanica*, 4(2), 345-367.

Day, S. J., Heleno da Silva, S., & Fonseca, J. F. B. D. (1999). A past giant lateral collapse and present-day flank instability of Fogo, Cape Verde Islands. *Journal of Volcanology and Geothermal Research*, 94(1–4), 191–218.

Edmonds, M., & Wallace, P. J. (2017). Volatiles and exsolved vapor in volcanic systems. *Elements*.

Fisher, R. V. (1966). Mechanisms of deposition from pyroclastic flows. *American Journal of Science*, 264(5), 350-363.

Gere, J. M., & Goodno, B. J. (2012). *Mechanics of materials* (8th ed.). Cengage Learning.

Gertisser, R., Charbonnier, S. J., Keller, J., & Quidelleur, X. (2012). The geological evolution of Merapi volcano, central Java, Indonesia. *Bulletin of Volcanology*, 74, 1213-1233.

Hartono, U., 1994. *The Petrology and Geochemistry of The Wilis and Lawu Volcanoes, East Java Indonesia*. University of Tasmania, 473 h.

Hüpers, A., et al. (2015). Depositional processes of the Chaitén 2008 eruption. *Journal of Volcanology and Geothermal Research*, 292.

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Houghton, B.F., Swanson, D.A., & Lanphere, M.A. (1987). *Pumice, ash, and the Kīlauea eruption of 1924*. U.S. Geological Survey Bulletin 1850.

Höskuldsson, Á., Sparks, R. S. J., & Carey, S. (2007). Eruptive history and magma evolution of Hekla volcano, Iceland. *Bulletin of Volcanology*, 70(2), 169–182.

Houghton, R. A., et al. (1987). The 1963-1967 Eruptions of Surtsey: A Preliminary Report. *Bulletin of Volcanology*, 49(6).

Inman, D. L. (1952). Measures for describing the size distribution of sediments. *Journal of Sedimentary Research*, 22(3).

Jenkins, S. F., Spence, R. J. S., Fonseca, J. F. B. D., Solidum, R. U., & Wilson, T. M. (2013). The Merapi 2010 eruption: The role of hazard maps in saving lives and reducing economic loss. *Journal of Volcanology and Geothermal Research*, 261, 1–6.

Jenkins, S. F., Spence, R. J. S., Fonseca, J. F. B. D., Solidum, R. U., & Wilson, T. M. (2020). Remotely assessing tephra fall building damage and vulnerability. *Journal of Applied Volcanology*, 9(1), 1–18.

Kandlbauer, J., & Sparks, R. S. J. (2014). New estimates of the 1815 Tambora eruption volume. *Journal of Volcanology and Geothermal Research*, 286, 93-100.

Klug, C., & Cashman, K. V. (1996). Permeability development in vesiculating magmas: implications for fragmentation. *Bulletin of Volcanology*, 58, 87–100.

Kuang, X., Jiao, J. J., Zheng, C., Cherry, J. A., & Li, H. (2020). A review of specific storage in aquifers. *Journal of Hydrology*, 581, 124383.

Larsen, G., Eiríksson, J., & Guðmundsson, Ó. (2021). Impacts of volcanic ash on aircraft operations in Europe: Historical perspective and future risks. *Journal of Air Transport Management*, 95, 102099.

Lechner, H. G., Gislason, S. R., & Gudmundsdottir, M. L. (2020). Respiratory symptoms and lung function in relation to the source of volcanic ash. *Environmental Research*, 184, 109317.

Luhr, J.F., & Simkin, T. (1993). *Parícutin: The Volcano Born in a Mexican Cornfield. Smithsonian Institution*, Global Volcanism Program Bulletin 30.

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

López, C. R., et al. (2014). Tephra Deposits from the 1953 Eruption of Volcán de Colima, Mexico. *Journal of Volcanology and Geothermal Research*, 265.

