

A Post-processing Framework based on Regions and Boundaries Using Convolutional Neural Networks and a New Dataset for Building Extraction

Supplementary Materials

The hyperparameters and GPUs used for the deep neural networks in this study are listed in Tables S1 and S2.

Table S1. Hyperparameters and GPUs used on the XIHU dataset.

Models	Batch size	Original learning rate	Epoch	GPU
U-Net	8	1e-5	800	NVIDIA 2080 ti
DeepLab	2	3e-4	3000	NVIDIA 2080 ti
Mask R-CNN	1	1e-5	6000	NVIDIA 1080
HED	6	1e-6	1000	NVIDIA 2080 ti
BDCN	8	1e-6	40000	NVIDIA 2080 ti
DexiNed	8	1e-4	3000	NVIDIA 2080 ti
PMNet	8	1e-3	1000	NVIDIA 1080 ti

Table S2. Hyperparameters and GPUs used on the WHUEA dataset.

Models	Batch size	Original learning rate	Epoch	GPU
U-Net	8	1e-5	800	NVIDIA 2080 ti
DeepLab	2	3e-4	3000	NVIDIA 2080 ti
Mask R-CNN	1	1e-5	6000	NVIDIA 1080
HED	6	1e-6	3000	NVIDIA 2080 ti
BDCN	8	1e-4	40000	NVIDIA 2080 ti
DexiNed	8	1e-4	3000	NVIDIA 2080 ti
PMNet	8	1e-3	1000	NVIDIA 1080 ti