

TAHBIS - A TROPICAL ATMOSPHERE-HYDROSPHERE-BIOSPHERE INTEGRATED STUDY IN THE AMAZON

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ABSTRACT

Several important scientific missions, with emphasis on the atmosphere, have taken place in the Brazilian Amazon region over recent years, in which scientists from the USA and Brazil have planned and participated with great enthusiasm. Interest in studies related to the Amazon basin in other scientific areas, has increased as well over the years. Some of these efforts have been officially approved by the Brazilian Government, such as the NASA GTE ABLE missions near Manaus, in 1985 and 1987, and the TRACE-A mission in 1992, and the Anglo-Brazilian ABRACOS project. Besides these, several other smaller missions, some of which have been performed by isolated researchers, have also done considerable progress towards better understanding the Amazon.

Presently there seem to be three well identified research areas that have a great interest in planning a new, integrated field study in the Amazon region, which are the Atmosphere, the Biosphere, and the Hydrosphere. Although a number of efforts have been made to integrate several interdisciplinary scientific areas in the larger field campaigns, this has

not been completely possible in the three large areas above. However, most of the larger experiments have been able to team up meteorologists and atmospheric chemists in atmospheric studies. The effort that is now in the planning stage, under the acronym TAHBIS, the Tropical Atmosphere Hydrosphere Biosphere Integrated Study, intends to involve interested workers in the three areas, to stimulate a **truly Integrated Study in the Brazilian Amazon region**. A planning workshop was held September 27-29, 1993, with NASA program managers, American leading scientists, and representatives of the Brazilian scientific community, to initiate contacts for performing a large field experiment in the Amazon region in the scientific areas of Atmospheric Chemistry, Ecology, and Hydro-meteorology. The workshop organizers invited a few key persons for the discussions, that lasted for three days. Views of a future large scale field experiment in Amazonia were discussed and recommendations for future actions were made.

GENERAL STRUCTURE

It was felt that a general Brazilian office should be established, possibly at INPE, to coordinate interests from different Institutions and countries in-

terested in doing experiments in Amazonia, so that a minimum of mutual coordination be achieved. Besides scientists from INPE, other Brazilian colleagues, from other Institutions would be invited to join the coordination committee.

The basic idea is to have three scientific areas, coordinated by the committee, where all the individual projects may be attached, maintaining their own individuality and independence. These areas were identified as: **Water and Energy; Biogeochemistry; and Atmospheric Chemistry.**

MEETING RECOMMENDATIONS

- 1- The meeting participants intend to work for the development of a large Amazon project.
- 2- An effort should be made to publish the minutes of the meeting.
- 3- Implement joint planning of specific subprojects.
- 4- Allow multinational subprojects.
- 5- Meet again in about 6-10 months.

