References for package "hsdar"

Lukas W. Lehnert

July 28, 2015

References

Apan, A., Held, A., Phinn, S., Markley, J., Jan. 2004. Detecting sugarcane "orange rust" disease using EO-1 Hyperion hyperspectral imagery. International Journal of Remote Sensing 25 (2), 489–498.

Bach, H., 1995. Die Bestimmung hydrologischer und landwirtschaftlicher Oberflächenparameter aus hyperspektralen Fernerkundungsdaten. Münchner Geographische Abhandlungen Reihe B, Band B21.

Ben-Dor, E., Levin, N., Singer, A., Karnieli, A., Braun, O., Kidron, G., Mar. 2006. Quantitative mapping of the soil rubification process on sand dunes using an airborne hyperspectral sensor. Geoderma 131 (1-2), 1–21.

Blackburn, G. A., 1998. Quantifying chlorophylls and caroteniods at leaf and canopy scales: An evaluation of some hyperspectral approaches. Remote Sensing of Environment 66 (3), 273 – 285.

Boochs, F., Kupfer, G., Dockter, K., Kühbauch, W., 1990. Shape of the red edge as vitality indicator for plants. International Journal of Remote Sensing 11 (10), 1741–1753.

Broge, N., Leblanc, E., 2001. Comparing prediction power and stability of broadband and hyperspectral vegetation indices for estimation of green leaf area index and canopy chlorophyll density. Remote Sensing of Environment 76 (2), 156 – 172.

Carter, G. A., 1994. Ratios of leaf reflectances in narrow wavebands as indicators of plant stress. International Journal of Remote Sensing 15 (3), 697–703.

Chappelle, E. W., Kim, M. S., Mcmurtrey, J. E., 1992. Ratio analysis of reflectance spectra (rars) - An algorithm for the remote estimation of the concentrations of chlorophyll-a, chlorophyll-b, and carotenoids in soybean leaves. Remote Sensing of Environment 39 (3), 239–247.

Chen, J. M., 1996. Evaluation of vegetation indices and a modified simple ratio for boreal applications. Canadian Journal of Remote Sensing 22, 229–242.

Clark, R. N., King, T. V. V., Gorelick, N. S., 1987. Automatic continuum analysis of reflectance spectra. In: Proceedings of the Third Airborne Imaging Spectrometer Data Analysis Workshop. pp. 138–142.

Dash, J., Curran, P. J., 2004. The MERIS terrestrial chlorophyll index. International Journal of Remote Sensing 25 (23), 5403–5413.

Datt, B., 1998. Remote sensing of chlorophyll a, chlorophyll b, chlorophyll a+b, and total carotenoid content in Eucalyptus leaves. Remote Sensing of Environment 66 (2), 111 – 121.

Datt, B., 1999a. Remote sensing of water content in *Eucalyptus* leaves. Australian Journal of Botany 47 (6), 909–923.

Datt, B., 1999b. Visible/near infrared reflectance and chlorophyll content in *Eucalyptus* leaves. International Journal of Remote Sensing 20 (14), 2741–2759.

Daughtry, C., Walthall, C., Kim, M., de Colstoun, E., III, J. M., 2000. Estimating corn leaf chlorophyll concentration from leaf and canopy reflectance. Remote Sensing of Environment 74 (2), 229 – 239.

Elvidge, C. D., Chen, Z. K., 1995. Comparison of broad-band and narrow-band red and near-infrared vegetation indexes. Remote Sensing of Environment 54 (1), 38–48.

Escadafal, R., Belghith, A., Ben Moussa, H., 1994. Indices spectraux pour la degradation des milieux naturels en Tunisie aride. In: 6éme Symp. Int. Mesures Physiques et Signatures en Télédétection. Val d'lsère, France.

Escadafal, R., Huete, A., 1991. Étude des propriétés spectrales des sols arides appliquée à l'amélioration des indices de végétation obtenus par télédétection. In: Comptes-rendus de l'Académie des Sciences de Paris, Série 312. pp. 1385–1391.

Filella, I., Peñuelas, J., 1994. The red edge position and shape as indicators of plant chlorophyll content, biomass and hydric status. International Journal of Remote Sensing 15 (7), 1459–1470.

Galvão, L. S., Formaggio, A. R., Tisot, D. A., 2005. Discrimination of sugarcane varieties in southeastern Brazil with EO-1 Hyperion data. Remote Sensing of Environment 94 (4), 523–534.

Gamon, J., nuelas, J. P., Field, C., 1992. A narrow-waveband spectral index that tracks diurnal changes in photosynthetic efficiency. Remote Sensing of Environment 41 (1), 35 – 44.

