

Seminários CGE/UE

Hora: 15:00

Data: 16 de Outubro de 2007 Local: Anf. 1 – Col. Luís Verney

Promove: CGE/UE

Aerosols over Siberia: The ZOTTO project Prof. Jost Heintzenberg Leibniz Institute for Tropospheric Research

Resumo

In September 2006 the construction of a 300 meter ZOTTO tower was completed in the middle of the forest at 90°E, 60°N by the Max-Planck-Society through their Institute for Biogeochemistry in Jena. ZOTTO stands for Zotino tall tower. This long-term project was initiated to understand and monitor the development of the carbon cycle over the vast forest region of Siberia during the ongoing global change.

This tower provided the unique chance and the extreme challenge to set up aerosol measurements from 300 m height over the largely unexplored Siberia in order to study aerosol formation from natural organic gas emissions and forest fires. The challenge of designing a 300 m long inlet was met with experimental tests and model calculations in Leipzig before setting it up at ZOTTO. An additional inlet at 50 m height yields some aerosol profile information. Consequently, aerosol measurements in the diameter range 10 to 800 nm dry particle size commenced at ZOTTO in September 2006.

A first synopsis of the number concentrations and size distribution measurements and until June 2007 will be presented together with three-year air mass statistics from which the geographical footprint of the tower has been derived.