Novas Fronteiras e Desafios no Sensoriamento Remoto Ecológico
New Frontiers and Challenges in Ecological Remote Sensing

Coordenadores: Dr. Thiago Sanna (UNESP) e Dra. Annia Susin Streher (UNESP)

Sala: Auditório – 17 de abril – Quarta-feira – 11h00 às 12h30

ABSTRACT: As the world enters the Anthropocene, it is increasingly urgent to assess biodiversity patterns and processes in a concise and scalable manner, to understand and forecast how ecosystems will change over the coming decades. Ecologists have been facing growing challenges in the acquisition and integration of taxonomic, phenological, phylogenetic and structural information of biodiversity across biological and spatial scales. Advances in remote sensing technology from ground measurements to drones to airborne and orbital platforms have increased our capabilities in 3-D scanning, repeatable very high resolution imaging, time series sensor fusion and spectroscopic measurements, which have been contributing to capture the temporal and spatial dynamics of landscapes the degree of functional variation in plant communities and ecosystems, the multidimensional structure of habitats. The convergence of remote sensing methods and ecological theory can pave the way to a more integrated global assessment of biodiversity, and this session will bring to the remote sensing community a discussion on the frontiers and challenges that lie in the interface between remote sensing and ecology, contributing to establish a common language and body of knowledge across eco and geo/earth scientists, and to help develop mechanisms for analyzing and sharing data across platforms and users.

Títulos	Palestrantes	Período
Opening	Dr Thiago Silva and Dr. Annia Streher (Unesp)	11:00
Remote sensing of tropical forest leaf demography	Dr. Bruce Walker Nelson (INPA)	11:10
Remote sensing of 3-D ecosystem structure and function	Dr. Douglas Morton (NASA)	11:30
UAV-based systems: Challenges and perspectives in ecology	Dr. Eben Broadbent – (University of Florida)	12:20
Discussion / Q&A – Closing		