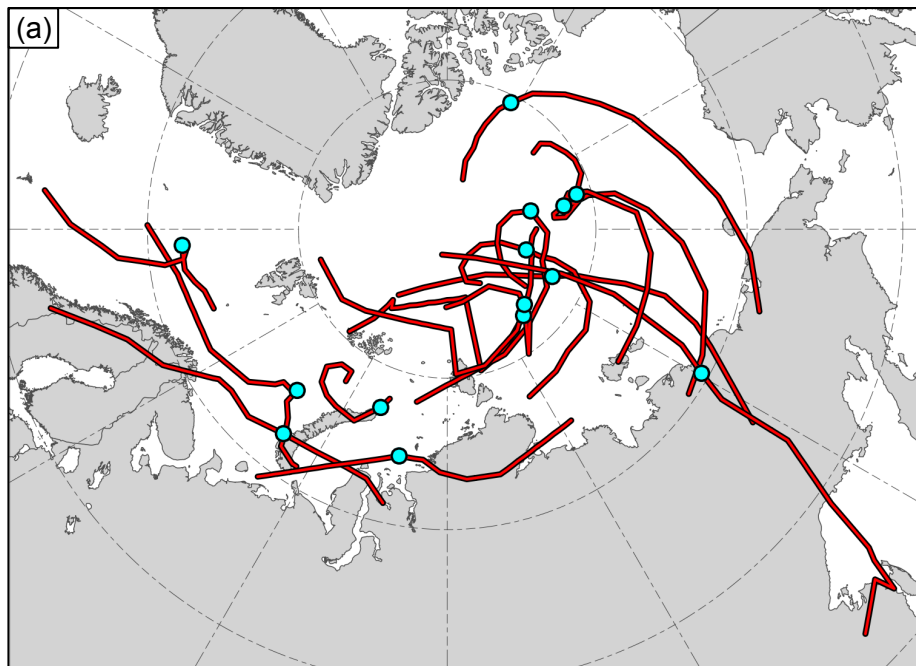
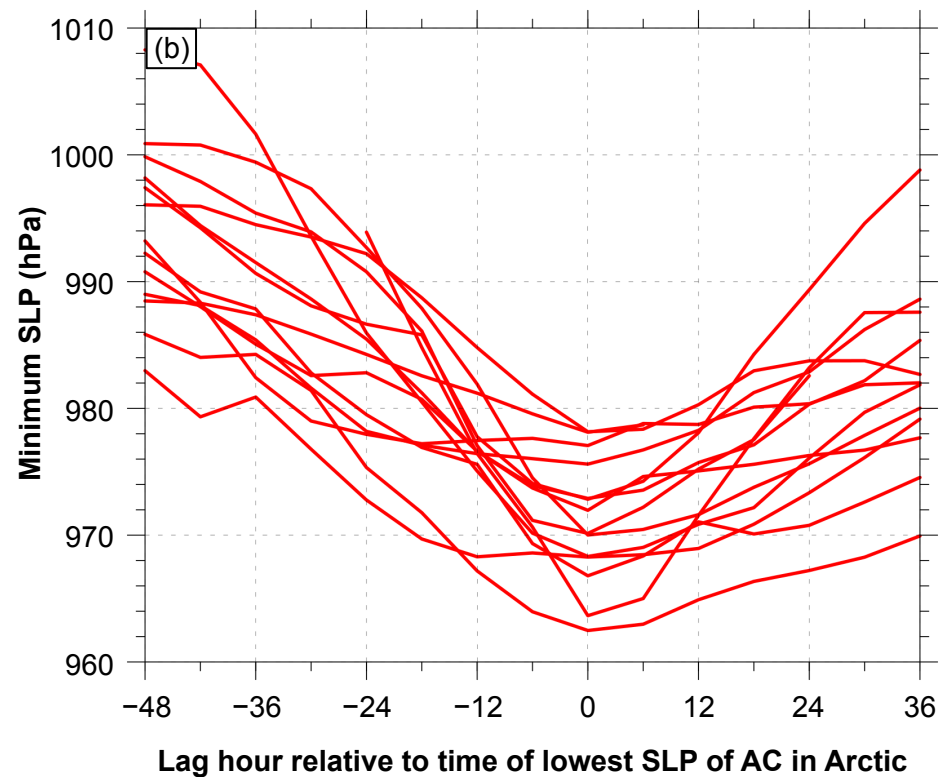