Gandia, S., Fernández, G., García, J., Moreno, J., 2004. Retrieval of vegetation biophysical variables from CHRIS/PROBA data in the SPARC campaign. In: ESA SP. Vol. 578. pp. 40–48.

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.

Garrity, S. R., Eitel, J. U., Vierling, L. A., 2011. Disentangling the relationships between plant pigments and the photochemical reflectance index reveals a new approach for remote estimation of carotenoid content. Remote Sensing of Environment 115 (2), 628 – 635.

Gitelson, A., Buschmann, C., Lichtenthaler, H., 1999. The chlorophyll fluorescence ratio F735/F700 as an accurate measure of the chlorophyll content in plants - Experiments with autumn chestnut and maple leaves. Remote Sensing of Environment 69 (3), 296–302.

Gitelson, A., Merzlyak, M. N., 1994. Quantitative estimation of chlorophyll-a using reflectance spectra: Experiments with autumn chestnut and maple leaves. Journal of Photochemistry and Photobiology B: Biology 22 (3), 247 – 252.

Gitelson, A., Y, G., MN., M., 2003. Relationships between leaf chlorophyll content and spectral reflectance and algorithms for non-destructive chlorophyll assessment in higher plant leaves. Journal of Plant Physiology 160 (3), 271–282.

Gitelson, A. A., Kaufman, Y. J., Merzlyak, M. N., 1996. Use of a green channel in remote sensing of global vegetation from EOS-MODIS. Remote Sensing of Environment 58 (3), 289 – 298.

Gitelson, A. A., Merzlyak, M. N., 1997. Remote estimation of chlorophyll content in higher plant leaves. International Journal of Remote Sensing 18 (12), 2691–2697.

Guyot, G., Baret, F., 1988. Utilisation de la haute resolution spectrale pour suivre l'etat des couverts vegetaux. In: Guyenne, T. D., Hunt, J. J. (Eds.), Spectral Signatures of Objects in Remote Sensing. Vol. 287 of ESA Special Publication. pp. 279–286.

Haboudane, D., Miller, J. R., Tremblay, N., Zarco-Tejada, P. J., Dextraze, L., 2002. Integrated narrow-band vegetation indices for prediction of crop chlorophyll content for application to precision agriculture. Remote Sensing of Environment 81 (2-3), PII S0034–4257(02)00018–4.

Haubrock, S.-N., Chabrillat, S., Lemmnitz, C., Kaufmann, H., Jan. 2008. Surface soil moisture quantification models from reflectance data under field conditions. International Journal of Remote Sensing 29 (1), 3–29.

Hernández-Clemente, R., Navarro-Cerrillo, R. M., Suárez, L., Morales, F., Zarco-Tejada, P. J., 2011. Assessing structural effects on PRI for stress detection in conifer forests. Remote Sensing of Environment 115 (9), 2360 – 2375.

Hernández-Clemente, R., Navarro-Cerrillo, R. M., Zarco-Tejada, P. J., 2012. Carotenoid content estimation in a heterogeneous conifer forest using narrow-band indices and PROSPECT + DART simulations. Remote Sensing of Environment 127 (0), 298 – 315.

Huete, A., 1988. A soil-adjusted vegetation index (SAVI). Remote Sensing of Environment 25, 295–309.

Huete, A., Liu, H., Batchily, K., van Leeuwen, W., 1997. A comparison of vegetation indices over a global set of TM images for EOS-MODIS. Remote Sensing of Environment 59 (3), 440 – 451.

Hunt, E. R., Doraiswamy, P. C., McMurtrey, J. E., Daughtry, C. S. T., Perry, E. M., Akhmedov, B., 2013. A visible band index for remote sensing leaf chlorophyll content at the canopy scale. International Journal of Applied Earth Observation and Geoinformation 21, 103–112.

Hunt, E. R., Rock, B. N., 1989. Detection of changes in leaf water-content using near-infrared and middle-infrared reflectances. Remote Sensing of Environment 30 (1), 43–54.

Jacquemoud, S., Baret, F., 1990. Prospect - a model of leaf optical-properties spectra. Remote Sensing of Environment 34 (2), 75–91.

Jacquemoud, S. A., Verhoef, W., Baret, F., Bacour, C., Zarco-Tejada, P. J., Asner, G. P., Francois, C., Ustin, S. L., 2009. PROSPECT + SAIL models: A review of use for vegetation characterization. Remote Sensing of Environment 113, Supplement 1 (0), 56 – 66.

Jordan, C. F., 1969. Derivation of leaf-area index from quality of light on forest floor. Ecology 50 (4), 663–&.

