# DAFTAR PUSTAKA

Abdel-Hamid, A., Dubovyk, O., Graw, V., & Greve, K. (2020). Assessing the impact of drought stress on grasslands using multi-temporal SAR data of Sentinel-1: a case study in Eastern Cape, South Africa. *European Journal of Remote Sensing*, *00*(00), 1–14. https://doi.org/10.1080/22797254.2020.1762514

Abdikan, S., Sekertekin, A., Ustunern, M., Balik Sanli, F., & Nasirzadehdizaji, R. (2018). Backscatter analysis using multi-temporal Sentinel-1 SAR data for Crop growth of Maize in Konya Basin, Turkey. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, *42*(3), 9–13. https://doi.org/10.5194/isprs-archives-XLII-3-9-2018

Achmad Syauqi. (2020). Klaten Siaga Kekeringan hingga November, Ini Penjelasan BPBD. *DetikNews*. https://news.detik.com/berita-jawa-tengah/d-5042221/klaten-siaga-kekeringan-hingga-november-ini-penjelasan-bpbd

Adiningsih, S. E. (2014). Tinjauan metode deteksi parameter kekeringan berbasis data penginderaan jauh. *Prosiding Seminar Nasional Penginderaan Jauh 2014*, 210–220.

Amriyah, Q., Arief, R., Dyatmika, H. S., & Maulana, R. (2019). Analysis of Comparison of Level-1 Data Sentinel 1A / B (SLC and GRD Data) Using SNAP and GAMMA Software. *Seminar Nasional Penginderaan Jauh Ke-6 Tahun 2019 Analisis*, 533–543.

Amuzigi. (2018). *Penginderaan Jauh*. https://www.amuzigi.com/2018/01/penginderaan-jauh-penjabaran-dan-penjelasannya.html

Anwar, A., Sudjatmiko, S., & Barchia, M. F. (2019). Pergeseran Klasifikasi Iklim Oldeman Dan Schmidth-Fergusson Sebagai Dasar Pengelolaan Sumberdaya Alam Di Bengkulu. *Naturalis: Jurnal Penelitian Pengelolaan Sumber Daya Alam Dan Lingkungan*, *7*(1), 59–68. https://doi.org/10.31186/naturalis.7.1.9261

Arekhi, M., Goksel, C., Sanli, F. B., & Senel, G. (2019). Comparative evaluation of the spectral and spatial consistency of Sentinel-2 and Landsat-8 OLI data for Igneada longos forest. *ISPRS International Journal of Geo-Information*, *8*(2). https://doi.org/10.3390/ijgi8020056

Arief, M., Anggraini, N., Adawiah, S. W., Hartuti, M., & Suwargana, N. (2017). *Aplikasi Data Satelit Radar Sentinel-1A Guna Deteksi Hutan Mangrove Studi Kasus : Segara*

*Anakan , Kabupaten Cilacap Application of Satellite Radar Sentinel 1a Data for Mangrove Forest Detection Case Study : Segara Anakan , Cilacap District*. *1982*, 277–289.

Atmaja. (2016). Climate regionalization for main production areas of Indonesia: Case study of West Java. *Journal of Physics: Conference Series*, *755*(1). https://doi.org/10.1088/1742-6596/755/1/011001

B.V ILACO. (1985). Agricultural Compendium For Rural Development In The Tropics and Subtropics. *Elsevier Science Publishing Company INC, Amsterdam*.

Badan Standardisasi Nasional. (2002). Penyusunan neraca sumber daya – Bagian 1: Sumber daya air spasial. *Sni 19-6728.1-2002*, *ICS 13.060*, 10.

Badwi, N., & Invanni, I. (2019). *Analisis Daerah Rawan Kekeringan Kabupaten Wajo Provinsi Sulawesi Selatan*. 148–154.

Bakker, W. H., Gieske, A. S. M., Gorte, B. G. H., Grabmaier, K. A., Hecker, C. A., Horn, J. A., Huurneman, G. C., Janssen, L. L. F., Kerle, N., Meer, F. D. van der, Parodi, G. N., Pohl, C., Prakash, A., Reeves, C. V., Ruitenbeek, F. J. van, Tempfli, K., Weir, M. J. C., & Woldai, T. (2003). *Principles of Remote Sensing*. *4*, 522–525.

Bousbih, S., Zribi, M., Lili-Chabaane, Z., Baghdadi, N., El Hajj, M., Gao, Q., & Mougenot, B. (2017). Potential of sentinel-1 radar data for the assessment of soil and cereal cover parameters. *Sensors (Switzerland)*, *17*(11). https://doi.org/10.3390/s17112617

Congalton, R. G., & Green, K. (2019). *Assessing the Accuracy of Remotely Sensed Data* (Third). CRC Press.

