

SOFOG3D Data and publication policy

version 1 - 10/03/2021

The primary objective of SOFOG3D (SOuth west FOGs 3D experiment for processes study) is to advance our understanding of fog processes to improve fog forecasts. SOFOG3D is a research project funded by the ANR through grant AAPG 2018-CE01-0004, that benefits of a large ongoing Météo-France initiative to validate the new fine scale version (500m horizontal resolution) of the operational, limited-area model AROME. Specifically, SOFOG3D conducts process studies on very well documented situations, using synergy between 3D high-resolution Large Eddy Simulation (LES) and unprecedented 3D detailed observations.

A six months field experiment has been conducted from October 2019 to March 2020 in the South-West of France, to provide 3D mapping of the boundary layer during fog events. The observation strategy was to combine vertical profiles derived from new remote sensing instruments (microwave radiometer (MWR), Doppler cloud radar and Doppler lidar) and balloon-borne in-situ measurements, with local observations provided by a network of surface stations, and a fleet of Unmanned Aerial Vehicles (UAV), to explore fog spatial heterogeneities.

Three nested domains have been instrumented with increasing density to collect observations from regional scale (300x200 km) down to local scale on the super-site (10x10 km) selected in an agricultural exploitation near St-Symphorien (31113).

The project coordinated by the CNRM (PI F. Burnet), involves LMD/IPSL (PI M. Haeffelin) and LATMOS/IPSL (PI J. Delanoë). The Met office (PI J. Price) has fully instrumented the UKMO-LE-COUYE site. The Köln University, MeteoSwiss, Laboratoire d'Aérodologie, ONERA and industrial partners (Radiometer Physics GmbH and IfU GmbH) have contributed to the MWR network (PI P. Martinet). This international collaboration is mainly driven by the European COST actions ES1303 TOPROF and CA18235 PROBE. Météo-France/DSO deployed a mini-MPL aerosol lidar at the CHARBONNIERE site and helped to managed additional radiosoundings. DESR/ENM provided very useful weather reports to trigger IOPs during daily briefings.

Hereafter, the word Data refers to the measurement data acquired by the various instruments operated by the different partners during the SOFOG3D field campaign that occurred from October 2019 to March 2020.

According to the ANR proposal, at the end of the project, the generated datasets will be made available to scientific community through the AERIS (www.aeris-data.fr) Internet portal, which gathers and distributes the vast majority of data originating from the French atmospheric community.

The aims of the SOFOG3D Data and publication policy are :

1. to ensure rapid exchange of data and results within the group of the SOFOG3D project participants,
2. to define mutual rights and obligations of data producers and data users, and in particular to ensure that SOFOG3D contributing scientists are associated to the scientific studies using the data they produced,
3. to help monitoring the scientific production of the project,
4. to ensure that data are preserved and made available after the end of the project.

The access given to the data through this policy allows the sole and direct use of the data for scientific and educational activities. This categorically excludes the redistribution of data to third parties and the usage for commercial applications. Any commercial use of a dataset should be negotiated directly with the project coordinator and the owners of the dataset, who generally are those who have paid for the data collection. The contacts for such an agreement are F. Burnet (frederic.burnet@meteo.fr) and the dataset principal investigator whose name is mentioned in the Metadata.

The data were originally collected for specific purposes and no warranty is given as to their suitability for use by the recipient. The database centers, the data owners and the data principal investigators have no liability for any loss, damage, claim, demand, cost or expense directly or indirectly arising from any use, receipt or supply of data under this agreement.

The present data and publication policy may be revised in order to fit the project and database evolution at best, as deemed necessary by the SOFOG3D project and field experiment lead scientists.

