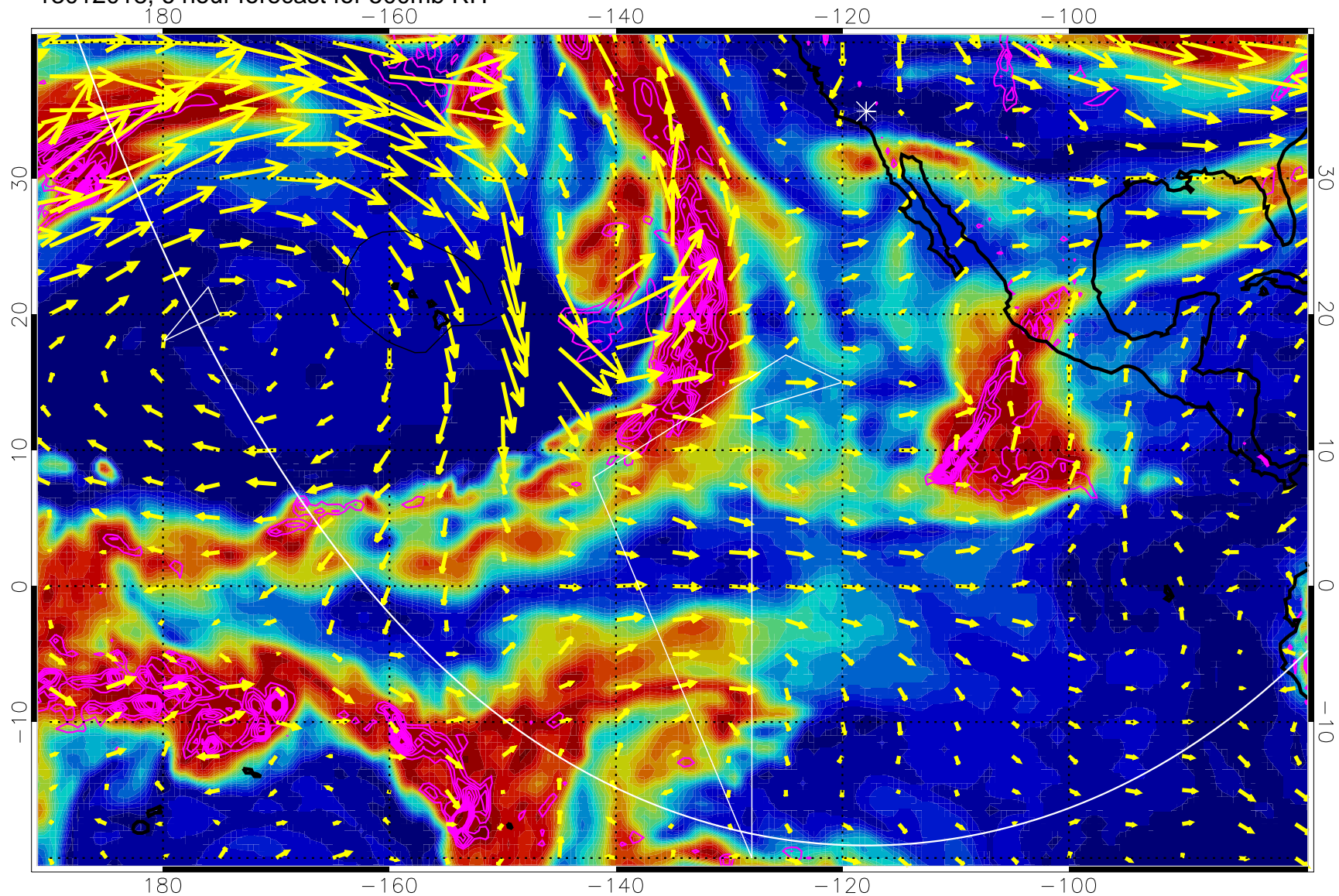


13012018, 6 hour forecast for 500mb RH



Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

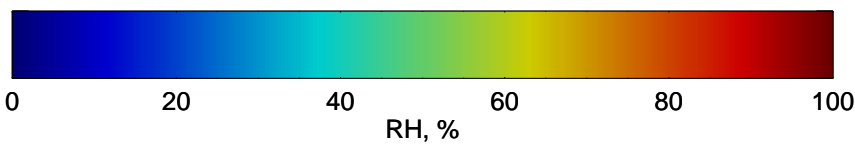
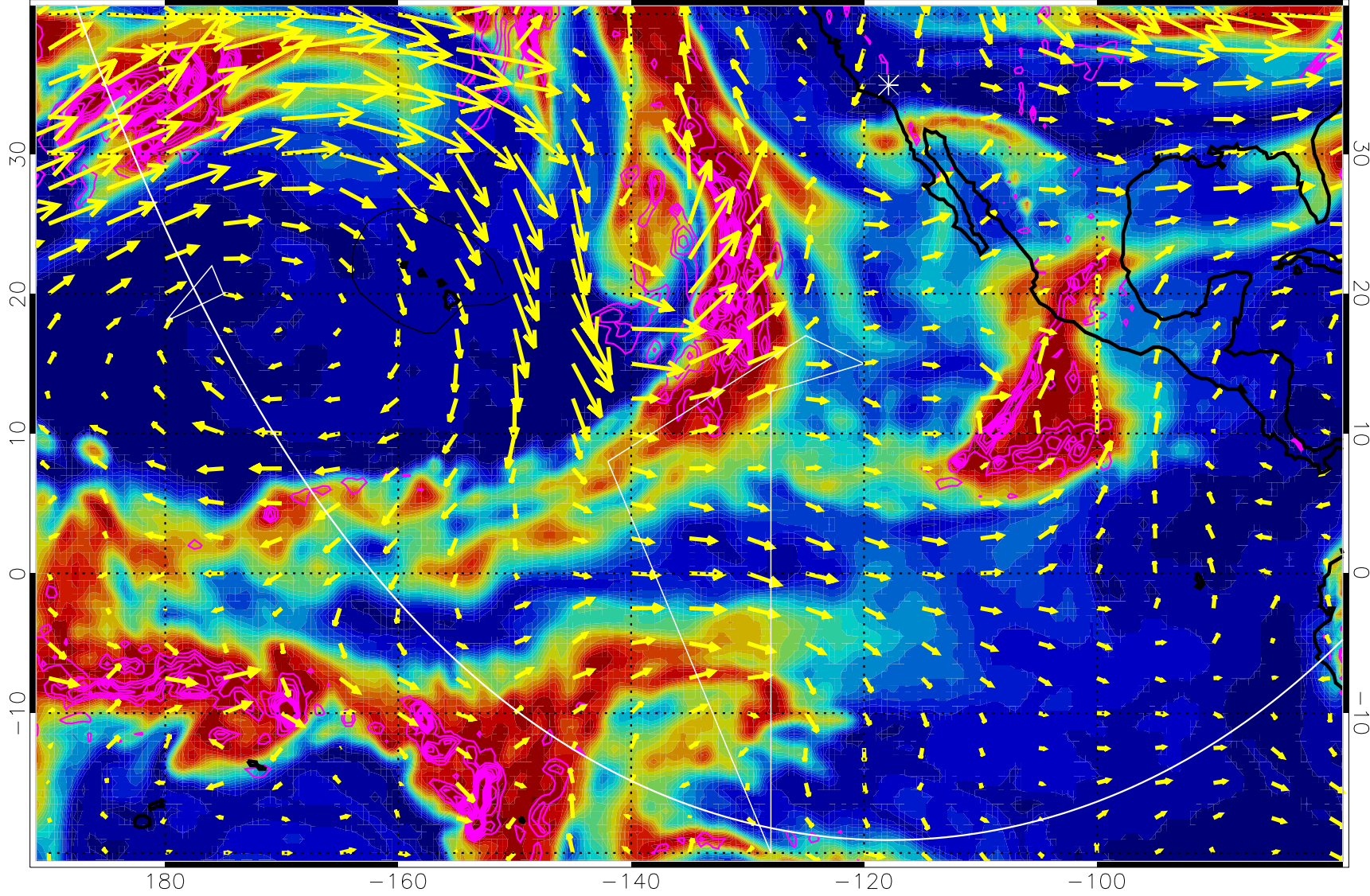
EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012100, 12 hour forecast for 500mb RH