Fig. 1



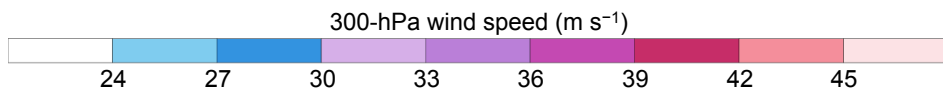
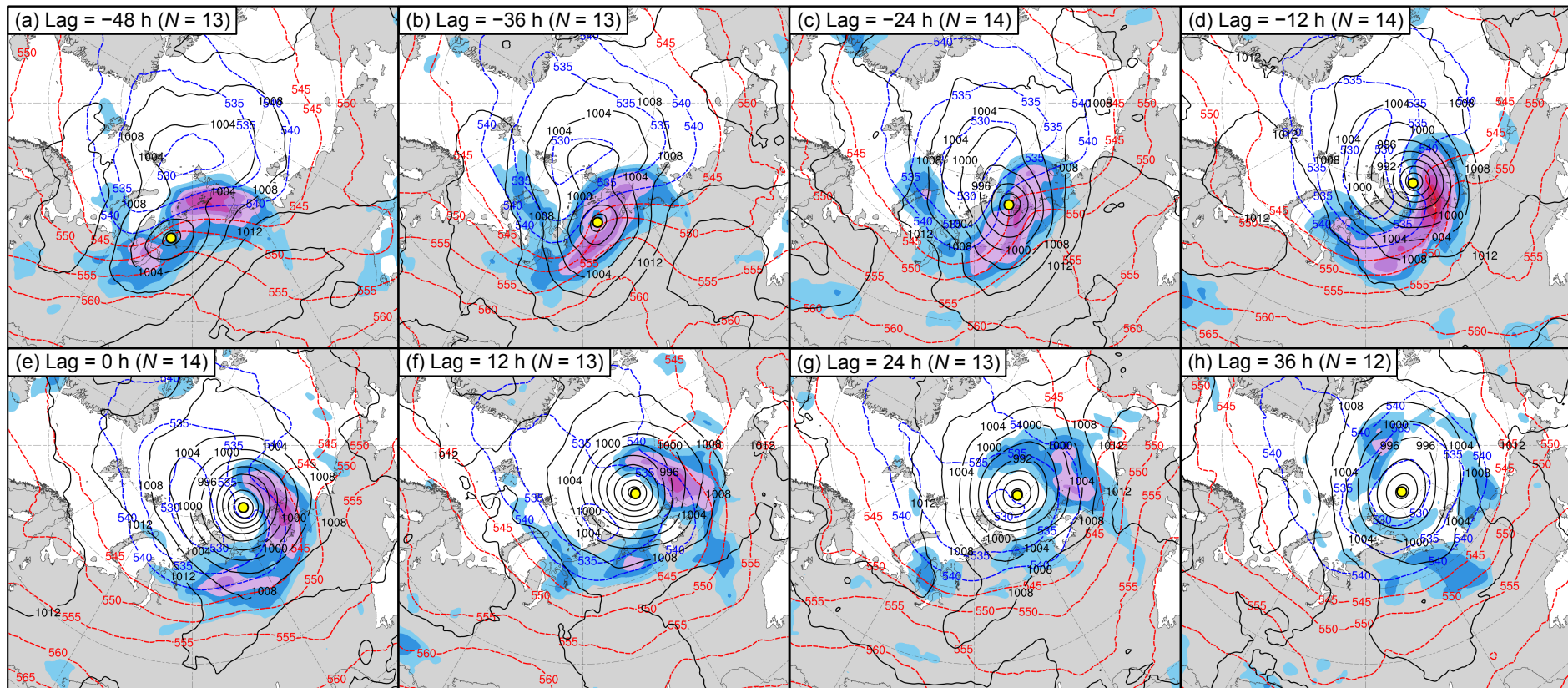
● AC location at lag 0 h (time of lowest SLP of AC in Arctic)

Red lines show tracks of ACs during lag -48 h to lag 36 h, when valid.



