

**School on "Exploring the Atmosphere by
Remote Sensing Techniques"
18 October - 5 November 1999**

1151-13

**"Objective Determination of Cloud Heights & Radar Reflective
Using a Combination of Active Remote Sensors at the
ARM CART Sites"**

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**Objective Determination of Cloud Heights and Radar
Reflectivities Using a Combination of Active Remote
Sensors at the ARM CART Sites**

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Gerald G. Mace
Kenneth P. Moran
Roger T. Marchand
Mark A. Miller
Brooks E. Martner**

Configure radar parameters for maximizing cloud detection and then attempt to recover from artifacts in the data that were introduced by maximizing radar sensitivity.

ACCURACY/SENSITIVITY TRADE-OFF

ROBUST

GENERAL

CIRUS

STRATUS

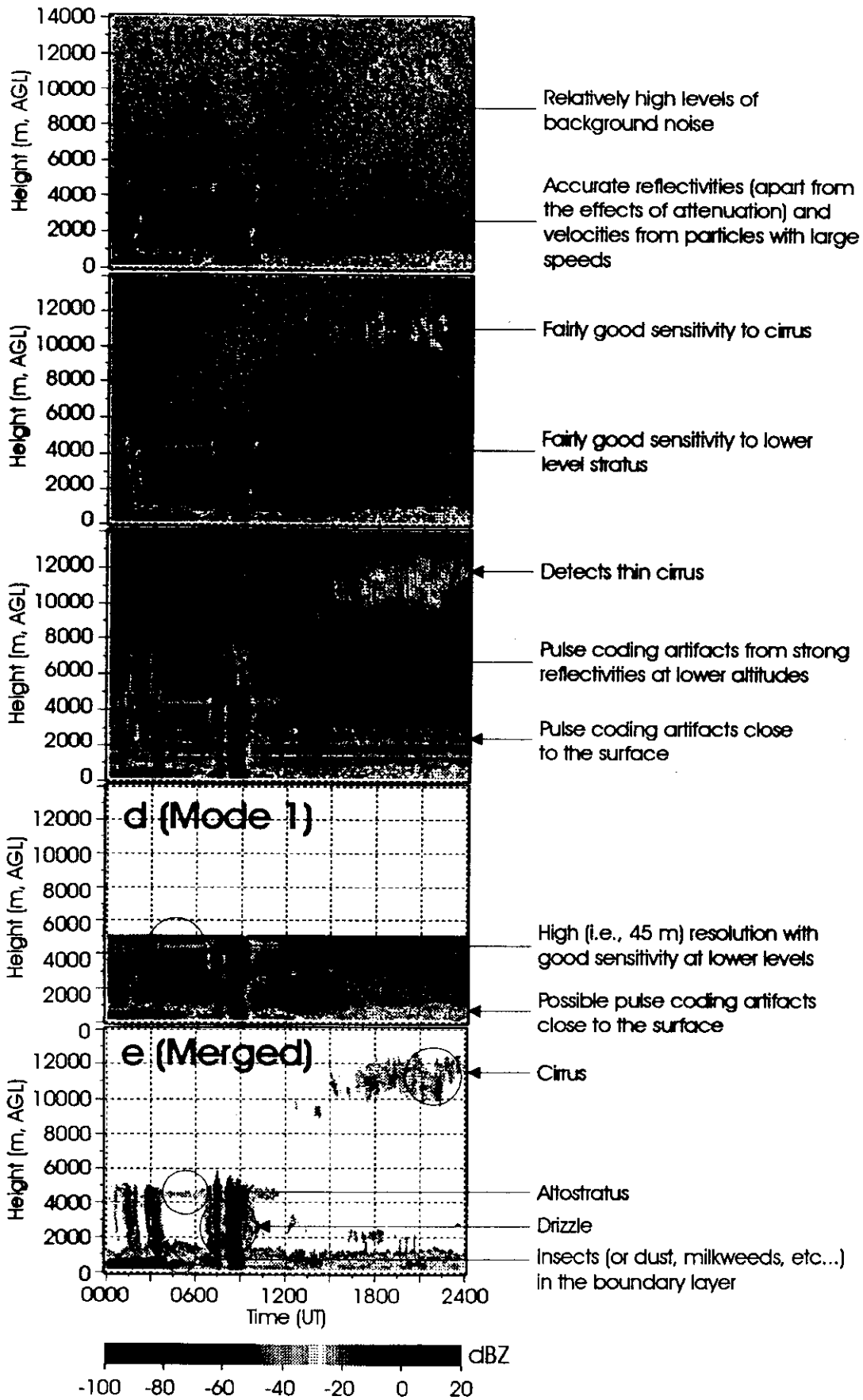
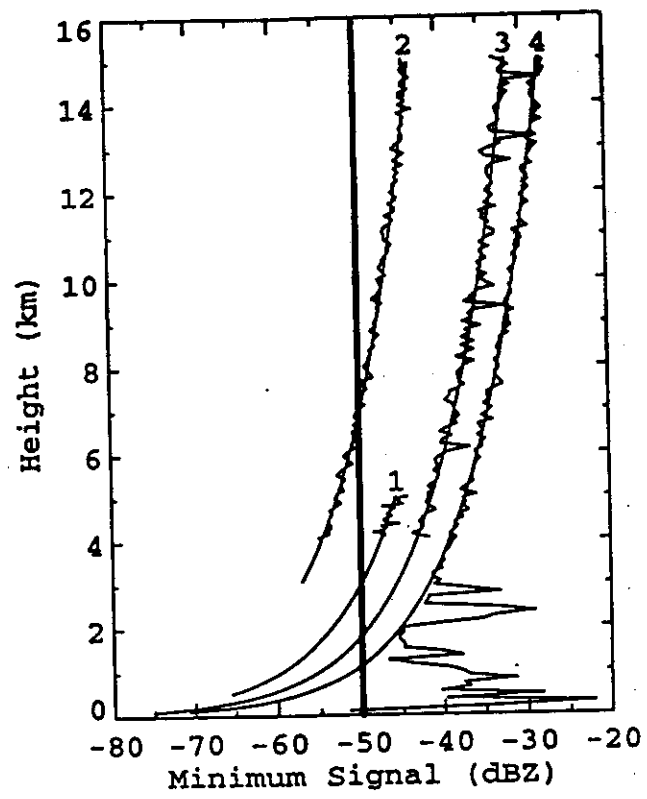
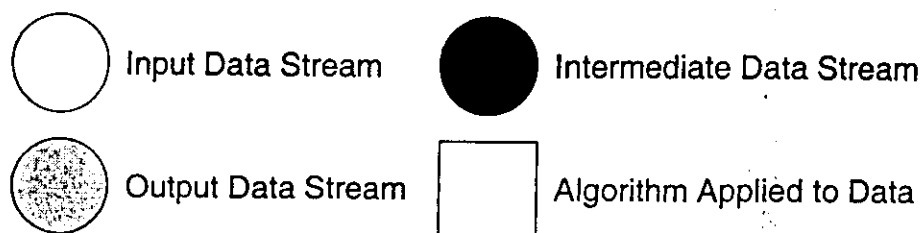
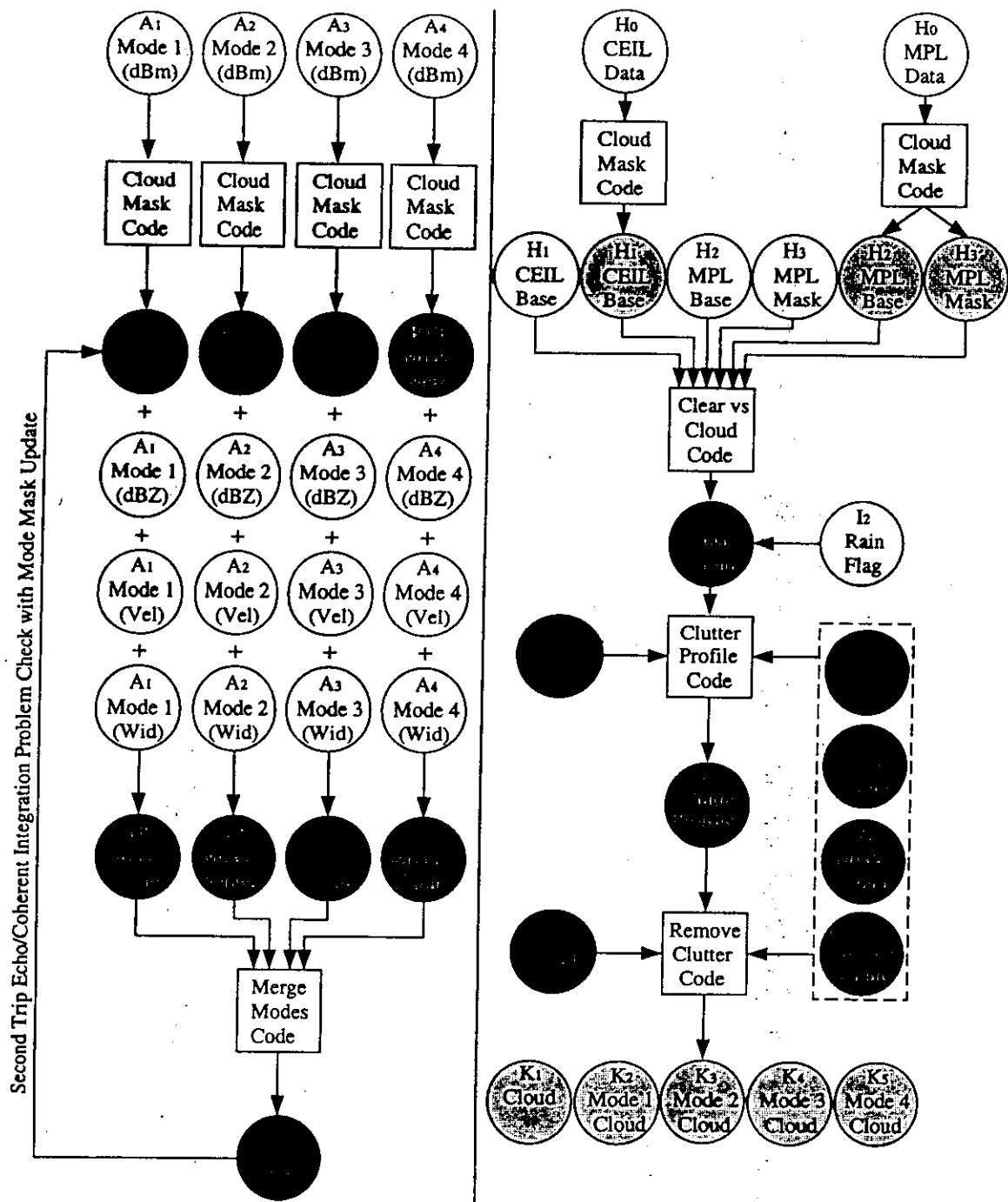
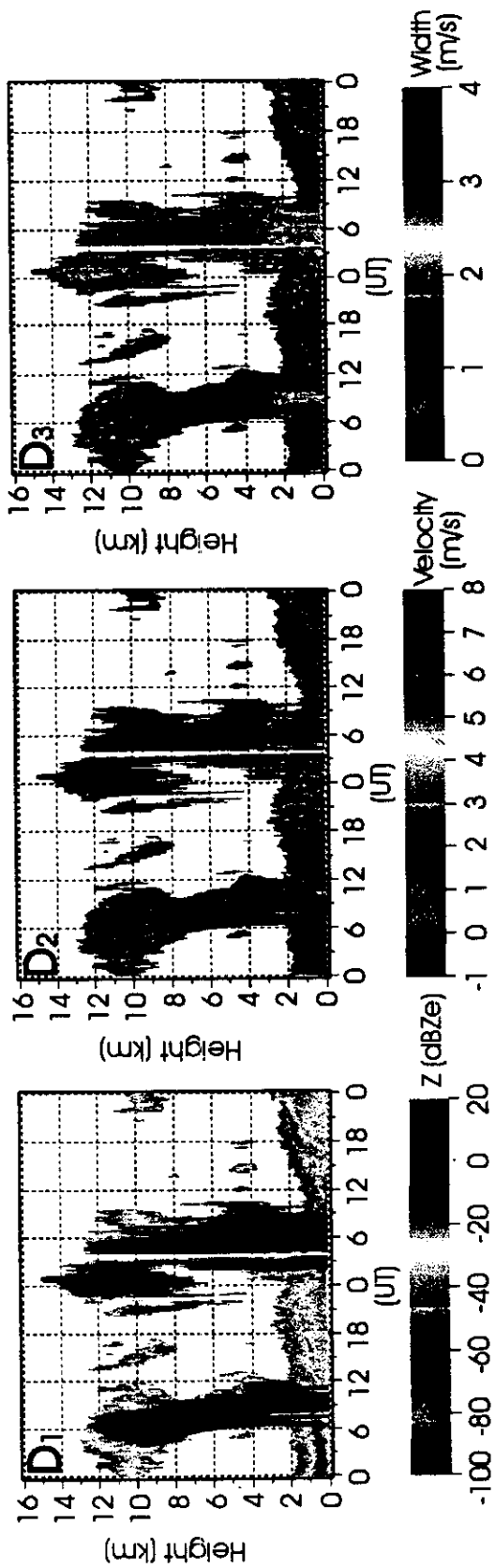
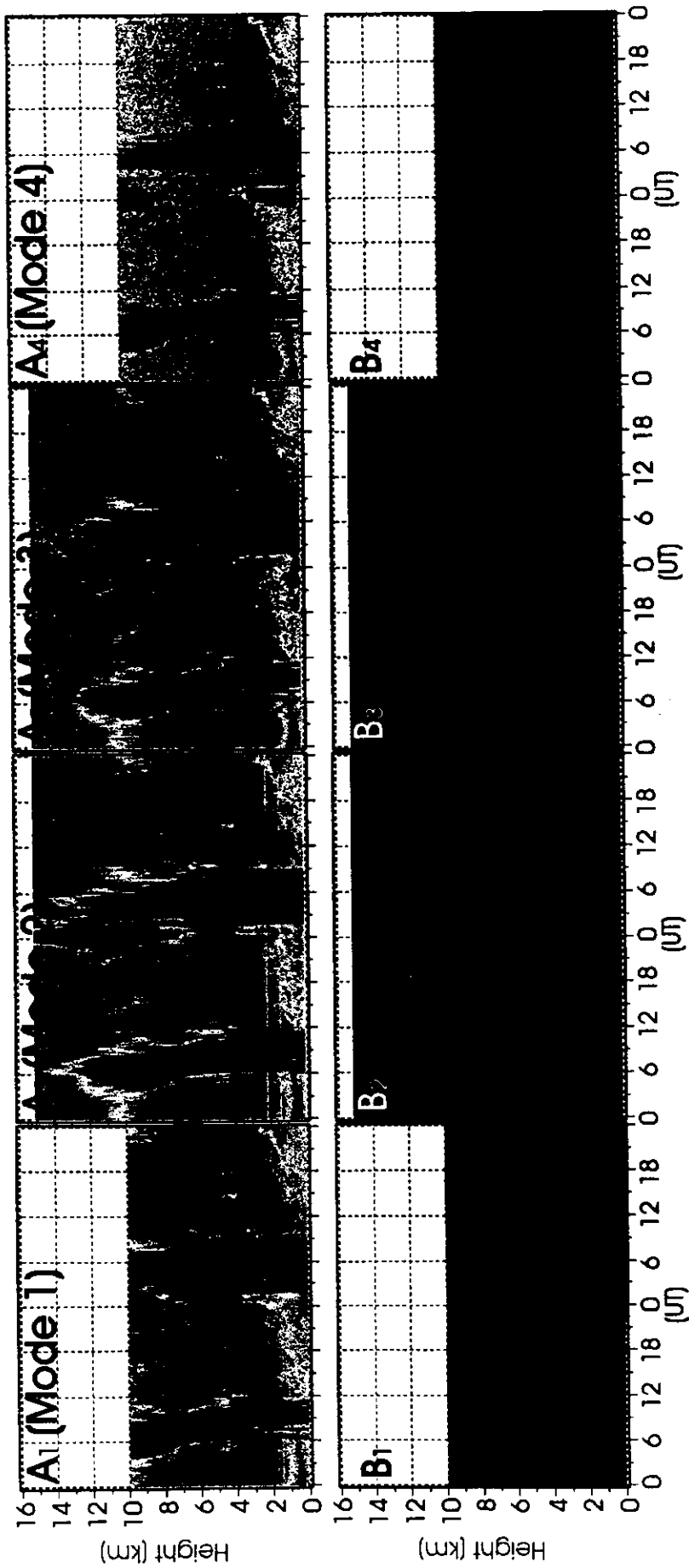
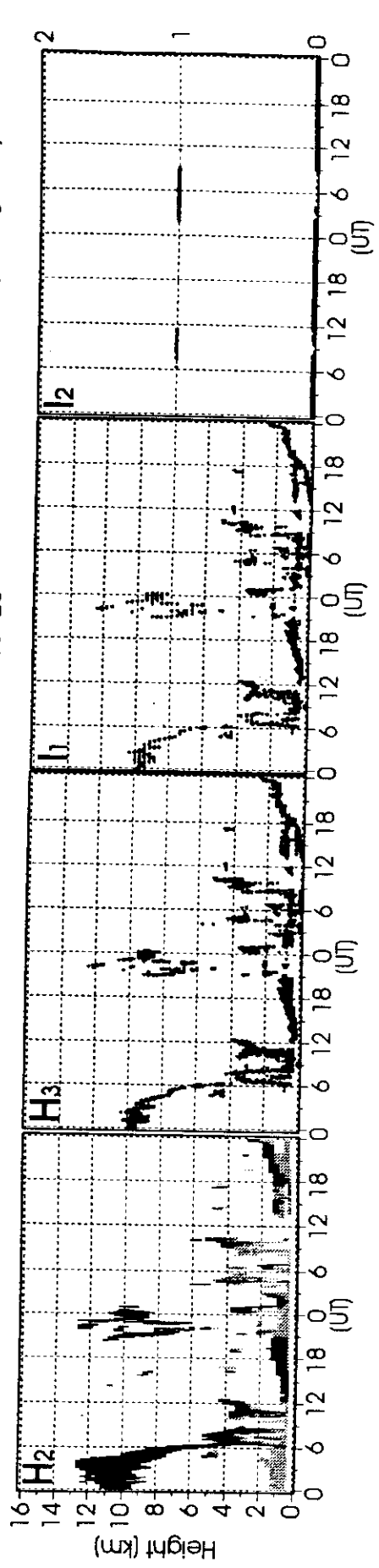
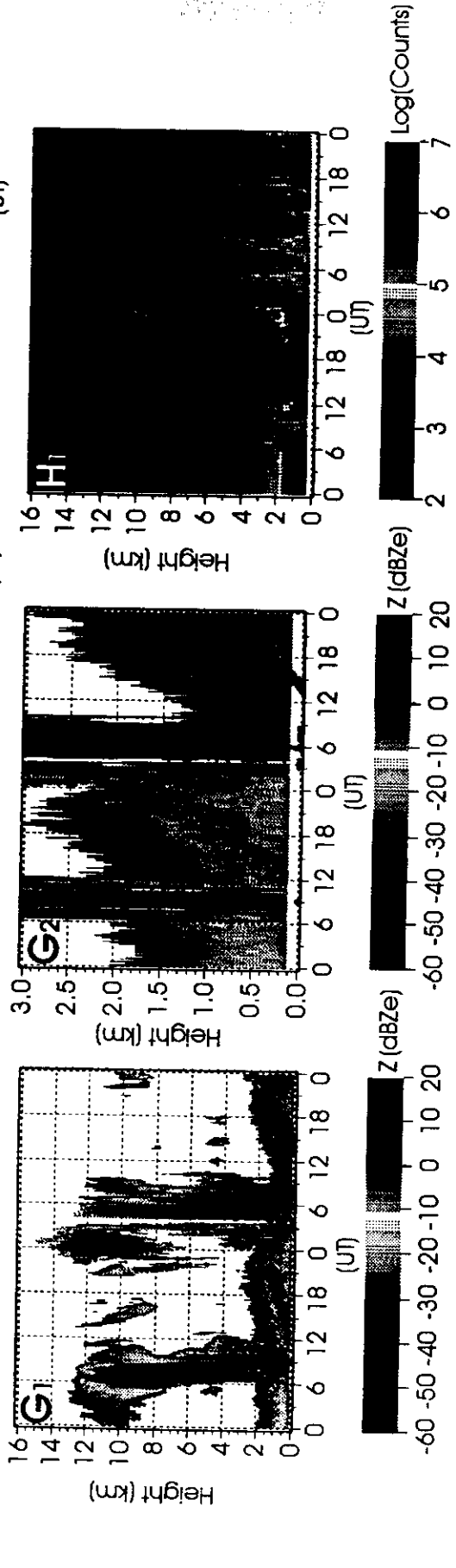
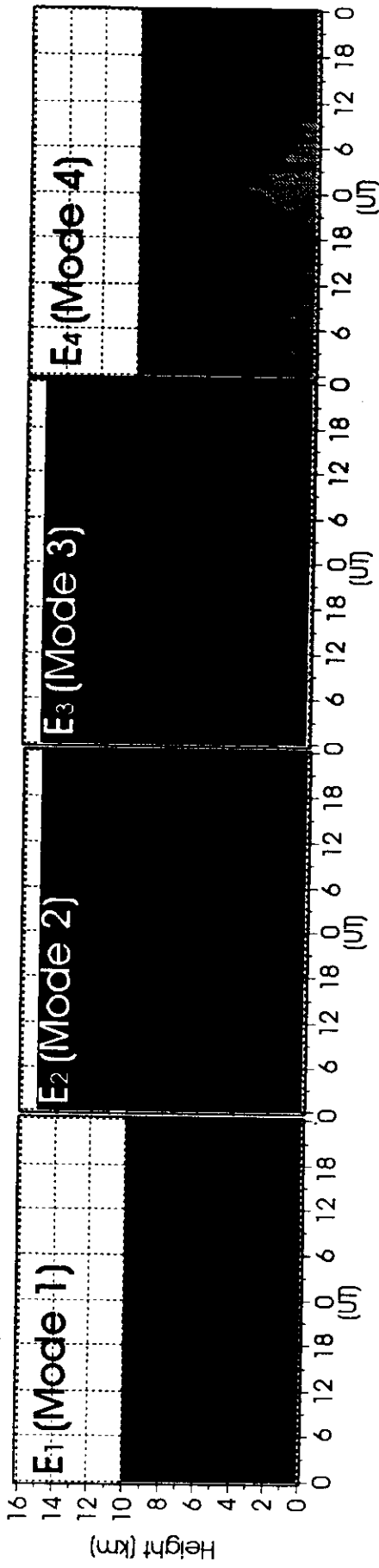


