

RELATIONSHIP OF CUMULUS LOCATIONS WITH KINEMATIC FEATURES DERIVED FROM MULTI-DOPPLER ANALYSIS ON 24 MAY 2002

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Digital photographs of an intensive observation region were obtained every 30 s during the IHOP mission of 24 May 2002. Photogrammetric techniques are utilized to produce maps of cumulus clouds at regular intervals. Analysis is aided by GOES imagery, and in-situ and remotely sensed estimates of cloud base and top height. The intensive observation domain was sampled by four mobile Doppler radars. Data from these radars are combined using multi-Doppler wind synthesis techniques. The locations of the developing cumulus clouds are compared to analyzed locations of kinematic features such as km-scale updrafts, and divergence and vorticity features.