

## Observações de LIDAR Espaciais e Aerotransportados de Estrutura de Floresta Tropical

### *Spaceborne and Airborne LIDAR Observations of Tropical Forest Structure*

**Coordenadores:** Dr. Sassan Saatchi (NASA/University of California), Dr. Michael Keller (NASA/Embrapa) e Dr. Jean Ometto (INPE)

**Sala:** Netuno II – 16 de abril – Terça-feira – 8h30 às 10h40

**ABSTRACT:** Tropical forests contain about one-fourth of total carbon stocks in land ecosystems and they are threatened by both climate change and continuing land use change. Lidar remote sensing from both airborne and satellite is a powerful tool for quantifying forest structure and carbon stocks of tropical forests. With emerging high resolution airborne lidar campaigns for national inventory of forest structure, and past (ICESAT) and future (ICESAT-2, GEDI) spaceborne missions, the use of lidar measurements is extending from small scale forestry applications to large scale carbon monitoring systems. This session will present regional and global analyses of tropical forest structure and changes of forest biomass using both airborne and spaceborne lidar data. This session will focus on changes attributed to forest responses to both anthropogenic disturbances and extreme climatic events.

Títulos	Palestrantes	Período
Opening	Dr. Michael Keller (NASA/Embrapa)	8:30
Lidar methodology, broadening research perspectives for the Amazon forest	Dr. Jean Ometto (INPE)	8:30
Diversity of forest structure and patterns of aboveground biomass in the Brazilian Amazon from national airborne lidar inventory	Dr. Sassan Saatchi (NASA)	9:05
Quantifying the impact of forest structure on carbon and water cycles in the Brazilian Amazon using biome-scale airborne lidar surveys and the Ecosystem Demography Model (ED2)	Dr. Marcos Longo (NASA/JPL)	9:25
Quantifying the continuum of canopy disturbances in tropical forests using repeat airborne lidar	Dr. Douglas Morton (NASA)	9:50
Discussion / Q&A – Closing		10:20