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6.3 CURRENT STATUS OF THE POKER FLAT MST RADAR

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An earlier brief report on the status of the Poker Flat, Alaska, MST radar appeared last year in MAP Handbook 14. The purpose of the present note is to bring that report up to date.

The Poker Flat MST radar ceased normal operations in April 1985, following more than six years of almost continuous data taking. Analyses of these data have already yielded over ninety research papers, five Ph.D and two MSc. dissertations.

The radar is now being configured to measure gravity-wave momentum flux in the troposphere, lower stratosphere, upper mesosphere, and lower thermosphere. The major change to the system involves modifying the antenna array to enable both (orthogonal) oblique beams to be automatically steered. GWMF data will be obtained on pairs of vertically symmetric beams in the manner described by VINCENT and REID (1983). Current funding is sufficient to complete this modification and to operate in this new mode until Fall 1986.

An additional effort is underway to prepare an archive of the existing six-year Poker Flat data set. This archive, when complete, will be transferred to the National Center for Atmospheric Research (NCAR) for use by anyone in the scientific community.

REFERENCES

Vincent, R. A., and I. M. Reid (1983), HF Doppler measurements of mesospheric gravity wave momentum fluxes, <u>J. Atmos. Sci.</u>, <u>40</u>, 1321-1333.