

DAFTAR PUSTAKA

- Aditiya, A., Aoki, Y., & Anugrah, R. D. (2018). Surface Deformation Monitoring of Sinabung Volcano Using Multi Temporal Insar Method and GIS Analysis For Affected Area Assessment. *IOP Conference Series: Materials Science and Engineering*, 344(1). <https://doi.org/10.1088/1757-899X/344/1/012003>
- Ager, T. (2013). An Introduction to Synthetic Aperture Radar Imaging. *Oceanography*, 26(2). <https://doi.org/10.5670/oceanog.2013.28>
- Albino, F., Biggs, J., & Syahbana, D. K. (2019). Dyke intrusion between neighbouring arc volcanoes responsible for 2017 pre-eruptive seismic swarm at Agung. *Nature Communications*, 10(1), 748. <https://doi.org/10.1038/s41467-019-08564-9>
- Andaru, R., Rau, J. Y., Syahbana, D. K., & Purnamasari, H. D. (2022). Post-Eruption Lava Dome Emplacement Measured By UAV Photogrammetry: An Investigation One Year After The 2017-2019 Mt. Agung Eruptions. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 43(B2-2022), 517–522. <https://doi.org/10.5194/isprs-archives-XLIII-B2-2022-517-2022>
- Andaru, R., Rau, J.-Y., Syahbana, D. K., Prayoga, A. S., & Purnamasari, H. D. (2021). The use of UAV remote sensing for observing lava dome emplacement and areas of potential lahar hazards: An example from the 2017–2019 eruption crisis at Mount Agung in Bali. *Journal of Volcanology and Geothermal Research*, 415, 107255. <https://doi.org/10.1016/j.jvolgeores.2021.107255>
- Anjasmara. (2013). *Deformation Study*. Teknik Geomatika ITS.
- Arini, S. Y. (2019). *Pemanfaatan Citra Sentinel-1 Untuk Pemantauan Deformasi Vertikal Gunung Anak Krakatau Dengan Metode D-INSAR*. Universitas Gadjah Mada.
- Beauducel, F., Briole, P., & Froger, J.-L. (2000). Volcano-wide fringes in ERS synthetic aperture radar interferograms of Etna (1992-1998): Deformation or tropospheric effect? *Journal of Geophysical Research: Solid Earth*, 105(B7), 16391–16402. <https://doi.org/10.1029/2000JB900095>
- Bemelmans, M. J. W., Biggs, J., Poland, M., Wookey, J., Ebmeier, S. K., Diefenbach, A. K., & Syahbana, D. (2023). High-Resolution InSAR Reveals Localized Pre-Eruptive Deformation Inside the Crater of Agung Volcano, Indonesia. *Journal*

of Geophysical Research: Solid Earth, 128(5).

<https://doi.org/10.1029/2022JB025669>

Braun, A., & Veci, L. (2021). *Sentinel-1 Toolbox TOPS Interferometry Tutorial*.

<https://skywatch.co>

Carrivick, J. L., Smith, M. W., & Quincey, D. J. (2016). *Structure from Motion in the Geosciences*. Wiley. <https://doi.org/10.1002/9781118895818>

Cassidy, M., Ebmeier, S. K., Helo, C., Watt, S. F. L., Caudron, C., Odell, A., Spaans, K., Kristianto, P., Triastuty, H., Gunawan, H., & Castro, J. M. (2019). Explosive Eruptions With Little Warning: Experimental Petrology and Volcano Monitoring Observations From the 2014 Eruption of Kelud, Indonesia. *Geochemistry, Geophysics, Geosystems*, 20(8), 4218–4247. <https://doi.org/10.1029/2018GC008161>

Chang-Wook, L., Lu, Z., Jung, H., Kwoun, O.-I., & Won, J.-S. (2008). *Surface Displacements of the St. Augustine Volcano, Alaska, measured from an DInSAR and GPS data*.

Clark, C. (1991). *Geocoding and Stereoscopy of Synthetic Aperture Radar Imagery*. University of London.

