Potential Missions for the SPA-10

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Ordinary thunderstorms

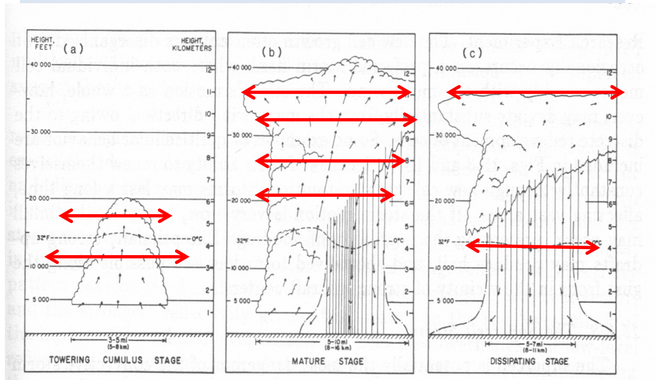
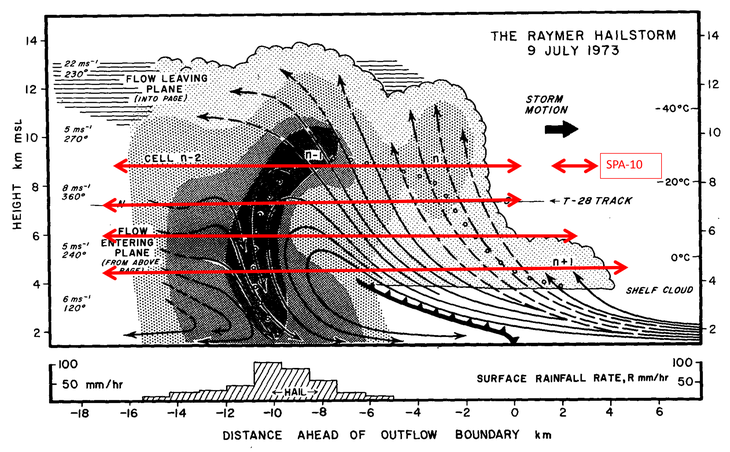


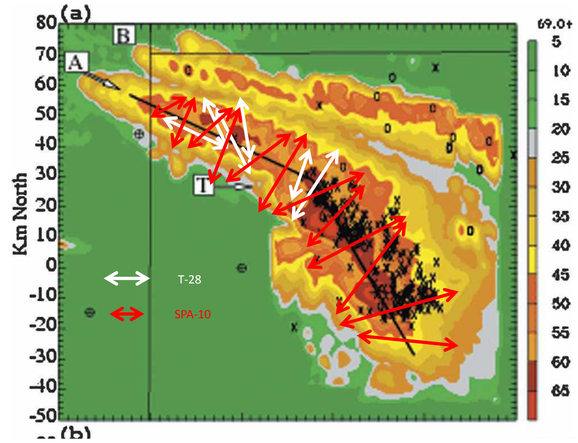
Figure 15.1. (a) The towering cumulus stage, (b) mature stage, and (c) dissipating stage of a short-lived convective cell. (Courtesy of C. A. Doswell, NOAA/ERL/WRP, Boulder, Colo.; adapted from Byers and Braham, 1949.)

Multicell thunderstorms



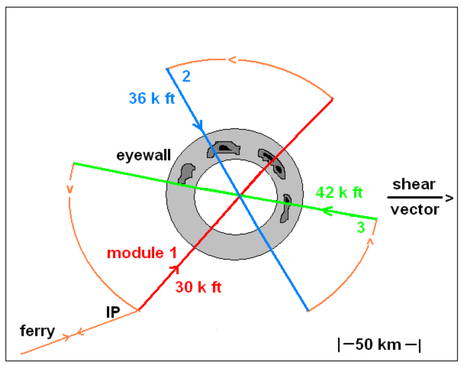
[Browning et al. 1976]

Supercell thunderstorms



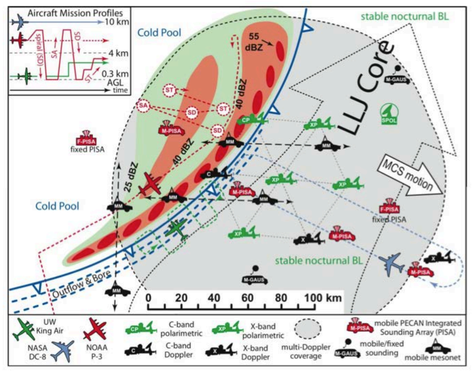
A Hovermuller-format presentation of peak radar reflectivity during 3 hours of supercell storm evolution for a storm occurrng in NW Kansas, 29 June, 2000 [Tessendorf et al. 2005]

Hurricane studies



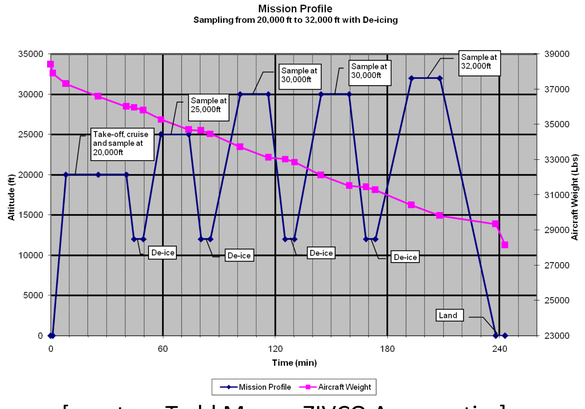
[courtesy Gary Barnes, U. Hawaii]

Squall -lines

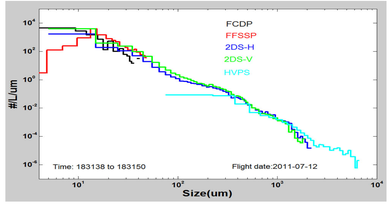


[courtesy Dave Jorgensen and PECAN investigators]

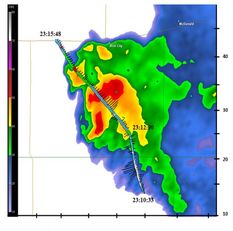
Mission profile



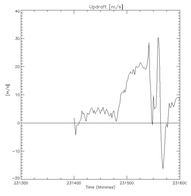
[courtesy Todd Morse, ZIVCO Aeronautics]



microphysical probes produce composite size spectra
(Spectral plot courtesy Sarah Lance, SPEC, Inc)



electric field observations map charge structure in storms



Extended, hardened, heated 5-port gust probe for retrieving 3-D winds [Courtesy Djamal Khelif, UC-Irvine]

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