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**MODIS Validation, Data Merger and Other Activities
Accomplished by the SIMBIOS Project: 2002-2003**

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Chapter 1

An Overview of MODIS Support and Accomplishments by SIMBIOS and SeaWiFS Projects

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Over the course of the SeaWiFS and SIMBIOS Projects, there has been a substantial level of collaboration with the MODIS program, e.g., the development of the Marine Optical Buoy (MOBY) and the prototyping of the MODIS Adaptive Processing System (MODAPS). Over the past year, in particular, both Projects have provided substantial support to the MODIS Ocean Team as guidance from NASA Headquarters was for SIMBIOS to focus on MODIS. The following list is a summary of specific types of assistance with names of the main people involved. The following chapters detail some of these contributions as of May 2003. More recent analyses associated with the pending MODIS (Terra) reprocessing are posted on various project websites and will be documented in more detail once the reprocessing is underway. Also, as part of the data system prototyping activities in preparation for the National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) Visible and Infrared Imaging Radiometer Suite (VIIRS) data, the Project is using MODIS data to explore new data formats, data access and distribution approaches, and processing system architectures. If deemed beneficial to the ocean color community, developments derived from this prototyping may eventually be integrated into the operational MODIS data processing system.

- MODIS-sensor characterization and on-board calibration analyses (Bob Barnes and Gerhard Meister)
- MODAPS (MODIS data processing system) prototype development (John Wilding)
- Distribution of MODIS diagnostic data (Sean Bailey and John Wilding) and Web Support (Norman Kuring)
- SeaDAS support of MODIS data display and analysis (Mark Rubens and Xiao-Long)
- MODIS data geolocation (Fred Patt)
- MODIS ancillary data (Wayne Robinson and Bryan Franz)
- MODIS over flight predictions in support of field campaigns (Sean Bailey and Jeremy Werdell)
- Bio-optical and atmospheric data from SeaBASS (Sean Bailey, Jeremy Werdell, and SIMBIOS Science Team members)
- MODIS L2 ocean and atmosphere measurement match-up analysis (Sean Bailey)
- MODIS comparison analysis (over time and by region) with SeaWiFS (Bryan Franz and Ewa Kwiatkowska)
- MODIS data merger with SeaWiFS and data distribution (Joel Gales and Bryan Franz)
- SIMBIOS laboratory radiometric intercomparisons with MODIS Team members (Gerhard Meister)
- SIMBIOS instrument pool support (Christophe Pietras and Kirk Knobelspiesse)