

## RONOCO Conditions of Use

The use of FAAM data produced in the context of the RONOCO project is ruled by the clauses of the FAAM Data Protocol stated below. In addition, the RONOCO Data Protocol applies.

## RONOCO Data Protocol

The aims of the RONOCO Data Protocol are:

- to encourage rapid dissemination of scientific results from the RONOCO consortium project;
- to maximize the exploitation of RONOCO scientific results by encouraging joint publications;
- to protect the rights of individual scientists in the RONOCO consortium;
- to ensure all participating researchers are treated equitably;
- to ensure the quality of the data in the RONOCO 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 the RONOCO project. Therefore to try to meet these aims, all investigators involved in RONOCO must agree to abide by the following conditions:

1. RONOCO data produced during the project will be made available to all RONOCO participants, and to RONOCO participants only, during a restricted access period ending 2 years after the end of the final campaign date of January 2011 (i.e. January 2013), after which data will be released to the public domain. At an investigators request, access may be extended to personally authorised collaborators. If a third-party collaborator wishes to seek access to the database, they must seek the permission of the RONOCO PI, Rod Jones.
2. The designated RONOCO data centre is the BADC.
3. The longevity of validated raw data must be ensured in a secure archive, if possible at the designated data centres. Details pertaining to the validated 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. When relevant, preliminary data should be made available to RONOCO collaborators as soon as possible. Any corrections or amendments to the preliminary data should be announced as soon as possible.
5. Validated processed data (i.e. data sets in their final form) must be archived at the designated RONOCO data centre.
6. Results of model studies feeding other RONOCO projects or using data acquired during RONOCO can be made available via the BADC.
7. Data submitted to the BADC must be in the data format agreed between RONOCO investigators and the BADC (NASA AMES). All agreed metadata describing data, models and model results, regardless of their archival location, must be supplied to the BADC. Format of the metadata are documented at BADC.
8. It is each investigators responsibility to ensure that the data used in publications are the best available at that time.
9. If measurements or model results from other research groups within RONOCO are used in a publication by a RONOCO participant, joint authorship must be offered. This does not necessarily have to be accepted; particularly in cases where due credit and acknowledgement can be given in other, possibly more appropriate, ways. An example of where authorship may not be accepted is where an average daily concentration for a given species is quoted, where as full authorship may be required if a full time series is shown.
10. Whilst the data are restricted from the public domain (see Clause 1), each investigator has the right to refuse to allow his/her work, whether measurement or calculation, to be used in a publication or presentation prior to the PI's own publication of that work.
11. Whilst the data are restricted from the public domain, no data should be transferred to a third party without the originators consent.
12. Any third party using the data must abide by the rules set out in the RONOCO data protocol.
13. In the event of dispute, the RONOCO scientific steering committee will then make a final decision.
14. Core FAAM data comes under the FAAM data protocol, see 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.feam.ac.uk/public/instrumentation.html>) which will be updated as new pieces of apparatus are assimilated to core.

[http://www.faaam.ac.uk/policies/flight\\_logs.html](http://www.faaam.ac.uk/policies/flight_logs.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.

Contact details of successful applicants may be communicated to the RONOCO management team, who wish to monitor data usage.