

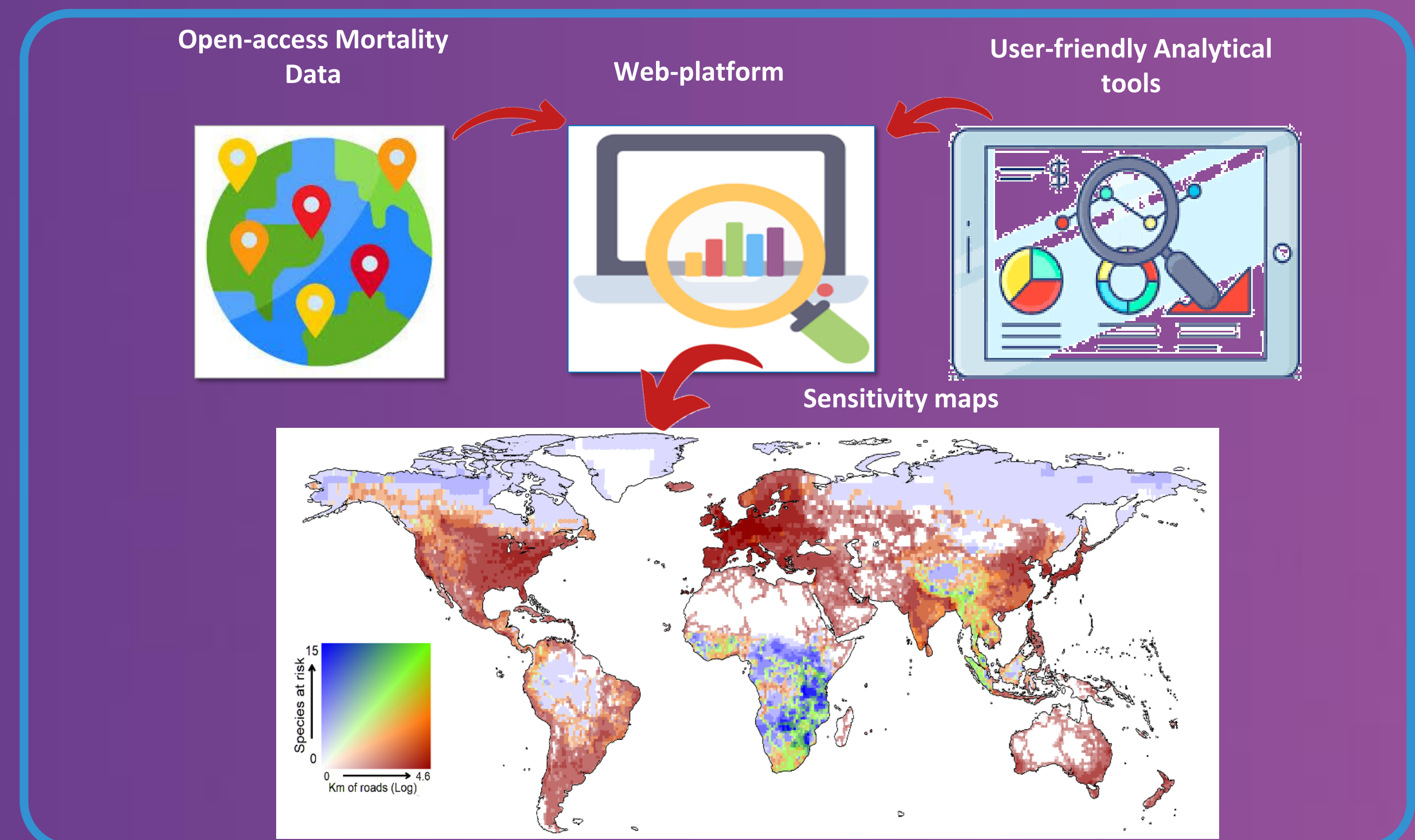


# RISKY – wildlife mortality from energy and transport infrastructure

www.risky.pt

## Summary

RISKY aims to develop an open-access platform for mortality data associated with energy and transport infrastructures, integrating user-friendly analytical tools and sensitivity maps.



## Challenge

Energy and transport infrastructures are expanding globally, killing millions of terrestrial vertebrates each year, yet scattered data limit effective wildlife-friendly planning.

## Solution

- Compile mortality data from non-FAIR sources;
- Develop user-friendly tools to analyse mortality data;
- Create a web platform where users can visualize, retrieve and analyse the now FAIR mortality data;
- Generate high-resolution sensitivity maps identifying collision and extinction risk.

## Results

- Webplatform RISKY
- Global Roadkill Data: a dataset on terrestrial vertebrate mortality caused by collision with vehicles
- mortalityRISK: a user-friendly application to assess the risk of extinction associated to mortality (in review)
- Extinction risk maps of carnivores in Iberian Peninsula present at XVII SECEM Congress (2025)

## Exploitation of results

- The datasets are available open-access and follow Darwin Core standard, making them easily interoperable;
- The web platform and associated tools permit anyone, regardless of skill level, to find and analyse the data;
- The sensitivity maps will inform conservation planning worldwide.

## Sustainability

- Future integration into EOSC via ENVRI.
- The web platform will be maintained and operable in the future.
- All datasets will also be published in GBIF, a widely used free and open-access portal to biodiversity data.
- The code for mortalityRISK will be open-source, available in GitHub.





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**Starting date: 1-Jan-2025**

**Duration: 24 months**

**Total funding: € 248 875**

**Principal investigator: Clara Grilo**

**Project partners: GBIF.PT, GBIF.ES, CEREMA, OFB, RGI, iDIV, CEFE**

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## Scientific outcomes

### Webplatform:

Temporarily available at

[https://registos.gbif.pt/occurrence/search?q=%3A\\*&qc=-\\_nest\\_parent\\_%3A\\*&fq=\(data\\_resource\\_uid%3A%22dr0%22%20OR%20data\\_resource\\_uid%3A%22dr12%22\)#tab\\_mapView](https://registos.gbif.pt/occurrence/search?q=%3A*&qc=-_nest_parent_%3A*&fq=(data_resource_uid%3A%22dr0%22%20OR%20data_resource_uid%3A%22dr12%22)#tab_mapView)

### Roadkill datasets

Available at the webplatform and GBIF

<https://www.gbif.org/dataset/65908f95-5ab6-48d9-bf6d-6da274ed730e>

<https://www.gbif.org/dataset/d3b6cb30-0a64-4f82-91ea-0bb14637ee17>

### Analytical tools

Mortality RISK [code will be available in GitHub]

### Publications

Grilo, C., Neves, T., Bates, J. *et al.* Global Roadkill Data: a dataset on terrestrial vertebrate mortality caused by collision with vehicles. *Sci Data* **12**, 505 (2025). <https://doi.org/10.1038/s41597-024-04207-x>  
Neves T & Grilo C (in review). mortalityRISK: a tool for estimating wildlife extinction risk associated with mortality caused by infrastructures. *Methods in Ecology and Evolution*.

