MOCA Data Exchange Protocol

This data protocol concerns the measurement data of the MOCA project. The aims of the MOCA data exchange protocol are

I. to ensure rapid dissemination of data and results within the project consortium,

II. to protect the data ownership of the contributing scientists and

III. to ensure that project data are preserved and made available after the end of the project.

All measurement data that are either fully or partly funded by the project are covered by this protocol. The protocol has four sections: A) General rules for all data, B) Additional rules and requirements for atmospheric data and C) Additional rules and requirements for ocean and sub-sea data, D) Procedures for agreement of data protocol. In addition, there is one appendix.

Undersigned of the data exchange protocol agrees to the following principal rules:

A. General rules for all measurement data,

1. All MOCA measurement data have an instrument principal investigator (PI), which is also the data owner. These are listed in Appendix 1.

2. Preliminary data must be made available to other project participants as soon as possible. Data may be stored in any format, but must be documented and self-descriptive, and include the name of data instrument PI.

3. Any corrections to preliminary data should be made as soon as possible.

4. All scientists of MOCA are to have equal and complete access to the measurements produced by the project.

5. If data produced within MOCA are used in a publication, joint authorship must be offered and intellectual input must be discussed with the data instrument PI. This implies that the lead author should inform the data owner about planned publications early in their preparation, but at least one month before submission.

6. Each data owner has the right to refuse to allow his/her work to be used in another publication prior to his/her own publication of the work. The data owner must then publish the work within reasonable time (6 months).

7. Data access is limited to undersigned of the data exchange protocol. During the project duration, access is limited to research groups being part of the MOCA consortium or to groups/individuals approved by the project Steering Committee.

8. Users of MOCA data must not redistribute these data to third parties

9. Any extensions or disagreements shall be considered by the MOCA Steering Committee

10. Data ownership remains with the data owner (instrument PI), also after the project finishes.

B. Rules and requirements for atmospheric data

11. All atmospheric data should be managed by NILU and archived in EBAS (ebas.nilu.no/). Except for Zeppelin measurement data included in the national monitoring program, data will be password protected, see #13 for regulation of this.

12. All preliminary atmospheric data must be submitted to NILU. Final data must be submitted to NILU archive no later than 6 months after the measurements were taken for ground based in situ measurements. Annual time series should be submitted before April 1st the following year.

13. Atmospheric data in EBAS partly or fully funded by MOCA will be password protected until either a) first publication, or b) 12 M after project ends. 12 M after project end, all atmospheric data will be made publically available through EBAS. The data will have the affiliation MOCA and CAGE (Helmer Hanssen cruises) in EBAS. For FF Helmer Hanssen cruises acknowledgements are: The work was supported by the Centre of Excellence; Arctic Gas Hydrate, Environment and Climate (CAGE funded by the Norwegian Research Council (grant 223259).

C. Rules and requirements for ocean and sub-sea data

14. All ocean and sub-sea measurements data should be managed and archived in accordance with procedures and rules within CAGE. These should be made available for the MOCA partners.

15. Preliminary data must be made available to MOCA project participants as soon as possible upon request from MOCA partners. Data may be stored in any format, but must be fully documented and self descriptive and include the name of data owner (instrument PI).

16. Any corrections to preliminary data should be made as soon as possible.

17. Final data must follow CAGE data management and harmonised procedures. Ocean data in the CAGE/UiT/IG data management system partly or fully funded by CAGE will be password protected until either a) first publication, or b) 24 M after Centre of Excellence ends (2025). 24 M after CAGE ends, all oceanographic data will be made publically available through the CAGE/UiT/IG data management system. The data will have the affiliation CAGE and the work was supported by the Centre of Excellence; Arctic Gas Hydrate, Environment and Climate (CAGE funded by the Norwegian Research Council (grant 223259).

D. Procedures for agreement of data protocol

The undersigned agrees to the conditions of this data protocol by completion of the table below, attached the full document to an e-mail and send it to MOCA WP1 data management: Ann Mari Fjæraa: amf@nilu.no. Subject; MOCA data access

Name :	
E-mail	
Affiliation	
Date	

Ann Mari Fjæraa will collect the information and keep MOCA SC updated.

Appendix I: Instrument principal investigators

The MOCA instrument principal investigators (PI) are the data contact persons.

Instrument /methodology	Platform	PI	E-mail
Atmospheric measurement data			
Picarro G2404 (CH4/CO/CO2/)	Helmer Hanssen	Cathrine Lund Myhre	clm@nilu.no
Atmospheric off-line isotopic sampling	Helmer Hanssen	Cathrine Lund Myhre	clm@nilu.no
Atmospheric off-line trace gases (e.g. ethane)	Helmer Hanssen	Cathrine Lund Myhre	clm@nilu.no
Picarro G2401 (CH4/CO/CO2/)	Zeppelin	Cathrine Lund Myhre	clm@nilu.no
Isotopic sampling	Zeppelin	Cathrine Lund Myhre	clm@nilu.no
MEDUSA (Trace gases on line e.g. ethane, propane)	Zeppelin	Chris Lunder	crl@nilu.no
All trace gases measured and sampled[1]	Data from FAAM flight, in accordance with MOCA contract period	John Pyle Cathrine Lund Myhre	clm@nilu.no john.pyle@atm.ch.cam.ac.uk
All isotopes data analyzed at RHUL	Zeppelin, Helmer Hanssen, FAAM fight	Euan Nisbet Cathrine Lund Myhre	clm@nilu.no e.nisbet@es.rhul.ac.uk
All trace gas and aerosol data measured[1]	YAK AEROSIB flight, in accordance with MOCA contract period	Cathrine Lund Myhre Jean-Daniel Paris	clm@nilu.no jdparis@lsce.ipsl.fr
Ocean measurement data			
CTD installation	Helmer Hanssen	Benedicte Ferré	Benedicte.ferre@uit.no
CTD + GC methane concentration in the water column	Helmer Hanssen	Anna Silyakova	anna.silyakova@uit.no
Picarro G2201-i (CH4/CO2/)	Helmer Hanssen	John Pohlman, USGS	john.pohlman@gmail.com
Bottom Sensors	Sea floor	Benedicte Ferre	Benedicte.ferre@uit.no
Methane hydrate	Sea floor	Jurgen Mienert	Jurgen.mienert@uit.no

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[1] http://www.faam.ac.uk/index.php/current-future-campaigns/485-gauge

https://yak-aerosib.lsce.ipsl.fr/doku.php?id=measurements