180 -160 -140 -120 -100



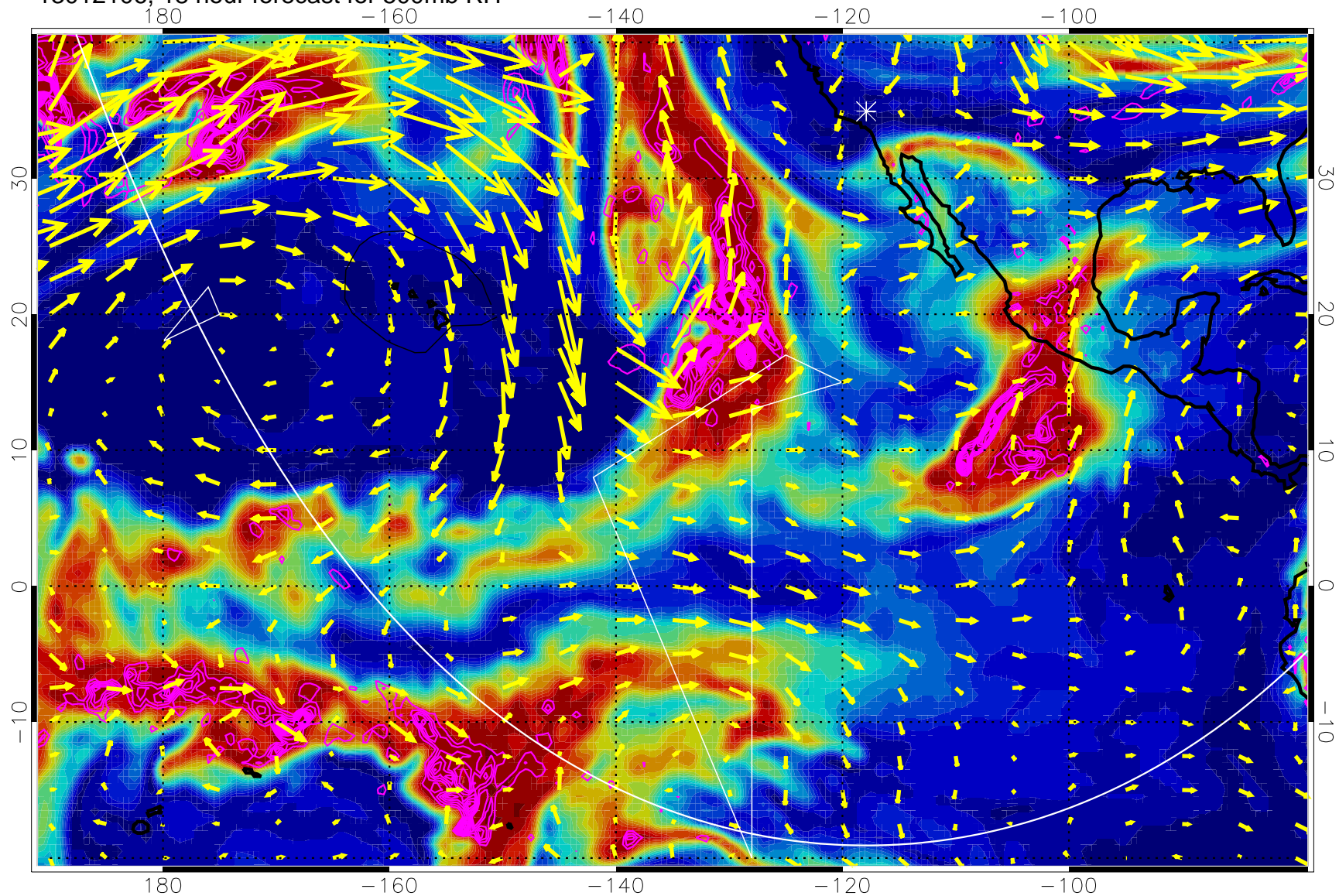
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012106, 18 hour forecast for 500mb RH