Crosetto, M., Crippa, B., Biescas, E., Vega, T., Biescas, E., Monserrat, O., Agudo, M., & Fernández, P. (2014). *Land Deformation Monitoring Using Sar Interferometry: State-Of-The-Art Geodetic Integrated Monitoring System (GIMS) View Project Land Deformation Measurement Using Sar Interferometry: State-Of-The-Art*. <https://www.researchgate.net/publication/262186921>

Darmawan, H., Walter, T. R., Brotopuspito, K. S., Subandriyo, & I Gusti Made Agung Nandaka. (2018). Morphological And Structural Changes At The Merapi Lava Dome Monitored In 2012–15 Using Unmanned Aerial Vehicles (UAVs). *Journal of Volcanology and Geothermal Research*, 349, 256–267. <https://doi.org/10.1016/j.jvolgeores.2017.11.006>

De Beni, E., Cantarero, M., & Messina, A. (2019). UAVs For Volcano Monitoring: A New Approach Applied On An Active Lava Flow On Mt. Etna (Italy), During The 27 February–02 March 2017 Eruption. *Journal of Volcanology and Geothermal Research*, 369, 250–262. <https://doi.org/10.1016/j.jvolgeores.2018.12.001>

- Ducke, B. (2018). Multi-View Stereo. Dalam *The Encyclopedia of Archaeological Sciences* (hlm. 1–4). John Wiley & Sons, Inc.
<https://doi.org/10.1002/9781119188230.saseas0398>
- ESA. (t.t.). *Sentinel-1 SAR User Guide*. Diambil 4 Januari 2023, dari <https://sentinel.esa.int/web/sentinel/user-guides/sentinel-1-sar>
- Febriyanti, R. F. (2017). *Analisis Deformasi Permukaan Gunung Raung Menggunakan Teknologi Differential Interferometry Synthetic Aperture Radar (DInSAR) Berdasarkan Erupsi 28 Juni 2015*. Institut Teknologi Sepuluh Nopember.
- Ferretti, A., Monti-Guarnieri, A., Prati, C., & Rocca, F. (2007). *InSAR Principles: Guidelines for SAR Interferometry Processing and Interpretation*. ESA Publications.
- Fletcher, Karen., & European Space Agency. (2012). *Sentinel-1: ESA's Radar Observatory Mission for GMES Operational Services*. ESA Communications.
- Fraser, C. S. (1997). Digital camera self-calibration. *ISPRS Journal of Photogrammetry and Remote Sensing*, 52(4), 149–159. [https://doi.org/10.1016/S0924-2716\(97\)00005-1](https://doi.org/10.1016/S0924-2716(97)00005-1)
- Gamma. (2008). *Geocoding and Image Registration*. GAMMA Remote Sensing AG.
https://esdynamics.geo.uni-tuebingen.de/wiki/files/remote_sensing/pdf/GEO_users_guide.pdf
- Gelautz, M., Frick, H., Raggam, J., Burgstaller, J., & Leberl, F. (1998). SAR image simulation and analysis of alpine terrain. *ISPRS Journal of Photogrammetry and Remote Sensing*, 53(1), 17–38. [https://doi.org/10.1016/S0924-2716\(97\)00028-2](https://doi.org/10.1016/S0924-2716(97)00028-2)
- Gens, R. (2006). *InSAR and Its Applications*. University of Alaska Fairbanks.
https://rudigens.github.io/geos639/limiting_factors.pdf
- Hanafiah Ismullah, I. (2004). Pengolahan Fasa untuk Mendapatkan Model Tinggi Permukaan Dijital (DEM) pada Radar Apertur Sintetik Interferometri (INSAR) Data Satelit. *ITB Journal of Sciences*, 36(1), 11–32.
<https://doi.org/10.5614/itbj.sci.2004.36.1.2>
- Hanssen, R. F. (2001). *Radar Interferometry* (Vol. 2). Springer Netherlands.
<https://doi.org/10.1007/0-306-47633-9>
- Hernandez, C., & Furukawa, Y. (2013). Multi-View Stereo: A Tutorial. Dalam *Foundations and Trends in Computer Graphics and Vision* (Vol. 9, hlm. 1–148).

