

Earth Observation with artificial Intelligence tools development Hackathon

The “Earth Observation with artificial Intelligence tools development Hackathon”

TESTING PHASE



Dear All,

The testing dataset has been released and the testing phase has started!!!

In the shared folder (<https://tinyurl.com/eoaihackathon>) you can find two testing datasets, **testing1** and **testing2**. The testing phase is composed of two tracks in which you need to test the networks on these datasets.

TRACK1

- *Testing dataset:*
testing1
- *Description of dataset:*
testing1 is a testing dataset extracted by the UCMerced Land Use (the same provided for the training). This time, the images are subjected to a processing: the images are randomly rotated and corrupted with additive gaussian noise with a Signal to Noise Ratio of 20 dB. As for the training dataset, the data are always 256x256 RGB images in TIFF format with uint8 precision
- *What to do:*
You should test your network in order to predict the class of each image.
- *Motivation:*
The aim of this test is to validate the robustness of your method with respect rotation and noise.

TRACK2

- *Testing dataset:*
testing2
- *Description of dataset:*
testing2 is a an RGB image of Dubai taken from World-View 3 with same spatial resolution of the training dataset.
The images are not corrupted.
As for the training dataset, the data are always 256x256 RGB images in TIFF format with uint8 precision
- *What to do:*
You should test your network in order to predict the class of each image.
Note that in this case, not all the classes are included in the testing dataset.
- *Motivation:*
The aim of this test is to assess the generalization ability of your network with respect a different sensor and different scenario.

Deliverable of the results:

Once you have tested the network you should provide at the contact e-mails you find at the end of this page:

1. a vector containing the predicted labels for the testing1 dataset.
2. a vector containing the predicted labels for the testing2 dataset.
3. the trained model.
4. a small report (max one page) describing your solution.

Note that the vector containing the predicted labels can be a .mat, .npy or .csv file. Moreover, in order to allow us to understand the association between tested image and predicted labels, we ask you to provide the predicted labels in the same order of the testing images. You should provide everything within **2 hours** since the testing datasets are available.

Evaluation of the results:

The performance will be evaluated in according to following metrics: precision, recall, f1 score and accuracy.

Good Job!

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