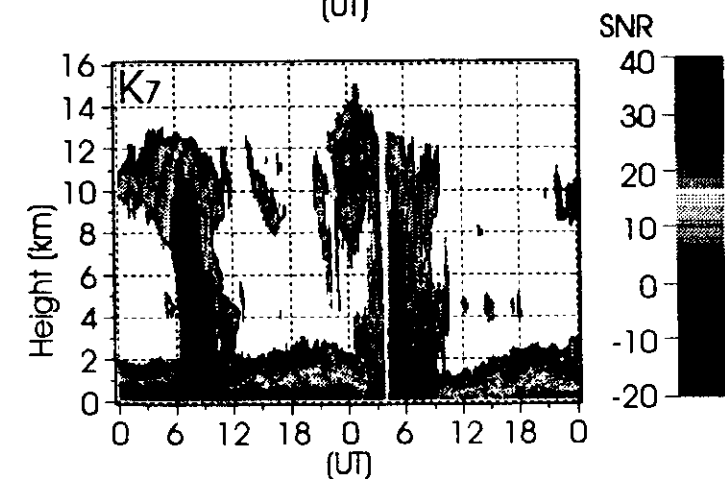
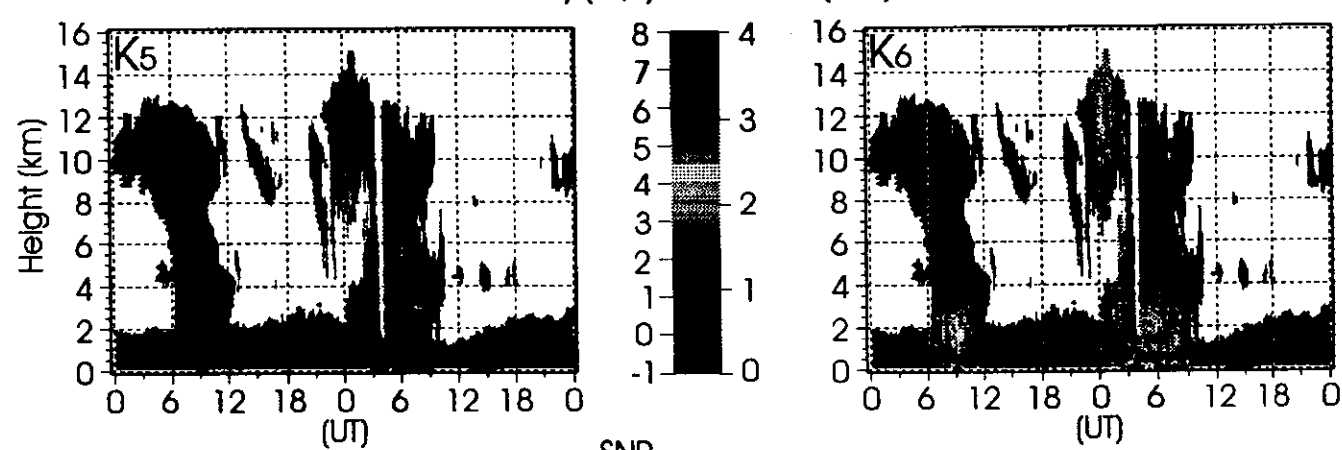
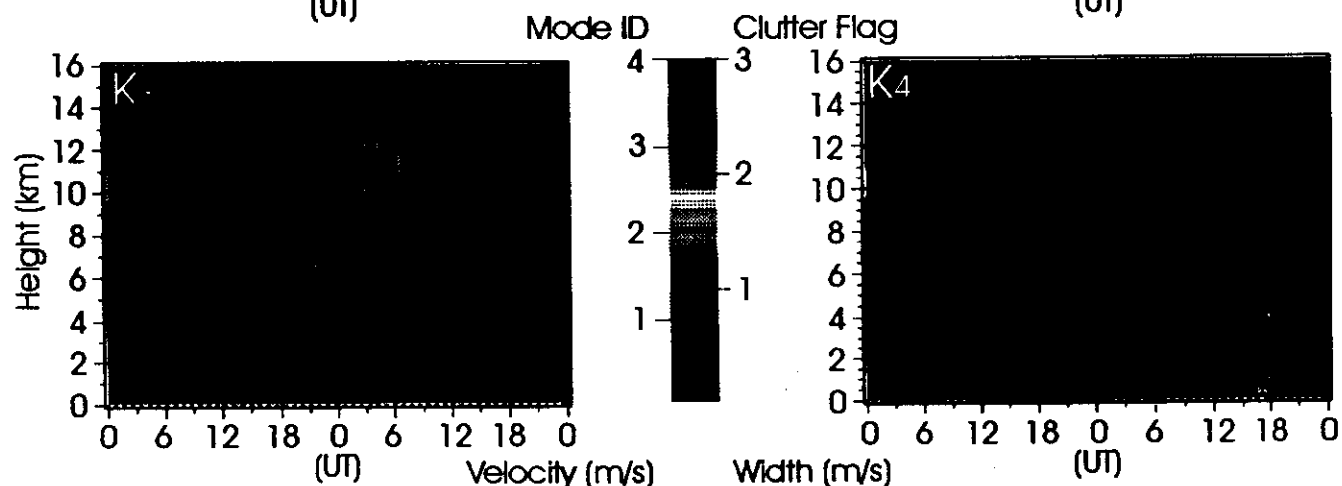
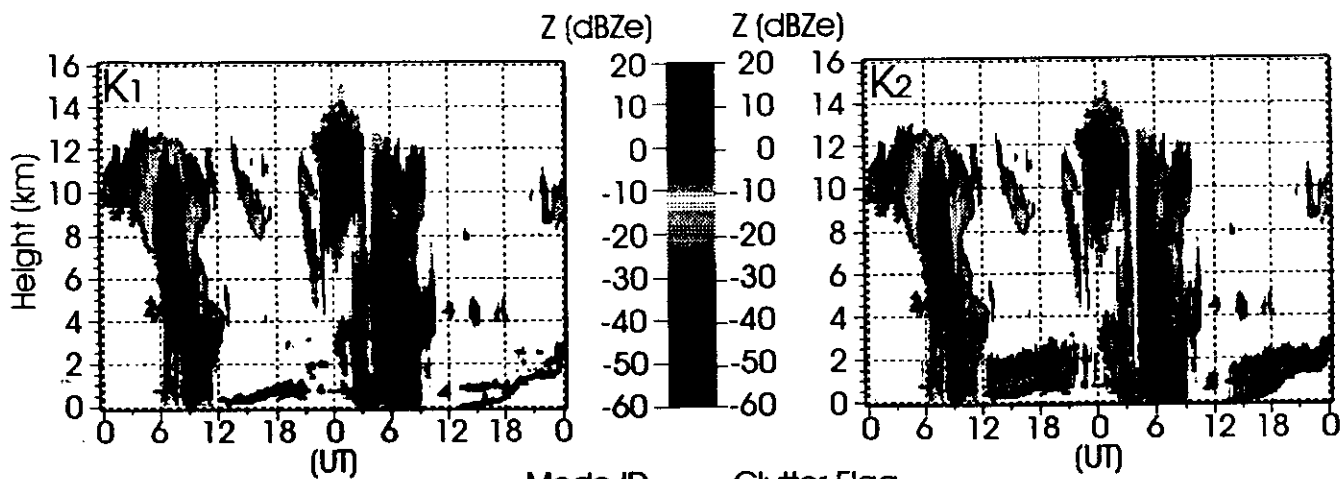
FIG. 3

