Terrestrial Ecology Products from PACE

Project Objectives: To advocate for the use of PACE observations for analysis of terrestrial ecosystems

My role in the PACE SAT is advisory, there are no PACE terrestrial products being developed at this time

PACE, with its frequently collected continuous high spectral resolution imagery and global coverage from OCI, provides an opportunity for a new generation of land ecosystem products that describe dynamics of key terrestrial vegetation biochemical and functional characteristics, and identify vegetation functional type coverage

Taken together, PACE measurements can describe factors determining terrestrial plant productivity, identify stress responses, and describe allocations of resources within plants, providing new insights into global patterns of the function of terrestrial ecosystems and their response to environmental conditions.

A requirement for any of the land products is PACE OCI atmospherically corrected surface reflectance and the MAIAC PACE OCI project will be producing them

Activities supporting SBG may be leveraged to help in the development of PACE terrestrial products including processed imaging spectrometer datasets from AVIRIS and Hyperion, synthetic datasets, and algorithm development activities

- PACE with its earlier launch date could test out some potential SBG products

K. Fred Huemmrich
Joint Center for Earth System Technology
University of Maryland Baltimore County

Biospheric Sciences Laboratory
Code 618
NASA Goddard Space Flight Center
Greenbelt, MD 20771