- Hosseininaveh, A., & Nasir, K. (2014). *Photogrammetric Multi-View Stereo and Imaging Network Design Some of the authors of this publication are also working on these related projects: buildings detection and reconstruction from Lidar point cloud View project 3D Reconstruction System View project*.
<https://www.researchgate.net/publication/272509454>
- IEEE. (1984). *IEEE Standard Letter Designations for Radar-Frequency Bands*.
- Janssen, V. (2007). Volcano deformation monitoring using GPS. *Journal of Spatial Science*, 52(1), 41–54. <https://doi.org/10.1080/14498596.2007.9635099>
- Julzarika, A., & Susanto. (2009). Pemanfaatan Interferometric Synthetic Aperture Radar (InSAR) Untuk Pemodelan 3D (DSM, DEM, dan DTM). Dalam *Majalah Sains dan Teknologi Dirgantara* (Vol. 4, Nomor Desember).
<http://www.rcamnl.wr.usgs.gov>,
- King, H. M. (t.t.). *Mount Agung an Active and Dangerous Volcano On The Island Of Bali*. Geology and Earth Science News and Information. Diambil 15 Januari 2023, dari <https://geology.com/volcanoes/agung/>
- KWU. (1996). *Synthetic Aperture Radar*. Kangwon National University.
http://sar.kangwon.ac.kr/etc/rs_note/rsnote/cp4/cp4-3.htm
- Liang, H., Xu, W., Ding, X., Zhang, L., & Wu, S. (2021). *Urban Sensing with Spaceborne Interferometric Synthetic Aperture Radar* (hlm. 345–365).
https://doi.org/10.1007/978-981-15-8983-6_21
- Luo, Q., Jixian, Z., & Hui, L. (2010). A Geocoding Method for Interferometric DEM in Difficult Mapping Areas. *31st Asian Conference on Remote Sensing 2010*.
- Massonnet, D., & Feigl, K. L. (1998). Radar Interferometry and Its Application To Changes in the Earth's Surface. *Reviews of Geophysics*, 36(4), 441–500.
<https://doi.org/10.1029/97RG03139>
- MathWorks. (2023). *Stripmap Synthetic Aperture Radar (SAR) Image Formation*.
<https://ww2.mathworks.cn/help/radar/ug/stripmap-synthetic-aperture-radar-sar-image-formation.html>
- Mogi, K. (1958). Relations between the Eruptions of Various Volcanoes and the Deformations of the Ground Surfaces around them. *Bulletin of the Earthquake Research Institute*, 36, 99–134.

- Pacey, A., Macpherson, C. G., & McCaffrey, K. J. W. (2013). Linear Volcanic Segments In The Central Sunda Arc, Indonesia, Identified Using Hough Transform Analysis: Implications For Arc Lithosphere Control Upon Volcano Distribution. *Earth and Planetary Science Letters*, 369–370, 24–33. <https://doi.org/10.1016/j.epsl.2013.02.040>
- Pangasa, P. (2021). *Pemantauan Deformasi Vertikal Gunung Merapi Menggunakan Teknologi Interferometric Synthetic Aperture Radar (InSAR)*. Universitas Gadjah Mada.
- Pérez-Falls, Z., Martínez-Flores, G., & Sarychikhina, O. (2022). Land Subsidence Detection in the Coastal Plain of Tabasco, Mexico Using Differential SAR Interferometry. *Land*, 11(9), 1473. <https://doi.org/10.3390/land11091473>
- Petillot, I., Trouve, E., Bolon, P., Julea, A., Yajing Yan, Gay, M., & Vanpe, J.-M. (2010). Radar-Coding and Geocoding Lookup Tables for the Fusion of GIS and SAR Data in Mountain Areas. *IEEE Geoscience and Remote Sensing Letters*, 7(2), 309–313. <https://doi.org/10.1109/LGRS.2009.2034118>
- Pinel, V., Sigmundsson, F., Sturkell, E., Geirsson, H., Einarsson, P., Gudmundsson, M. T., & Högnadóttir, T. (2007). Discriminating volcano deformation due to magma movements and variable surface loads: application to Katla subglacial volcano, Iceland. *Geophysical Journal International*, 169(1), 325–338. <https://doi.org/10.1111/j.1365-246X.2006.03267.x>
- PVMBG. (2014). *Gunung Agung, Bali*.
- Ren, H., & Feng, X. (2020). Calculating vertical deformation using a single InSAR pair based on singular value decomposition in mining areas. *International Journal of Applied Earth Observation and Geoinformation*, 92, 102115. <https://doi.org/10.1016/j.jag.2020.102115>
- Rivera, A. M. M., Amelung, F., & Eco, R. (2015, Mei 1). Volcano Deformation and Modeling on Active Volcanoes in the Philippines from ALOS InSAR Time Series. *Proceedings of Fringe 2015: Advances in the Science and Applications of SAR Interferometry and Sentinel-1 InSAR Workshop*. <https://doi.org/10.5270/Fringe2015.pp302>
- Sahara, D. P., Rahsetyo, P. P., Nugraha, A. D., Syahbana, D. K., Widiyantoro, S., Zulfakriza, Z., Ardianto, A., Baskara, A. W., Rosalia, S., Martanto, M., & Afif, H.