Macedo, O., et al. (1999). Volcanic Hazard Assessment at Volcán de Colima, Mexico. *Geological Society of America Special Papers*, 33

Jehadu, S. (2024, November 4). Erupsi Gunung Lewotobi Laki-laki, Korban Tewas Jadi 10 Orang. *Kompas*. https://regional.kompas.com/read/2024/11/04/133954178/erupsi-gunung-lewotobi-laki-laki-korban-tewas-jadi-10-orang

Koppe, M. (2023, January 24). *Learning the lessons of the Hunga Tonga eruption*. CNRS News. Diakses 23 Mei 2025 dari https://news.cnrs.fr/articles/learning-the-lessons-of-the-hunga-tonga-eruption

Mayfield, S., Boore, S., Myers, B., & Diggles, M. (2005, February 28). *The Cataclysmic 1991 Eruption of Mount Pinatubo, Philippines*. The Cataclysmic 1991 Eruption of Mount Pinatubo, Philippines, Fact Sheet 113-97. Diakses 23 Mei 2025 dari https://pubs.usgs.gov/fs/1997/fs113-97/

McPhie, J. (1993). *Volcanic textures: a guide to the interpretation of textures in volcanic rocks*.

Mei, E.T.W., Lavigne, F., Picquout, A., et al. (2013). Lessons learned from the 2010 evacuations at Merapi volcano. *Journal of Volcanology and Geothermal Research*, 261.

Miura, K., Ban, M., & Yagi, H. (2008). The tephra layers distributed around the eastern foot of the Zao volcano: Ages and volumes of the Za-To 1 to 4 tephras. *Bulletin of the Volcanological Society of Japan*, 53(5).

Miyabuchi, Y., Maeno, F., Nakada, S., Tomiya, A., Nagai, M., Suzuki, Y., ... & Tanaka, Y. (2013). The 2011 eruption at Shinmoe-dake, Kirishima volcano, Japan: Characteristics of eruptive activity and related phenomena. *Earth, Planets and Space*, 65(6), 657–667.

Miyabuchi, Y., Iizuka, Y., Hara, C., Yokoo, A., & Ohkura, T. (2018). The September 14, 2015 phreatomagmatic eruption of Nakadake first crater, Aso Volcano, Japan: eruption sequence inferred from ballistic, pyroclastic density current and fallout deposits. *Journal of Volcanology and Geothermal Research*, 351.

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Miyaji, N., Kan'no, A., Kanamaru, T., & Mannen, K. (2011). High-resolution reconstruction of the Hoei eruption (AD 1707) of Fuji volcano, Japan. *Journal of Volcanology and Geothermal Research, 207*(3-4), 113-129.

Morris, M. O., Gula, J., & Peltier, W. R. (2023). Atmospheric circulation patterns associated with extreme wind events in Canadian cities. *Journal of Climate*, 36(13), 4463–4480.

Muhammad, F. (2017). *Rekonstruksi Genesa Telaga Ngebel Kabupaten Ponorogo Provinsi Jawa Timur* (Skripsi). Universitas Gadjah Mada.

Mulyana, E., Prayoga, M. B. R., Yananto, A., Wirahma, S., Aldrian, E., Harsoyo, B., ... & Sunarya, Y. (2018). Tropical cyclones characteristic in southern Indonesia and the impact on extreme rainfall event. Dalam MATEC Web of Conferences (Vol. 229, p. 02007). EDP Sciences.

Neal, C. A., et al. (2006). Volcanic Hazard Assessment for the Rotorua District, New Zealand. *New Zealand Journal of Geology and Geophysics*, 49(3).

Newhall, C. G., & Punongbayan, R. S. (1996). *Fire and Mud: Eruptions and Lahars of Mount Pinatubo, Philippines*. Philippine Institute of Volcanology and Seismology.

Newhall, C. G., & Self, S. (1982). The volcanic explosivity index (VEI) an estimate of explosive magnitude for historical volcanism. Journal of Geophysical Research: Oceans, 87(C2), 1231-1238.

