

Quarterly Report

Time Period: for January - March, 1998

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A) Near-term Objectives

1. Validation of LST algorithms
2. Working on LST V2 delivery

B) Task Progress

1. A field campaign for the validation of LST algorithms was conducted at test sites near Mono Lake and in Death Valley, California on March 9-15, 1998. Scientists from five groups (two from the MODIS team, one from the MISR team, and two EOS Validation P.I.'s groups) participated in this field campaign. MAS data were collected from one daytime and one nighttime ER-2 flight missions on 10th March, a beautiful clear-sky day. We received the MAS 1B data from Ames one week after the field campaign. Preliminary analysis shows the excellent quality of both day and night MAS images. We are making data processing and analysis of both MAS and field measurement data.

2. We redelivered V2.0 code for the daily L2 and L3 LST products twice after its initial delivery in December 1997. These two redeliveries dealt with issues related to metadata definitions and memory leaks. We also worked on the use of MODIS snow-cover and atmospheric profile simulation products in the V2.1 code. The V2.1 code will be delivered in early April (already delivered when writing this report).

C) Anticipated Activities During the Next Quarter

1. To deliver V2 codes for level-3 LST products including 1km 8-day product, CMG products daily, 8-day and monthly.
2. To calculate the look-up tables based on the final MODIS spectral response functions released recently. The complete LUT files will be used in the code for the at-launch LST products.
3. To process MAS 1B data acquired in the previous field campaigns with our LST algorithms and compare the results with field measurement data.

D) Problems/Corrective Actions (None)

E) Publications

W. Snyder and Z. Wan, BRDF models to predict spectral reflectance and emissivity in the thermal infrared, IEEE Trans. Geosci. and Remote Sens., Vol. 36, no. 1, pp. 214-225, 1998.