Sentinel-2 multi-spectral images

Spectral bands (10m)

Indexes (NDVI, NDWI, …)

Hue

JRC water extent dataset

Training dataset

Stratified sampling

Possible water extent (2019)

Water frequency (A)

Water classification model

Final water frequency (10m, 2019)

Water classification

Water body identification

Permanent Water extents (10 m, 2019)

Identification

• Extract water bodies
• Exclude rivers and streams
• Remove noises
• ...

Water bodies (2019, WBD-NAHL)

Interpreted water dataset

Regional water body datasets (e.g., PeRL)

Comparison & Confusion metrics

Accuracy Assessment