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6 March, 2018

Dear Dr. Ni-Bin Chang

My coauthors and I wish to submit a new manuscript entitled “Regional mapping of spekboom canopy cover using very high resolution aerial imagery” for consideration by the *Journal of Applied Remote Sensing*.

We confirm that this work is original and has not been published elsewhere nor is it currently under consideration for publication elsewhere.

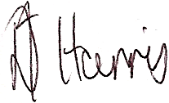
In this paper, we report on the application of remote sensing techniques for producing large area, very high resolution (VHR) spekboom canopy cover maps from multi-spectral aerial imagery. Canopy cover maps are required for the planning and monitoring of restoration of degraded subtropical thicket habitat in South Africa. Relatively few studies have assessed the application of high resolution remote sensing for monitoring vegetation over large areas, especially in arid regions. The paper should be of interest to readers in the areas of machine learning, vegetation mapping and VHR image analysis.

We obtained accurate spekboom canopy cover estimates across the study area using a per-pixel classification approach. Unwanted radiometric variations were reduced using a technique to homogenize to surface reflectance by calibration with satellite reference data. Problems of unstable and sub-optimal feature selection from high dimensional spaces containing redundancy were alleviated using a feature clustering and ranking technique. The combination of feature selection and surface reflectance homogenization methods alleviates the impact of unwanted radiometric and habitat variations and allows a single classification algorithm to be successfully applied over an extended region. I believe that this manuscript is appropriate for publication by the *Journal of Applied Remote Sensing* because it presents a vegetation mapping technique useful for environmental quality monitoring and ecological restoration.

Please address all correspondence concerning this manuscript to me at dugalh@gmail.com.

Thank you for your consideration of this manuscript.

Sincerely,



Dugal Harris