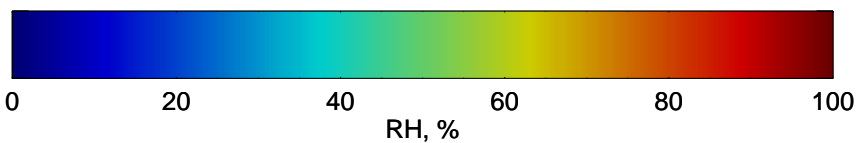
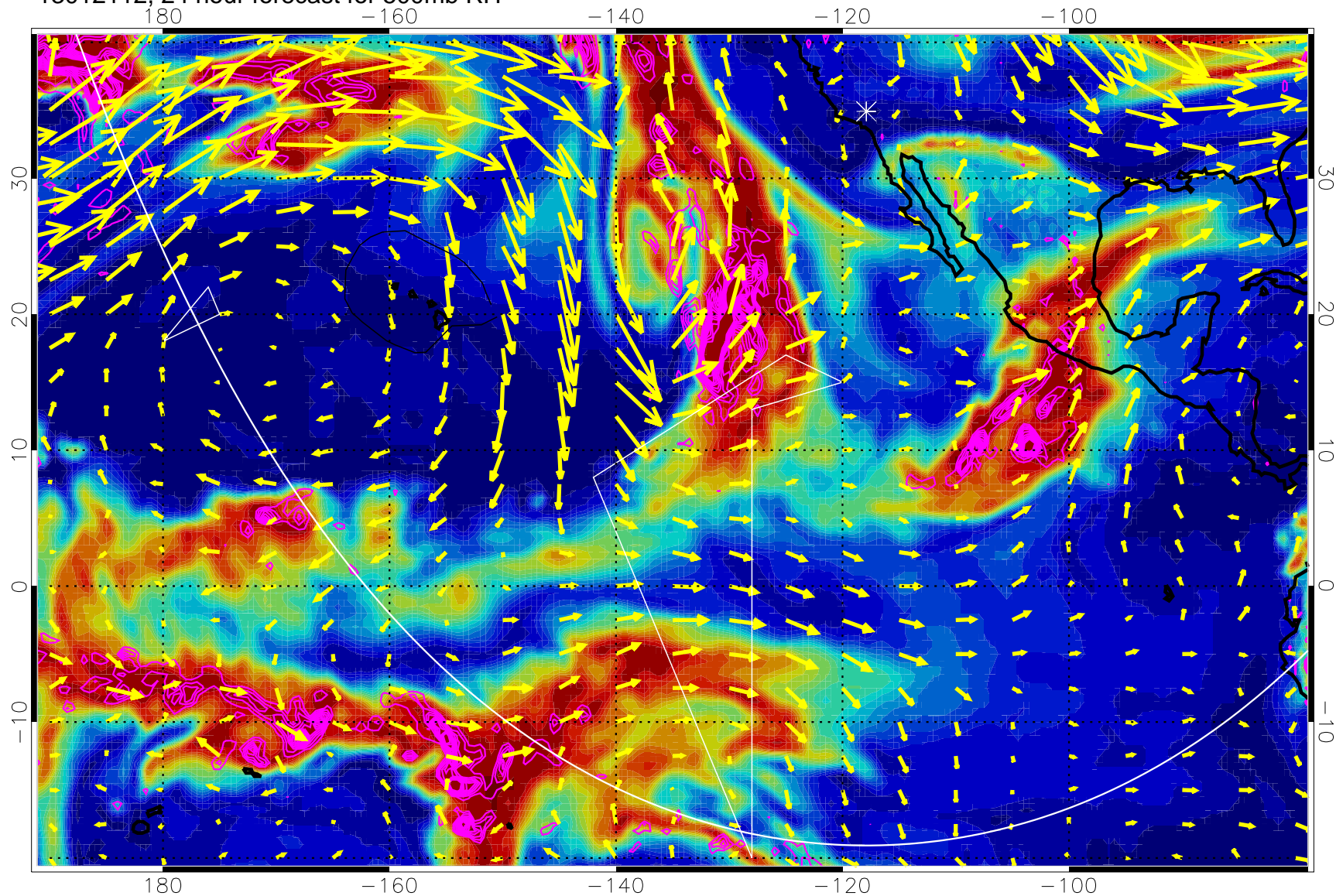
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012112, 24 hour forecast for 500mb RH



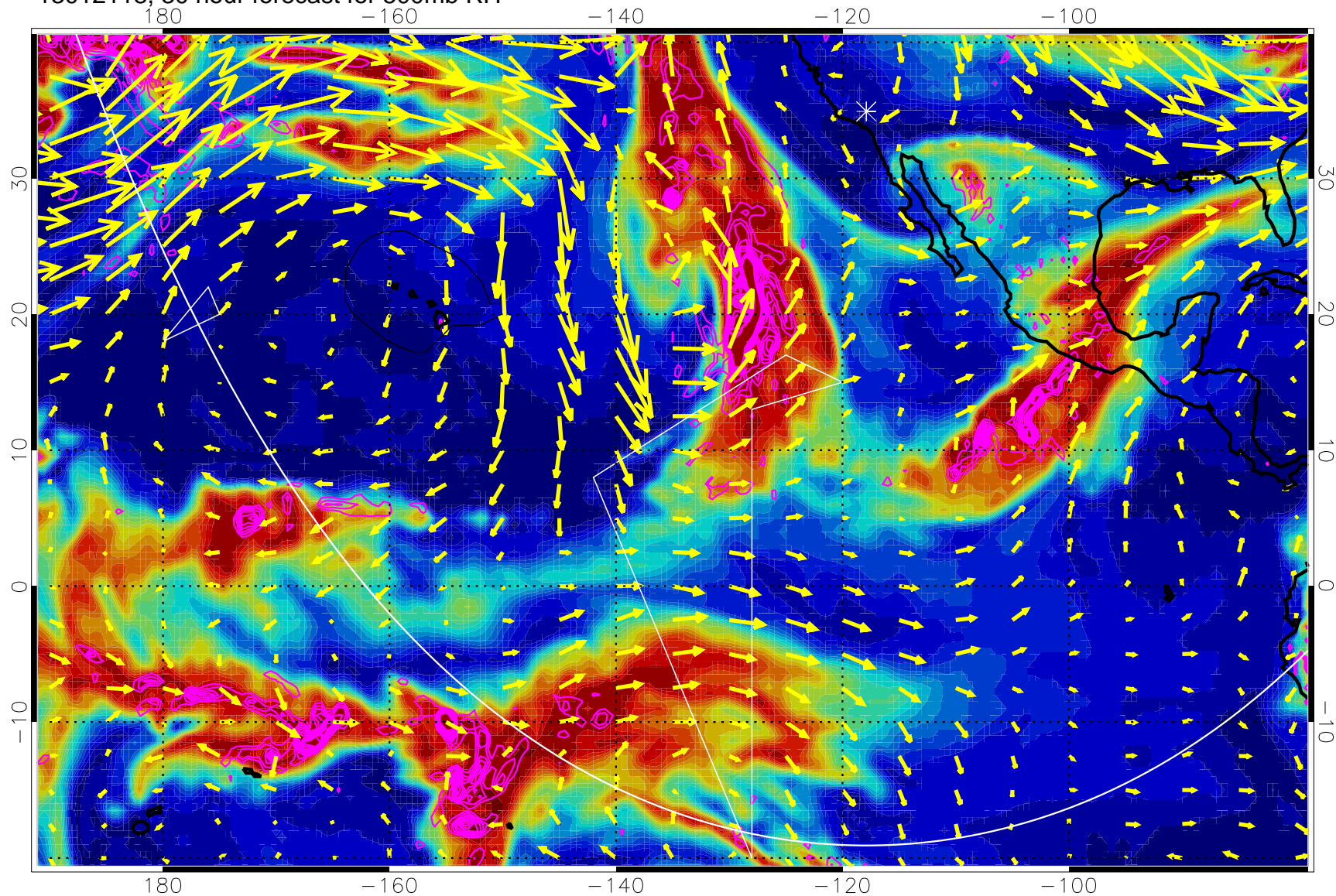
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012118, 30 hour forecast for 500mb RH



