Special Session on

"Ocean as the Source and Sink of Carbon Dioxide"

Pan Oceanic Remote Sensing Conference, October 18-23, in Keelung Taiwan Co-sponsored by Commission VIII of the International Society for Photogrammetry and Remote Sensing Convener: W. Timothy Liu

The ocean as the source and sink of carbon dioxide is important to global warming and ecology. The special session will address the quantitative changes in ocean carbon storage, the exchange with the atmosphere, and the effect on acidification. Point measurements from mooring, ship, and aircraft have provided improved measurements but not sufficient coverage. Recently, the depth-integrated carbon dioxide has been successfully retrieved from AIRS. Dedicated space missions, such as GOSAT and OCO-reflight, will improve the coverage of atmospheric carbon dioxide content, from which the ocean source and sink could be inferred. Much progress is being made in retrieving the ocean-atmosphere exchanges through turbulence parameterization. Regional and seasonal relations have been established to relate the partial pressure of carbon dioxide in water to parameters such as ocean color, temperature, and salinity that could be measured from space. Parameterization of the transfer velocity in term of surface roughness or momentum flux measured by spacebased radars has also been made. Papers on all these recent developments, from oligotrophic and eutrophic oceans, and, from coastal to open oceans, in all time scales are welcome in this session.



Submit abstracts before the deadline (August 25th). The details of the conference and abstract submission is in http://porsec2010.ntou.edu.tw/_Please indicate that your abstract is intended for this special session in your submission and send a courtesy copy of the abstract to w.t.liu@jpl.nasa.gov. Please also note that preregistration to the meeting is required before the abstract deadline for any presentation.