- (2021). Use of Local Seismic Network in Analysis of Volcano-Tectonic (VT) Events Preceding the 2017 Agung Volcano Eruption (Bali, Indonesia). *Frontiers in Earth Science*, 9. <https://doi.org/10.3389/feart.2021.619801>
- Sandwell, D., Xu, X., Mellors, R., Wei, M., Tong, X., Tymofeyeva, K., & DeSanto, J. (2022). *Satellite Radar Interferometry: Theory*.
- Sari, A. R. (2014). *Metode Differential Interferometry Synthetic Aperture Radar (DInSAR) Untuk Analisa Deformasi di Daerah Rawan Bencana Gempa Bumi (Studi Kasus : Kepulauan Mentawai, Sumatera Barat)*. Institut Teknologi Sepuluh Nopember.
- SARscape. (2009). *Synthetic Aperture Radar*. <https://www.sarmap.ch/pdf/SAR-Guidebook.pdf>
- Shimizu, N., & Yastika, P. E. (2016). *Applications of DInSAR for Ground Surface Deformation Measurements-Case Studies of Subsidence Measurements and Deformation Detections Due to an Earthquake*. <https://www.researchgate.net/publication/319876190>
- Stanford. (2023). *SNAPHU: Statistical-Cost, Network-Flow Algorithm for Phase Unwrapping*. Stanford Radar Interferometry Research Group.
- Suwarsono, S., Prasasti, I., Nugroho, J. T., Sitorus, J., Arief, R., Rahmi, K. I. N., & Triyono, D. (2019). Detecting Deformation Due To The 2018 Merapi Volcano Eruption Using Interferometric Synthetic Aperture Radar (InSAR) From Sentinel-1 TOPS. *International Journal of Remote Sensing and Earth Sciences (IJReSES)*, 16(1), 45. <https://doi.org/10.30536/j.ijreses.2019.v16.a3145>
- Syahbana, D. K., Kasbani, K., Suantika, G., Prambada, O., Andreas, A. S., Saing, U. B., Kunrat, S. L., Andreastuti, S., Martanto, M., Kriswati, E., Suparman, Y., Humaida, H., Ogburn, S., Kelly, P. J., Wellik, J., Wright, H. M. N., Pesicek, J. D., Wessels, R., Kern, C., ... Lowenstern, J. B. (2019). The 2017–19 Activity At Mount Agung in Bali (Indonesia): Intense Unrest, Monitoring, Crisis Response, Evacuation, And Eruption. *Scientific Reports*, 9(1). <https://doi.org/10.1038/s41598-019-45295-9>
- UCSD. (2010). *An InSAR Processing System Based On GMT*. <https://topex.ucsd.edu/gmtsar/>
- University of Arizona. (1993). *Principles of Photogrammetry*.

University of California San Diego. (t.t.). *A Principles of Synthetic Aperture Radar A.1 Introduction*.

Valentino, G. (2021). *Introduction to Interferometric SAR*. European Space Agency.

Van Zyl, J., & Kim, Y. (2010). Synthetic Aperture Radars (SAR) Imaging Basics .
Dalam *Synthetic Aperture Radar Polarimetry* (Vol. 2). John Wiley & Sons.

Wang, T., Liao, M., & Perissin, D. (2010). InSAR Coherence-Decomposition Analysis.
IEEE Geoscience and Remote Sensing Letters, 7(1), 156–160.
<https://doi.org/10.1109/LGRS.2009.2029126>

Wellik, J. J., Prejean, S. G., & Syahbana, D. K. (2021). Repeating Earthquakes During Multiple Phases of Unrest and Eruption at Mount Agung, Bali, Indonesia, 2017.
Frontiers in Earth Science, 9. <https://doi.org/10.3389/feart.2021.653164>

Werner, C. L., Wegmüller, U., & Strozzi, T. (2002). *Processing Strategies For Phase Unwrapping For Insar Applications*.