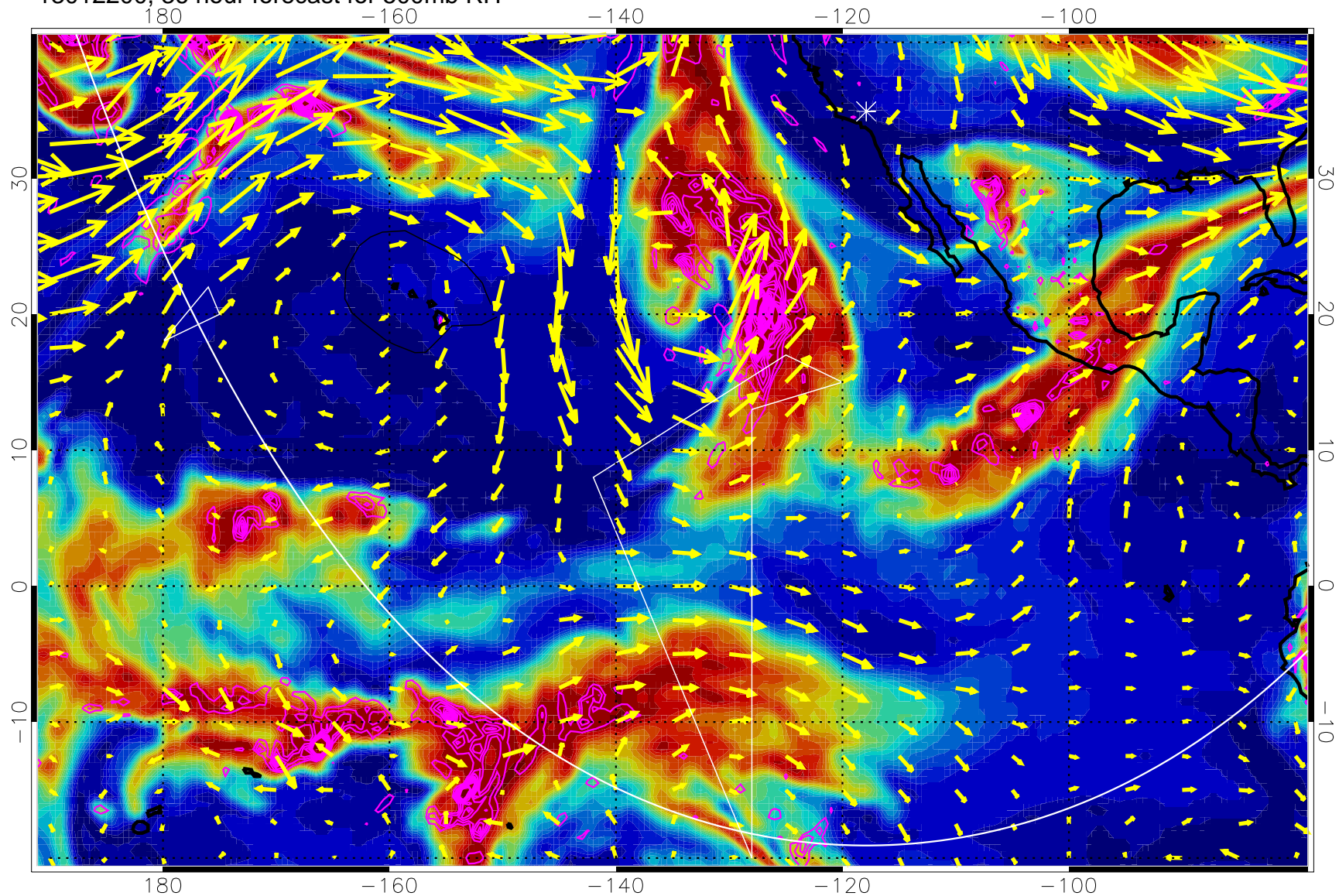
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012200, 36 hour forecast for 500mb RH