Lag hour relative to time of lowest SLP of AC in Arctic

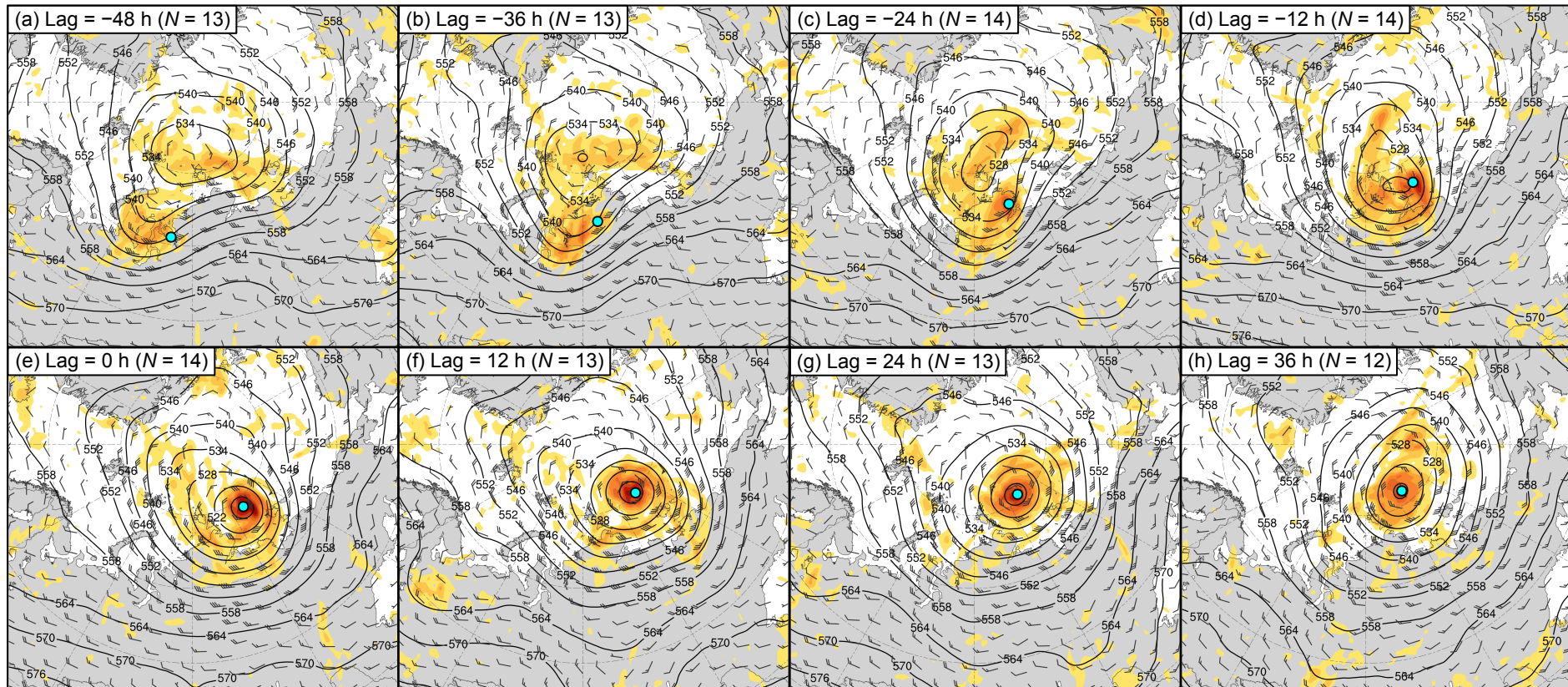
Time series of minimum SLP (hPa) of ACs during lag -48 h to lag 36 h, when valid

