

FLUXEX Data Protocol

The following clauses apply to the share and use of the FLUXEX data.

- FLUXEX data should be promptly provided to all FLUXEX investigators through the BADC archive.
- Core data collected on board the FAAM aircraft during the FLUXEX campaign will be of public access.
- To allow quality control, data analysis, and publication of their results by the FLUXEX investigators, all other FLUXEX data, including FAAM non-core data, will be subject to an 18-month retention time period following the last day of collection, during which access to the data will be restricted to the FLUXEX participants – and to external collaborators if requested by the principal investigator. After the retention period, data will be made publicly available but co-authorship and acknowledgement requirements (see below) will continue to apply.
- Investigators who collected the data and have done the initial analysis will be offered co-authorship of any publication or communication based on or using FLUXEX data. In the event that the offer is declined, investigators who have collected and analysed the data must be duly acknowledged.

In addition, data collected on board the FAAM aircraft are subject to the FAAM Data Protocol enclosed below.

FAAM Data Protocol

The aims of the Data Protocol are

- to encourage rapid dissemination of scientific results from the FAAM;
- to protect the rights of the individual scientists using the FAAM;
- to have all the involved researchers treated equitably;
- to ensure the quality of the data in the FAAM data archive.

These aims conflict at times, and it is hoped that the provisions of the protocol resolve these conflicts fairly. It is recognised that this cannot always be achieved to everyone's complete satisfaction; there are bound to be cases where individual interests clash with those of FAAM. Therefore, to try to meet these aims, all scientists involved in the use of the FAAM, in accordance with and on behalf of their co-investigators, must agree to abide by the conditions stated below.

In what follows, it will be referred to "core" versus "non-core" data.

Core data are data generated by core instruments as defined in the *FAAM Instruments document*

(<http://www.faam.ac.uk/public/instrumentation.html>), which will be updated as new pieces of apparatus are assimilated to core instruments. Core instruments are operated by staff appointed by the FAAM.

Flight logs will be considered as core metadata.

Non-core data will be all other data, i.e. data generated by non-core instruments onboard the aircraft, which will be operated by the scientists conducting the experiments and sponsored by the various project funding bodies.

In the clauses below, "FAAM scientists" will denote all the scientists running experiments using the FAAM.

1. The designated FAAM data centre is the British Atmospheric Data Centre (BADC).
2. All validated processed data (i.e. data sets in their final form) together with the associated metadata should be submitted to the BADC.
3. The longevity of raw data must be ensured in a secure archive, possibly but not necessarily the BADC. Details pertaining to this raw data (i.e. metadata), whether or not archived at BADC, must be sent to the BADC, as well as information on how to access the data.
4. All core data must be submitted to the BADC as soon as possible, together with scanned flight logs (no hardcopies).
5. By default, once archived at the BADC, core data will be made freely available to all users within and outside FAAM. However, on request from the principal investigator of a project, access to the core data generated by that project may be made restricted to the project participants for a maximum of 12 months after the last flight.
6. FAAM non-core data produced under the auspices of a NERC directed research programme will be subject to the data protocol of that programme. In the event of conflict the directed research programme protocol will take precedence.
7. FAAM non-core data produced in contexts other than a NERC directed research programme will be subject to a data protocol to be set up in agreement with the project investigators. When the data production, distribution and use are already regulated by an existing programme policy, that policy will apply.
8. Submission of non-core validated processed data must take place no later than two years after the campaign final date.
9. Data submitted to the BADC must be in the data format agreed between FAAM and the BADC (namely, NetCDF and NASA Ames). All agreed metadata describing data (and possibly accompanying model results) must be supplied to BADC. Formats and metadata are documented at BADC.
10. Data submission to the BADC should be made via Web uploading for files not exceeding 1 GB. Larger data files should be submitted on DVDs.
11. Results of model studies feeding or accompanying FAAM campaign data analysis can be made available via the BADC.
12. Data users are requested to contact the responsible scientist prior to any use of the data. FAAM scientists may request acknowledgement (or joint authorship) in any publications based, using or quoting their data.
13. It is each principal investigator's responsibility to ensure that the data used in publications are the best available at that time.
14. In the event of a dispute over this protocol the final decision rests with the FAAM Board.

