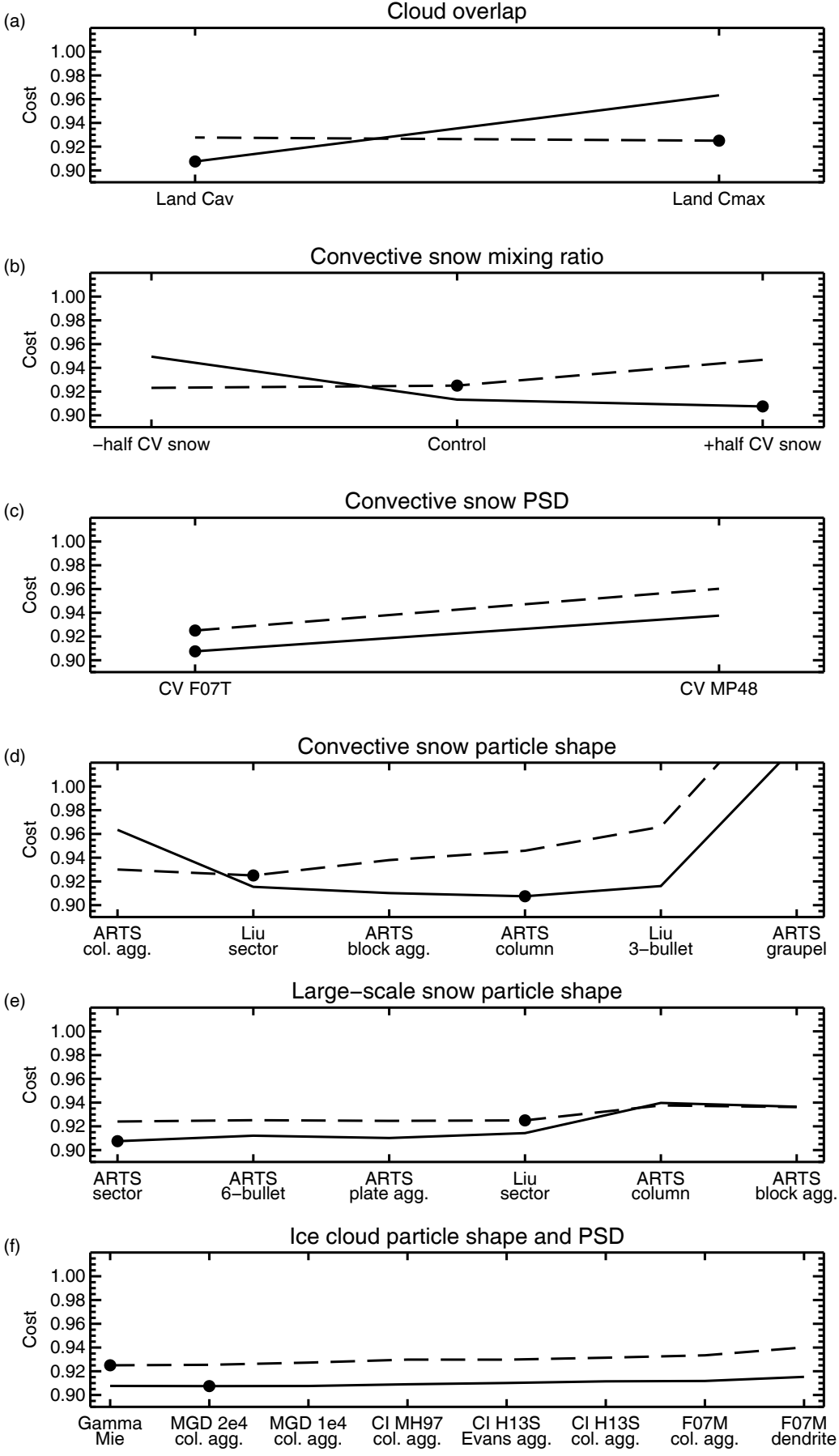
(a)
Cloud overlap
Cost
1.00
0.98
0.96
0.94
0.92
0.90
Land Cav
Land Cmax
(b)
Convective snow mixing ratio
Cost
1.00
0.98
0.96
0.94
0.92
0.90
−half CV snow
Control
+half CV snow
(c)
Convective snow PSD
Cost
1.00
0.98
0.96
0.94
0.92
0.90
CV F07T
CV MP48
(d)
Convective snow particle shape
Cost
1.00
0.98
0.96
0.94
0.92
0.90
ARTS col. agg.
Liu sector
ARTS block agg.
ARTS column
Liu 3−bullet
ARTS graupel
(e)
Large−scale snow particle shape
Cost
1.00
0.98
0.96
0.94
0.92
0.90
ARTS sector
ARTS 6−bullet
ARTS plate agg.
Liu sector
ARTS column
ARTS block agg.
(f)
Ice cloud particle shape and PSD
Cost
1.00
0.98
0.96
0.94
0.92
0.90
Gamma Mie
MGD 2e4 col. agg.
MGD 1e4 col. agg.
CI MH97 col. agg.
CI H13S Evans agg.
CI H13S col. agg.
F07M col. agg.
F07M dendrite