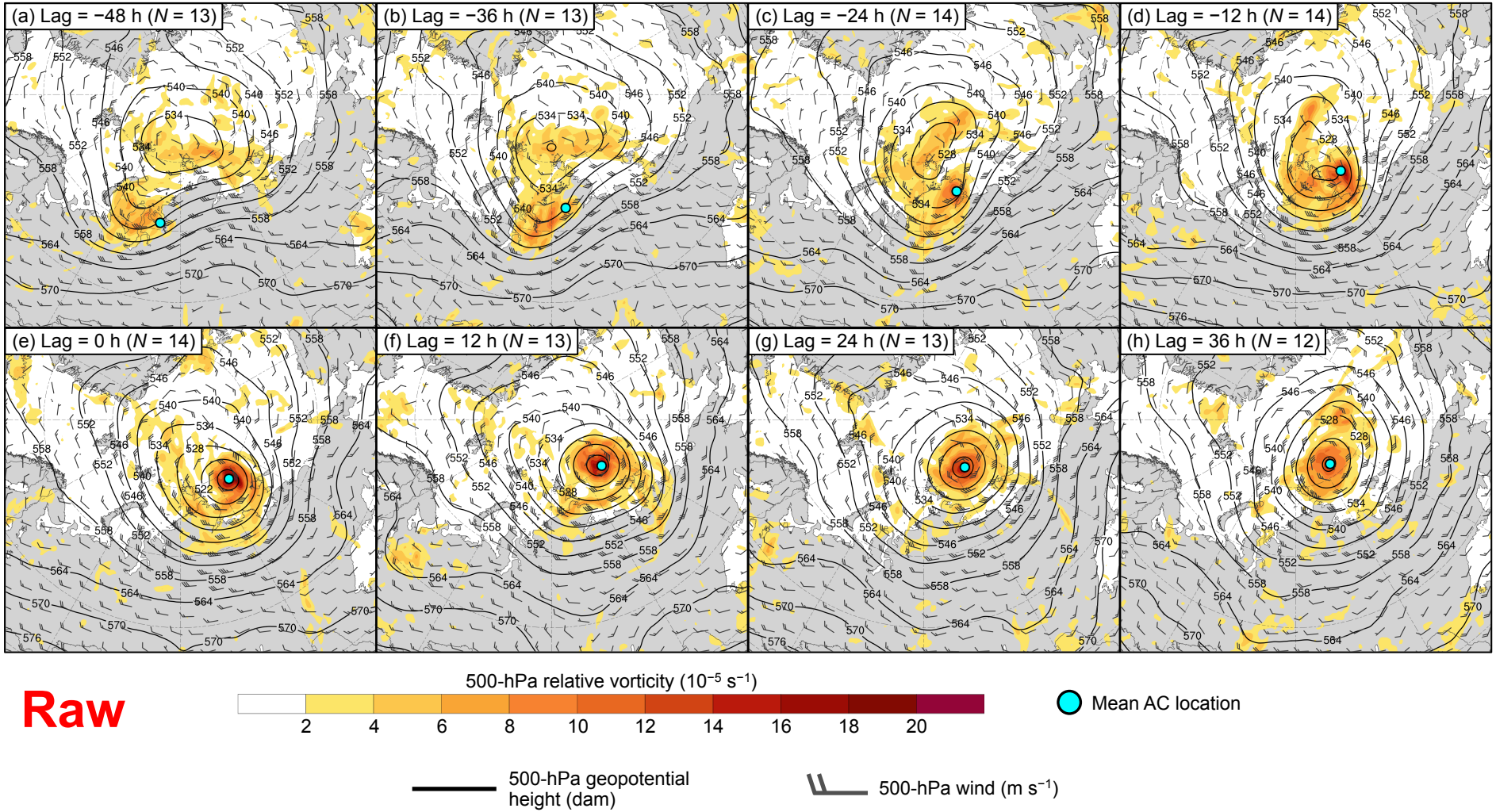
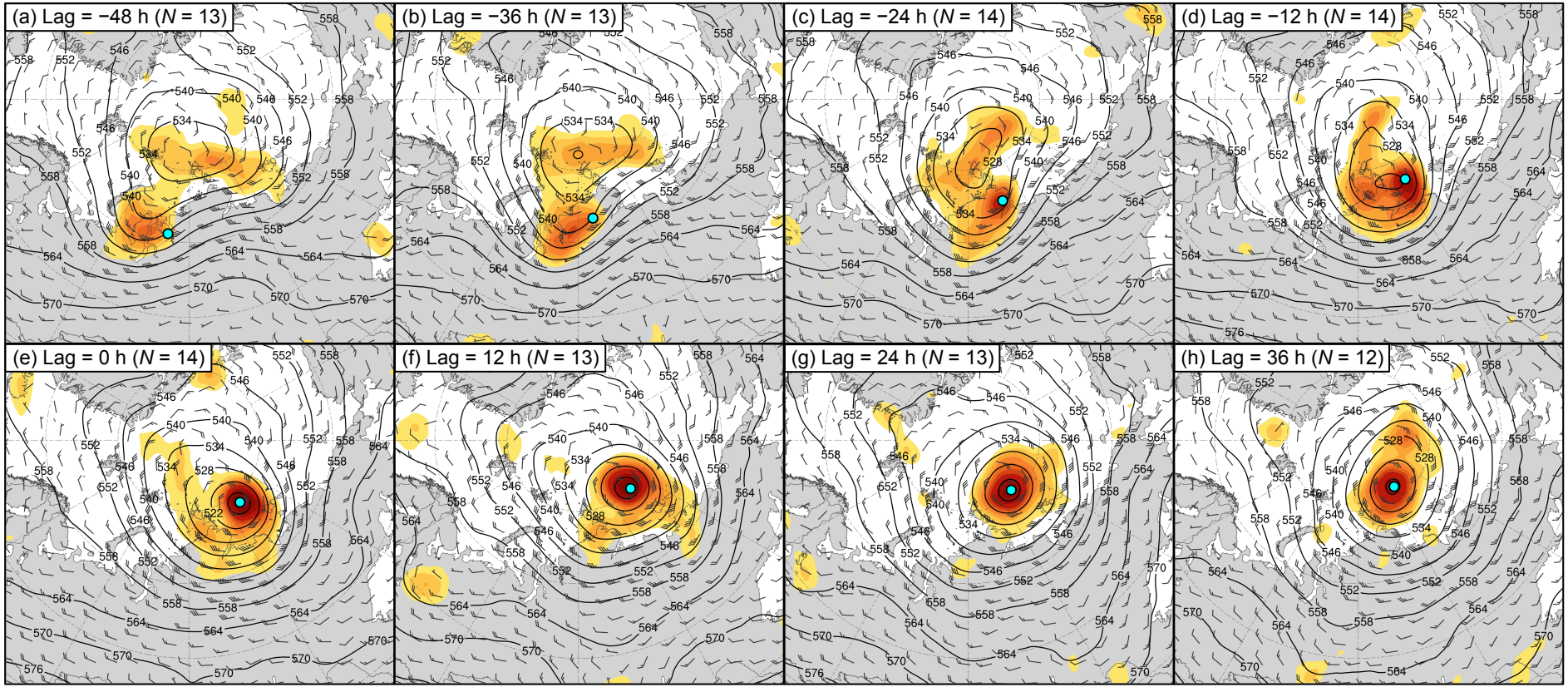

(a) Lag = −48 h (N = 13)
(b) Lag = −36 h (N = 13)
(c) Lag = −24 h (N = 14)
(d) Lag = −12 h (N = 14)
(e) Lag = 0 h (N = 14)
(f) Lag = 12 h (N = 13)
(g) Lag = 24 h (N = 13)
(h) Lag = 36 h (N = 12)
Raw
500-hPa relative vorticity (10⁻⁵ s⁻¹)