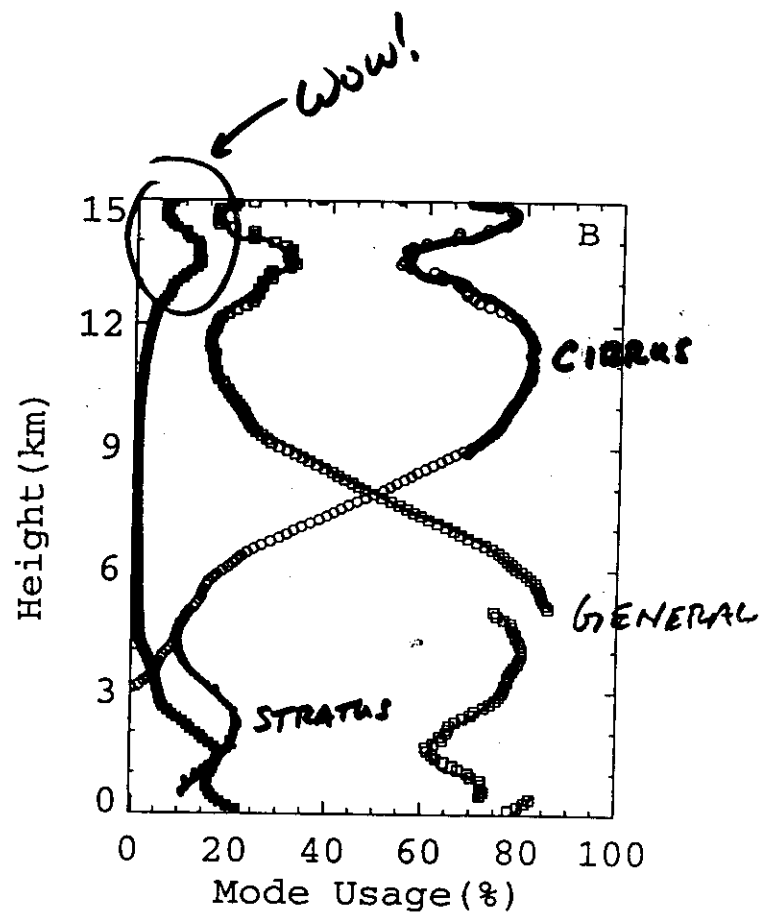
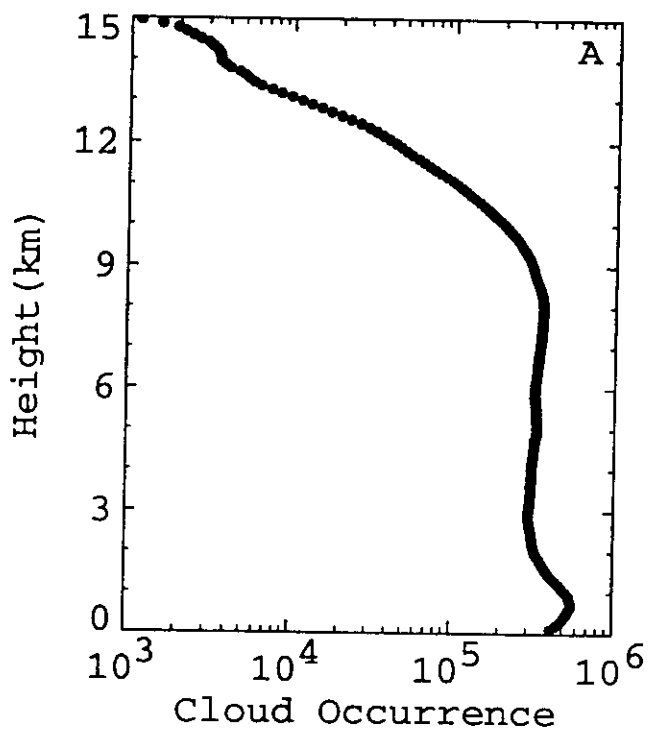