Cunha, Alvalá, R. C., Nobre, C. A., & Carvalho, M. A. (2015). Monitoring vegetative drought dynamics in the Brazilian semiarid region. *Agricultural and Forest Meteorology*, *214–215*, 494–505. https://doi.org/10.1016/j.agrformet.2015.09.010

Danoedoro, P. (2012). *Pengantar Penginderaan Jauh Digital*. Andi Offset.

Djalante, R., & Thomalla, F. (2012). Disaster risk reduction and climate change adaptation in Indonesia: Institutional challenges and opportunities for integration. *International Journal of Disaster Resilience in the Built Environment*, *3*(2), 166–180. https://doi.org/10.1108/17595901211245260

Elza Surmaini, A. F. (2016). Kejadian Iklim Ekstrem Dan Dampaknya Terhadap Pertanian Tanaman Pangan Di Indonesia. *Kejadian Iklim Ekstrem Dan Dampaknya Terhadap Pertanian Tanaman Pangan Di Indonesia*, *10*(2), 115–128. https://doi.org/10.2018/jsdl.v10i2.7031

Esa Sentinel Online. (2021). *Sentinel Online*. https://sentinels.copernicus.eu/web

Fadholi, A. (2013). Studi Dampak El Nino Dan Indian Ocean Dipole (Iod) Terhadap Curah Hujan Di Pangkalpinang. https://doi.org/10.14710/jil.11.1.43-50

Fadilla, L., Subiyanto, S., & Suprayogi, A. (2017). Jurnal Geodesi Undip Oktober 2017. *Analisis Arah Dan Prediksi Persebaran Fisik Wilayah Kota Semarang Tahun 2029 Menggunakan Sistem Informasi Geografis Dan CA Markov Model*, *6*(02), 517–525.

Femy; Tati Budiarti;Nizar Nasruallah. (2017). Pengaruh Tata Hijau Terhadap Suhu Dan Kelembaban Relatif Udara, Pada Balai Besar Pengembangan Mekanisasi Pertanian, Serpong. *Pengaruh Tata Hijau Terhadap Suhu Dan Kelembaban Relatif Udara, Pada Balai Besar Pengembangan Mekanisasi Pertanian, Serpong*, *6*(2), 21–28. https://doi.org/10.29244/jli.2014.6.2.21-28

Fensholt, R., & Sandholt, I. (2005). Evaluation of MODIS and NOAA AVHRR vegetation indices with in situ measurements in a semi-arid environment. *International Journal of Remote Sensing*, *26*(12), 2561–2594. https://doi.org/10.1080/01431160500033724

Filgueiras, R., Mantovani, E. C., Althoff, D., Fernandes Filho, E. I., & da Cunha, F. F. (2019). Crop NDVI monitoring based on sentinel 1. *Remote Sensing*, *11*(12). https://doi.org/10.3390/rs11121441

Filipponi, F. (2019). Sentinel-1 GRD Preprocessing Workflow. *Proceedings*, *18*(1), 11. https://doi.org/10.3390/ecrs-3-06201

Ghaleb, F., Mario, M., & Sandra, A. N. (2015). Regional landsat-based drought monitoring from 1982 to 2014. https://doi.org/10.3390/cli3030563

Gustino, D. (2019). *No Title*. School Of Information System, Binus University. https://sis.binus.ac.id/2019/10/29/dasar-scatter-plot-pada-tibco-spotfire-x/#:~:text=Keuntungan%3A,menampilkan relasi positif dan negative.

Hamdir, A. N. R. W., & Herumurti, S. (2014). Studi perbandingan klasifikasi multispektral Maximum Likelihood dan Support Vector Machine untuk Pemetaan

Penutup Lahan. *Jurnal Bumi Indonesia*, *3*(4), 1–7.

Hayes, M. J., Svoboda, M. D., Wardlow, B. D., Anderson, M. C., & Kogan, F. (2012). Drought monitoring: Historical and current perspectives. *Remote Sensing of Drought: Innovative Monitoring Approaches*, 1–19. https://doi.org/10.1201/b11863

Ichikawa, D., & Wakamori, K. (2018). The integrated use of Landsat, sentinel-2 and planetscope satellite data for crop monitoring. *International Geoscience and Remote Sensing Symposium (IGARSS)*. https://doi.org/10.1109/IGARSS.2018.8519024

Jaber, S. M. (2018). Landsat-based vegetation abundance and surface temperature for surface urban heat island studies: the tale of Greater Amman Municipality. *Annals of GIS*, *24*(3), 195–208. https://doi.org/10.1080/19475683.2018.1471519