2 4 6 8 10 12 14 16 18 20
Mean AC location
500-hPa geopotential height (dam)
500-hPa wind (m s⁻¹)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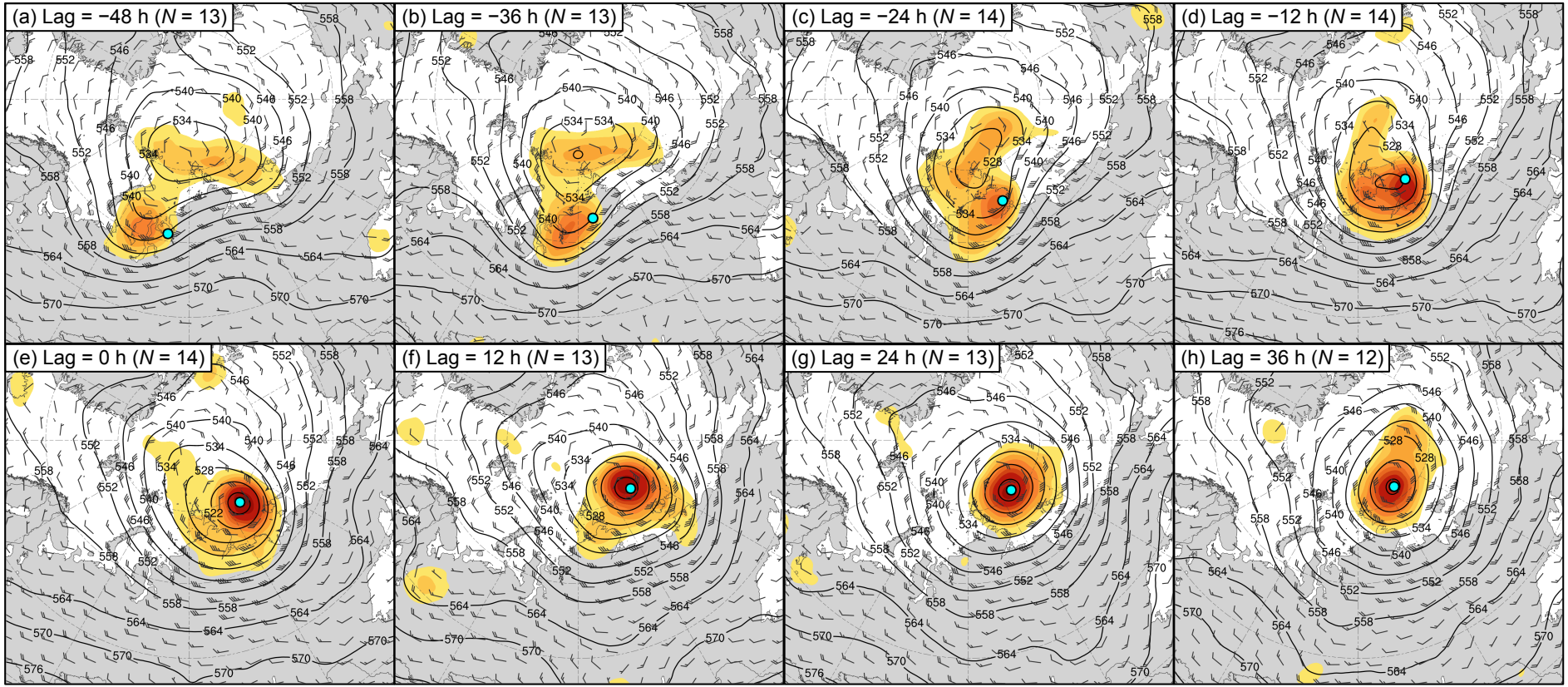
(g) Lag = 24 h (N = 13)
(h) Lag = 36 h (N = 12)
200 km
200-km area-averaged 500-hPa relative vorticity (10⁻⁵ s⁻¹)
2 3 4 5 6 7 8 10 12 14