Nugroho, I. F., Pramudita, D., & Ekayani, M. (2022). Dampak Ekonomi dan Pengembangan Wisata Telaga Ngebel, Kecamatan Ngebel, Kabupaten Ponorogo. *Indonesian Journal of Agriculture Resource and Environmental Economics*, 1(1), 11-24.

Nurcahyo, A. D., & Muzayanah, M. (2020). Analisis Dampak Penambangan Pasir Berbasis Pembangunan Berkelanjutan di Kecamatan Ngebel Kabupaten Ponorogo. *Jurnal Geografi Geografi Dan Pengajarannya*, 18(2), 139-144.

Nurfiani, D., & Bouvet De Maisonneuve, C. (2018). Furthering the investigation of eruption styles through quantitative shape analyses of volcanic ash particles. *Journal of Volcanology and Geothermal Research*, 354

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Pallister, J. S., & Hoblitt, R. P. (2022). "Volcanic hazard assessment and the role of isopach maps in modern eruption forecasting." *Journal of Volcanology and Geothermal Research*, 428, 107501.

Pebrianti, C. (2023). *Fenomena Gas Belerang Telaga Ngebel Penyebab Ikan Mati Kini Susah Diprediksi*. detikcom. Diakses 19 Oktober 2024, dari https://www.detik.com/jatim/berita/d-6494536/fenomena-gas-belerang-telaga-ngebel-penyebab-ikan-mati-kini-susah-diprediksi

Pierson, T. C., & Major, J. J. (2014). *Hydrologic processes influencing lahars and related mass flows*. In P. T. Bobrowsky & B. Marker (Eds.), Volcano Hazards, Risks, and Disasters (pp. 61–88). Academic Press.

Porter, S. C. (1979). Quaternary Stratigraphy and Geochronology of Mauna Kea, Hawaii: A 380,000-Year Record of Mid-Pacific Volcanism and Ice-Cap Glaciation. *Geological Society of America Bulletin*, 90(7), 609-611.

Reynolds, P., Holford, S., & Schofield, N. (2016). The facies architecture of submarine basaltic volcanoes and their effects on fluid flow. *ASEG Extended Abstracts*, *2016*(1), 1-6.

Sarna-Wojcicki, A. M., Shipley, S., Waitt, R. B., Dzurisin, D., Hays, W. H., Davis, J. O., ... & Bateridge, T. (1980). Areal distribution, thickness, and volume of downwind ash from the May 18, 1980, eruption of Mount St. Helens (No. 80-1078). US Geological Survey.

Sasminto, Retno Ayu, & Alexander Tunggul. (2014). Analisis spasial penentuan iklim menurut klasifikasi Schmidt-Ferguson dan Oldeman di Kabupaten Ponorogo." *Jurnal Sumberdaya Alam dan Lingkungan*. 51-56.

Serber, B. (2023, April 14). *Hawaiian Eruptions*. National Park Service. Diakses 23 Mei 2025 dari https://www.nps.gov/articles/000/hawaiian-style-eruptions.htm

Sheridan, M. F., & Wohletz, K. H. (1983). Hydrovolcanism: Basic considerations and review. *Journal of Volcanology and Geothermal Research*, 17(1–4), 1–29.

Sigurdsson, H., Carey, S., & Devine, J. D. (1990). The Eruption of Tambora in 1815: Environmental Effects and Eruption Dynamics. *Bulletin of Volcanology*, 52(2), 175-195.

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Sigurdsson, H., Houghton, B., McNutt, S. R., Rymer, H., & Stix, J. (2000). *The Encyclopedia of Volcanoes*. Academic Press.

Sparks, R. S. J. (1978). The dynamics of bubble formation and growth in magmas: A review and analysis. *Journal of Volcanology and Geothermal Research*, 3(1–2), 1–37.

Sparks, R. S. J., Moore, J. G., & Rice, C. J. (1986). The initial giant umbrella cloud of the May 18th, 1980, explosive eruption of Mount St. Helens. *Journal of Volcanology and Geothermal Research*, 28(3-4), 257-274.