Fig. 2

● Mean AC location

— SLP (hPa)

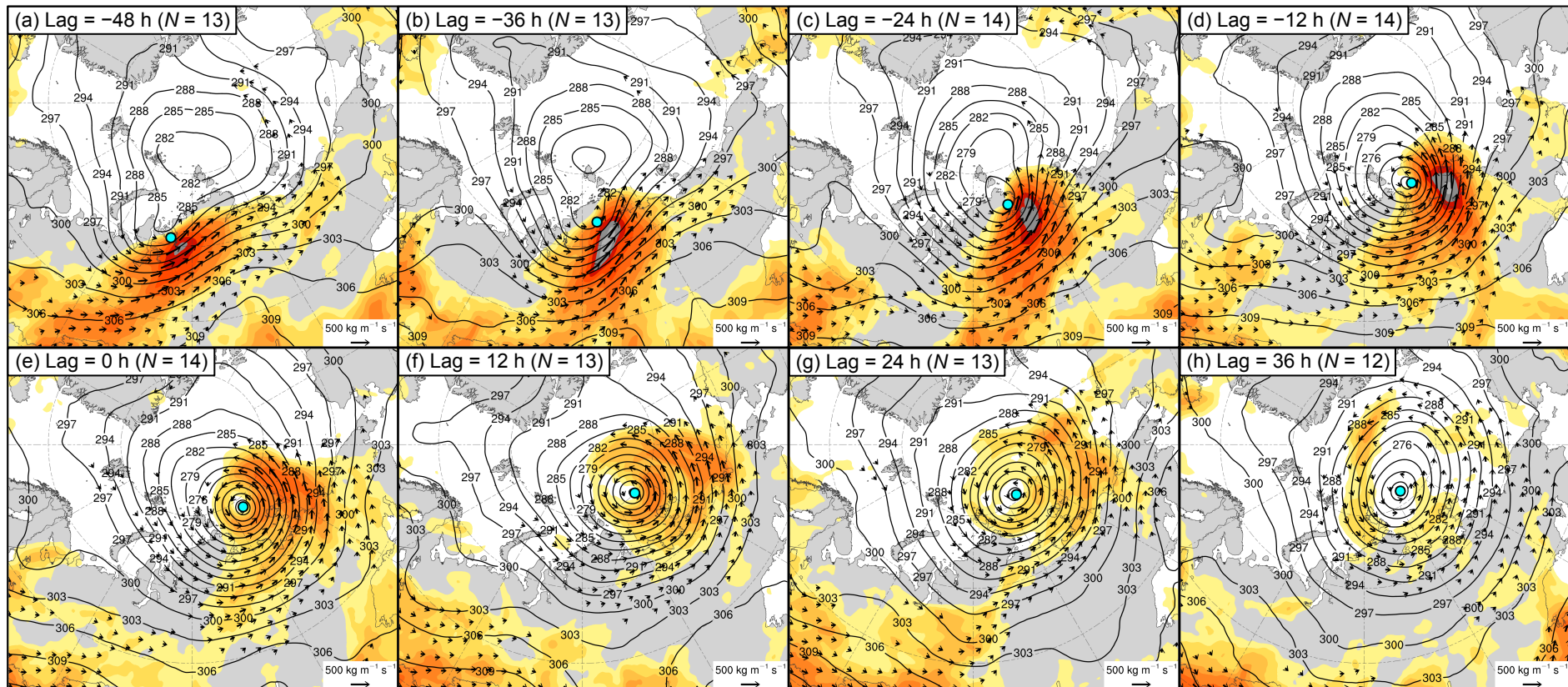
--- 1000–500-hPa
thickness (dam)

Fig. 3500-hPa relative vorticity (10^{-5} s^{-1})

2 4 6 8 10 12 14 16 18 20

500-hPa geopotential
height (dam)500-hPa wind (m s^{-1})

