

# EU-AIR-TRANSPORTATION MULTIPLEX NETWORK

Last update: 1 July 2014

## Reference and Acknowledgments

This README file accompanies the dataset representing the multiplex air transportation network of Europe.

If you use this dataset in your work either for analysis or for visualization, you should acknowledge/cite the following paper:

```
"Emergence of network features from multiplexity"  
Alessio Cardillo et al  
Scientific Reports 3, 1344 (2013)
```

that can be found at the following URL:

<http://www.nature.com/srep/2013/130227/srep01344/full/srep01344.html>

See the official webpage of this dataset

<http://complex.unizar.es/~atnmultiplex/>

for further details.

## Description of the dataset

The multilayer network is composed by thirty-seven different layers each one corresponding to a different airline operating in Europe.

There are 450 nodes in total, labelled with integer ID between 1 and 450, with 3588 connections. The multiplex is undirected (with only one direction specified) and unweighted, stored as edges list in the file

```
EUAirTransportation_multiplex.edges
```

with format

```
layerID nodeID nodeID weight
```

(Note: all weights are set to 1)

The IDs of all layers are stored in

```
EUAirTransportation_layers.txt
```

The IDs of nodes, together with their geographical coordinates (latitude and longitude in deg) can be found in the file

```
EUAirTransportation_nodes.txt
```

## License

The EU-AIR-TRANSPORTATION MULTIPLEX DATASET is provided "as is" and without warranties as to performance or quality or any other warranties whether expressed or implied. By using this data set, you agree not to perform reverse engineering to extract airlines, airport names, or any other information, and not to perform comparative studies about the performance of different air transport actors.

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## Contacts

If you find any error in the dataset or you have questions, please contact

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