

### MeteoPole **A New Opensource and Free Software Tool to Sanitize Data** Zephy Science and to Enable Projects Data Sharing in the Wind Industry

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# A Call for Reproducible and Transparent Validations to Make Wind More Bankable

The global wind industry has become more mature and sophisticated in the past half-decade, with a much better understanding of wind farm modeling at multiple scales. However, there is a lack of validation data sets available for transparent testing of enhanced wind resource assessment methodologies, allowing reproducible assessment processes leading to unquestionable conclusions. Zephy-Science is pleased to introduce a free, opensource and cross-platform software tool to sanitize project data to enable project data sharing between projects owners and technology providers.

### A Free Tool to Sanitize Data Locally before Running Simulation Jobs on Cloud Servers

The first version of the tool focuses on sanitizing all the projects data required for providing a complete third party wind resource assessment. Measurement data can be sanitized by applying scale factors and offsets. Topographical data can be sanitized by removing the georeference

### information and by applying a rotation with a random angle.





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Random Rotation

Default Offset

visualization

### **Data Sanitization Process**

In order to make wind projects more bankable, wind industry players should work together to build reproducible and transparent validation cases to be integrated within industry software and shared with users community. Such validation cases could be referred to as "Open Validation Cases". To do so, wind industry players should be able to share data without compromising on privacy and sensitivity issues. Sanitizing data becomes crucial to achieve the required data sharing. The sanitizing process can be done on local computers before uploading the data on the internet. Along with the sanitized data, another output of the tool is a key allowing data owners to reproduce the original input data from any sanitized output data. The data sanitizing process will be explained in details and examples in different projects around the world will be given.

## Example on CREYAP II Project Inputs

The Data Sanitization Process is shown for the CREYAP II project inputs : Orography Data, Roughness Data and Wind Data.



### Let's Start Sharing Data to Drive Science Forward!

The data sanitizing tool can be accessed for free and the sources can also be checked on GitHub to ensure transparency. This tool can now be used by industry players to share projects data without compromising on data sensitivity and privacy.



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