Kim, M., Daughtry, C., Chappelle, E., McMurtrey, J., Walthall, C., 1994. The use of high spectral resolution bands for estimating absorbed photosynthetically active radiation (Apar). In: Proceedings of the Sixth Symposium on Physical Measurements and Signatures in Remote Sensing. Val D'Isere, France, pp. 299–306.

Kruse, F. A., Lefkoff, A. B., Boardman, J. W., Heidebrecht, K. B., Shapiro, A. T., Barloon, P. J., Goetz, A. F. H., 1993. The spectral image processing system (SIPS) – interactive visualization and analysis of imaging spectrometer data. Remote Sensing of Environment 44 (2-3), 145–163.

le Maire, G., Francois, C., Dufrene, E., 2004. Towards universal broad leaf chlorophyll indices using PROSPECT simulated database and hyperspectral reflectance measurements. Remote Sensing of Environment 89 (1), 1–28.

le Maire, G., François, C., Soudani, K., Berveiller, D., Pontailler, J.-Y., Bréda, N., Genet, H., Davi, H., Dufrêne, E., 2008. Calibration and validation of hyperspectral indices for the estimation of broadleaved forest leaf chlorophyll

content, leaf mass per area, leaf area index and leaf canopy biomass. Remote Sensing of Environment 112 (10), 3846 – 3864.

Levin, N., Kidron, G. J., Ben-dor, E., 2007. Surface properties of stabilizing coastal dunes: Combining spectral and field analyses. Sedimentology 54 (4), 771–788.

Lichtenthaler, H. K., Lang, M., Sowinska, M., Heisel, F., Miehe, J. A., 1996. Detection of vegetation stress via a new high resolution fluorescence imaging system. Journal of Plant Physiology 148 (5), 599–612.

Lobell, D. B., Asner, G. P., Law, B. E., Treuhaft, R. N., 2001. Subpixel canopy cover estimation of coniferous forests in Oregon using SWIR imaging spectrometry. Journal of Geophysical Research 106 (D6), 5151–5160.

Maccioni, A., Agati, G., Mazzinghi, P., 2001. New vegetation indices for remote measurement of chlorophylls based on leaf directional reflectance spectra. Journal of Photochemistry and Photobiology B: Biology 61 (1-2), 52 – 61.

Madeira, J., Bedidi, A., Cervelle, B., Pouget, M., Flay, N., Sep. 1997. Visible spectrometric indices of hematite (Hm) and goethite (Gt) content in lateritic soils: The application of a Thematic Mapper (TM) image for soil-mapping in Brasilia, Brazil. International Journal of Remote Sensing 18 (13), 2835–2852.

Mathieu, R., Pouget, M., Cervelle, B., Escadafal, R., Oct. 1998. Relationships between satellite-based radiometric indices simulated using laboratory reflectance data and typic soil color of an arid environment. Remote Sensing of Environment 66 (1), 17–28.

McMurtrey, J. E., Chappelle, E. W., Kim, M. S., Meisinger, J. J., Corp, L. A., 1994. Distinguishing nitrogen-fertilization levels in-field corn (*Zea mays* L) with actively induced fluorescence and passive reflectance measurements. Remote Sensing of Environment 47 (1), 36–44.

McNairn, H., Protz, R., 1993. Mapping corn residue cover on agricultural fields in Oxford County, Ontario, using Thematic Mapper. Canadian Journal of Remote Sensing 19 (2), 152–159.

Merzlyak, M. N., Gitelson, A. A., Chivkunova, O. B., Rakitin, V. Y., 1999. Non-destructive optical detection of pigment changes during leaf senescence and fruit ripening. Physiologia Plantarum 106 (1), 135–141.

Mutanga, O., Skidmore, A., 2004a. Hyperspectral band depth analysis for a better estimation of grass biomass (*Cenchrus ciliaris*) measured under controlled laboratory conditions. International Journal of applied Earth Observation and Geoinformation 5 (2), 87–96.

Mutanga, O., Skidmore, A. K., 2004b. Narrow band vegetation indices overcome the saturation problem in biomass estimation. International Journal of Remote Sensing 25 (19), 3999–4014.

Nagler, P. L., Inoue, Y., Glenn, E., Russ, A., Daughtry, C., 2003. Cellulose absorption index (CAI) to quantify mixed soil-plant litter scenes. Remote Sensing of Environment 87 (2-3), 310 – 325.

Oppelt, N., Mauser, W., 2004. Hyperspectral monitoring of physiological parameters of wheat during a vegetation period using AVIS data. International Journal of Remote Sensing 25 (1), 145–159.

Peñuelas, J., Baret, F., Filella, I., 1995a. Semiempirical indexes to assess carotenoids chlorophyll-a ratio from leaf spectral reflectance. Photosynthetica 31 (2), 221–230.