Sparks, R. S. J., Bursik, M. I., Carey, S. N., Gilbert, J. S., Glaze, L. S., Sigurdsson, H., & Woods, A. W. (1997). *Volcanic Plumes*. Wiley.

Spence, R., Kelman, I., Baxter, P., Zuccaro, G., & Petrazzuoli, S. (2005). Residential building and occupant vulnerability to tephra fall. *Natural Hazards and Earth System Sciences*, 5(4), 477–494.

Suhendro, I., Diwijaya, S., Rahmawati, Z. Y., Priyana, P. E., Zen, R. F., Jonathan, A., ... & Yuliawan, E. (2024). Constraints on building susceptibility zone from tephra-lapilli loading through isopach mapping: A case study of the Quaternary (< 27.4-> 1.1 ka), VEI 3–4 eruptions of Sumbing volcano, Central Java, Indonesia. *Natural Hazards*, 120(6), 5785-5809.

Suhendro, I., Naen, G. N. R. B., Gurusinga, A., Sari, S. A., Moktikanana, M. L. A., Gunawan, R. M. P. P., ... & Ardian, D. N. (2023). Dynamics of the Young Merapi (< 2.2 ka–1,788 CE) pumice fall deposits: Insights from textural and geochemical studies. *Journal of Volcanology and Geothermal Researc*h, 443, 107919.

Surono, Jousset, P., Pallister, J., et al. (2012). The 2010 explosive eruption of Java's Merapi volcano—A '100-year' event. *Journal of Volcanology and Geothermal Research*, 241-242, 121-135.

Suzuki, T. (1983). A theoretical model for dispersion of tephra. In S. Tazieff & J.-C. Sabroux (Eds.), Forecasting volcanic events (pp. 95–113). Elsevier.

Syaifullah, M. D. (2017). Analisis Kondisi Udara Atas Wilayah Indonesia dengan Data Radiosonde. *Jurnal Meteorologi dan Geofisika*, 18(1).

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Takarada, S., & Hoshizumi, H. (2020). Distribution and eruptive volume of Aso-4 pyroclastic density current and tephra fall deposits, Japan: A M8 super-eruption. *Frontiers in Earth Science*, 8, 170.

Takeuchi, S., Toshida, K., Miura, D., Ito, H., & Uesawa, S. (2021). Relationships between magmatic properties and eruption magnitude of explosive eruptions at Japanese arc volcanoes during the last one hundred thousand years. *Journal of Volcanology and Geothermal Research*, 419.

Toramaru, A. (2006). BND (bubble number density) decompression rate meter for explosive volcanic eruptions. *Journal of Volcanology and Geothermal Research*, 154(3-4).

Tilling, R. I., & Dvorak, J. J. (1993). Anatomy of a basaltic volcano. *Nature*, 363(6425), 125-133.

Taylor, A. (2015, May 18). *The Eruption of Mount St. Helens in 1980*. The Atlantic. Diakses 23 Mei 2025 dari https://www.theatlantic.com/photo/2015/05/the-eruption-of-mount-st-helens-in-1980/393557/

Ullum, I. T. N. H., Fitria, A., & Widodo, W. (2024). Variasi Hasil Analisis Data Hasil El Nino-Southern Oscillation (ENSO) terhadap Iklim Global. JSN. *Jurnal Sains Natural*, 2(2), 40-47.

USGS. (2023, April 14). *Strombolian Eruptions (U.S)*. National Park Service. Diakses 23 Mei 2025 dari https://www.nps.gov/articles/000/strombolian-eruptions.htm

Valentine, G. A. (1998). Damage to structures by pyroclastic flows and surges, inferred from nuclear test data. *Journal of Volcanology and Geothermal Research*, 87(1-4), 117-140.

Vergniolle, S., Brandeis, G., & Harris, A. J. L. (1996). Strombolian eruptions: An interpretation of the seismic data from Stromboli volcano (Italy). *Bulletin of Volcanology*, 58(5), 329-340.

