



## DAFTAR PUSTAKA

- Adiningsih, E.S. (2014). Tinjauan metode deteksi parameter kekeringan berbasis data penginderaan jauh. *Seminar Nasional Penginderaan Jauh*. 211 – 220.
- Adiwicaksono, H., Sudarto. & Widianto. (2014). Estimasi distribusi spasial kekeringan lahan di kabupaten tuban menggunakan penginderaan jauh dan sistem informasi geografis. *Jurnal Tanah dan Sumberdaya Lahan*, 1(2), 70–76.
- BAKORNAS PB. (2007). *Pengenalan karakteristik bencana dan upaya mitigasinya di indonesia*. Direktorat Mitigasi, Lakhar BAKORNAS PB.
- Balitkabi. (2015). Ancaman kekeringan pada produksi beras di Jawa Timur. <http://balitkabi.litbang.pertanian.go.id/kilas-litbang/2028-ancaman-kekeringan-pada-produksi-beras-di-jawa-timur.html> diakses tanggal 17 Oktober 2015.
- Bappeda Jawa Timur. (2014). Petani terancam gagal panen. <http://bappeda.jatimprov.go.id/2014/10/07/kekeringan-petani-terancam-gagal-panen/> diakses tanggal 20 Oktober 2015.
- Bappeda Jawa Timur. (2012) Kekeringan akan landa 20000 ha sawah. <http://bappeda.jatimprov.go.id/2012/09/06/kekeringan-akan-landa-20-000-ha-sawah/> diakses tanggal 24 Januari 2016.
- Bappeda Jawa Timur. (2013). *Gambaran Umum Kondisi Daerah*. <http://jatimprov.go.id/ppid/uploads/berkasppid/BAB-2.1-Gambaran-Umum.pdf> diakses tanggal 06 November 2015.
- Bappenas Jawa Timur. (2015). *Profil Pembangunan Jawa Timur*. <http://simreg.bappenas.go.id/document/Profil/Profil%20Pembangunan%20Provinsi%203500JaTim%202013.pdf> diakses tanggal 06 November 2015.
- BMKG. (2015). *Kekeringan 2015*. Presentasi.
- BPBD Jawa Timur. (2015). Update El-Nino 2015. <http://bpbd.jatimprov.go.id/index.php/berita-terkini/314-update-el-nino-2015> dikakses tanggal 17 Oktober 2015.
- Caccamo, G., Chisholm, L.A., Bradstock, R.A., & Puotinen, M.L. (2011). Assessing the sensitivity of MODIS to monitor drought in high biomass ecosystems. *Remote Sensing of Environment*, 115, 2626-2639
- Campbell, J.B. (2002). *Introduction to Remote Sensing*, 3rd edition. New York: Guildford Press.
- Chavez, Jr. Pat S. (1988). An improved dark-object subtraction technique for atmospheric scattering correction of multispectral data. *Remote Sensing of Environment*, 24, 459-279.
- Coll, J. M. Galve, J. M. Sánchez, and V. Caselles. (Jan 2010). Validation of Landsat-7/ETM+ Thermal-Band Calibration and Atmospheric Correction With Ground-Based Measurements. *IEEE Trans. Geosci. Remote Sensing*, 48 (1), 547–555.
- Congalton, R.G. (1991). A review of assessing the accuracy of classifications of remotely sensed data. *Remote Sensing of Environment*, 37, 35-46.
- Curran. (1985). *Principle of Remote Sensing*. London: Longman.
- Danoedoro, P. (2012). *Pengantar penginderaan jauh digital*. Fakultas Geografi, Universitas Gadjah Mada, Yogyakarta: Penerbit Andi.
- Daruarti, D. (2012). Pola wilayah kekeringan lahan basah (sawah) di Provinsi Jawa Barat, *Tesis*, Departemen Geografi FMIPA Universitas Indonesia.



- Davis, S.M., Landgrebe, D.A., Phillips, T.L., Swain, P.H., Hoffer, R.M., Lindenlaub, J.C., Silva, L.F. (1978). *Remote Sensing: The Quantitative Approach*. Edited by Philip H. Swain and Sherly M Davis. New York: Mc Graw Hill.
