



(b)

**PCA inputs: 8 variables (differences between beginning and end of the trajectory, and along-trajectory means for CCFs: WS, q,  $\omega$ , and EIS)**

2 CCFs (SST and  $P_{MSL}$ )  
and cloud variables are  
excluded from PCA.

	PC1	-0.03	-0.38	0.02	0.78	-0.43	-0.72	0.48	0.48	-0.07	-0.47	0.21	-0.04	-0.06	-0.17	0.15	-0.1
PC2	0.6	-0.56	0.23	0.39	-0.15	0.29	0	-0.74	-0.34	0.38	0.12	-0.05	-0.37	-0.19	0.02	0.19	
	$\Delta WS_{10m} (m s^{-1})$	$\Delta q (g kg^{-1})$	$\Delta \omega (Pa s^{-1})$	$\Delta EIS (K)$	$WS_{10m} (m s^{-1})$	$q (g kg^{-1})$	$\omega (Pa s^{-1})$	EIS (K)	CF (%)	SST (°C)	$P_{MSL} (hPa)$	$\log(CERES LWP)$	$\log(N_d)$	$\log(< N_a >)$	MODIS CTH (km)	$\log(\text{Precip})$	