

## TECHNICAL REPORT

Contract Title: Infrared Algorithm Development for  
Ocean Observations with EOS/MODIS

Contract: NAS5-31361

Type of Report: Quarterly

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### MODIS INFRARED ALGORITHM DEVELOPMENT

#### 1.a Near-Term Objectives

Continue algorithmic development effort, expansion of modeling facilities, evaluation of global data assimilation, and support of investigators.

#### 1.b Overview of Current Progress

(1) Algorithm activities - Efforts are continuing to develop a new suite of AVHRR atmospheric correction algorithms.

(a) An improved functional form for atmospheric corrections in the infrared.

(b) Test and evaluation of atmospheric correction procedures using the RAL and Lowtran codes.

(2) Processing environment - An examination is continuing to evaluate appropriate workstations/data servers for algorithm development activities.

#### (3) Investigator Support

(a) O. Brown - Team related effort

(b) G. Halliwell - Analyses efforts

#### (4) Accomplishments:

(a) Submission of Calibration paper to JGR. (b) Completion of Halliwell analysis of historical in situ and MCSST satellite derived SST's.

(c) Preparation for MODIS Team Meeting.

#### 1c Future Activities

##### (1) Algorithms

(a) Develop and test East Coast algorithms on global retrievals. (b) Evaluation of global data assimilation.

(2) Processing environment - Complete installation of new workstations.

(3) Investigator support - Continue current efforts.

#### 1d Problems

Travel: Due to changes in Federal and airline travel regulations we are unable to use GSA fares between Miami and Washington/Baltimore. This has increased travel costs by a factor of three without an increase in funding, making future travel planning difficult.

#### 1e Publications

Submitted for review: Calibration of AVHRR Infrared Observations: a New Approach to Non-linear Correction, J.W. Brown, O.B. Brown, and R.H. Evans, Division of Meteorology and Physical Oceanography, Rosenstiel School of Marine and Atmospheric Science, University of Miami.