

Exploring potential causes, consequences and visualizing evolution of major air pollutant emissions over EU28

Jules Sauvinet, Marine Ruiz

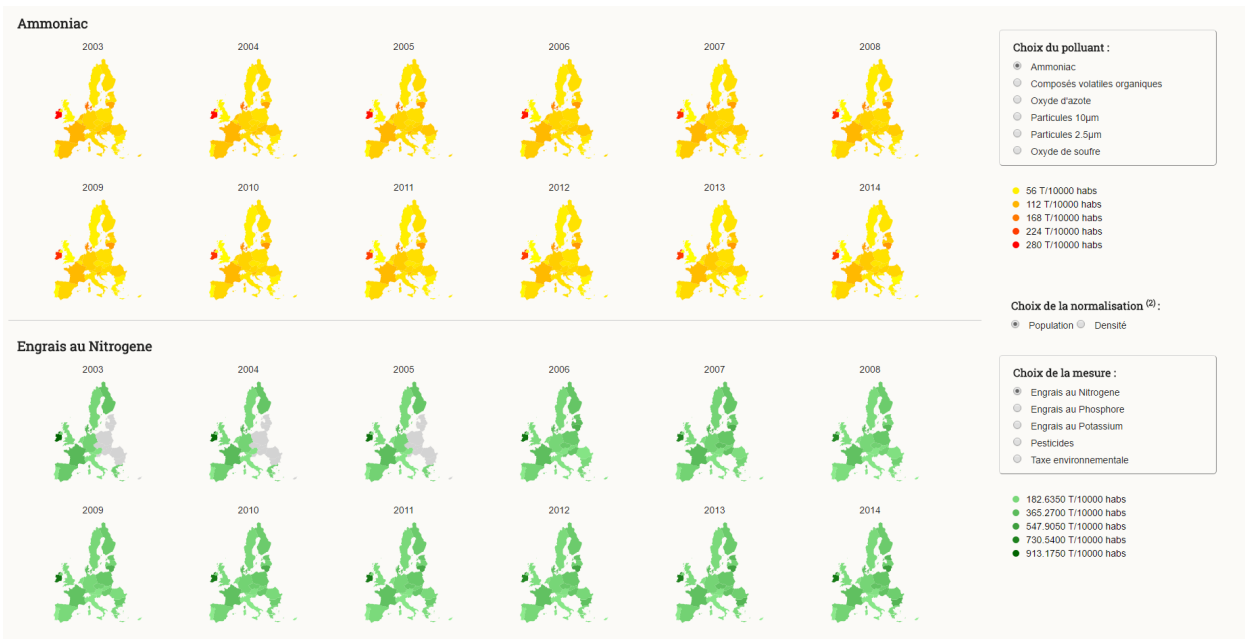


Fig. 1. Main view of the visualization: The smallMaps of pollution on the top (the pollutant chose is Ammoniac) and the smallMaps of the mesure below (the mesure chose is the "Engrais azots")

Abstract—Visualisation sur 12 années au maximum des relevés sur des polluants et des relevés sur des données de santé ou autre afin de visualiser ou non, une possible relation entre le polluant et la mesure.

Index Terms—Air pollution, Ammoniac, Sulphur oxides, Non-methane volatile organic compound, Nitrogen oxides, Particulate matters, EU28, eurostats, ecology, health

1 INTRODUCTION(1P)

The emissions of most harmful air pollutants has globally decreased over the past 25 years (see the figure 2 below). But that doesn't mean that we handle the problem of pollution and that the ... Some countries have decided to apply a political policy of reduction, while others have continued to put in place very serious problems for the environment and health. Etc ...

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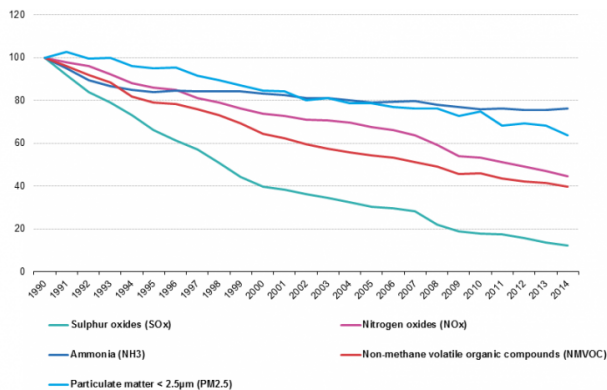


Fig. 2. A visualization of the data from [?]. The image is from [?] and is in the public domain.

