Corrections to "Automatic Spectral Rule-Based Preliminary Classification of Radiometrically Calibrated SPOT-4/-5/IRS, AVHRR/MSG, AATSR, IKONOS/QuickBird/OrbView/GeoEye, and DMC/SPOT-1/-2 Imagery"

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In our two-part paper [1], [2] (this issue, pp. 1299–1354), there are two errors which we correct here.

In Part I of our paper [1], there is an error in point 4) on page 1311. The corrected text is as follows.

For example, LSRC maps every pixel-based seven-band Landsat-like data vector onto a discrete and finite set of 46 spectral categories belonging to six *parent* spectral categories (supercategories) which are listed as follows (according to their order of detection): 1) *cloud*; 2) *either snow* or *ice*; 3) *either water* or *shadow*; 4) *vegetation*; 5) *either bare soil* or *built-up*; and 6) *outliers* [27]. It is worthy of note that each aforementioned spectral category is named after the set of (3-D) land cover classes providing the reference ensemble of spectral signatures (refer to point 2) earlier in this paper) associated with that spectral (color) behavior. For example, let us consider the realistic case where, at the Landsat sensor-specific spectral and spatial resolutions, LSRC assigns a spectral-based semiconcept *either bare soil* or *built-up* to unlabeled pixels depicting an instance of the (3-D) object class (concept) *ship* (refer to Section II-C3b of this paper and Fig. 15(a) in Part II of this paper). By assigning a per-pixel MS data vector belonging to an instance of the (3-D) class *ship* with a (2-D) color-based semiconcept *either bare soil* or *built-up*, LSRC means that an input unlabeled data vector looks like, i.e., shares the same MS properties as, the family of reference spectral signatures generated from the land-cover-class set *either bare soil* or *built-up*. By no means should this mapping occurrence be considered a classification error where an instance of the (3-D) object class (concept) *ship* is (mis)labeled by LSRC as belonging to the OR combination of (3-D) object classes (concepts) *bare soil* and *built-up*.

In Part II of our paper [2], there is an error in the first sentence of point 8b) on page 1347. The corrected text is as follows.

Exploitation of useful and computationally efficient second-stage morphological filters when the target object's shape and size are known *a priori*, and the target object is a bright object in a dark background, or *vice versa*.

REFERENCES

[1] A. Baraldi, L. Durieux, D. Simonetti, G. Conchedda, F. Holecz, and P. Blonda, "Automatic spectral-rule-based preliminary classification of radiometrically calibrated SPOT-4/-5/IRS, AVHRR/MSG, AATSR, IKONOS/QuickBird/OrbView/GeoEye, and DMC/SPOT-1/-2 imagery—Part I: Systems design and implementation," *IEEE Trans. Geosci. Remote Sens.*, vol. 48, no. 3, pp. 1299–1325, Mar. 2010.

[2] A. Baraldi, L. Durieux, D. Simonetti, G. Conchedda, F. Holecz, and P. Blonda, "Automatic spectral rule-based preliminary classification of radiometrically calibrated SPOT-4/-5/IRS, AVHRR/MSG, AATSR, IKONOS/QuickBird/OrbView/GeoEye, and DMC/SPOT-1/-2 imagery—Part II: Classification accuracy assessment," *IEEE Trans. Geosci. Remote Sens.*, vol. 48, no. 3, pp. 1326–1354, Mar. 2010.

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