- Dinas Pertanian Jawa Timur. (2013). Dampak kekeringan jatim diprediksi tak parah.<http://nasional.tempo.co/read/news/2013/09/18/058514631/dampak-kekeringan-jatim-diprediksi-tak-parah> diakses tanggal 20 Oktobe 2015.
- Dinas Pertanian Jawa Timur. (2015). Puluhan ribu hektare sawah di Jatim kekeringan. <http://www.madiunpos.com/2015/08/05/kemarau-2015-puluhan-ribu-hektare-sawah-di-jatim-kekeringan-630012> diakses tanggal 24 Januari 2016.
- Du, L., Tian, Q., Yu, T., Meng, Q., Jancso, T., Udvardy, P., & Huang, Y. (2013). A comprehensive drought monitoring method integrating MODIS and TRMM data. *International Journal of Applied Earth Observation and Geoinformation*, 23, 245-253.
- Dutta, D., Kundu, A., Patel, N.R., Saha, S.K., & Siddiqui, A.R. (2015). Assessment of agricultural drought in Rajasthan (India) using remote sensing derived Vegetation Condition Index (VCI) and Standardized Precipitation Index (SPI). *The Egyptian Journal of Remote Sensing and Space Science*, 18, 53-63.
- ENVI, *Principal Component Analysis*\_ENVIHelp.
- Foth, H.D. (1995). *Fundamental of Soil Science*. (diterjemahkan oleh Endang D.P., Dwi R.L., dan Rahayuning T., dedit oleh Sri Andani B. Hudoyo, 1995). Yogyakarta: Gadjah Mada University Press.
- Gao, B.C. (1996). NDWI - A normalized difference water index for remote sensing of vegetation liquid water from space. *Remote Sensing of Environment*, 58(3), 257–266.
- Huete, A.R. (1988). A Soil-adjusted Vegetation Index (SAVI), *Remote Sensing of Environment*, 25, 295-309.
- Huete, A.R., Didan, K., Miura, T., Rodriguez, E.P., Gao, X., and Ferreira, L.G. (2002). Overview of the radiometric and biophysical performance of the MODIS vegetation indices. *Remote Sensing of Environment*, 83, 195-213.
- Idso, S.B., Jackson, R.D., Pinter, P.J., Reginato, R.J., & Hatfield, J.L. (1981). Normalizing the stress-degree-day parameter for environmental variability. *Agricultural Meteorology*, 24, 45-55.
- Jamulya dan Suprojo, S.W. (1993). *Pengantar Geografi Tanah*. Departemen Pendidikan dan Kebudayaan, Fakultas Geografi, Universitas Gadjah Mada-Yogyakarta.
- Jeyaseelan, A.T. (2003). Droughts & floods assessment and monitoring using remote sensing and GIS. *Satellite Remote Sensing and GIS Applications in Agricultural Meteorology*, 291–313.
- Jensen, J.R. (2004). *Introductory Digital Image Processing – A Remote Sensing Perspective*, 3rd edition. Englewood Cliffs, N.J.: Prentice Hall.
- Jensen, J.R. (2007). *Remote Sensing of the Environment: An Earth Resource Perspective*, 2nd edition. Englewood Cliffs, N.J.: Prentice Hall.
- Kaufman, Y.J. and Gao, B.-C. (1992), Remote Sensing Of Water Vapor in The Near IR from EOS/MODIS. *IEEE Transactions on Geoscience and Remote Sensing*, 30, 871–884.



- Kogan, F.N. (1995). Droughts of the late 1980s in the united states as derived from noaa polar-orbiting satellite data. *Bulletin of the American Meteorological Society*, 76(5), 655–668.
- Kogan, F.N. (1997). Global drought watch from space. *Bulletin of the American Meteorological Society*, 78(4), 621–636.
- Li, A.L. and Becker, F. (1993). Feasibility of land surface temperature and emissivity determination from AVHRR data. *Remote Sensing Of Environment* 43: 67–85.
- Lillesand, T.M. and Kiefer, R.W. (1990). Penginderaan Jauh dan Interpretasi Citra (Diterjemahkan oleh Dulbahri, Prakto Suharsono, Hartono, Suharyadi; Penyunting,Sutanto). Yogyakarta:Gadjah MadaUniversity Press.
- Lillesand, T.M., Kiefer, R.W., and Chipman, J.W. (2004). *Remote Sensing and Image Interpretation*. University of Wiscosin – Madison.
