

Answer to public comments by Roberto Sommariva, Claire Reeves and Peter Bräuer. We thank Roberto Sommariva, Claire Reeves, and Peter Bräuer for their comments, and for bringing several questions to our attention.

## Authorship and acknowledgements

The first and main comment raised by Roberto Sommariva, and discussed in the other public comments, deals with the authorship about the model code, with the rather implicit claim that he should be offered co-authorship, along with other people who work with MISTRA in the past.

We can confirm that our manuscript conforms to the GMD authorship guidelines stated here:

[https://www.geoscientific-model-development.net/policies/publication\\_ethics.html](https://www.geoscientific-model-development.net/policies/publication_ethics.html)

*"All authors listed on a presented scientific work must have contributed a significant part to it. Vice versa, all persons who contributed to the presented work need to be named."*

With respect to the authorship of the code, we asked developers of legacy parts in the MISTRA-v9.0 code (A. Kerckweg: contribution to netCDF output format; B. Luo: ion activities; S. Pechtl: nucleation; J. Landgraf: photolysis rates) whether they agreed with the open-source release of their contribution to MISTRA, under the EUPL. The first three confirmed that they were happy with this. Unfortunately, despite repeated attempts via email and phone, we were unsuccessful in making contact with J. Landgraf.

We had already added headers including the author names to the various routines in the code. We now also added a CREDITS file in the repository, to summarise all known people who developed and worked with MISTRA, based on the list of publications.

With regard to the work done by Roberto Sommariva in MISTRA: this work was published in 2012 (Sommariva and von Glasow, 2012) and the modified gas phase chemistry mechanism was made public in this paper. This work is acknowledged in our paper through the citation of Sommariva and von Glasow (2012).

## Financial support

We now also acknowledge the ASIBIA grant, which supported the developments presented here. Other grants have only supported work with MISTRA presented elsewhere and have been acknowledged there.

## Licensing

GNU General Public License (GPL) and European Union Public Licence (EUPL) provide similar rules (authorisations and obligations) regarding the model code (see for instance <https://choosealicense.com/appendix/>). However, the

EUPL provides wider compatibility with other licences, which means that MISTRA (released under EUPL) can be merged with code covered by a compatible license, such that the combined derivative work can be distributed under the compatible licence.

As mentioned above, the people we contacted agreed for the release of the code under EUPL. This release had also been advertised to all known people involved with MISTRA in 2017, when a beta version of the code of MISTRA-v9.0 was first released on GitHub. Roberto Sommariva and Peter Bräuer forked this code, which we have taken as an implicit endorsement and agreement.

### **Other points raised by Peter Bräuer**

In his comment, Peter Bräuer add 3 more remarks about the current release of MISTRA code:

- The organisation name on GitHub, "MISTRA-UEA", was chosen more than 4 years ago because "MISTRA" was already taken. The repository itself is named only "MISTRA". The organisation could be renamed, but this would break the existing links to the GitHub repository.
- admin privileges on the GitHub repository are not necessary to use, contribute and collaborate to the project. To our knowledge, admin privileges are mostly limited to technical aspects of the repository: naming and deleting for instance.
- regarding the manual source: it will be shared to any developers upon request.

### **References**

Sommariva, R. and von Glasow, R.: Multiphase halogen chemistry in the tropical Atlantic Ocean, *Environmental Science & Technology*, 46, 10 429–10 437, <https://doi.org/10.1021/es300209f>, 2012.