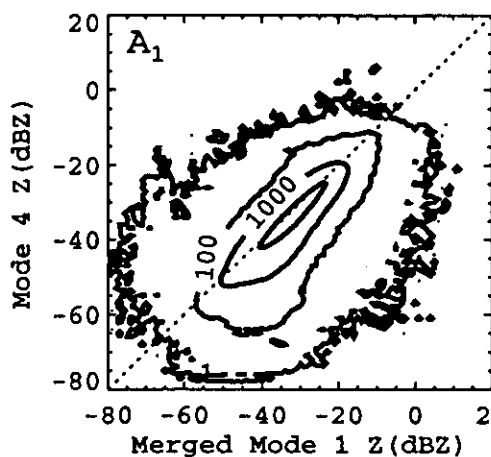




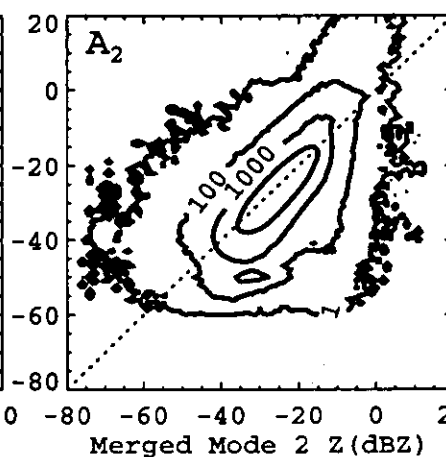




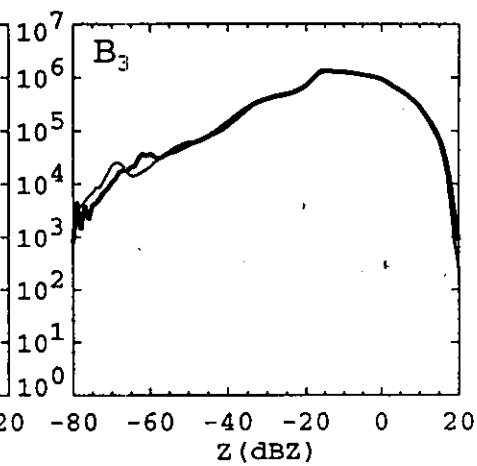
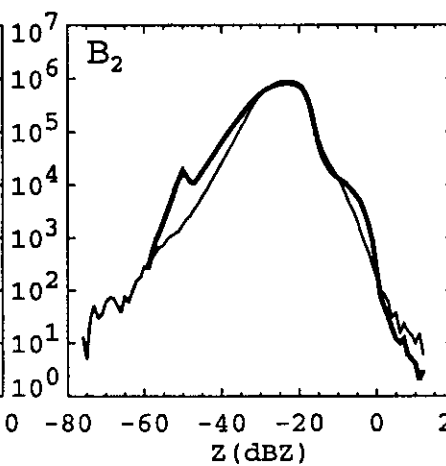
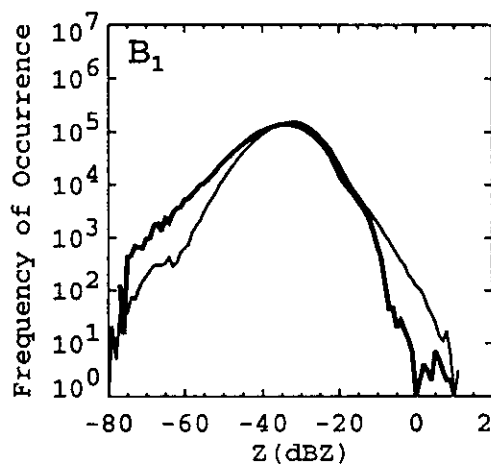
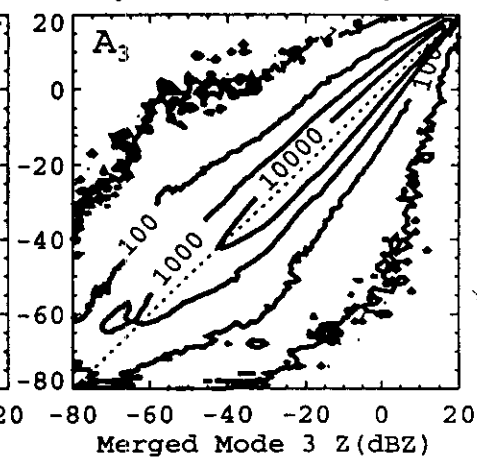
MODE 1 VS 4

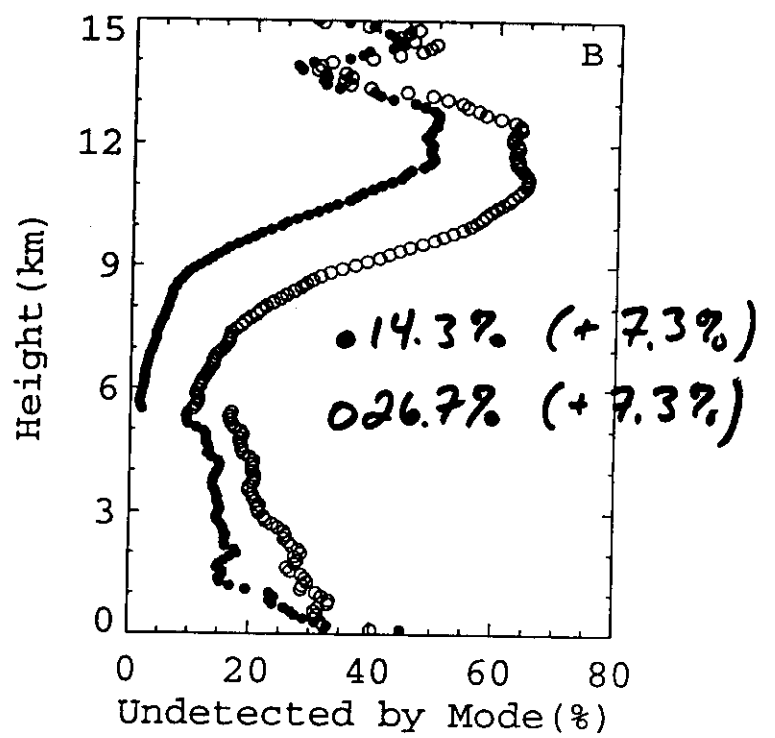
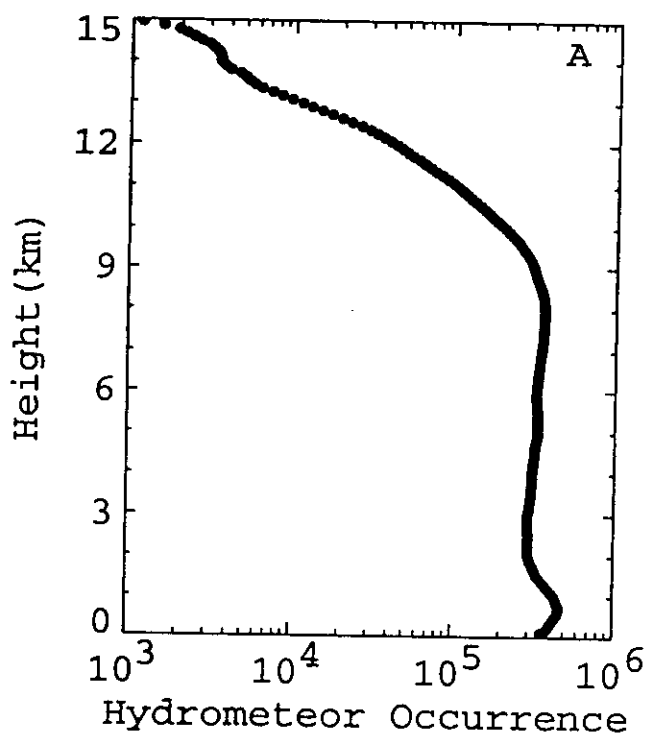


