

# RS2C

## Remote Sensing Scene Classification

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- Web service for remote sensing scene classification
  - Anotate images with labels from a pre-defined set
  - <http://rs2c.etfbl.net>
- Applications:
  - Land cover and land use classification,
  - Monitoring urban growth,
  - Monitoring and forecasting climate changes,
  - Monitoring of ecosystems, ...

- RESTful web service and web application
- Based on convolutional neural networks
  - ResNet-50 architecture
  - ImageNet pre-training
  - MLRSNet fine-tuning
- Image upload/URL
- Two groups of methods:
  - Single-label classification, 46 scene categories
  - Multi-label classification (tagging), 60 labels

- Service is featured in the NI4OS catalogue
  - Metadata
- HTTP access/Docker container
  - Terms of use
- RESTful API
  - Accepts HTTP POST requests
  - Returns JSON objects
- Based on open source tools and libraries
- MIT License