Principal investigator's obligations and rights

1. Principal investigators (PI) are associated with an instrument from instrument deployment and data collection, to data processing and transfer to the SOFOG3D database. A PI is the scientist responsible for the instrument or any person (collaborator, student) that he/she may suggest.
2. Metadata card must be created or completed by the PIs using the on line dataset registration form. Rules for naming, data files, filling metadata card, and FTP deposit are given in the document : <https://nextcloud.meteo.fr/s/9qpBf6mso9dtmiN>. Data supply to the SOFOG3D database must be done using ftp deposit procedure. PIs are advised to provide data files written in the NetCDF format respecting CF conventions. But ASCII column files fully documented and self-descriptive will be accepted too.
3. Raw or preliminary data must be made available to other project participants as soon as possible, with a priority on data from the intensive observation periods. Quality controlled data shall be submitted by 30 June 2021.
4. A dataset can be updated at any time. The PIs are responsible for providing the best quality version of the dataset to the SOFOG3D database. Information on the evolving versions given by the PIs will be kept updated on the database website by the database managers.
5. The datasets will be firstly reserved to the SOFOG3D project participants until 31 March 2023. Starting April 1st, 2023, according to the ANR proposal, the generated datasets will be made available to scientific community. However, with the agreement of the relevant PIs, datasets could be shared with non-participants before the 31 March 2023, for specific studies that do not compete with the objectives of the SOFOG3D project.
6. The PIs may propose an acknowledgment sentence which will be used in publications using the supplied data in addition to the general acknowledgment sentence proposed below. This dataset specific acknowledgment sentence should appear in the metadata.
7. The PIs has the responsibility to make all personal data anonymous prior to data transfer to the database.
8. The PIs are invited to refer to the database managers in case of any data misuse.

Data user obligations and rights

1. Only metadata and public part of the SOFOG3D website can be accessed by non-registered users.
2. Users wishing to get access to the SOFOG3D database are required to fill in an on line registration form including an abstract about the intended work, and to sign the data use rules. During the reserved access period, only SOFOG3D project participants will be registered.
3. SOFOG3D data are delivered royalty free to the registered users for the sole purpose of scientific studies and educational activities.
4. Any re-export or transfer of SOFOG3D data received through the present data and publication policy to a third party is prohibited.
5. Data users are expected to directly contact the PIs of the data in order to offer collaboration. Any access to a dataset will automatically trigger an e-mail to the dataset PIs so that they are aware of who intends to use the data.
6. Co-authorship of the dataset users and dataset PIs shall be the rule for publications making significant use of a dataset (“significant” meaning that the dataset used is necessary for the paper acceptance). In any case, the origin of the data used in publications shall be appropriately acknowledged and referenced.
7. If a user notices that any personal data is left as such in a dataset, he/she should not use the information and report immediately to the dataset PIs.
8. Users having produced significant processed products based on the use of a dataset should inform the dataset PIs. If so decided, the processed products should be provided to the database and disseminated to the registered users under the rules described herein (see point 6 above).
9. The agencies or institutions funding the SOFOG3D field experiment have to be acknowledged in any publication or communication using the data. A general paragraph of acknowledgment is proposed, which should be included in the acknowledgment in each publication that is based on SOFOG3D database:
“The SOFOG3D field campaign was supported by METEO-FRANCE and ANR through grant AAPG 2018-CE01-0004. Data are managed by the French national center for Atmospheric data and services AERIS.”
For each dataset, a specific acknowledgment sentence may be added by the corresponding PIs. The sentence is mentioned in the metadata (see point 6 above).
10. Any publication making use of SOFOG3D data shall be transmitted in electronic form to the project coordinator frederic.burnet@meteo.fr as soon as it is submitted to a journal, conference or any other publication support. Changes in the publication may be required as deemed necessary to fit the present SOFOG3D Data and Publication policy. When published references shall be transmitted in electronic form to publications@aeris-data.fr.
11. Registered users accept the obligations described herein attached to the use of the data. If a user breaks the data and publication policy rules, the database managers will remove him/her from the registered user directory, ask him/her to delete all the copies of the datasets he/she has obtained from the database and to withdraw publications making use of the datasets.