



STINT

The Swedish Foundation for International
Cooperation in Research and Higher Education



Course on atmospheric aerosols and clouds with introduction to process oriented modeling

16 – 27 March 2015

Venue: IFUSP – Institute of Physics, University of Sao Paulo, Brazil. Sala 101, Edifício Basílio Jafet.

Scope:

The scope of the course is on atmospheric aerosols and clouds with special focus on tropics and Amazonia. Participants on the course will use aerosol analysis and modeling tools based on the CALM aerosol process based model (Tuved et al, Atmos. Chem. Phys., 10, 10161–10185, 2010). The tools will be applied on real observational data from wider Amazon Basin. The main goal is to focus on understanding the major physical, chemical and optical processes, together with transport in the atmosphere, controlling aerosol properties and distribution in the atmosphere.

The course includes:

- 1) Lectures given by lecturers from University of Sao Paulo, Stockholm University and Lund University.
- 2) Introduction to aerosol dynamics and chemistry process based models
- 3) Introduction to cloud model
- 4) Practical part involving data analysis of the observations from Amazonia and use of the aerosol process based modeling tools.

Lecturers:

Prof. Paulo Artaxo, Prof. Henrique Barbosa, Prof. Luciana Rizzo (Univ. Sao Paulo)

Dr. Vaughan Phillips (University of Lund)

Dr. Peter Tunved, Prof. HC-Hansson, Dr. Radovan Krejci (University of Stockholm)

Requirements:

Needed: Access and prior knowledge of Matlab is advantage, but not requirement. Each participant needs own computer. For those who cannot bring it with them, access to computer will be provided on site at USP.

Data analysis software to process the modelling tools output is free of choice, but should be able to read in ASCII files.

Registration for the course: For students interested in participation in the training course, please send an e-mail to Paulo Artaxo (artaxo@if.usp.br) and Henrique Barbosa (hbarbosa@if.usp.br) with a short CV and a description of your research interests.

