Reference	Regime	Platform/Methodology	Main finding
Telford et al 1984 (cited by L&S)	theory	Theory, from a modeler's perspective; briefly compared to one cumulus cloud sampled by aircraft	“Entity-type entrainment mixing”: “homogeneous” vs “inhomogeneous”. Dry-air entrainment at cloud top dominates entrainment, has minimal effect on the droplet size spectra
Stevens et al 1998 (cited by both)	Stratocu (“Idealized, noctournal, stratocu-toppped marine PBLs”)	LES with size-resolved cloud liquid water representation; entrainment rates cannot be resolved on that resolution	Heavy precipitation decreases LWP and entrainment; drizzle may increase cloudfrac(time) by increasing lifetime of thinner precipitating clouds in a more slowly-deepening boundary layer
Heymsfield and McFarquhar 2001 (cited by L&S)	Trade cu (Indian Ocean); clean and polluted conditions	INDOEX, C130 flights across the ITCZ; low-level, in and below clouds; measured droplet size distrib, LWC, wind	Regimes partitioned by LWC show a relationship with updraft velocity; entrainment probably comes into play but is not analyzed here. Specifically in polluted regime, cloud base vertical velocity limits droplet activation.
Ackerman et al 2004	**Stratiform clouds**	**8-hr nocturnal model simulations initiated with ASTEX, DYCOMS-II, and FIRE-I field measurements**	**Increased aerosol changes liquid water in clouds: increasing due to precip suppression, decreased from cloud-top entrainment. Regime-dependent: latter dominates except for low droplet conc or humid above-cloud air (which enhances precip)**
Lu and Seinfeld 2006	**Stratocumulus**	**3D LES with bin microphysics; initialized with FIRE and ASTEX data**	**Effects of 2nd indirect effect on cloud spectral relative dispersion (decreases by suppressing collision/coalescence and reducing drizzle latent heating at cloud top, increased BL TKE) and cloud susceptibility (optical depth response to CDNC)**
Matsui et al 2006	Warm marine low clouds, global, mostly tropical	Satellite obs (TRMM, MODIS), modeled aerosol (GOCART), NCEP/NCAR reanalysis (lower-trop stability)	AI/droplet-size anticorrelation. Correlation between increased AI and decreased CLWP, stronger than the effect of increased LTS on (decreased) CLWP
Wood 2007 (cites Ackerman)	Marine stratocumulus	Mixed layer model of a cloud-capped MBL; time-stepped cloud heights responding to perturbations in aerosol concentration	the relative Albrecht-to-Twomey ratio scales with precip rate, cloud height, trop humidity, entrainment rate at equilib; on short time scales it doesn't, 2nd indir effects are muted or negative (cloud thinning); timescale, FT conditions are important to indir effects
Stevens and Feingold 2009 (cites Ackerman)	Review paper	Review paper	aerosol-cloud effects are regime-, timescale-, and spatially-dependent
Burnet and Brenguier 2010	Convective cumulus clouds (summertime)	Ground radar and instrumented aircraft (Merlin-IV)	Three case studies of clouds; two collapsed before reaching an altitude which produced precip; 3rd one got tall enough for precip, possibly due to moister ambient environment
Lee and Penner 2011	Stratocu off the west coast of Mexico	Cloud-system resolving model (Goddard Cumulus Ensemble); high/low aerosol # conc, LWP varied by varying surface LH flux	Condensation/evaporation within the cloud is has a larger effect on LWP than does precipitation suppression. Diff btwn high/low aerosol is greater for greater LWP.