

ABSTRACT

The paper reports on a new technique for detecting changes in multi-temporal very high resolution satellite images. The methodology relies on the use of pulse-coupled neural networks (PCNNs), which are based on the implementation of the mechanisms underlying the visual cortex of small mammals. The qualitative and more quantitative results are reported. The performance of the algorithm has been evaluated on a pair of QuickBird images taken over the test area of Tor Vergata University, Rome. A comparison with a more traditional approach is also considered.