Comments to the "ASPRS Accuracy Standard " (Draft March 2014) of Joachim Höhle

Page 3, line 104: "Within this document, GSD is assumed to be the value computed using the calibrated camera focal length and camera height above average ~~mean~~ horizontal terrain".

(Remarks: 1. Focal length is an optical value and differs from the camera constant. Sloped terrain ogives other GSD values than horizontal terrain.

Page 24, line 826: Low confidence polygons.

"This draws a clear distinction between non-vegetated terrain where errors typically follow a normal distribution suitable for RMSE statistical analyses, and vegetated terrain where errors do not necessarily follow a normal distribution and where the 95th percentile value is more fair~~er~~ in estimating vertical accuracy at the 95% confidence level".

I agree with this very much. However, the methods for deriving the borders for the VVA standard should be open for other methods. I understand from the draft that by the photogrammetric approach, a compiler (operator) should trace the polygon of low confidence area manually and in case of lidar the polygon is derived by a raster analysis using observed ground point densities. There are other methods. For example, it is easily possible to determine the polygon of vegetated areas from an aerial camera with red, green, blue, and near infra-red bands images and derive a 'normal difference vegetation index' (NDVI) value for each point (cell) of the elevation model. The elevation model can be derived either from images only (cf. attached literature) or from a lidar/camera combination. Other approaches may use multi-wavelength airborne laser scanners which can also detect vegetation. Each point of the DSM point cloud could be supplemented with an NDVI index.

I suggest the following addition:

The methodology to derive the borders where the VVA standard can be applied may change in future.

Reference (attached)

Höhle, J., Höhle, M., 2013. Generation and Assessment of Urban Land Cover Maps Using High-Resolution Multispectral Aerial Cameras. International Journal on Advances in Software vol. 6 no 3 & 4, year 2013, http://www.iariajournals.org/software/ (no. 3 & 4), 272-282.