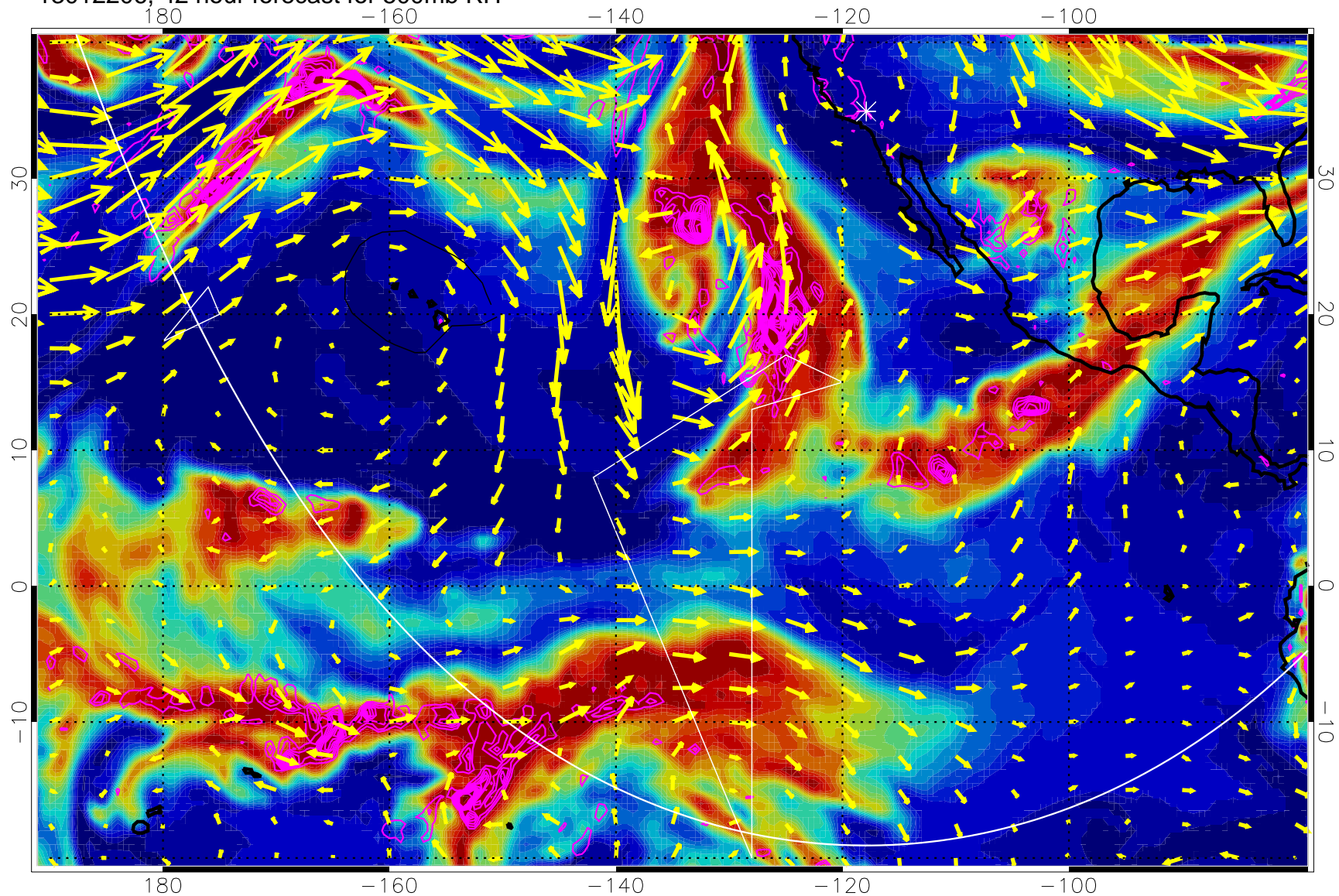
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012206, 42 hour forecast for 500mb RH



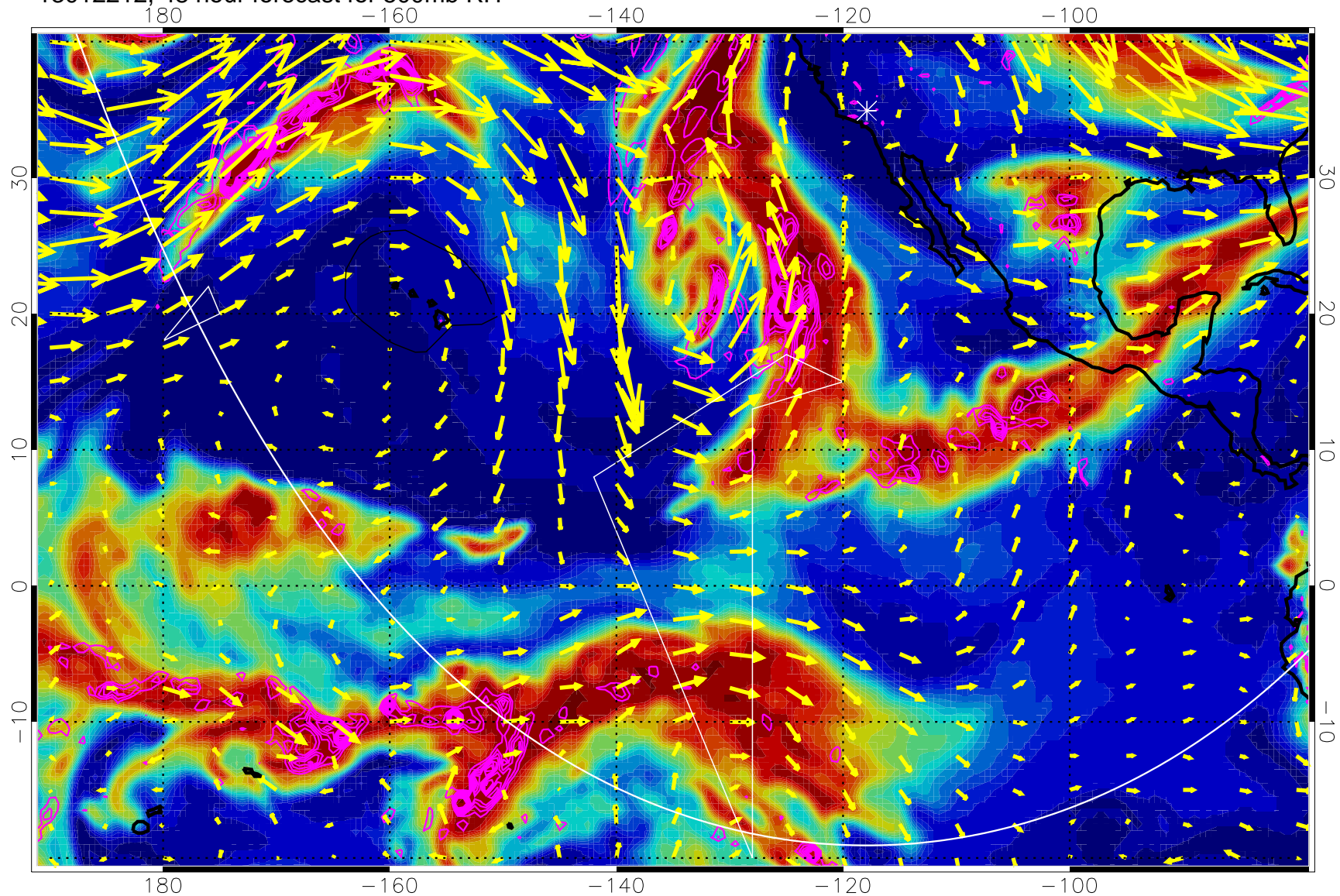
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012212, 48 hour forecast for 500mb RH



Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

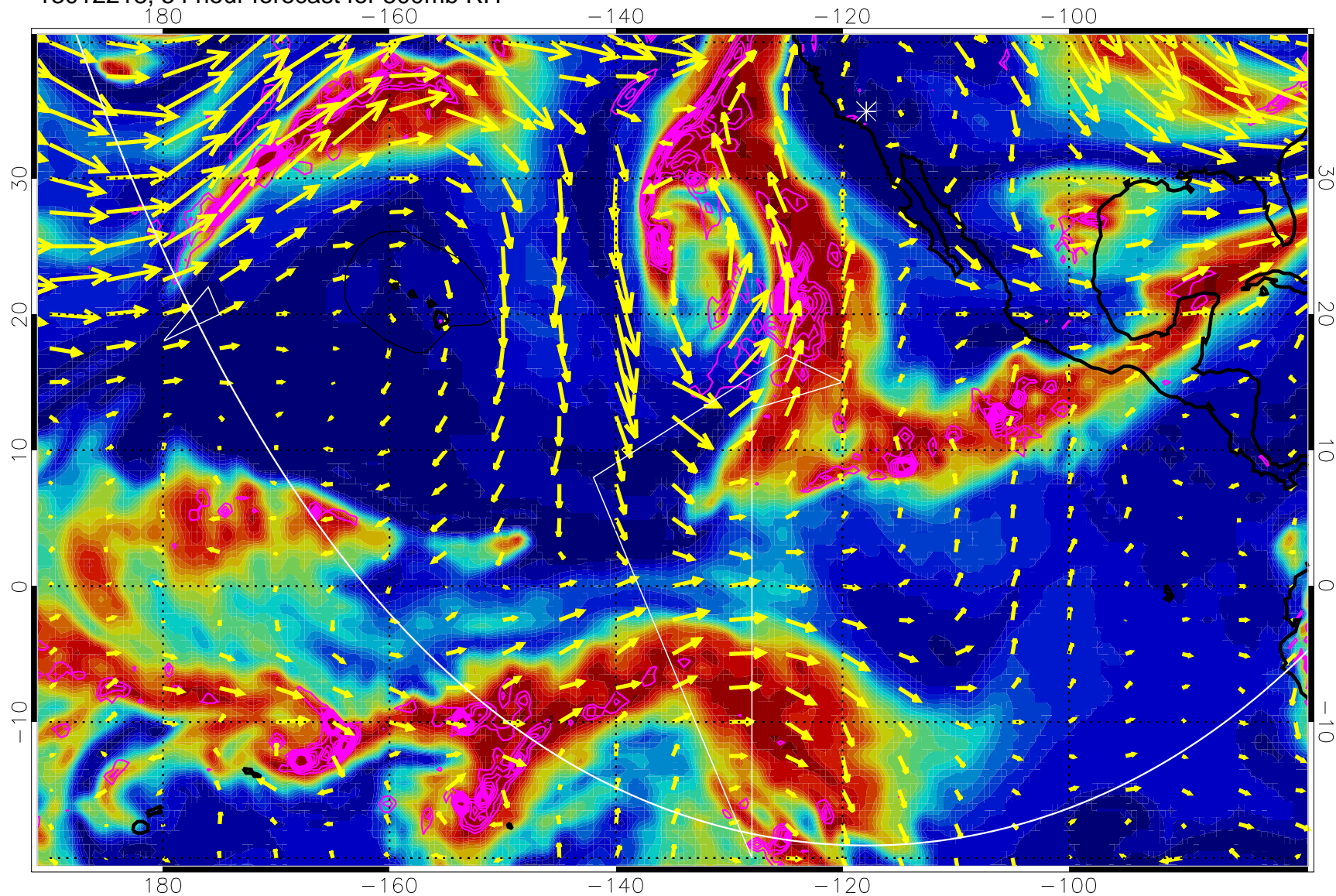
EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip



13012218, 54 hour forecast for 500mb RH



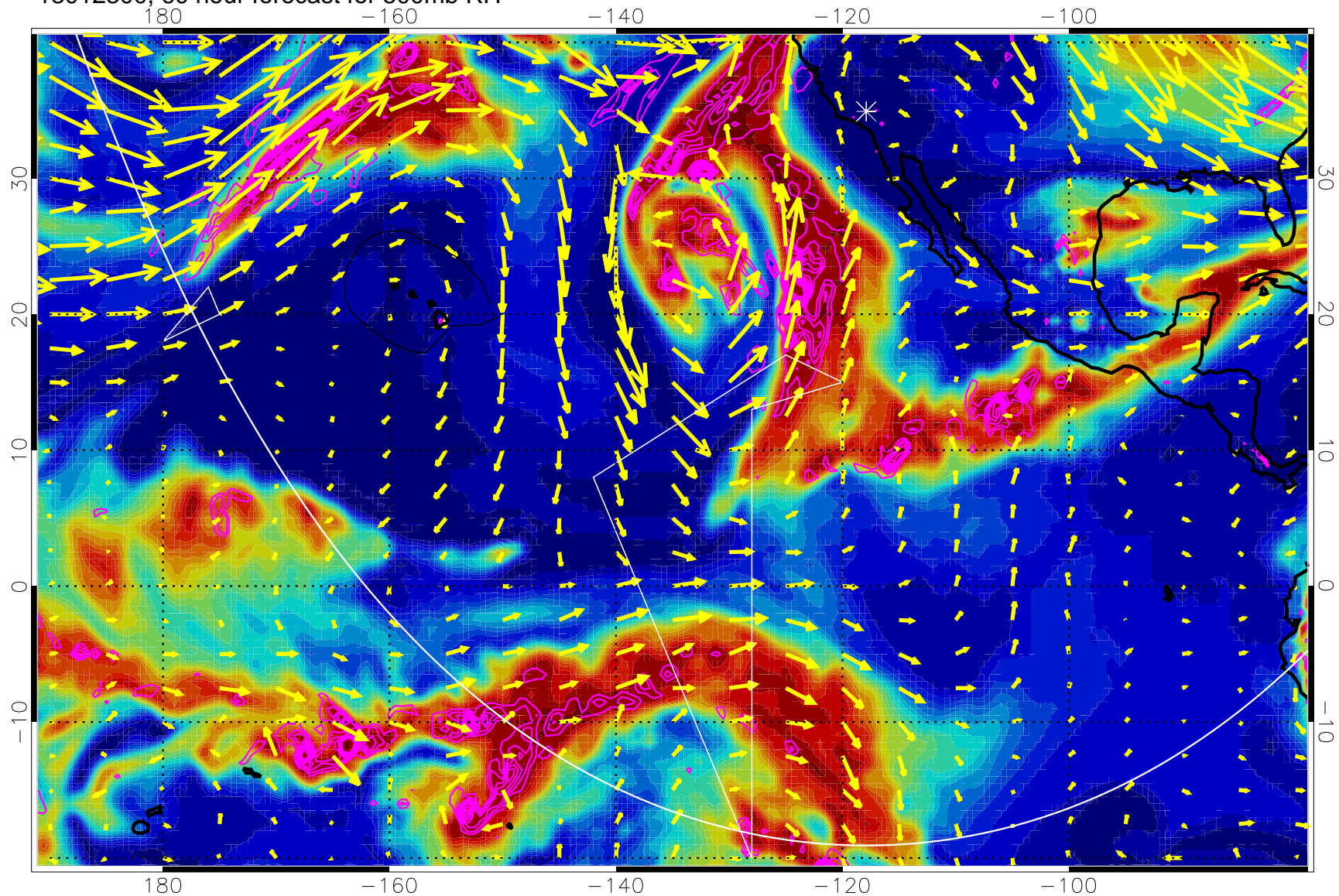
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012300, 60 hour forecast for 500mb RH