Mean AC location
500-hPa geopotential height (dam)
500-hPa wind (m s⁻¹)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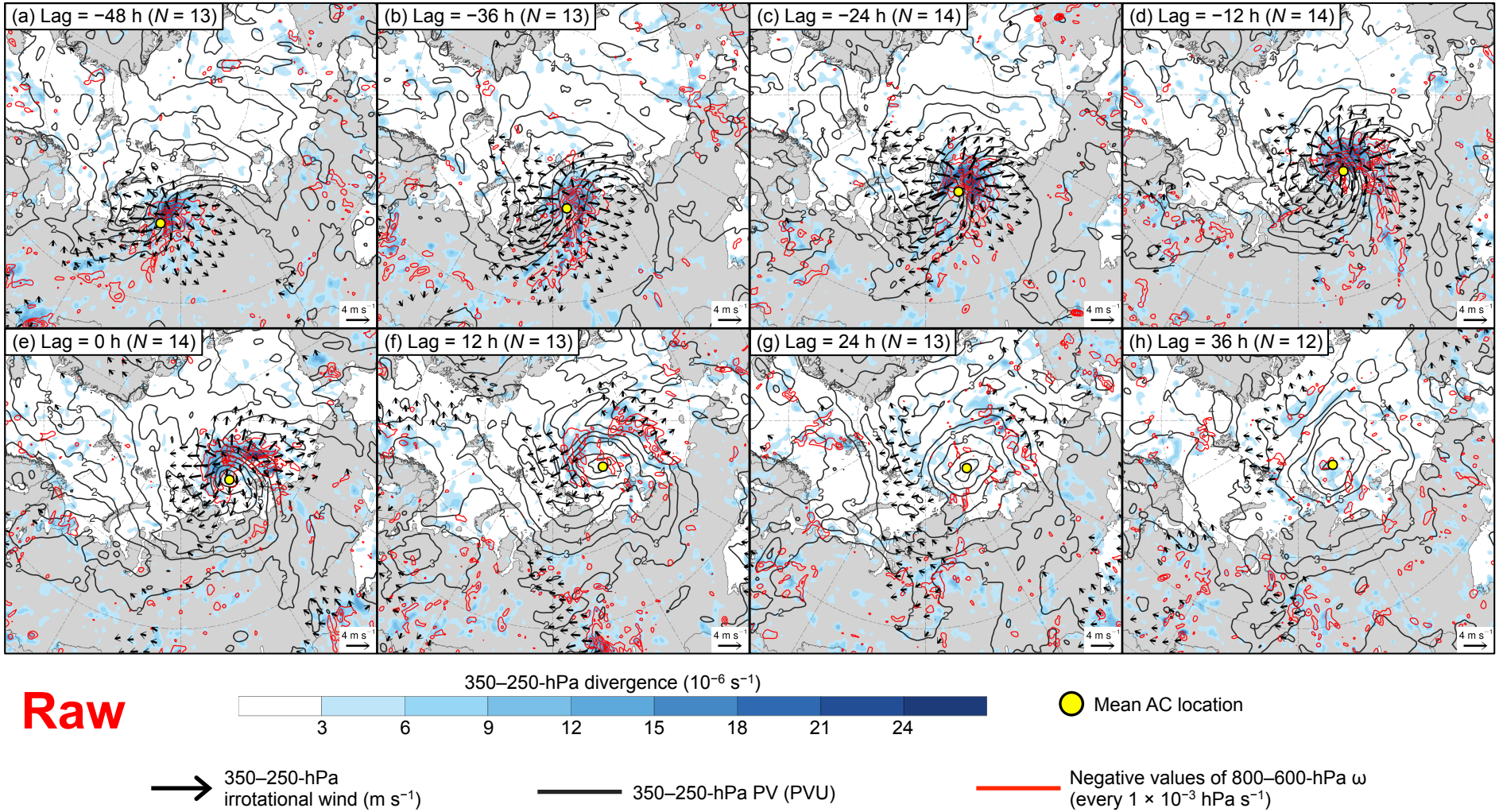
(h) Lag = 36 h (N = 12)
300 km
300-km area-averaged 500-hPa relative vorticity (10⁻⁵ s⁻¹)
2 3 4 5 6 7 8 10 12 14
Mean AC location
500-hPa geopotential height (dam)
