

Comments and Corrections

Corrections to “Change Detection in Full and Dual Polarization, Single- and Multi-Frequency SAR Data”

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Abstract—When the covariance matrix formulation is used for multi-look polarimetric synthetic aperture radar (SAR) data, the complex Wishart distribution applies. Based on this distribution a test statistic for equality of two complex variance-covariance matrices and an associated asymptotic probability of obtaining a smaller value of the test statistic are given. In a case study airborne EMISAR C- and L-band SAR images from the spring of 1998 covering agricultural fields and wooded areas near Foulum, Denmark, are used in single- and bi-frequency, bi-temporal change detection with full and dual polarimetry data.

Index Terms—Complex covariance matrix test statistic, complex wishart distribution, dual polarization, EMISAR, full polarization, remote sensing change detection, quad polarization.

In [1], wrong figures were printed on page 4044. The correct figures are shown here.



Fig. 1. EMISAR C-band C64 May 20, 1998, Pauli RGB.



Fig. 2. EMISAR L-band C64 May 20, 1998, Pauli RGB.



Fig. 3. EMISAR C-band C65 June 16, 1998, Pauli RGB.

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Color versions of one or more of the figures in this paper are available online at <http://ieeexplore.ieee.org>.

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Fig. 4. EMISAR L-band C65 June 16, 1998, Pauli RGB.

REFERENCE

- [1] A. A. Nielsen, K. Conradsen, and H. Skriver, "Change detection in full and dual polarization, single- and multi-frequency SAR data," *IEEE J. Sel. Top. Appl. Earth Obs. Remote Sens.*, vol. 8, no. 8, pp. 4041–4048, Aug. 2015.