KLHK.(2017). *Dampak dan fenomena perubahan iklim*. Direktorat Jenderal Pengendalian Perubahan Iklim. http://ditjenppi.menlhk.go.id/kcpi/index.php

Kelsey Herndon, Meyer, F., Flores, A., Cherrington, E., & Kucera, Le. (2020). *What is Synthetic Aperture Radar?* EARTHDATA NASA. https://earthdata.nasa.gov/learn/backgrounders/what-is-sar

Kuenzer, C., Bluemel, A., Gebhardt, S., Quoc, T. V., & Dech, S. (2011). Remote sensing of mangrove ecosystems: A review. In *Remote Sensing* (Vol. 3, Issue 5). https://doi.org/10.3390/rs3050878

Kumar, D., Rao, S., & Sharma, J. R. (2013). Radar Vegetation Index as an Alternative to NDVI for Monitoring of Soyabean and Cotton. *Proceedings of the XXXIII INCA International Congress (Indian Cartographer), 19-21 September, 2013, Jodhpur, India, September 2013*, 91–96.

Kustandiyo, H., Sukojo, B. M., & Parwati, E. (2014). Studi Tingkat Kerapatan Mangrove Menggunakan Indeks Vegetasi. *Geoid*, *9*(2), 101. https://doi.org/10.12962/j24423998.v9i2.738

Lang, M. W., McCarty, G. W., Ritchie, J. C., Sadeghi, A. M., Hively, W. D., & Eckles, S. D. (2008). Radar monitoring of wetland hydrology: Dynamic information for the assessment of ecosystem services. *International Geoscience and Remote Sensing Symposium (IGARSS)*, *1*(1), 10–12. https://doi.org/10.1109/IGARSS.2008.4778843

Latuamury, B., & Resesi, K. (2016). Pengaruh Kerapatan Vegetasi Penutup Lahan terhadap Karakteristik Resesi Hidrograf pada Beberapa Subdas di Propinsi Jawa

Tengah Dan Propinsi DIY. *Majalah Geografi Indonesia*, *26*(2), 98–118. https://doi.org/10.22146/mgi.13418

Lee, D., Kim, J., Lee, M. H., Lee, S. B., & Kim, J. (2018). Application of Landsat-8 and Sentinel-1 images for drought monitoring over the Korean peninsula. *International Geoscience and Remote Sensing Symposium (IGARSS)*, *2018-July*, 7286–7288. https://doi.org/10.1109/IGARSS.2018.8517393

Lembaga Ilmu Pengetahuan Indonesia. (2019). *Krisis Air di Jawa dan Bagaimana Kita Harus Menyikapinya*. B Iro Kerja Sama, Hukum, Dan Humas LIPI. http://lipi.go.id/berita/krisis-air-di-jawa-dan-bagaimana-kita-harus-menyikapinya/21725

Lilik, K., Yunus, R., Muhammd, robi amir, & Narwawi, P. (2011). *Indeks Kerawanan Bencana di Indonesia*. 1–226.

Lisan, A. R. K., & Adji, T. N. (2017). Identifikasi Jebakan Airtanah Asin Menggunakan Pendugaan Geolistrik Di Wilayah Selatan Kabupaten Klaten, Jawa Tengah. *Jurnal Bumi Indonesia*. https://core.ac.uk/download/pdf/295176629.pdf

Ma, J., Huang, S., Li, J., Li, X., Song, X., Leng, P., Sun, Y., & Lei, T. (2016). Estimating soil moisture in the agricultural areas using RADARSAT-2 Quad-olarization SAR data. *International Geoscience and Remote Sensing Symposium (IGARSS)*, *2016-Novem*, 3031–3034. https://doi.org/10.1109/IGARSS.2016.7729784

Mandal, D., Kumar, V., Ratha, D., Dey, S., Bhattacharya, A., Lopez-Sanchez, J. M., McNairn, H., & Rao, Y. S. (2020). Dual polarimetric radar vegetation index for crop growth monitoring using sentinel-1 SAR data. *Remote Sensing of Environment*, *247*(January), 111954. https://doi.org/10.1016/j.rse.2020.111954

Mishra, A., Vu, T., Veettil, A. V., & Entekhabi, D. (2017). Drought monitoring with soil moisture active passive (SMAP) measurements. *Journal of Hydrology*, *552*(January 2015), 620–632. https://doi.org/10.1016/j.jhydrol.2017.07.033

Nanzad, L., Zhang, J., Tuvdendorj, B., Nabil, M., Zhang, S., & Bai, Y. (2019). NDVI anomaly for drought monitoring and its correlation with climate factors over Mongolia from 2000 to 2016. *Journal of Arid Environments*, *164*(May 2018), 69–77. https://doi.org/10.1016/j.jaridenv.2019.01.019

Nasirzadehdizaji, R., Sanli, F. B., Abdikan, S., Cakir, Z., Sekertekin, A., & Ustuner, M.