MODE 2 VS 4

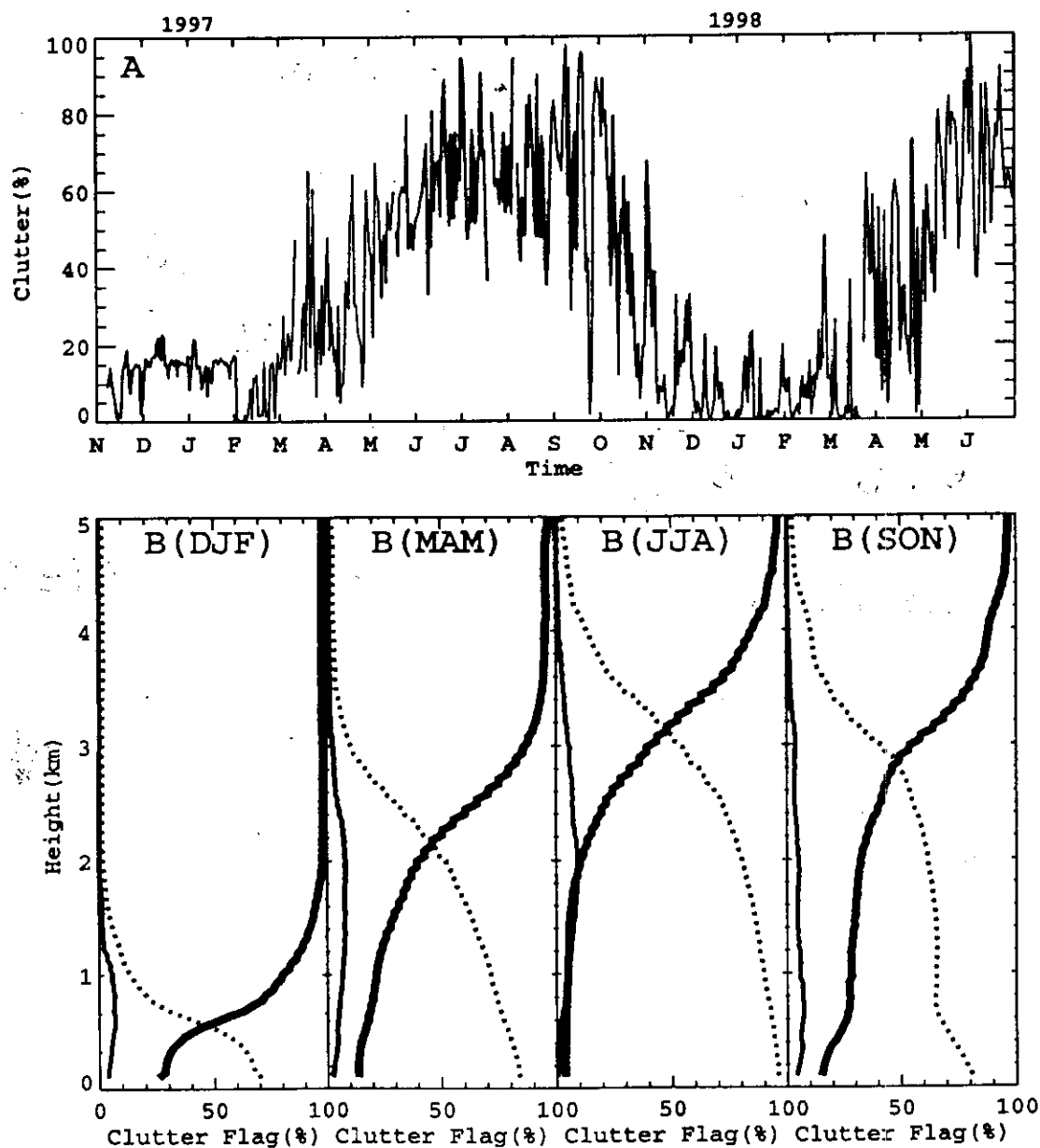


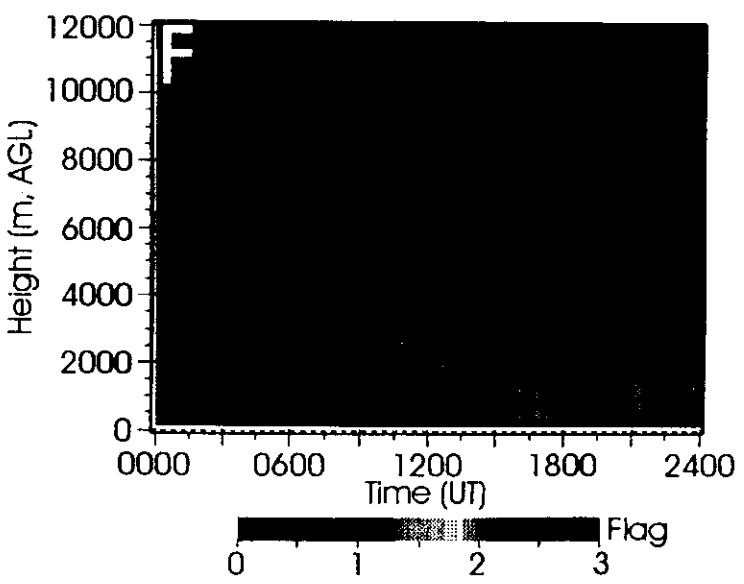
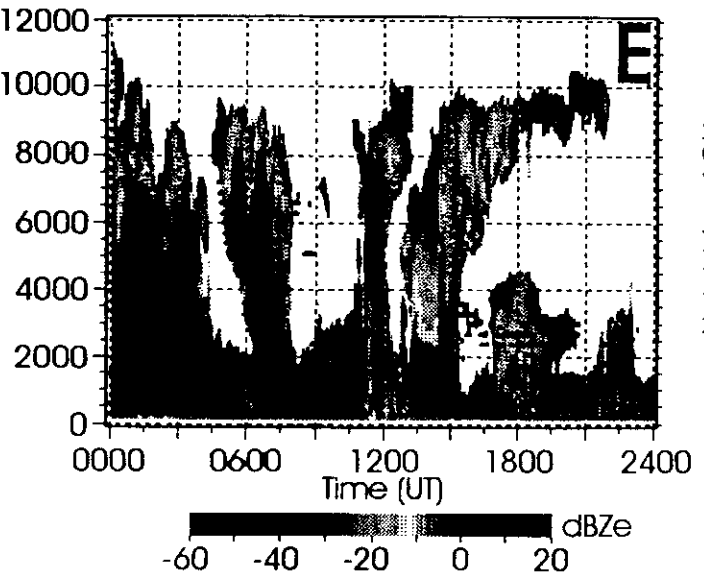
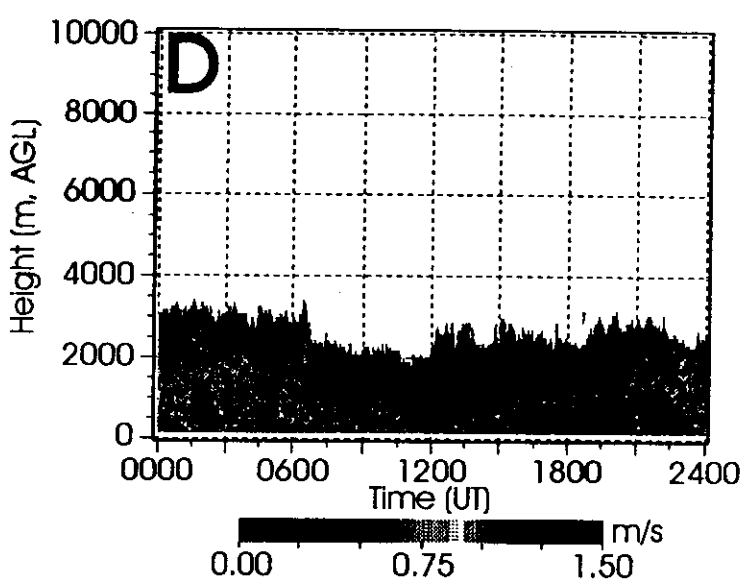
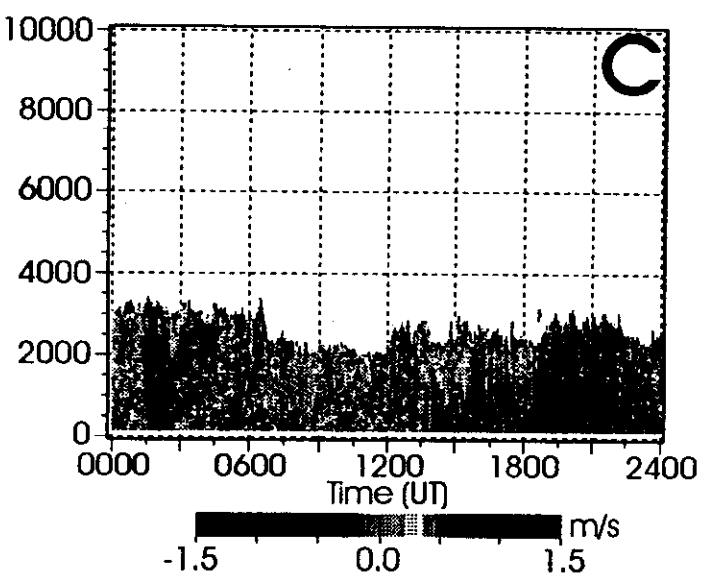
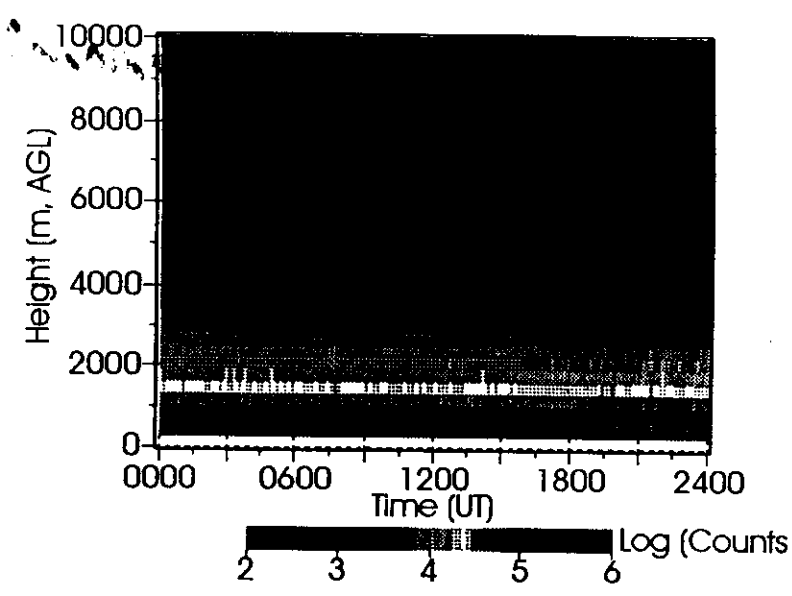
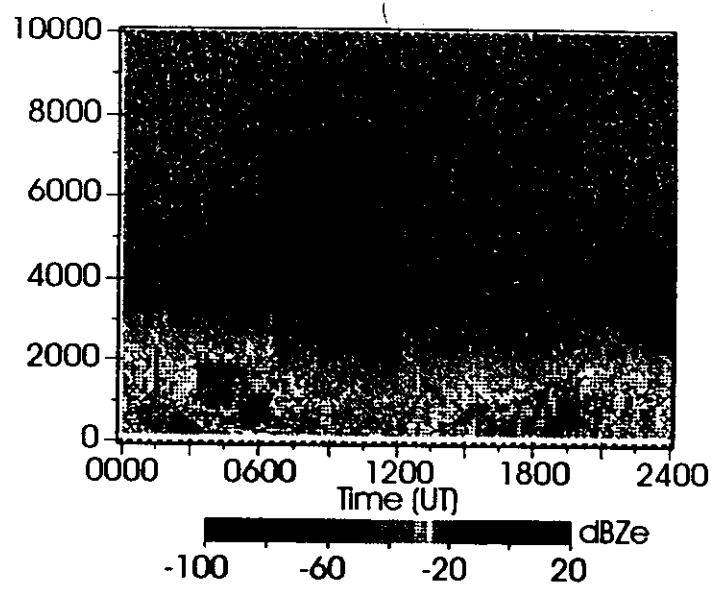
MODE 3 VS 4

