

Object-Based Augmentation Improves Quality of Remote Sensing Semantic Segmentation

Problem they are trying to solve / Purpose of method

Remote sensing semantic segmentation requires high quality data, but it is time consuming, expensive, and difficult to obtain it.

The standard approach is to apply image augmentations.

How does it differ from other methods?

Object-Based Augmentation apply augmentations to objects in the image instead of augmenting the image itself.

How the method works

The Object-Based Augmentation (OBA) targets objects instead of the whole image. This us to create many combinations. For this approach to work, all objects that can be augmented needs a mask.

When creating the augmentations, object overlap is prohibited, and the augmentations are generated during training.