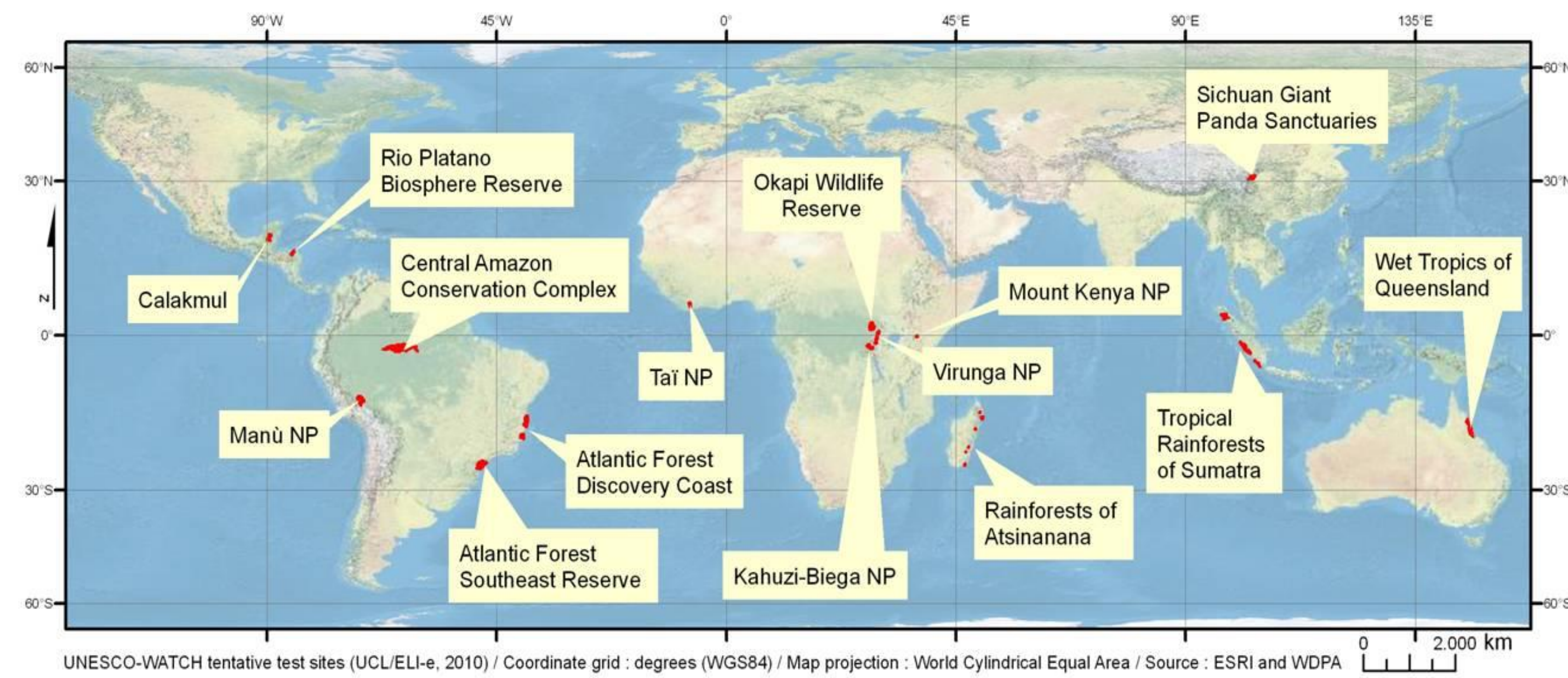


Change detection in and around UNESCO World Heritage sites in tropical forests

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1. Context

UNESCO needs operational tools to facilitate the monitoring of the 76 World Heritage sites covered by tropical forests.



2. Objective

The goal is to develop a semi-automated alert system for land cover change detection in and around tropical forests WH sites using a multi-sensor processing chain.