● Mean AC location

Fig. 4

Integrated vapor transport (IVT) ($\text{kg m}^{-1} \text{s}^{-1}$)

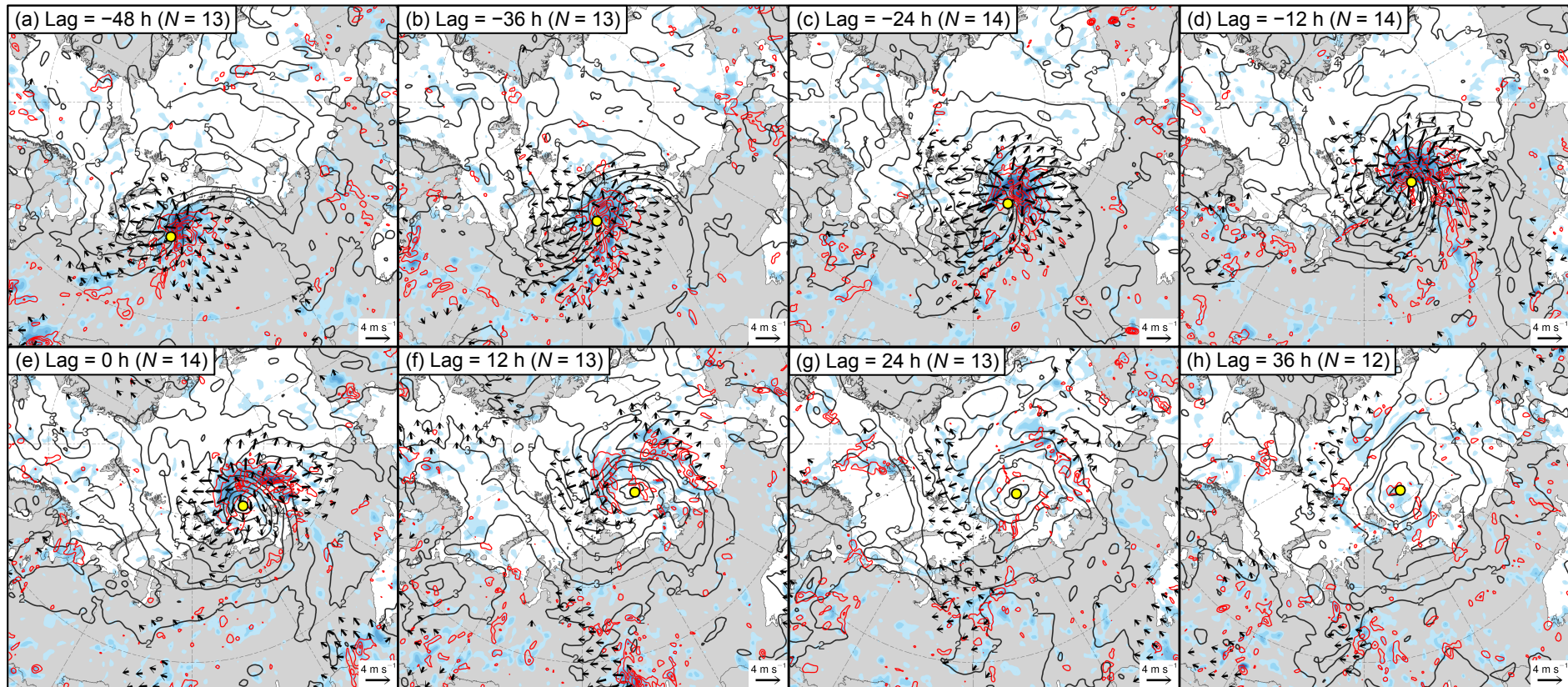


● Mean AC location

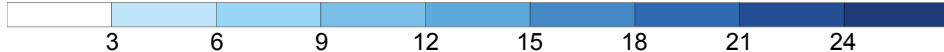
→ IVT ($\text{kg m}^{-1} \text{s}^{-1}$)