500-hPa wind (m s⁻¹)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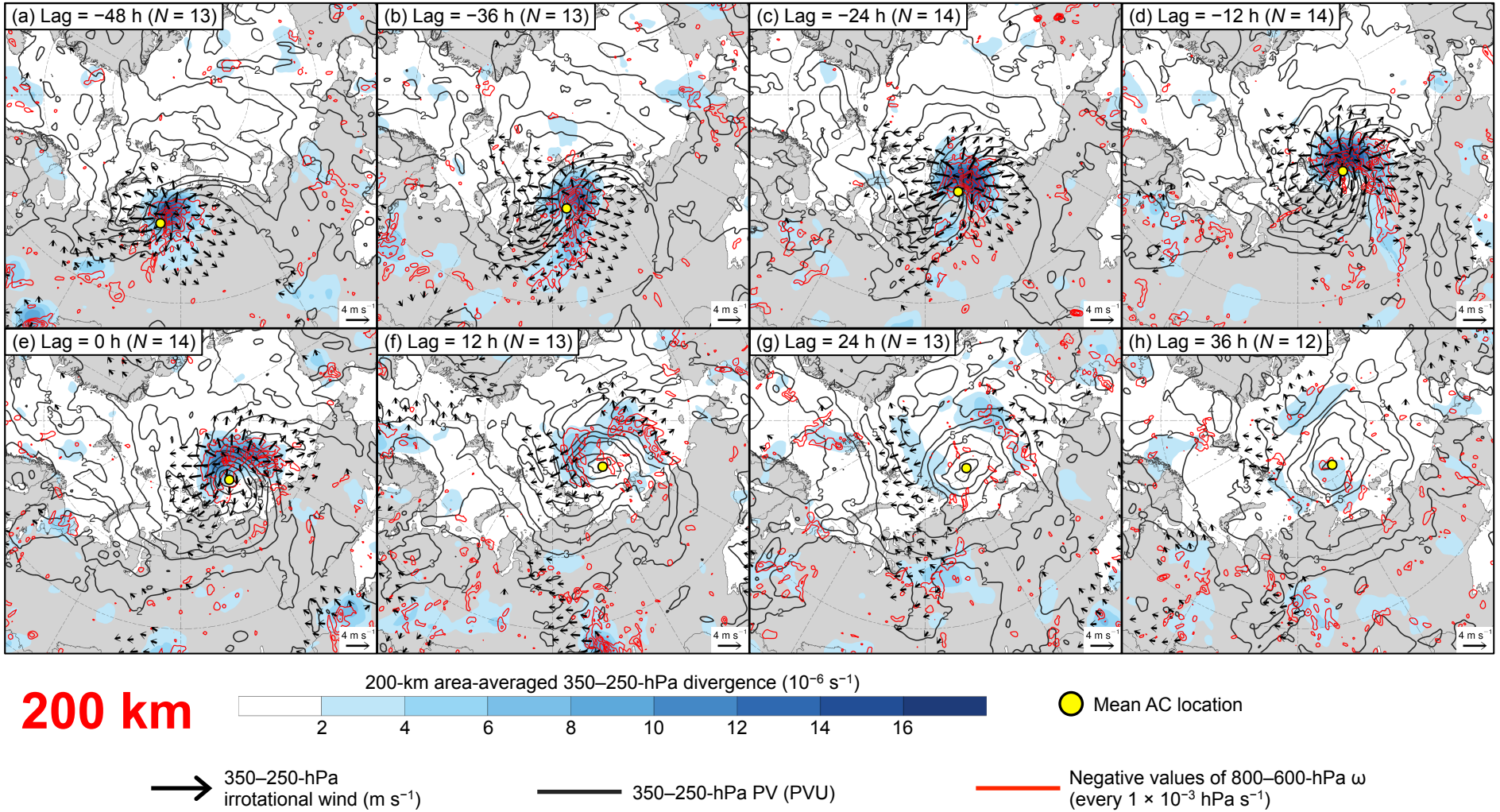
(g) Lag = 24 h (N = 13)
(h) Lag = 36 h (N = 12)
4 m s⁻¹
Raw
350–250-hPa divergence (10⁻⁶ s⁻¹)
3
6
9
12
15
18
21
24
Mean AC location
350–250-hPa irrotational wind (m s⁻¹)
350–250-hPa PV (PVU)