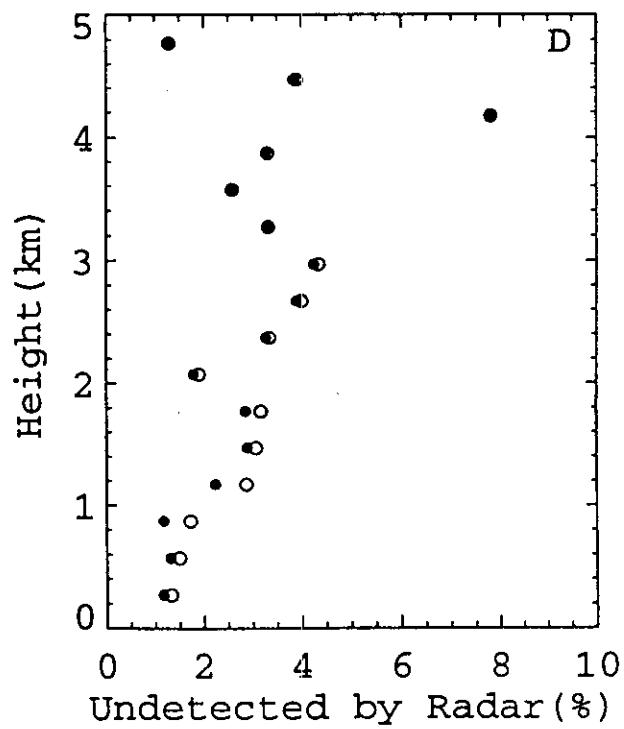
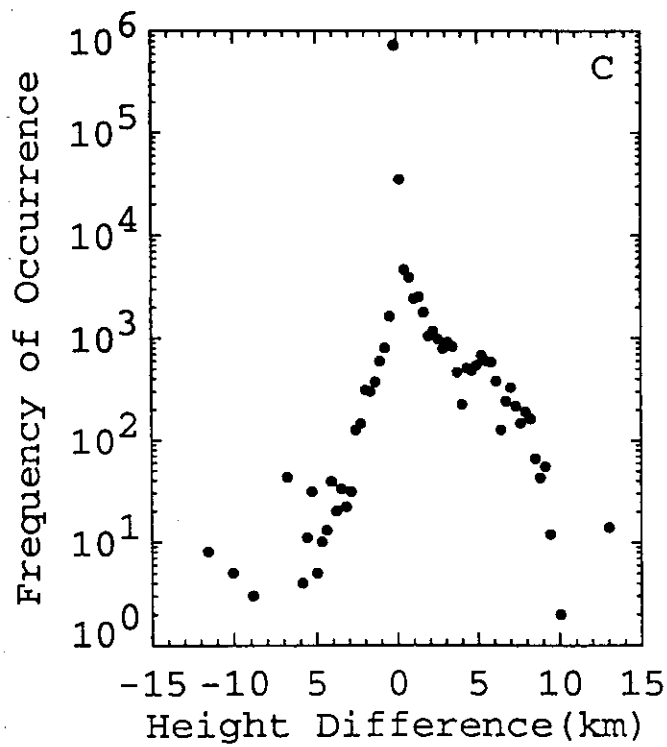
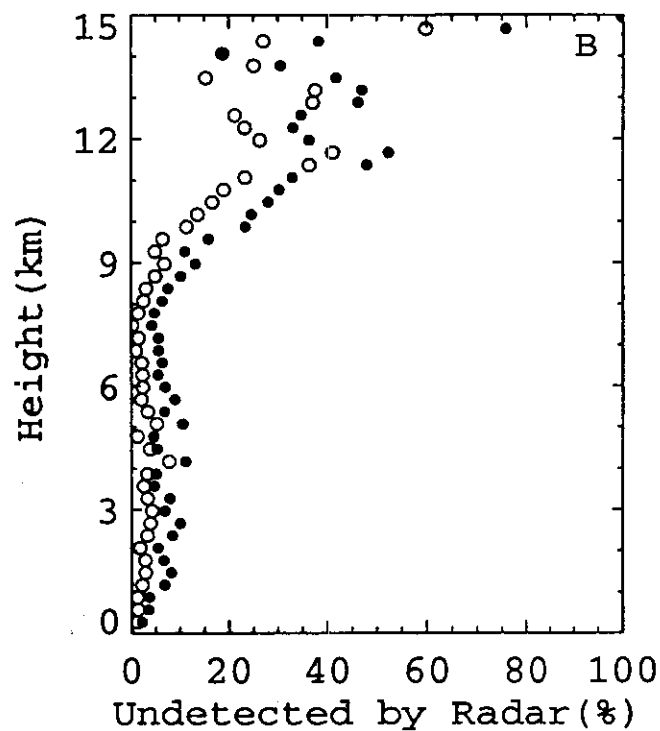
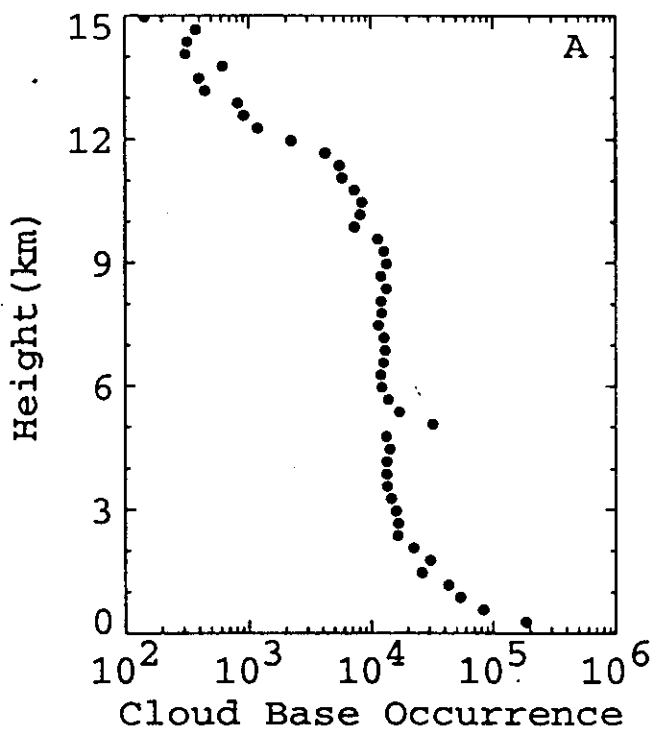




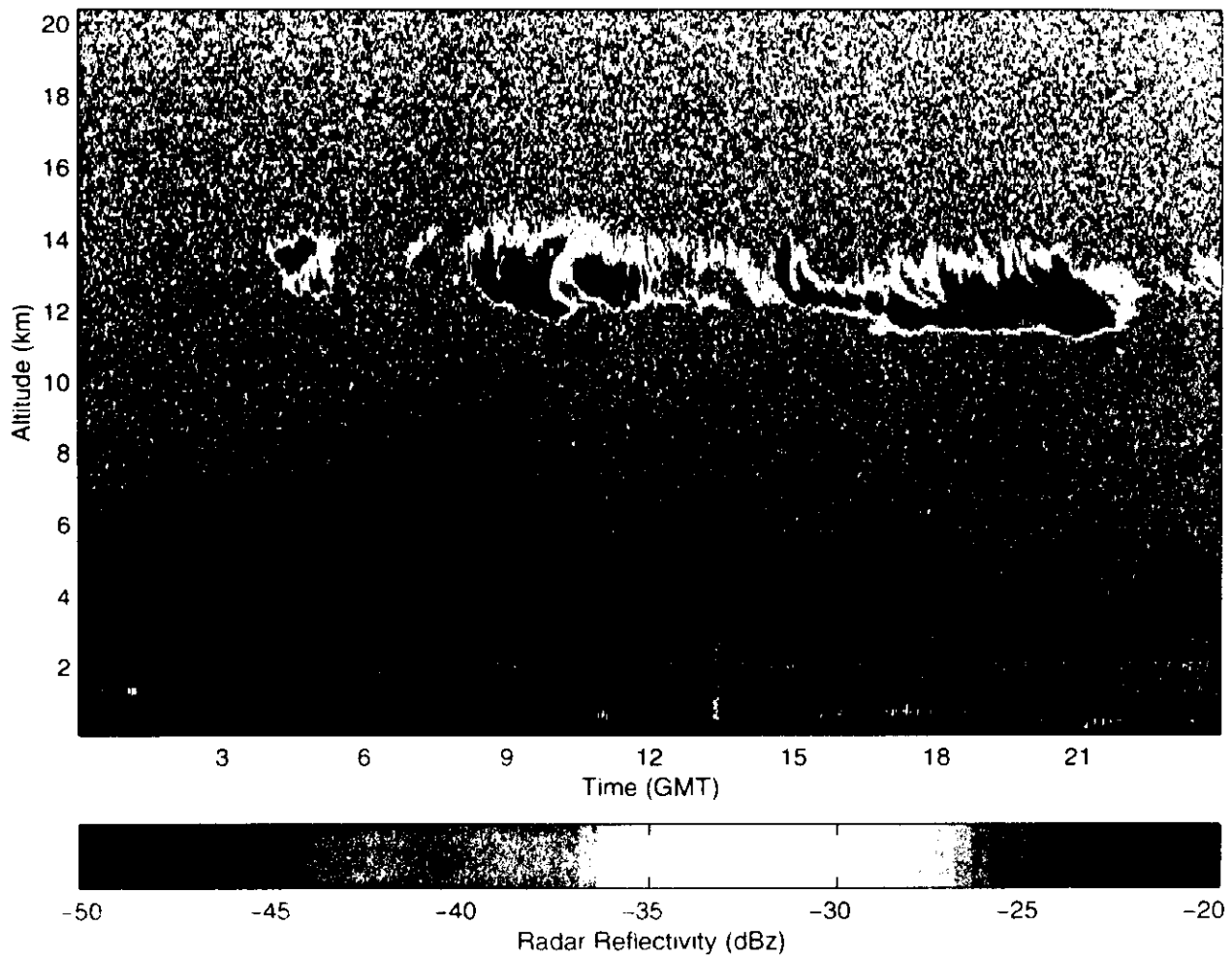
"THE PLANKTON" (A264!)