- Luis, De.M., Raventos, J., Gonzalez-Hidalgo, J.C.. Sanchez, J.R. and Cortina, J. (2000). Spatial analysis of rainfall trends in the region of Valencia (East Spain). *International Journal of Climatology*, 20, 1451–1469.
- McKee, T.B., Doesken, N.J. & Kleist, J. (1993). The relationship of drought frequency and duration to time scales. *Eighth Conference on Applied Climatology*, 179-184.
- Money, D.C. (1972). *Climate, Soils, and Vegetation*, 2nd edition. London, University Tutorial Press ltd Foxton, near Cambrige.
- Moran,M., Clarke, T.R., Inoue, Y., and Vidal, A. 1994. Estimating Crop Water Deficit Using The Relation between Surface Air-Temperature and Spectral Vegetation Index. *Remote Sensing Environment*, 49, 246-263.
- Moran,M., Clarke, T.R., Inoue, Y., and Vidal, A. (1994). Estimating crop water deficit using the relation between surface air-temperature and spectral vegetation index. *Remote Sensing of Environment*, 49, 246-263.
- NASA. (2003). *Landsat 7 science data users handbook*. Washington, DC.
- NASDA. (2001). *TRMM users handbook*. Tokyo, Japan.
- NOAA. (2008). *Drought national oceanic and atmosphere administration national weather service*. Drought Public Fact Sheet.
- NOAA. (2015). *Southern Oscillation Index (SOI)*.  
<https://www.ncdc.noaa.gov/teleconnections/enso/indicators/soi/> diakses tanggal 06 November 2015.
- Nugroho, S.P. (2014). *Penanganan kebakaran lahan-hutan dan kekeringan pada musim kemarau 2014*. Presentasi.
- O'Geen, A.T. (2012). Soil Water Dynamics. *Nature Education Knowledge*, 3(6), 12.
- Parwati & Suwarsono. (2008). Model indeks TVDI (Temperature Vegetation Dryness Index ) untuk mendekripsi kekeringan lahan berdasarkan data modis-terra. *Penginderaan Jauh*, 5, 35-44.
- Patel, N.R., Parida, B.R., Venus, V., Saha, S.K., & Dadhwal, V.K. (2012). Analysis of agricultural drought using vegetation temperature condition index (VTCI) from Terra/MODIS satellite data. *Environ Monit Assess*, 184, 7153-7163.



- Phinn, SR. (2007). *Advanced Remote Sensing of Environment (Course Profile and Tutorial)*, School of Geography, Planning & Architecture The University of Queensland, Brisbane.
- Prasasti, I., Sambodo, K.A., and Carolita, I. (2007). Pengkajian pemanfaatan data Terra-MODIS untuk ekstraksi data suhu permukaan lahan (spl) berdasarkan beberapa algoritma (the study of applicationof Terra-MODIS for land surface temperature extraction based on several algorithms). *Jurnal Penginderaan Jauh*, 4, 1-3.
- Purwadhi, S.H. dan Sanjoto, T.B, (2008). *Pengantar Interpretasi Citra Penginderaan Jauh*. LAPAN-UNNES.
- Puslitbang SDA. (2003). *Permasalahan Kekeringan dan Cara Mengatasinya*, Bandung: Balai Hidrologi, Departemen Permukiman dan Prasarana Wilayah.
- Raharjo, P.D. (2010). Teknik penginderaan jauh dan sistem informasi geografis untuk identifikasi potensi kekeringan. *Makara Teknologi*, 14(2), 97–105.
- Rahimzadeh-Bajgiran, P., Omasa, K., & Shimizu, Y. (2012). Comparative evaluation of the Vegetation Dryness Index (VDI), the Temperature Vegetation Dryness Index (TVDI) and the improved TVDI (iTVDI) for water stress detection in semi-arid regions of Iran. *ISPRS Journal of Photogrammetry and Remote Sensing*, 68, 1-12.
- Rahayu, P.S. (2011). Modul TOT penyuluhan pertanian dalam rangka peningkatan kesadaran petani terhadap isu-isu perubahan iklim serta mitigasi dan adaptasinya, kerjasama badan Litbang Pertanian dengan BMKG. <http://www.mdmc.or.id/petabencana/index.php/potensi-dan-analisa/45-penyebab-kekerangan-dan-upaya-penanggulangannya> Diakses Tanggal 10 April.