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2 RELATED WORK (1P)

- Note that each author needs to have a separate entry in author footer on the bottom-left corner of the first page, merging two people (even if from the same institution) is not permitted.
- The style uses the hyperref package, thus turns references into internal links. We thus recommend to make use of the “\autoref{reference}” call (instead of “Figure~\ref{reference}” or similar) since “\autoref{reference}” turns the entire reference into an internal link, not just the number. Examples: ?? and ??.
- The style automatically looks for image files with the correct extension (eps for regular L^AT_EX; pdf, png, and jpg for pdfL^AT_EX), in a set of given subfolders (figures/, pictures/, images/). It is thus sufficient to use “\includegraphics{CypressView}” (instead of “\includegraphics{pictures/CypressView.jpg}”).
- For adding hyperlinks and DOIs to the list of references, you can use “\bibliographystyle{abbrv-doi-hyperref-narrow}” (instead of “\bibliographystyle{abbrv}”). It uses the doi and url fields in a bibT_EX entry and turns the entire reference into a link, giving priority to the doi. The doi can be entered with or without the “http://dx.doi.org/” url part. See the examples in the bibT_EX file and the bibliography at the end of this template.

Note 1: occasionally (for some L^AT_EX distributions) this hyper-linked bibT_EX style may lead to **compilation errors** (“pdfendlink ended up in different nesting level ...”) if a reference entry is broken across two pages (due to a bug in hyperref). In this case make sure you have the latest version of the hyperref package (i.e., update your L^AT_EX installation/packages) or, alternatively, revert back to “\bibliographystyle{abbrv-doi-narrow}” (at the expense of removing hyperlinks from the bibliography) and try “\bibliographystyle{abbrv-doi-hyperref-narrow}” again after some more editing.

Note 2: the “-narrow” versions of the bibliography style use the font “PTSansNarrow-TLF” for typesetting the DOIs in a compact way. This font needs to be available on your L^AT_EX system. It is part of the “paratype” package, and many distributions (such as MikT_EX) have it automatically installed. If you do not have this package yet and want to use a “-narrow” bibliography style then use your L^AT_EX system’s package installer to add it. If this is not possible you can also revert to the respective bibliography styles without the “-narrow” in the file name.

DVI-based processes to compile the template apparently cannot handle the different font so, by default, the template file uses the abbrv-doi bibliography style but the compiled PDF shows you the effect of the abbrv-doi-hyperref-narrow style. **Note 2:** the “-narrow” versions of the bibliography style use the font “PTSansNarrow-TLF” for typesetting the DOIs in a compact way. This font needs to be available on your L^AT_EX system. It is part of the “paratype” package, and many distributions (such as MikT_EX) have it automatically installed. If you do not have this package yet and want to use a “-narrow” bibliography style then use your L^AT_EX system’s package installer to add it. If this is not possible you can also revert to the respective bibliography styles without the “-narrow” in the file name.

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- Cancer death (Morts de cancers)
- Pesticides (Pesticides)
- Nitrogen fertilizers
- Potassium fertilizers

- Problème de compatibilité entre nos deux ordinateurs pour visualiser le projet (pas le temps)
- Quand on clique sur pays, un graphique apparaît avec cette fois-ci toutes les années (sans limite de nombre), les courbes d'évolution de la donnée polluante et de la donnée mesures.

- cela aurait pu permettre de mieux visualiser la corrélation entre les deux données
- Quand on clique sur un pays, un tableau des valeurs pour tous les autres pays pour l'année courante
- Cela aurait pu permettre de mieux visualiser le pays ciblé en fonction des autres de façon plus précise que par la coloration
- intégrer la notion de respect de normes écologiques pour mettre en évidence les pays qui ne la respectent pas
- plus de polluants intéressants (il aurait fallu interroger des personnes avec une connaissance approfondie du sujet) (ozone) et plus de mesures (idem) (de santé)
- cela aurait pu permettre d'avoir une liste de polluants et de mesures associées plus que pertinentes
- ATTENTION LES DONNÉES NE SONT PAS TOUJOURS DISPONIBLES / PUBLICS NON PLUS
- possibilité de naviguer au travers de toutes les années disponibles sur la combinaison polluant/mesure avec un slider d'intervalles de 12 années
- passer données en mois (en gardant un slider pour naviguer sur les années) et afficher l'évolution sur une seule année et faire des corrélations sur les saisons
- mais données non compatibles ce jour
- passer en NUTS2 pour plus de précision
- plus précis, mais trop précis par rapport à la taille de la SmallMap qu'il faudrait de ce fait agrandir et donc réduire le nombre de données affichées = compromis

6 CONCLUSION

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ACKNOWLEDGMENTS

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