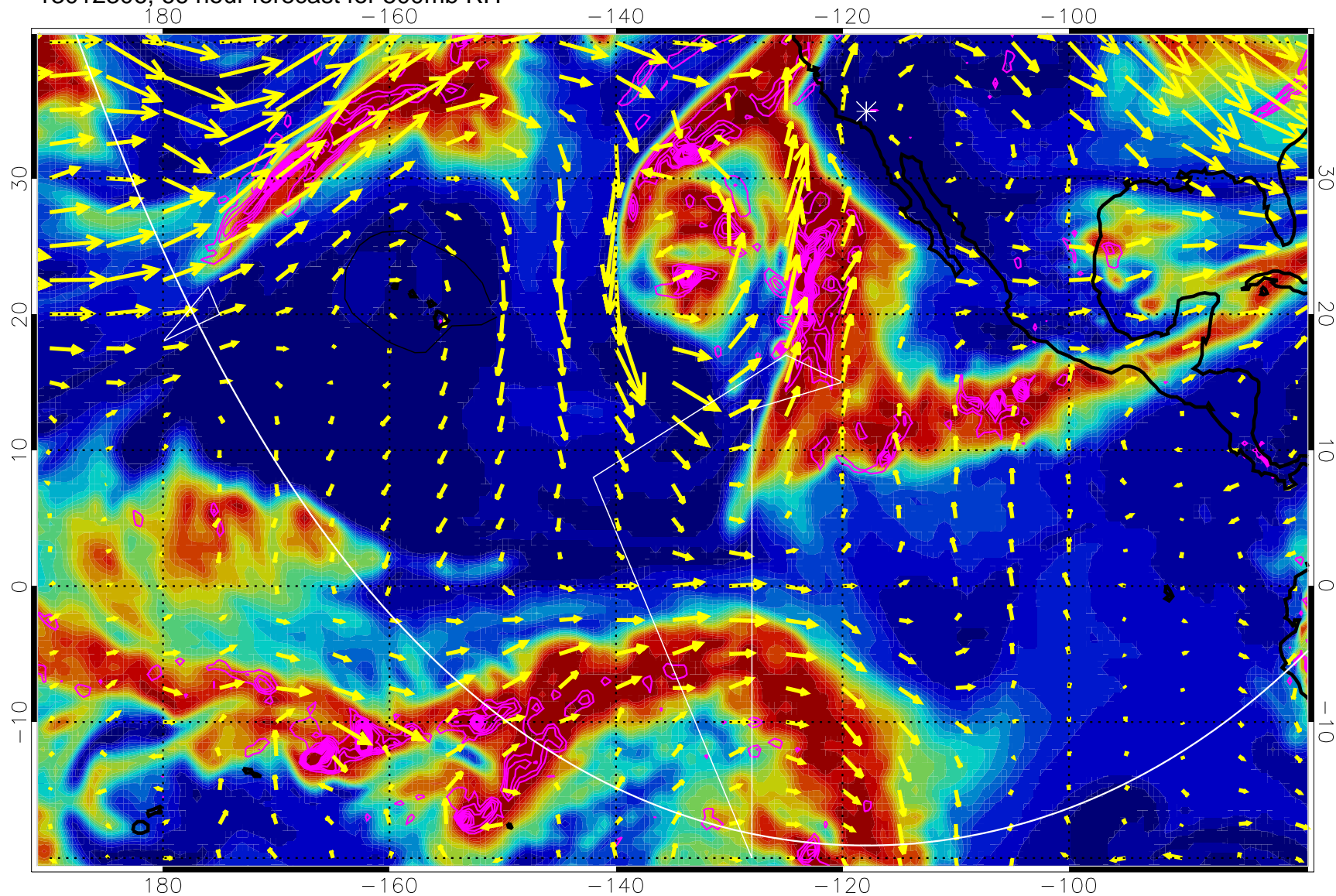
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012306, 66 hour forecast for 500mb RH



