# Article information:

A review of supervised object-based land-cover image classification - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S092427161630661X>

# Article summary:

1. This article provides a meta-analysis of supervised object-based land-cover image classification, synthesizing research results from 254 experimental cases described in 173 scientific papers.

2. The meta-analysis reveals general characteristics of the studies and relationships between factors of interest, such as spatial resolution and study area or optimal segmentation scale, accuracy and number of targeted classes.

3. The article also identifies methods that may advance supervised object-based image classification, such as deep learning and type-2 fuzzy techniques.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article is a comprehensive review of supervised object-based land-cover image classification, providing an extensive meta-analysis of research results from 254 experimental cases described in 173 scientific papers. The authors provide useful data on supervised object-based image classification, including general characteristics of the studies (e.g., geographic range of relevant institutes, preferred journals) and the relationships between factors of interest (e.g., spatial resolution and study area or optimal segmentation scale, accuracy and number of targeted classes). Furthermore, they identify methods that may advance supervised object-based image classification (e.g., deep learning and type-2 fuzzy techniques).

The article is well written and provides a thorough overview of the topic at hand. It is based on reliable sources (173 scientific papers) which are referenced throughout the text to support its claims. The authors have also provided useful data on supervised object-based image classification which can be used to further explore the effects of varied factors on this type of classification.

The only potential bias in this article is that it does not present both sides equally; instead it focuses solely on the benefits and advantages associated with supervised object-based land cover image classification without exploring any potential risks or drawbacks associated with this method. However, given that this is a review paper rather than an argumentative one, this bias can be overlooked as it does not detract from the overall quality or reliability of the article itself.

# Topics for further research:

* Supervised object-based image classification accuracy
* Deep learning for land cover classification
* Type-2 fuzzy techniques for land cover classification
* Advantages of supervised object-based image classification
* Disadvantages of supervised object-based image classification
* Impact of spatial resolution on land cover classification

# Report location:

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