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TITLE: HCMM - Soil Moisture in Relation to Geologic Structure and Lithology, Northern California

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IMAGERY RECEIVED AND QUALITY

Two complete sets of HCMM imagery were received late in the quarter. These include Day-Vis, Day-IR, and Nite-IR for May 31 and June 21, 1978. The quality of the imagery, from a visual interpretative point of view, is variable - ranging from reasonably good contrast (Day IR) to extremely low or no contrast (Day-Vis and Nite-IR).

ACCOMPLISHMENTS

Because the images were received late in the quarter, only a "first-look" qualitative analysis has been possible. Work is continuing on the geologic analyses.

SIGNIFICANT RESULTS

A preliminary analysis of the HCMM imagery of the project area indicates that locally some differentiation of lithologic units within the Northern Coast Range may be possible.

Of significance, however, is a thermally cool linear area that appears on the 30 May 1978 Nite-IR. This linear feature seems to coincide with the Bear Mt. Fault and with the axis of the Chico Monocline along the eastern margin of the Sacramento Valley. The quality of the imagery is inadequate for verification and no additional usable nite-IR imagery is available for comparison purposes. This feature, along with the areas in the Coast Ranges, will be monitored on subsequent images.