- Rozenstein, O., Qin, Z., Derimian, Y., and Karnieli, A. (2014). Derivation of Land Surface Temperature for Landsat-8 TIRS Using a Split Window Algorithm. *Sensor*, 14, 5768-5780.
- Sabins, F.F. (1978). *Remote Sensing: Principles and Interpretation*. W.H. Freeman and Co., San Francisco.
- Sandholt, I., Rasmussen, K., and Sawada, H. (2002). A simple interpretation of the surface temperature/vegetation index space for assessment of surface moisture status. *Remote Sensing of Environment*, 79, 213 – 224.
- Schowengerdt, RA. (2007). *Remote Sensing; models and methods for image processing*, 3rd edn, Academic Press, London.
- Sobrino, J.A., Kharraz, J.E.L., and Li, Z.-L. (2003). Surface temperature and water vapour retrieval from MODIS data. *International Journal of Remote Sensing*, 24 (24), 5161-5182.
- Son, N.T., Chen, C.F., Chen, C.R., Chang, L.Y., & Minh, V.Q. (2012). Monitoring agricultural drought in the Lower Mekong Basin using MODIS NDVI and land surface temperature data. *International Journal of Applied Earth Observation and Geoinformation*, 18, 417-427.
- Sudaryatno. (2015). Integrasi citra penginderaan jauh dan sistem informasi geografi untuk penyusunan model kerentanan kekeringan (kasus di Provinsi Jawa Timur dan Daerah Istimewa Yogyakarta). *Disertasi*. Fakultas Geografi, Yogyakarta: Universitas Gadjah Mada.



- Suharsono, P. (1988). Identifikasi Bentuklahan dan Interpretasi Citra untuk Geomorfologi (Kumpulan Bahan Kuliah). Yogyakarta: Program Penginderaan Jauh, Fakultas Geografi, Universitas Gadjah Mada-PUSPIC.
- Suryani, A.S. (2015). Ancaman El-Nino 2015. *Info Singkat; Kesejahteraan Sosial* Vol. VII, No.13/I/P3DI/Juli/2015.
- Sutanto. (1986). *Penginderaan Jauh Jilid I*. Yogyakarta: Gadjah Mada University Press.
- USDA. (1998). *Natural resources conservation service (soil quality resource concern: availablewater capacity)*. Soil Quality Information Sheet.
- USGS-a. (2015). *Landsat 8 data users handbook*. Earth Resources Observation and Science (EROS), Sioux Falls, South Dakota.
- USGS-b. (2015). Shuttle Radar Topography Mission (SRTM) 1 Arc-Second Global. <https://lta.cr.usgs.gov/SRTM1Arc> diakses tanggal 17 Oktober 2015.
- Van Zuidam, R.A. (1983). *Guide to Geomorphologic Aerial Photographic Interpretation and Mapping*. ITC, The Netherlands.
- Van Zuidam, R.A. and Van Zuidam-Cancelado, F.I. (1978). *Terrain Analysis and Classification Using Aerial Photographs; A Gemorphological Approach*. ITC, The Netherlands.
- Wan, Z. (April 1999). *MODIS Land-Surface Temperature Algorithm Theoretical Basis Document (LST ATBD) Version 3.3*. Institute for Computational Earth System Science, University of California, Santa Barbara.
- Wan, Z., Zhang, Y., Zhang, Q., & Li, Z.L. (2004). Quality assessment and validation of the MODIS global land surface temperature. *International Journal of Remote Sensing*, 25, 261-274.
- Wisnubroto, S. (2003). Menggagas strategi alternatif dalam menyiasati penyimpangan ilkim serta implikasinya pada tataguna lahan dan ketahanan pangan nasional. *Seminar Nasional Ilmu Tanah*. Yogyakarta 24 Mei 2003. Keluarga Mahasiswa Ilmu Tanah, Jurusan Tanah, Fakultas Pertanian, Universitas Gadjah Mada.
- Wu, J., Zhou, L., Liu, M., Zhang, J., Leng, S., & Diao, C. (2013). Establishing and assessing the Integrated Surface Drought Index (ISDI) for agricultural drought monitoring in mid-eastern China. *International Journal of Applied Earth Observation and Geoinformation*, 23, 397-410.