Peñuelas, J., Filella, I., Lloret, P., Muñoz, F., Vilajeliu, M., 1995b. Reflectance assessment of mite effects on apple trees. International Journal of Remote Sensing 16 (14), 2727–2733.

Peñuelas, J., Gamon, J. A., Fredeen, A. L., Merino, J., Field, C. B., 1994. Reflectance indexes associated with physiological-changes in nitrogen-limited and water-limited sunflower leaves. Remote Sensing of Environment 48 (2), 135–146.

Peñuelas, J., Piñol, J., Ogaya, R., Filella, I., 1997. Estimation of plant water concentration by the reflectance water index WI (R900/R970). International Journal of Remote Sensing 18 (13), 2869–2875.

Qi, J., Chehbouni, A., Huete, A., Kerr, Y., Sorooshian, S., 1994. A modified soil adjusted vegetation index. Remote Sensing of Environment 48 (2), 119 – 126.

Rondeaux, G., Steven, M., Baret, F., 1996. Optimization of soil-adjusted vegetation indices. Remote Sensing of Environment 55 (2), 95–107.

Roujean, J. L., Breon, F. M., 1995. Estimating par absorbed by vegetation from bidirectional reflectance measurements. Remote Sensing of Environment 51 (3), 375–384.

Serrano, L., Peñuelas, J., Ustin, S. L., 2002. Remote sensing of nitrogen and lignin in mediterranean vegetation from AVIRIS data: Decomposing biochemical from structural signals. Remote Sensing of Environment 81, 355 – 364.

Sims, D., Gamon, J., 2002. Relationships between leaf pigment content and spectral reflectance across a wide range of species, leaf structures and developmental stages. Remote Sensing of Environment 81 (2), 337–354.

Smith, R., Adams, J., Stephens, D., Hick, P., 1995. Forecasting wheat yield in a mediterranean-type environment from the NOAA satellite. Australian Journal of Agricultural Research 46 (1), 113–125.

Sohn, Y. S., McCoy, R. M., 1997. Mapping desert shrub rangeland using spectral unmixing and modeling spectral mixtures with TM data. Photogrammetric Engineering and Remote Sensing 63 (6), 707–716.

Thenkabail, P. S., Smith, R. B., Pauw, E. D., 2000. Hyperspectral vegetation indices and their relationships with agricultural crop characteristics. Remote Sensing of Environment 71 (2), 158 – 182.

Tsai, F., Philpot, W., 1998. Derivative analysis of hyperspectral data. Remote Sensing of Environment 66 (1), 41–51.

Tucker, C. J., 1979. Red and photographic infrared linear combinations for monitoring vegetation. Remote Sensing of Environment 8 (2), 127–150.

Vincini, M., Frazzi, E., D'Alessio, P., 2006. Angular dependence of maize and sugar beet VIs from directional CHRIS/PROBA data. In: Fourth ESA CHRIS PROBA Workshop. ESRIN. Frascati, Italy, pp. 19–21.

Vogelmann, J. E., Rock, B. N., Moss, D. M., 1993. Red edge spectral measurements from sugar maple leaves. International Journal of Remote Sensing 14 (8), 1563–1575.

Whiting, M. L., Li, L., Ustin, S. L., Feb. 2004. Predicting water content using Gaussian model on soil spectra. Remote Sensing of Environment 89 (4), 535–552.

Wu, C., Niu, Z., Tang, Q., Huang, W., 2008. Estimating chlorophyll content from hyperspectral vegetation indices: Modeling and validation. Agricultural and Forest Meteorology 148 (8-9), 1230 – 1241.

Wu, W., 2014. The generalized difference vegetation index (GDVI) for dryland characterization. Remote Sensing 6 (2), 1211–1233.

Zarco-Tejada, P. J., Gonzalez-Dugo, V., Williams, L. E., Suarez, L., Berni, J. A. J., Goldhamer, D., Fereres, E., 2013. A PRI-based water stress index combining structural and chlorophyll effects: Assessment using diurnal narrow-band airborne imagery and the CWSI thermal index. Remote Sensing of Environment 138, 38–50.

Zarco-Tejada, P. J., Miller, J. R., 1999. Land cover mapping at BOREAS using red edge spectral parameters from CASI imagery. Journal of Geophysical Research-atmospheres 104 (D22), 27921–27933.

Zarco-Tejada, P. J., Pushnik, J. C., Dobrowski, S., Ustin, S. L., 2003. Steady-state chlorophyll a fluorescence detection from canopy derivative reflectance and double-peak red-edge effects. Remote Sensing of Environment 84 (2), 283–294.