This is demonstrated on 3 out of 15 sites to be processed in order to answer the following questions :

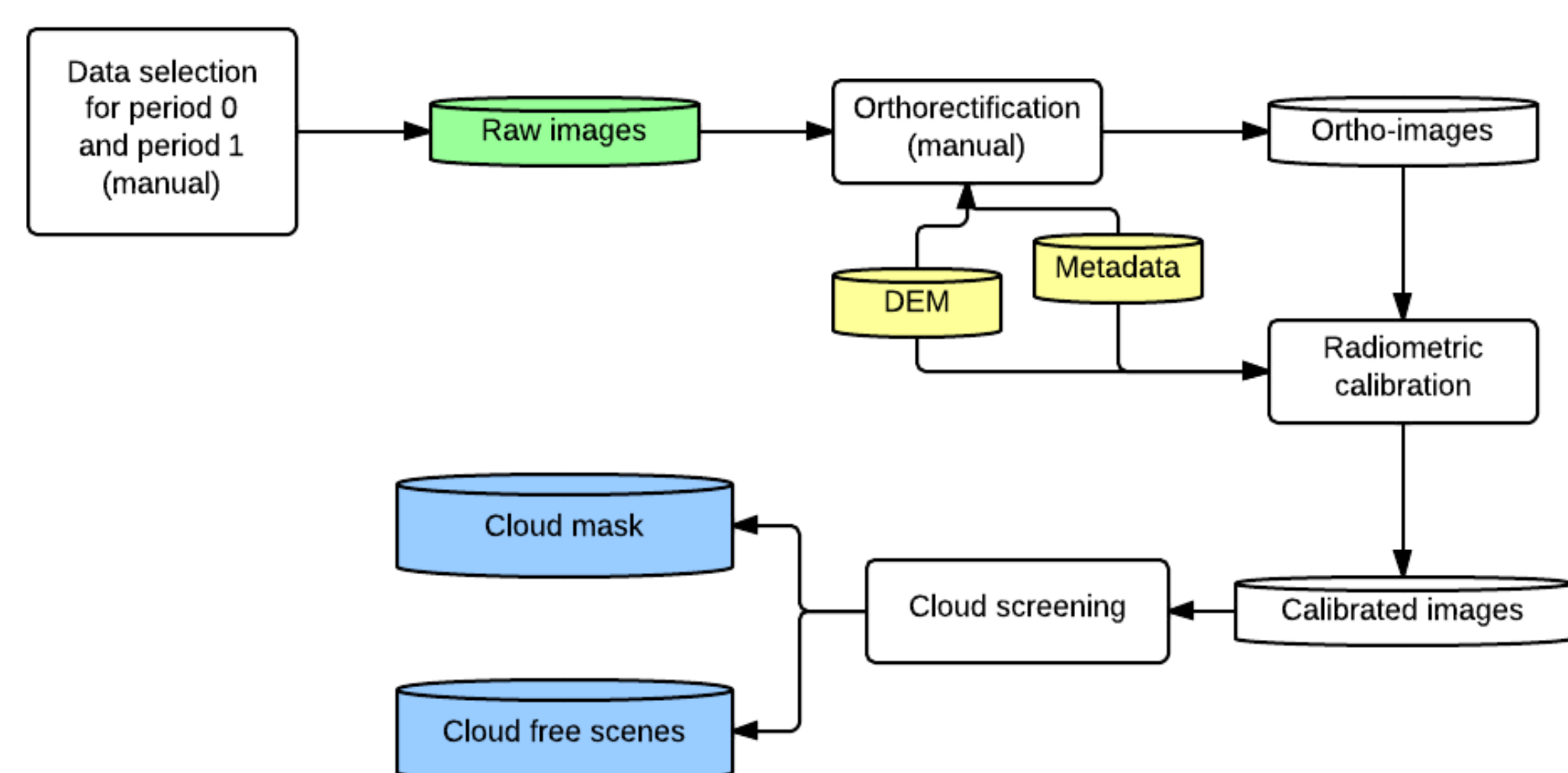
- How did the site inscription affect land cover in the selected sites and in the buffer zone ?
- Are the site boundaries consistent with the observed land cover ?