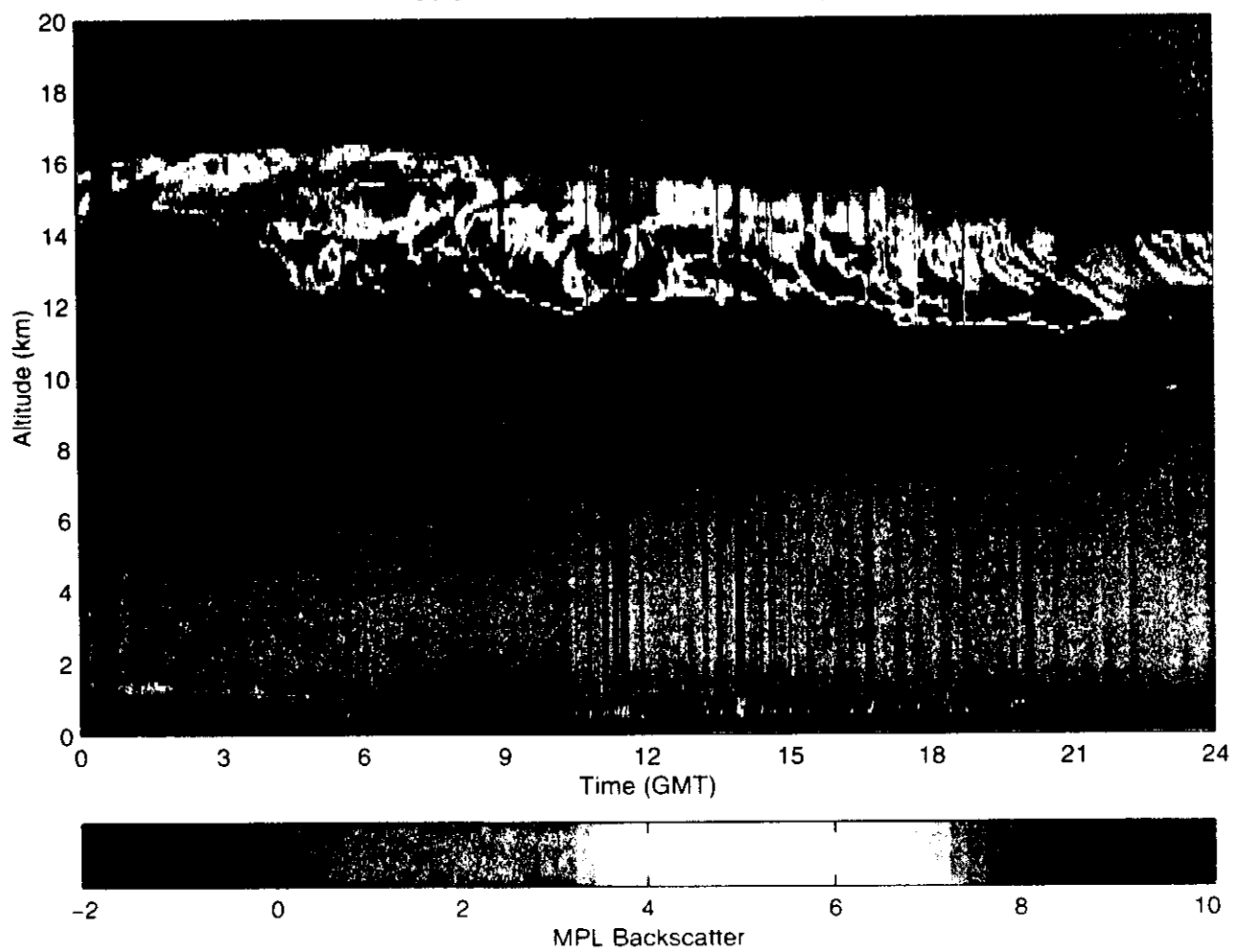


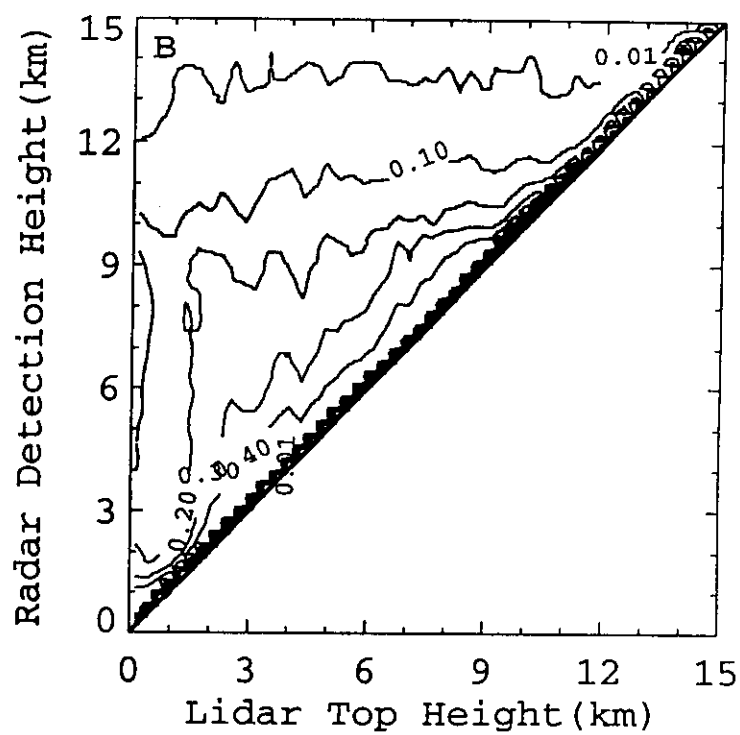
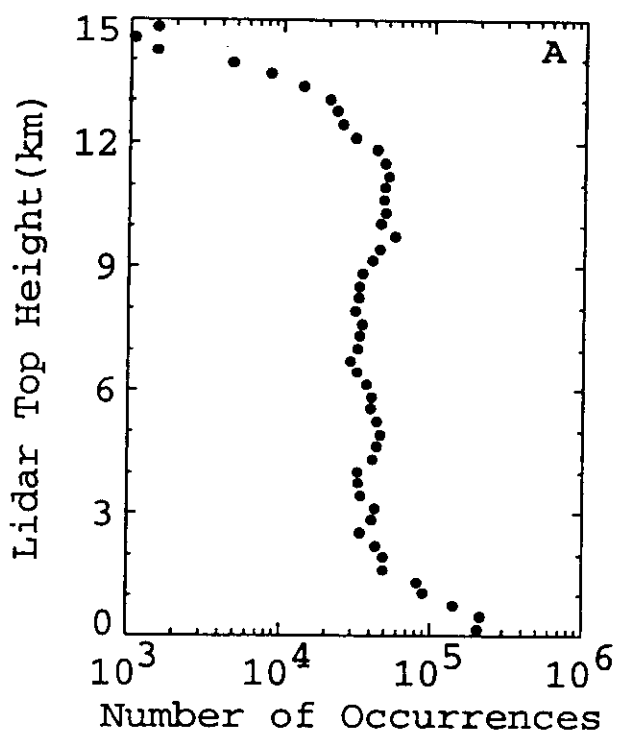


Nauru MMCR Reflectivity: December 2, 1998



Nauru MPL Backscatter: December 2, 1998



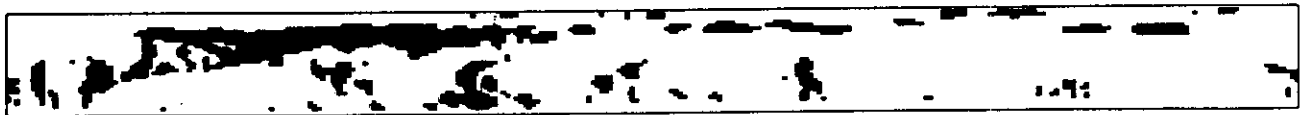


Barker et al., Overlapping Cloud: What
Radars Give and What Models Require

liquid droplets



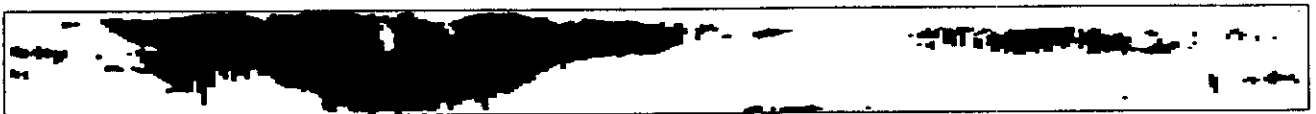
liquid + ice



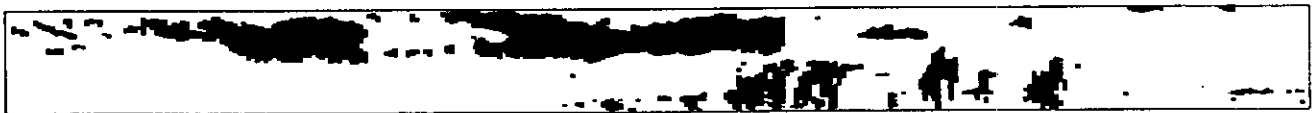
liquid + ice + precip.



April 22, 1997



June 23, 1997



October 10, 1997

