



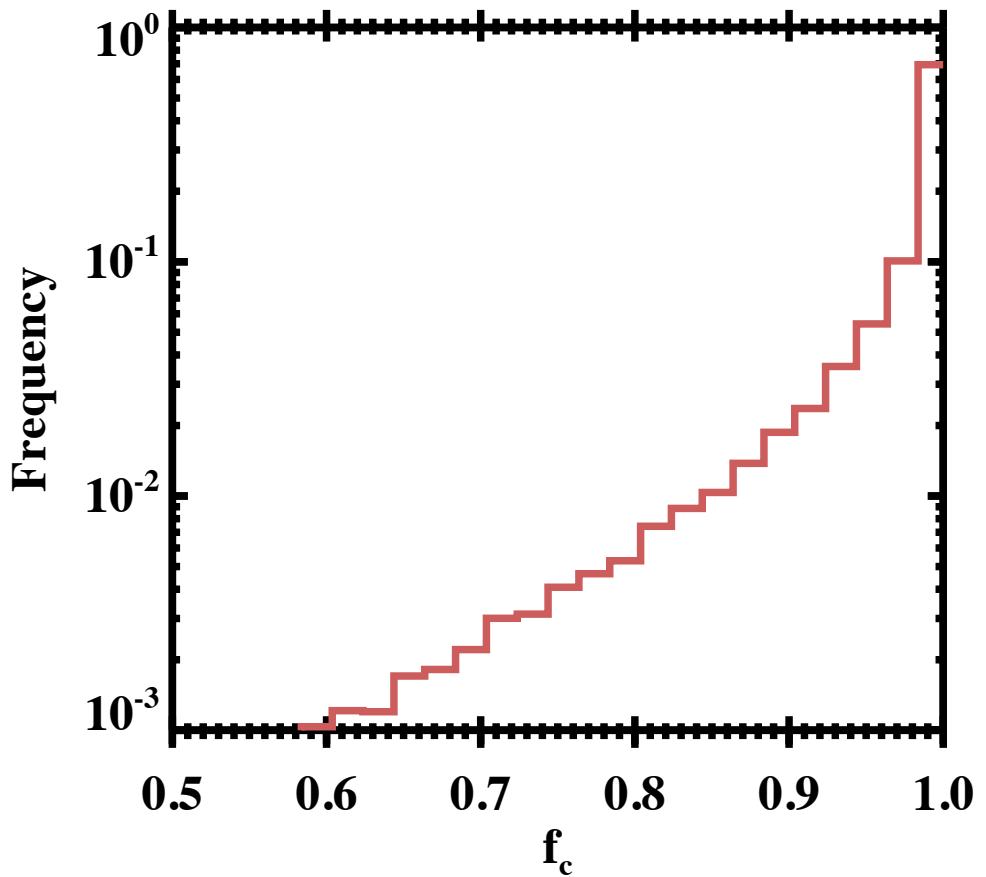
*Supplement of*

## **Albedo susceptibility of northeastern Pacific stratocumulus: the role of covarying meteorological conditions**

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**Figure S1.** Probability distribution of  $1^\circ \times 1^\circ$  low cloud fraction ( $f_c$ ) for data analyzed in this study. Note the log-scale on y-axis.

CTH quartile ranges	(0.9] km	[0.9, 1.1] km	[1.1, 1.4] km	[1.4) km	Unit
quartile-mean occurrence-weighted $F_0$	$\pm 5.63$	$\pm 5.61$	$\pm 5.59$	$\pm 5.50$	$W m^{-2} \ln(N_d)^{-1}$
Twomey-brightening $F_0$	$\pm 4.15$	$\pm 3.97$	$\pm 3.45$	$\pm 1.86$	$W m^{-2} \ln(N_d)^{-1}$
entrainment-darkening $F_0$	$\pm 2.23$	$\pm 2.92$	$\pm 3.50$	$\pm 4.13$	$W m^{-2} \ln(N_d)^{-1}$
precip-brightening $F_0$	$\pm 3.07$	$\pm 2.68$	$\pm 2.65$	$\pm 2.64$	$W m^{-2} \ln(N_d)^{-1}$

**Table S1.**  $F_0$  uncertainties reported for cloud top height (CTH) quartiles, corresponding to Fig. 6a.

LTS quartile ranges	(18.0] K	[18.0, 19.8] K	[19.8, 21.6] K	[21.6) K	Unit
quartile-mean occurrence-weighted $F_0$	$\pm 5.58$	$\pm 5.60$	$\pm 5.61$	$\pm 5.62$	$W m^{-2} \ln(N_d)^{-1}$
Twomey-brightening $F_0$	$\pm 2.57$	$\pm 3.23$	$\pm 3.53$	$\pm 4.16$	$W m^{-2} \ln(N_d)^{-1}$
entrainment-darkening $F_0$	$\pm 3.46$	$\pm 3.47$	$\pm 3.42$	$\pm 3.27$	$W m^{-2} \ln(N_d)^{-1}$
precip-brightening $F_0$	$\pm 3.54$	$\pm 2.81$	$\pm 2.32$	$\pm 1.88$	$W m^{-2} \ln(N_d)^{-1}$

**Table S2.**  $F_0$  uncertainties reported for lower-tropospheric stability (LTS) quartiles, corresponding to Fig. 7a.

RH <sub>ft</sub> quartile ranges	(12.3] %	[12.3, 20.1] %	[20.1, 33.9] %	[33.9) %	Unit
quartile-mean occurrence-weighted $F_0$	$\pm 5.63$	$\pm 5.63$	$\pm 5.64$	$\pm 5.65$	$W m^{-2} \ln(N_d)^{-1}$
Twomey-brightening $F_0$	$\pm 3.77$	$\pm 3.53$	$\pm 3.34$	$\pm 2.90$	$W m^{-2} \ln(N_d)^{-1}$
entrainment-darkening $F_0$	$\pm 3.58$	$\pm 3.52$	$\pm 3.46$	$\pm 3.09$	$W m^{-2} \ln(N_d)^{-1}$
precip-brightening $F_0$	$\pm 2.16$	$\pm 2.41$	$\pm 2.80$	$\pm 3.60$	$W m^{-2} \ln(N_d)^{-1}$

**Table S3.**  $F_0$  uncertainties reported for free-tropospheric relative humidity (RH<sub>ft</sub>) quartiles, corresponding to Fig. 8a.

SST quartile ranges	(292.3] K	[292.3, 293.6] K	[293.6, 294.8] K	[294.8) K	Unit
quartile-mean occurrence-weighted $F_0$	$\pm 5.59$	$\pm 5.63$	$\pm 5.59$	$\pm 5.61$	$W m^{-2} \ln(N_d)^{-1}$
Twomey-brightening $F_0$	$\pm 3.98$	$\pm 3.69$	$\pm 3.53$	$\pm 3.05$	$W m^{-2} \ln(N_d)^{-1}$
entrainment-darkening $F_0$	$\pm 2.78$	$\pm 3.45$	$\pm 3.20$	$\pm 3.68$	$W m^{-2} \ln(N_d)^{-1}$
precip-brightening $F_0$	$\pm 2.78$	$\pm 2.47$	$\pm 2.70$	$\pm 2.78$	$W m^{-2} \ln(N_d)^{-1}$

**Table S4.**  $F_0$  uncertainties reported for sea surface temperature (SST) quartiles, corresponding to Fig. 9a.