3. Data and study area

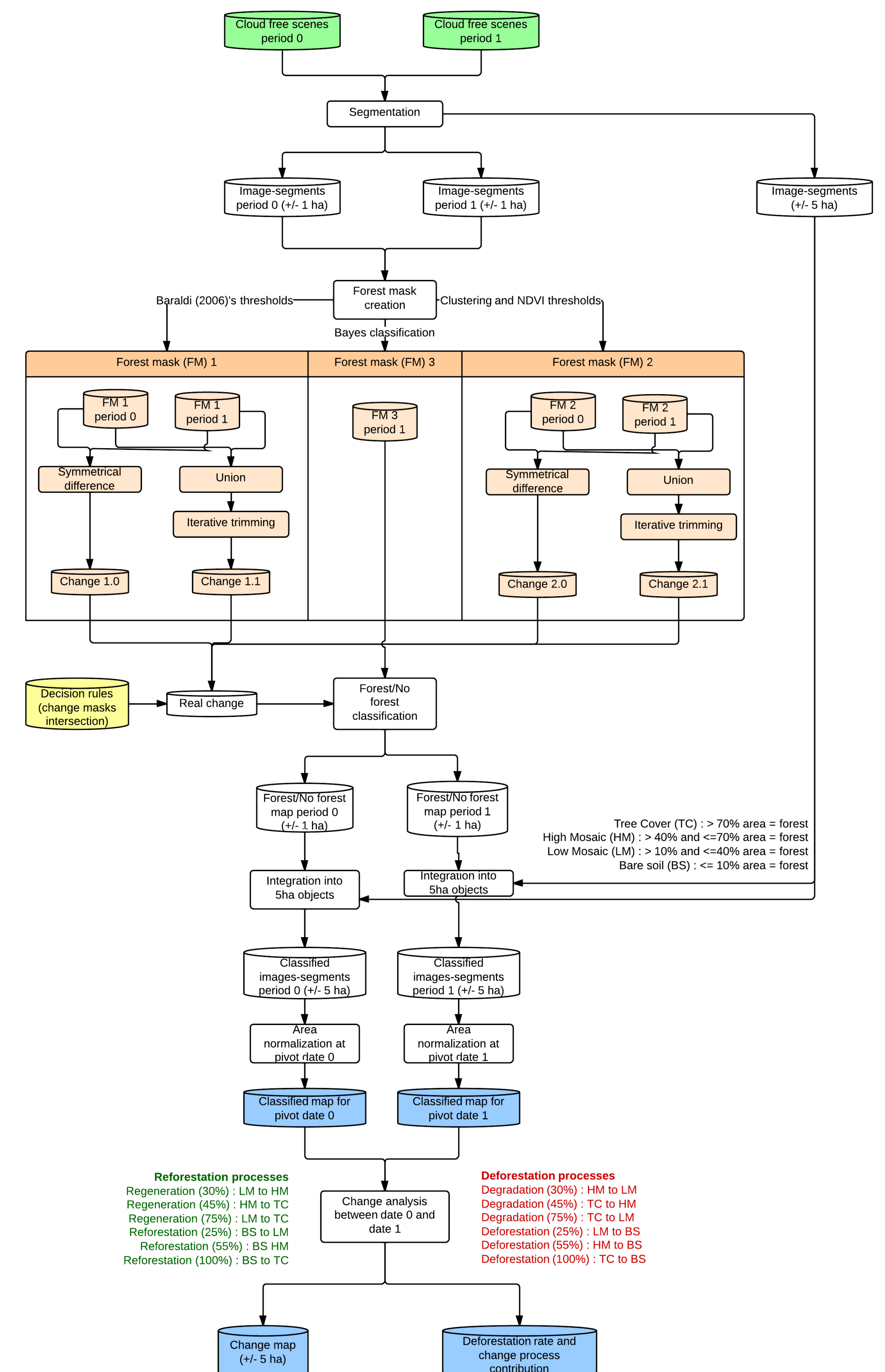
15 sites have been selected in order to represent the diversity of the tropical forest ecosystems. These sites are covered for 2 epochs (just before site implementation and nowadays) by $\pm$ 450 SPOT images and $\pm$ 250 Landsat images.

