

CARIBIC DATA PROTOCOL

www.caribic-atmospheric.com

The project **CARIBIC** (**C**ivil **A**ircraft for the **R**egular **I**nvestigation of the **A**tmosphere **B**ased on an **I**nstrumented **C**ontainer) is monitoring the distributions of trace species mostly in the upper troposphere and lowermost stratosphere and investigates the processes governing them. CARIBIC used a Boeing B767-300ER from 1997-2002, and a new, extended system flies a Lufthansa Airbus A340-600 since December 2004. Scientific Coordinator of CARIBIC is Dr. Andreas Zahn, e-mail: Andreas.Zahn@kit.edu.

Access to CARIBIC data is primarily restricted to the CARIBIC partners (see Table 1). External researchers will be allowed access to the database after consent of the CARIBIC partners, and after signing this data protocol.

Table 1: List of the CARIBIC partners

Institution	Principal investigator	Mail
Institut für Meteorologie und Klimaforschung, Karlsruhe Institute of Technology, Karlsruhe, Germany	A. Zahn	Andreas.Zahn@kit.edu
Max-Planck-Institut für Chemie, Mainz, Germany	C. A. M. Brenninkmeijer	Carl.Brenninkmeijer@mpic.de
Leibniz-Institut für Troposphärenforschung, Leipzig, Germany	M. Hermann	Hermann@tropos.de
Institut für Physik der Atmosphäre, DLR, Oberpfaffenhofen, Germany	H. Ziereis	Helmut.Ziereis@dlr.de
Royal Dutch Meteorological Institute, de Bilt, the Netherlands	P. van Velthoven	Velthove@knmi.nl
Laboratoire des Sciences du Climat et de l'Environnement, CEA Saclay, France	P. Ciais	Philippe.ciais@cea.fr
Helmholtz-Zentrum Geesthacht, Zentrum für Material- und Küstenforschung GmbH, Institut für Küstenforschung, Geesthacht, Germany	R. Ebinghaus	Ralf.ebinghaus@gkss.de
Institut für Klima- und Umweltphysik, University of Bern, Switzerland	M. Leuenberger	Leuenberger@climate.unibe.ch
Fysiska Institutionen, University of Lund, Sweden	B. Martinsson	Bengt.martinsson@nuclear.lu.se
Institut für Umweltphysik, Universität Heidelberg, Germany	U. Platt	Ulrich.Platt@iup.uni-heidelberg.de
School of Environmental Sciences, University of East Anglia, Norwich, UK	D. Oram	d.e.oram@uea.ac.uk

The aims of this protocol are:

- (a) to ensure free and fair use of the CARIBIC data,
- (b) to encourage rapid dissemination of the scientific results,
- (c) to uphold the rights of the individual scientists,
- (d) to ensure the visibility and integrity of the project,
- (e) to have all involved researchers treated equitably,
- (f) to encourage an orderly and timely analysis and publication of data, and
- (g) to produce a central repository of data to be released to the public domain.

A. MEASUREMENTS

- i) Participants are obliged to provide data in standard formats (NASA-Ames), as far as reasonable.
- ii) Preliminary data must be made available to other CARIBIC scientists as soon as possible for planning of the future phases of the project and scientific evaluation.
- iii) The data set should contain qualifiers of the status of analysis (preliminary, final, revised as of ..). Any corrections/amendments to the preliminary data should be announced as soon as possible.
- iv) It is the Principal Investigator's responsibility to ensure that the data used in publications are the best available at that time.

B. MODEL STUDIES

- i) Results of model studies using data acquired during CARIBIC must be made available to other CARIBIC scientists as soon as possible. Thus colleagues using CARIBIC data in model evaluations shall inform the CARIBIC scientists of their intention and progress.
- ii) Corrections/amendments to the preliminary results will be announced as soon as possible.
- iii) It is the Principal Investigator's responsibility to ensure that model results used in publications are the best available at that time.

C. GENERAL

- i) The CARIBIC science team are the scientists of the CARIBIC partners and further scientists accepted by the CARIBIC partners. A registry of the CARIBIC science team will be kept on the MPI CARIBIC web site. Each registered member of the CARIBIC science team has to sign the CARIBIC protocol.
- ii) All scientists involved in CARIBIC have equal and complete access to measurements and model results produced during CARIBIC. Data cannot be provided to persons outside of the CARIBIC science teams without the expressed approval of that data set's PI and the Project Coordinator. Public access to the data will be given three years after the end of the year in which the data were measured. The data sets are and remain password protected. The password information will be made available on the condition that the user signs this data protocol and takes into account the rights of the CARIBIC team.

D. PUBLICATIONS

- i) If measurement/model results from other research groups within CARIBIC are used in a publication, joint authorship must be offered.
- ii) Each Principal Investigator has the right to refuse to allow his/her work, whether measurement or calculation, to be used in another publication prior to his/her publication of that work.
- iii) Publications relating to the project shall be approved by all partners before release. The manuscript for any journal publication has to be sent to the co-authors and the CARIBIC coordinator 4 weeks before submission. Contributions to conferences have to be sent to the co-authors 1 week before submission with a copy to the CARIBIC coordinator. The principal authors have to take substantial comments into account before submission of the publication. The co-authors and the project coordinator should be kept informed on the fate of the publication.
- iv) Publication of results in the scientific literature is encouraged at any time during CARIBIC, as long as conditions i), ii), and iii) are met.

E. DATABASE

- i) The rapid exchange of data promotes collaborations, identifies instrument problems, and helps flight planning. Data acquired during the field deployments will be electronically exchanged after each flight and will constitute a preliminary archive.
 - a. All raw data (including ARINC and master) will be submitted to the ftp server within a week after the flight.
 - b. The raw data will be evaluated and preliminary measured data submitted within a month after the flight. The results of sample analyses will be submitted within 2 months after analysis.
- ii) All data files should be in the NASA Ames format or in netCDF.

F. SETTLEMENT OF DISPUTES

Any disputes about the use of other groups data, particularly with respect to publications, will be resolved by a committee of scientists from the CARIBIC science team.

G. PUBLIC/PRESS

- i) No CARIBIC partner, or any other scientist using CARIBIC data will make public statements without prior consultation with the coordinator. The interest of the project and the work of many colleagues can be damaged when statements are not clearly formulated as to prevent misunderstanding by non experts.
- ii) On request of the CARIBIC website administrator, members of the CARIBIC science team will provide general information on their instrumentation, analysis methods, or pictures from already published data in order to improve the public value of CARIBIC.

The undersigned agrees to the conditions of this data protocol.

Signature: _____

Date: _____

Name: _____

Position (PI, Post-doc, student,...): _____

Institutional Address : _____

E-mail: _____

Please return to:

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