— 700-hPa geopotential height (dam)

Fig. 5



350–250-hPa divergence (10^{-6} s^{-1})

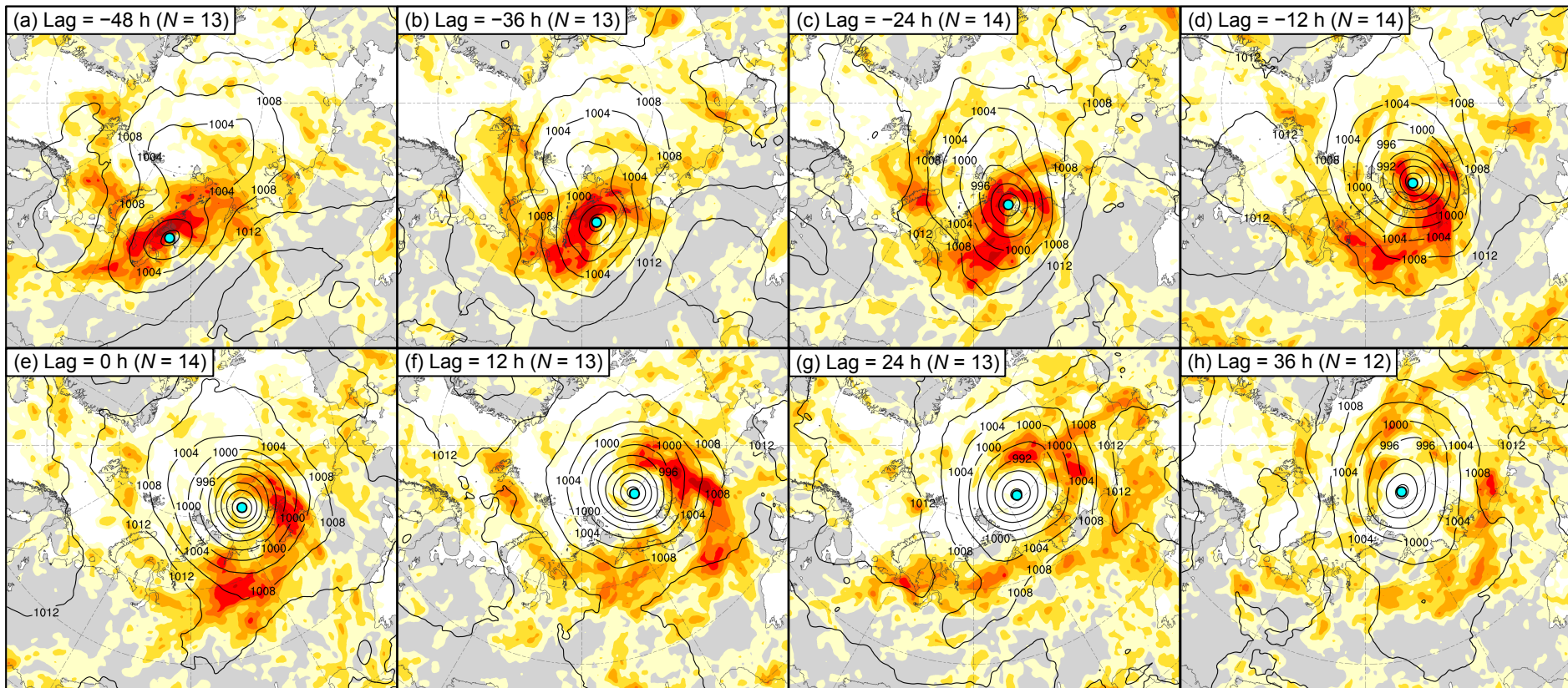


● Mean AC location

→ 350–250-hPa irrotational wind (m s^{-1})

— 350–250-hPa PV (PVU)

— Negative values of 800–600-hPa ω (every $1 \times 10^{-3} \text{ hPa s}^{-1}$)

Fig. 6850-600-hPa Eady growth rate (day⁻¹)

Mean AC location

SLP (hPa)