

Parallel Sessions

Parallel Session 1

How can the Amazon continue as a sustainable hot spot for the Earth System? Contributions of LBA science

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The Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA) is a major scientific undertaking led by Brazil, involving the scientific communities of the Amazonian countries, USA and nine European countries. It engaged over 1800 researchers and students working on 150 integrated studies. The main goal of LBA is to answer two over-arching questions: how Amazonia functions as a regional entity with respect to the cycles of water, energy, carbon, other GHG, aerosols and nutrients; and how climate and land use changes will affect the physical, chemical and biological functioning of ecosystems in Amazonia, including the sustainability of development and global climate. LBA studies are organized in seven closely integrated themes: physical climate, atmospheric chemistry, carbon cycle, biogeochemistry and nutrient cycle, surface hydrology and water chemistry, land use and land cover change, and human dimension. LBA research started in 1998 and the first phase is ending in 2006. Over 250 MSc and PhD students are doing their research within LBA and most of them are from Amazonia. In sum, LBA has been a paradigm for integrated regional studies. The LBA session will have six invited overview talks covering its research components followed by a number of submitted presentations as posters. There will be three cross-cutting presentations: one on LBA and Global Environmental Change, a second one on LBA and Sustainability and a third one on The Legacy of LBA for Amazonia.