

M3.4: Precise definition of high level products to be implemented in the LADP

A new Library of Advanced Data Products is being developed in order to provide free access to different types of mature and high level products derived from simulation chamber experiments and widely used for chemical modelling, radiative transfer calculation and measurements in real atmosphere. Thanks to discussions during a dedicated technical workshop at CERN in September 2017 and the annual meeting in November 2017, a precise list of high level products has been established by partners. It includes:

- Rate constants for gas-phase reactions
- SOA yields
- Rate constants for aqueous/condensed phase reactions
- Photolysis frequencies and quantum yields
- Vapor pressure and Henry's constants
- Mass extinction coefficients and complex refractive index of aerosols
- Growth factors/CCN activation potentials
- Modelling tools

Considering the diversity of simulation chambers, all these products cannot be provided by each partner. Therefore, in order to ensure a large dataset for each type of products, a questionnaire has been sent to partners to identify which type of high level products they can provide. The result of this poll is given in Table 1. It must not be considered as a commitment of the partners to provide all these data products but gives rather an indication of who can provide what. However, given the interest in having a large dataset, each partner commits to do its best to provide as much advanced products as possible during the project. The format of these advanced products as metadata attached will be discussed during another technical meeting which will take place in September 2018.

Partner	Gas phase rate constants	SOA yields	Cond. phase rate constants	Photolysis freq. & quant. yields	Vapor press. & Henry's constants	Mass extinct. coefficients	GF/CCN	Modelling tools
CNRS-LISA								
CNRS-ICARE								
CNRS-IRCELYON								
BUW								
KIT								
FZJ								
TROPOS								
PSI								
CEAM								
UCC								
UEF								
FORTH								
INFN								
UAIC								
NCAS-CAM								
NCAS-MAN								
NCAS-LEEDS								
NCAS-YORK								
NCAS-UEA								

Table 1: Expected contribution of E-2020 partners to LADP