Paper Author (s)	Region/Model Type/ Technique	Key Finding
Köhler, H. (1936)	Haldde mountain, Norway; Observations/Measurements and derivation of equation.	Clouds consist of activated water droplets that grow spontaneously after they reach a critical radius corresponding to a certain saturation ratio. Solute decreases the saturation ratio which explains why droplet formation occurs in the atmosphere at saturation ratios of ~101%.
Twomey, S. (1974)	Wollongong-Port Kembla, Australia; Observation/Measurements.	Higher aerosols will lead to higher concentrations of CCN which in turn will increase the cloud droplet concentration, increasing the cloud albedo.
Albrecht, B.A. (1989)	Global oceanic regions; one dimensional model of the thermodynamic structure of the trade-wind boundary layer.	Increase in in CCN concentration decreases the mean droplet size which in turn reduces drizzle production and as a result increases cloud liquid water content and fractional cloudiness.
Plantick, S. and Twomey, S. (1993)	Marine Stratocumulus clouds.	Introduces new term "cloud susceptibility" to measure the extent of CCN influence on cloud albedo. The authors used satellites to measure susceptibility for various clouds at different locations around the globe.
Feingold, G. et al. (1994)	Marine stratocumulus cloud layer; RAMS microphysics/ LES model (two dimensional).	Authors were able to support Twomey's hypothesis (increasing CCN results in decreasing droplet size and increasing droplet concentration) through simulations.
Pincus, R. and Baker M. B. (1994)	Measurements using the AVHRR instrument on board NOAA's polar orbiting satellites.	Cloud albedo susceptibility is increased 50-200% when the dependence of cloud thickness on particle number is included. When clouds are thin and have low droplet concentration, adding aerosols into

		the maritime boundary layer increases cloud liquid water and albedo by suppressing precipitation.
Charlson, R. et al. (2001)	Review.	Explains both the Köhler's and Twomey's theories and links them to cloud formation. Also discusses how water soluble trace gases lower the critical supersaturation of a droplet.
Feingold, G. et al. (2003)	Southern Great Planes, Oklahoma, USA; Ground based remote measurements.	Using ground based remote sensors the authors were able to correlate cloud drop size to aerosol content (r=0.67). The advantage of this method is that the aerosol effect can be examined in a single column of air at high temporal resolution.
Takemura, T. et al. (2005)	Global Model; Global three-dimensional aerosol transport-radiation model, SPRINTARS	Diagnosing scheme based on Köhler equation that was able to calculate cloud droplet effective radius in "reasonable" agreement with satellite data.
W. Junkermann et al. (2011)	Karlsruhe (Germany), Xilinhot (Mongolia), boreal forest (Finland), Australia; Airborne measurements using an ultra-light aircraft and a motorized glider in Australia.	Fossil fuel power plants are a major source of ultrafine particles which cause a reduction or suppression of steady low-intensity precipitation.

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