**Curso 8 –** Introdução ao laser terrestre e aerotransportado: integração de dados de sensoriamento remoto multi- fontes e aplicações para as ciências ambientais e florestais (Introduction to terrestrial and airborne laser scanning: multisource remote sensing data integration and applications for environmental and forest sciences.)

Coordenador: Dr. Veraldo Liesenberg. (Pós-Doc FAPESP/UNICAMP)

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Idioma: Inglês

**Vagas**: 30

**Natureza:** teórico/prático (A parte prática consiste em exercícios e demonstrações feitos somente pelo Professor. Não serão fornecidos computadores para os alunos. O aluno que desejar pode levar o seu próprio laptop.)

Abstract: This two-day course will provide faculty, students, and professionals with an introduction to both Airborne and Terrestrial Laser Scanning (TLS – ground based LiDAR) measurements. The challenges of combining both data sources in order to fully benefit from their high-resolution three-dimensional measurements are the main focus of this short course. The additional use of other sources of remote sensing data such as hyperspectral and microwave measurements will also be given. The lectures will strongly focus on both ALS and TLS technologies, their data collection, data integration, data preprocessing and analysis as well as the extraction of selected features. Several examples and applications for both environmental and forest sciences will be shown. A combination of lecture and on-site exercises, including data preprocessing and analysis will be explored exhaustively.