Voloschina, M., Métrich, N., Bertagnini, A., Marianelli, P., Aiuppa, A., Ripepe, M., & Pistolesi, M. (2023). Explosive eruptions at Stromboli volcano (Italy): a comprehensive geochemical view on magma sources and intensity range. *Bulletin of Volcanology*, 85(6), 34.

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Walker, G. P. L. (1971). Grain-size characteristics of pyroclastic deposits. *Journal of Geology*, 79(6), 696-714.

Watson, I. M., & Oppenheimer, C. (2000). The role of remote sensing in monitoring global volcanoes and atmospheric plumes. *Bulletin of Volcanology*, 62(1), 2-16.

Wibowo, D. P. (2016). Dampak Eksploitasi Pasir Trass Terhadap Persepsi Masyarakat Mengenai Ekonomi, Sosial, Dan Lingkungan (Studi Kasus Di Desa Ngogung, Kecamatan Ngebel, Kabupaten Ponorogo). *Jurnal Ilmiah Mahasiswa* FEB, 4(2).

Williams, G. T., Jenkins, S. F., Biass, S., Wibowo, H. E., & Harijoko, A. (2020). Remotely assessing tephra fall building damage and vulnerability: Kelud Volcano, Indonesia. *Journal of Applied Volcanology*, 9, 1-18.

Williams, G. T., Jenkins, S. F., Lee, D. W., & Wee, S. J. (2021). How rainfall influences tephra fall loading—an experimental approach. *Bulletin of Volcanology*, 83, 1-13.

Wilson, T. M., Stewart, C., Sword-Daniels, V., Leonard, G. S., Johnston, D. M., & Cole, J. W. (2012). Volcanic ash impacts on critical infrastructure. *Physics and Chemistry of the Earth*, 45–46, 5–23.

Wright, H. M., Cashman, K. V., Mothes, P. A., Hall, M. L., Ruiz, A. G., & Le Pennec, J. L. (2012). Estimating rates of decompression from textures of erupted ash particles produced by 1999–2006 eruptions of Tungurahua volcano, Ecuador. *Geology*, 40(7), 619-622.

Yamamoto, T., Suzuki, Y. J., & Koyaguchi, T. (2022). A physics-based source model for real-time tephra-dispersal forecasting. *Journal of Applied Volcanology*, 11, 1–15.

Yenehun, A., Dessie, M., Nigate, F., Belay, A. S., Azeze, M., Van Camp, M., ... & Walraevens, K. (2022). Spatial and temporal simulation of groundwater recharge and cross-validation with point estimations in volcanic aquifers with variable topography. *Journal of Hydrology: Regional Studies*, 42, 101142.

Yudiantoro, D. F., Ratnaningsih, D. R., Pratiknyo, P., Mahreni, M., Sayudi, D. S., Paramitahaty, I., ... & Sampurno, D. G. (2021). Hydrothermal Fluids-Rock

UNIVERSITAS
GADJAH MADA
Analisis Isopach dalam Penentuan Zona Kerawanan Atap Runtuh Akibat Tekanan Tefra
Muhammad Alsamtu Tita Sabila Pratama Suhartono, Dr. Indranova Suhendro, S.T., M.Sc.,
Universitas Gadjah Mada, 2025 | Diunduh dari http://etd.repository.ugm.ac.id/

Interactions in the Geothermal Area of the Ngebel Volcano Complex Ponorogo, East Java, Indonesia. In RSF Conference Series: Engineering and Technology (Vol. 1, No. 1, pp. 267-280).

Yudiantoro, D. F., Ratnaningsih, D. R., Pratiknyo, P., Mahreni, M., Sayudi, D. S., Haty, I. P., ... & Sampurno, D. G. (2023). Magma Evolution of Ngebel Volcano, Ponorogo, East Java, Indonesia. *Indonesian Journal on Geoscience*, 10(1), 51-62.

Yuwono, Y.S., 2013. *Penugasan Survei Pendahuluan Potensi Panas bumi Gunung Wilis*, PT. MRI Energy. 32 h.