4. Method

4.1. Pre-processing

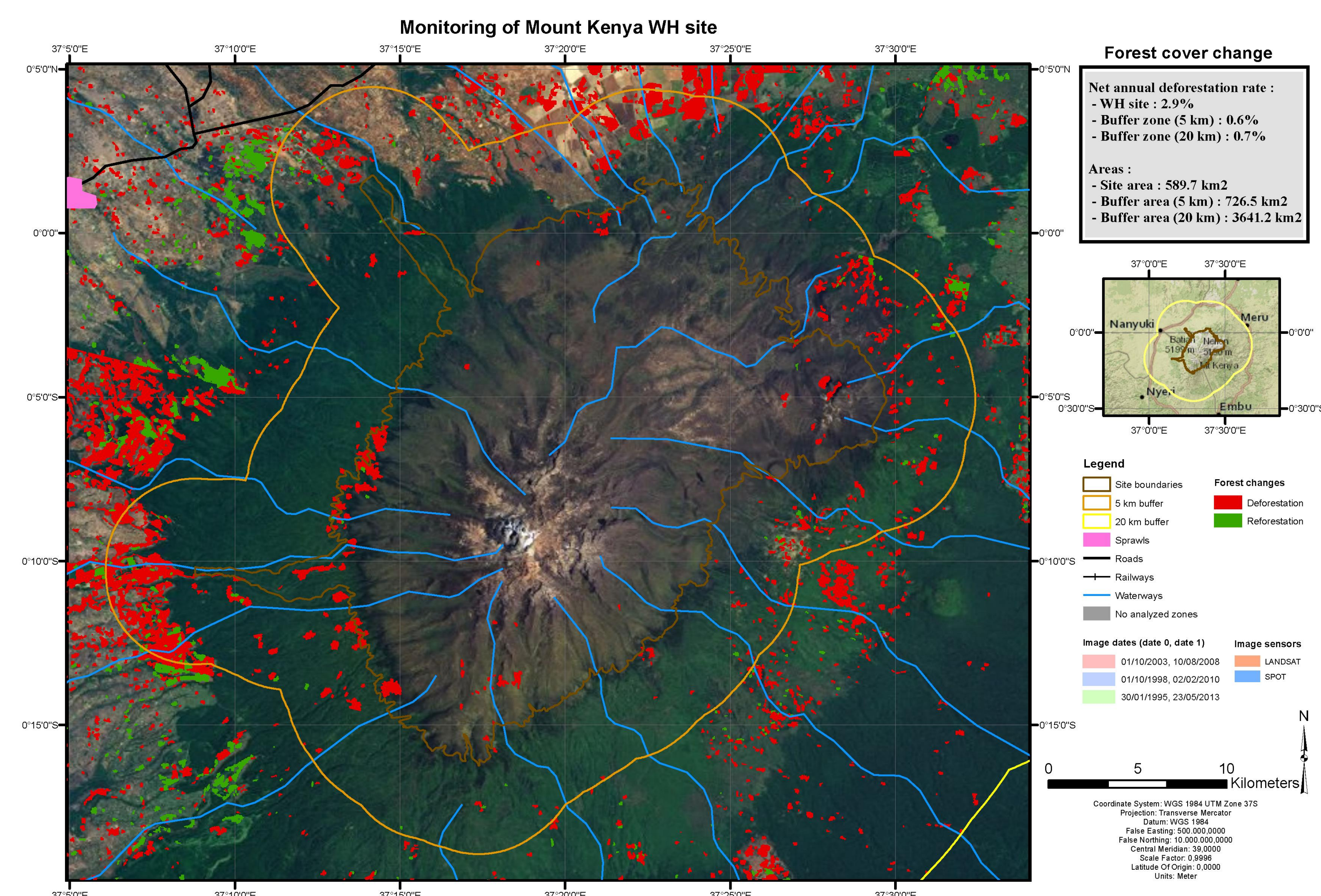


4.2. Change detection processing chain



5. Results

Change detection analysis for Mount Kenya WH site highlights cover change outside the site boundaries, especially outside 5 km buffer zone.



Thanks to :



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