Negative values of 800–600-hPa ω (every 1 × 10⁻³ hPa s⁻¹)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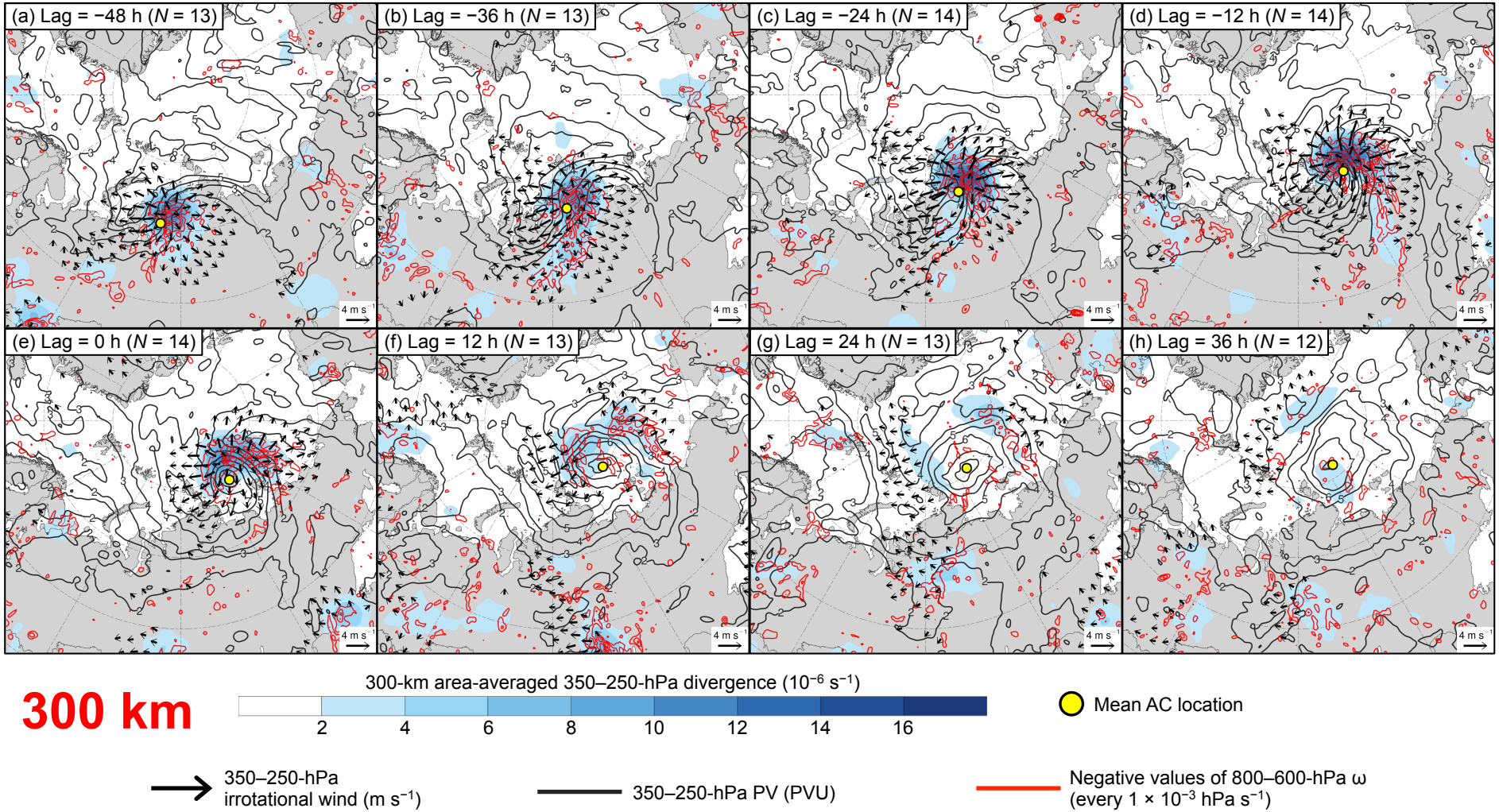
(h) Lag = 36 h (N = 12)
4 m s⁻¹
200 km
200-km area-averaged 350–250-hPa divergence (10⁻⁶ s⁻¹)
2
4
6
8
10
12
14
16
Mean AC location
350–250-hPa irrotational wind (m s⁻¹)
350–250-hPa PV (PVU)
Negative values of 800–600-hPa ω (every 1 × 10⁻³ hPa s⁻¹)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300 km
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Mean AC location
350–250-hPa irrotational wind (m s⁻¹)
350–250-hPa PV (PVU)
Negative values of 800–600-hPa ω (every 1 × 10⁻³ hPa s⁻¹)