Avanços no Sensoriamento Remoto de Ecossistemas Terrestres: Sensores, Algoritmos e Analítica

Advances in Remote Sensing of Terrestrial Ecosystems: Sensors, Algorithms and Analytics

Coordenadores: Dr. Alexei I. Lyapustin (NASA) and Dr. Derek R. Peddle University of Lethbridge – Canada

Sala: Auditório – 16 de abril – Terça-feira – 11h00 às 12h30

ABSTRACT: Recent developments in Earth Observation (EO) sensors and programs coupled with advances in new algorithms and integration of higher-level products through analytics provides new and emerging opportunities. These include not only higher quality baseline information and time series, but also improved image understanding, prediction, and process-based modeling that are responsive to greater applications needs.
This Special Session will provide a snapshot of some of these advances, and will bring together international expertise relevant to addressing pressing questions in terrestrial ecosystem retrievals over large areas. Emphasis will be placed on conceptual advances, transferability, and horizontal integration within, across, and outside EO communities. The full scope of processing chains from data acquisition to pre-processing, analysis, integration and validation will be covered. This includes innovation in atmospheric correction across multiple sensors and scales; advanced information extraction over large areas using multi-scale sub-pixel analysis; recent program updates on new spaceborne LiDAR opportunities [GEDI will be launched and in early-mission phase by April 2019 SBSR]; assessing tropical forest degradation in South America using Landsat; and monitoring global forest carbon from Lidar and radar satellite fusion. Collectively, these presentations span a breadth of sensors, scales, algorithms and applications, with examples from large areas with global scope.

Títulos	Palestrantes	Período
Opening		
MAIAC Atmospheric Correction across Sensors and Scales: from MODIS/VIIRS/geostationary to Landsat/Sentinel and WorldView2	Dr. Alexei I. Lyapustin (NASA GSFC - USA)	11:00
Advanced Sub-Pixel Scale EO Analytics for Large Area, High Resolution Biophysical Parameter Extraction	Dr. Derek R. Peddle (University of Lethbridge/Canada)	11:25
Monitoring Global Forest Carbon Dynamics from Fusion of Lidar and Radar Satellite Observations	Dr. Sassan Saatchi (NASA JPL/USA)	11:50
Discussion / Q&A – Closing		12:15