

(a) Determined using ModelE output hydrometeor mixing ratios												
Simulated hydrometeor-containing grid cells												
	Containing only liquid phase			Containing mixed phase			Containing only ice phase			Relative to total number of simulated grid cells		
Frequency of occurrence (%)	2.4			59.8			37.8			43.5		
(b) Determined using flexible objective thresholds estimated using model output mixing ratios												
Simulated hydrometeor-containing grid cells containing detectable hydrometeor amounts												
	Classified as liquid phase			Classified as mixed phase			Classified as ice phase			Relative to simulated hydrometer-containing grid cells		
	Median	1/2 IQR		Median	1/2 IQR		Median	1/2 IQR		Median	1/2 IQR	
Frequency of occurrence (%)	11.3	±	0.6	19.2	±	1.8	68.8	±	3.1	78.3	±	1.8
False positive (%)	0.5	±	0.0	1.1	±	0.3	0.0	±	0.0	1.7	±	0.3
False negative (%)	0.2	±	0.0	Approximately equal to sum of questionable row: (~ 5.2 ± 0.9)			1.5	±	0.2	1.7	±	0.3
Questionable (%)	1.4	±	0.0				3.8	±	0.9	5.2	±	0.9
Total error (%)										6.9	±	1.1
(c) Determined using fixed empirical thresholds modified from Shupe (2007)												
Simulated hydrometeor-containing grid cells containing detectable hydrometeor amounts												
	Classified as liquid phase			Classified as mixed phase			Classified as ice phase			Relative to simulated hydrometer-containing grid cells		
	Median	1/2 IQR		Median	1/2 IQR		Median	1/2 IQR		Median	1/2 IQR	
Frequency of occurrence (%)	12.5	±	0.4	13.1	±	2.4	71.5	±	3.7	78.2	±	1.8
False positive (%)	0.5	±	0.0	0.3	±	0.0	0.1	±	0.0	0.9	±	0.0
False negative (%)	0.1	±	0.0	Approximately equal to sum of questionable row: (~ 6.7 ± 1.1)			0.7	±	0.0	0.9	±	0.0
Questionable (%)	1.4	±	0.0				5.3	±	1.1	6.7	±	1.1
Total error (%)										7.6	±	1.1