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T. Dube, O. Mutanga, S. Cletah, S. Adelabu and B. Tsitsi. 2016. [Satellite remote sensing of forest aboveground biomass: A review](#). *Tropical Ecology* 57(2): 125-132

S. Adelabu, T. Dube. 2015. [Employing ground and satellite-based Quickbird data and random forest to discriminate five tree species in a Southern African Woodland](#). *Geocarto International* 30:4, 457-471

C. Shoko, T. Dube, M. Sibanda, S. Adelabu. 2015. [Applying the Surface Energy Balance System \(SEBS\) remote sensing model to estimate spatial variations in evapotranspiration in Southern Zimbabwe](#). *Transactions of the Royal Society of South Africa* 70:1, 47-55

S. Adelabu, O. Mutanga, E. Adam. 2015. [Testing the reliability and stability of the internal accuracy assessment of Random Forest when compared with independent dataset](#). *Geocarto International* 30:7, 810-821

T. Dube, K. Seutalai, S. Adelabu, C. Shoko. 2015. [Water Quality Monitoring in Sub-Saharan Africa: A Review of Remote Sensing Methods](#). *African Journal of Aquatic Science* 70:1, 1-7

M. Sibanda, K. Seutalai, T. Dube, S. Adelabu. 2015. [Operational applications of remote sensing in groundwater mapping across sub-Saharan Africa](#). *Transactions of the Royal Society of South Africa* 70:2,173-179

S. Adelabu, O. Mutanga, E. Adam and R. Sebege. 2014. [Spectral Discrimination of Insect Defoliation levels in Mopane Woodland using Hyperspectral Data](#). *IEEE Journal of Selected Topics in Earth Observation and Remote Sensing* 7:1, 177-186



S. Adelabu, O. Mutanga and E. Adam. 2014. [Evaluating the impact of red-edge band from Rapideye Image for classifying insect defoliation levels](#). *ISPRS Journal of Photogrammetry and Remote Sensing* 95, 34-41

S. Adelabu, O. Mutanga, E. Adams and M.A. Cho. 2013. [Exploiting Machine Learning Algorithms for Tree Species Classification in a Semi-Arid woodland Using Rapideye image](#). *Journal of Applied Remote Sensing* 7 (1), 073480

S. Adelabu, O. Mutanga, M.A. Cho. 2012. [A review of remote sensing of insect defoliation and its implications for the detection and mapping of Imbrasia belina defoliation of Mopane woodland](#). *The African Journal of Plant Science and Biotechnology* 6: 1-13

S. Adelabu, O. Areola, R.J. Sebego. 2011. [Assessing Growing Season Changes in Southern Botswana](#). *The African Journal of Plant Science and Biotechnology* 5:81-88