

Issued: 10 April 1980

MONTHLY REPORT

for

March 1980

THE SCHWERDTFEGGER LIBRARY
1225 W. Dayton Street
Madison, WI 53706

VISSR Atmospheric Sounder (VAS)
Development and Performance Evaluation

Contract No.: NAS5-21965

Prepared by

Space Science and Engineering Center
The University of Wisconsin
Madison, WI

for

National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, MD

I. General

On March 17-18, Rob Uram and Ron Steiner traveled to Kansas City to install the NESS remote McIDAS terminal. On March 24-28, J. T. Young went to Kansas City for McIDAS training of the personnel at the Severe Storm Forecast Center. This was followed by a trip on March 31-April 4, by Gary Wade, Bill Togstad and Bill Smith for training on the use of TIROS-N remote soundings. On March 18, Paul Menzel traveled to Washington, DC, for meetings with NOAA on the operational calibration of GOES-D and for meetings on transparent multi-spectral imaging and dwell sounding operations.

II. Data Processing System Development

The ADCCP communications equipment has been successfully tested with GSFC. The ADCCP equipment successfully transferred test data blocks between SSEC and GSFC and vice versa. Efforts continue in software generation of remote file reads and data access software.

The GOES mode AA frame sync and archive require a test signal for checkout. Arrangements have been made with GSFC to borrow a mode AA simulator in early April so that checkout can proceed prior to the May 1 test. The VAS preprocessor hardware has been checked out and firmware for the microprocessor in the preprocessor has been started. The first level of software for the VAS ingester on the data base manager has been written and is waiting for a signal from the preprocessor for debugging. The VAS ingester software which will be ready for the link-up test will be a simple ingest, file, and write to tape of the VAS raw data. The ingester software will be expanded this summer to include sorting the data into image files and sounding files, automatic start-up, and improved house keeping functions.

The EM 3780 emulator software for remote job entry is now operational for both the 360/195 at Suitland and the CRAY at NCAR. The 360 link is currently

used primarily for LFM outputs. The CRAY link is used for testing of the numerical weather prediction model and for outputting model data sets to the McIDAS data base.

The remote VAS terminal for use by NESS was installed in Kansas City at the NESS Satellite Field Service Station. The terminal was greeted with great enthusiasm by the forecasters at Kansas City. The terminal is being heavily used throughout the day and night by forecasters becoming familiar with McIDAS, interactive processing, and remote sounding TIROS data. An initial round of training sessions have been completed. A second iteration of training will take place in May.

III. VAS Instrument Support

VAS-D calibration coefficients were recalculated. The temperature measurements of the telescope foreoptics components were altered by SBRC; the conversion from sensor digital reading to temperature was found to be incorrect. Also the relative spectral response of each of the 12 spectral bands was updated to reflect the current status of the VAS-D filter-detector combinations. The new calibration coefficients were found to be altered minimally and previous conclusions were unchanged.