(2019). Sensitivity analysis of multi-temporal Sentinel-1 SAR parameters to crop height and canopy coverage. *Applied Sciences (Switzerland)*, *9*(4). https://doi.org/10.3390/app9040655

National weather service. (n.d.). *Variasi Klasifikasi kekeringan*. https://www.weather.gov/ilm/drought

Nugraheni. (2019). Katalog desa / kelurahan rawan kekeringan. In Wartono (Ed.), *2019*. badan Nasional Penanggulangan Bencana.

Payab, A. H., & Türker, U. (2018). Analyzing temporal–spatial characteristics of drought events in the northern part of Cyprus. *Environment, Development and Sustainability*, *20*(4), 1553–1574. https://doi.org/10.1007/s10668-017-9953-5

Rousta, I., Olafsson, H., Moniruzzaman, M., Zhang, H., Liou, Y. A., Mushore, T. D., & Gupta, A. (2020). Impacts of drought on vegetation assessed by vegetation indices and meteorological factors in Afghanistan. *Remote Sensing*, *12*(15). https://doi.org/10.3390/RS12152433

Sardjono, D. (2020). Klaten Siaga Darurat Bencana Kekeringan. *Mediaindonesia*. https://mediaindonesia.com/nusantara/325006/klaten-siaga-darurat-bencana-kekeringan

Singh, D., Prakash, R., Pathak, N. P., Mohan, S., & Singh, K. P. (2011). SAR and optical data utilization for soil moisture retrieval in vegetated region. *2011 3rd International Asia-Pacific Conference on Synthetic Aperture Radar, APSAR 2011*, *0*(2), 790–793.

Sudarmadji, S., Darmanto, D., Widyastuti, M., & Lestari, S. (2016). Pengelolaan Mata Air Untuk Penyediaan Air Rumahtangga Berkelanjutan Di Lereng Selatan Gunungapi Merapi (Springs Management for Sustainability Domestic Water Supply in the South West of Merapi Volcano Slope). *Jurnal Manusia Dan Lingkungan*, *23*(1), 102. https://doi.org/10.22146/jml.18779

Sutanto. (1986). *Penginderaan jauh jilid 1*. Gadjah Mada University Press.

Sutanto. (1987). *Penginderaan jauh jilid 2*. Gadjah Mada University Press.

Suwarsono & Khomarudin. (2014). Detecting the Spatial Distribution of Settlements on Volcanic Region Using Image Landsat-8 Oli Imagery. *International Journal of Remote Sensing and Earth Sciences (IJReSES)*, *11*(1), 63. https://doi.org/10.30536/j.ijreses.2014.v11.a2602

Syam'ani. (2019). *Dasar-dasar Teknologi SAR*. Pusat Pengembangan Infrastruktur IG. https://ppiig.ulm.ac.id/2019/06/23/dasar-dasar-teknologi-sar/

T.M. Lillesand dan R.W. Kiefer. (2004). *Remote Sensing and Image Interpretation* (5th Editio).

The European Space Agency. (2014). *Sentinel-1 SAR Technical Guide*. https://sentinel.esa.int/web/sentinel/technical-guides/sentinel-1-sar

U.S. Geological Survey. (2016). Landsat 8 Data Users Handbook. *Nasa*, *8*(June), 97. https://landsat.usgs.gov/documents/Landsat8DataUsersHandbook.pdf

*UU RI NOMOR 24 TAHUN 2017*. (n.d.). https://doi.org/10.1080/00102208008946937

Vreugdenhil, M., Wagner, W., Bauer-Marschallinger, B., Pfeil, I., Teubner, I., Rüdiger, C., & Strauss, P. (2018). Sensitivity of Sentinel-1 backscatter to vegetation dynamics: An Austrian case study. *Remote Sensing*, *10*(9), 1–19. https://doi.org/10.3390/rs10091396

West, H., Quinn, N., & Horswell, M. (2019). Remote sensing for drought monitoring & impact assessment: Progress, past challenges and future opportunities. *Remote Sensing of Environment*, *232*(November 2018), 111291. https://doi.org/10.1016/j.rse.2019.111291

Yunjin Kim,van Zyl. (2009). A Time-Series Approach to Estimate Soil Moisture Using Polarimetric Radar Data. *IEEE*, 2519–2527.