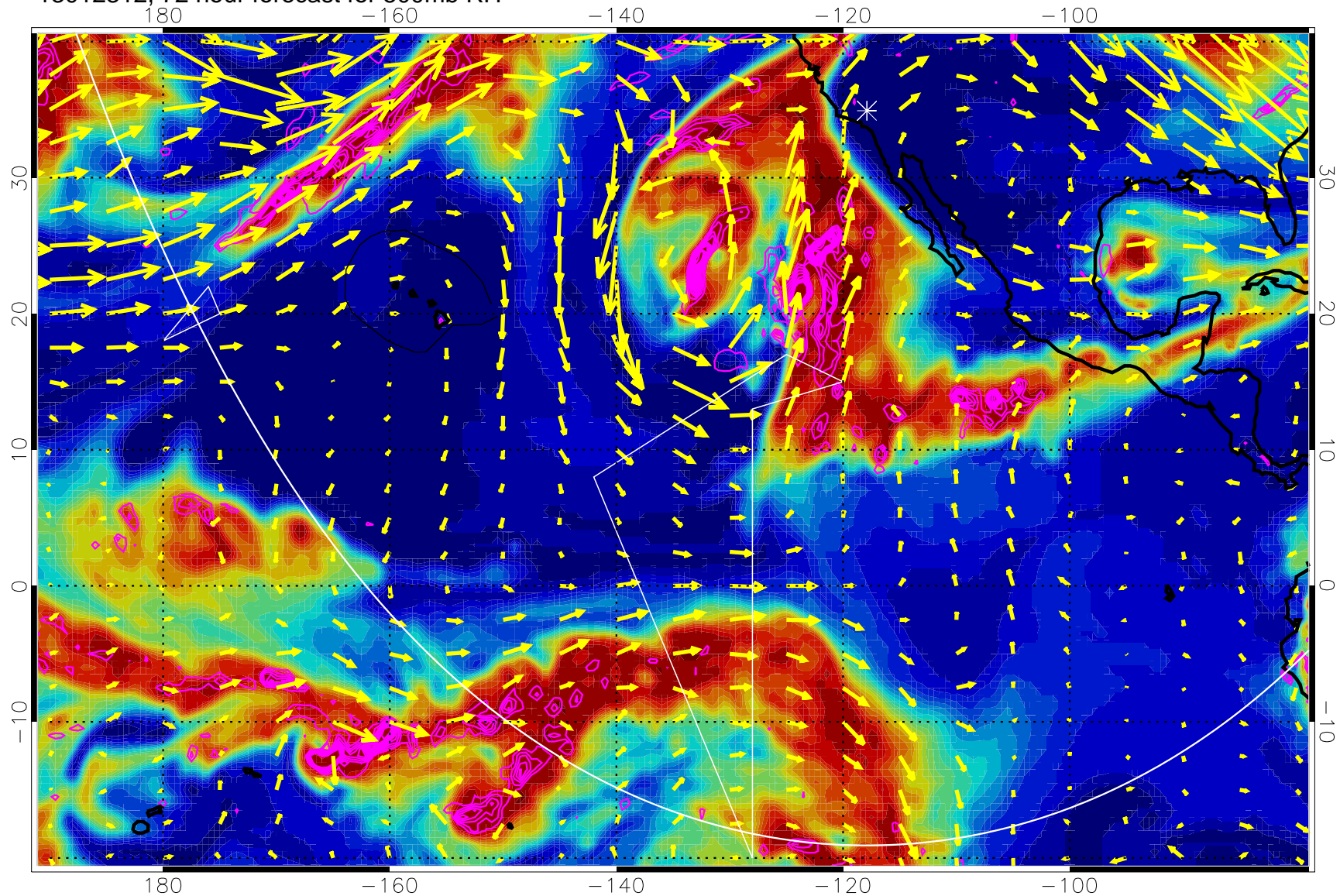
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012312, 72 hour forecast for 500mb RH



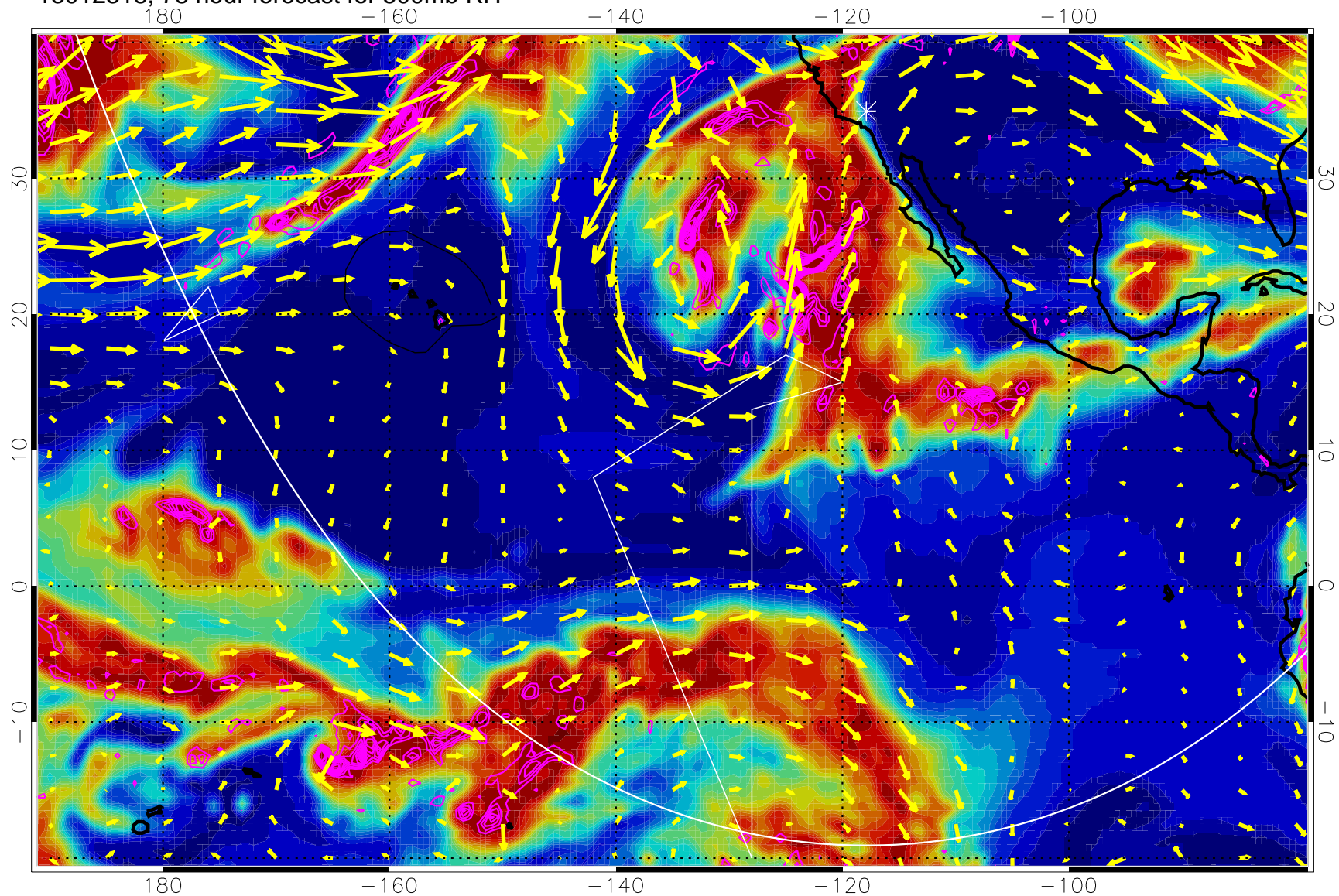
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012318, 78 hour forecast for 500mb RH



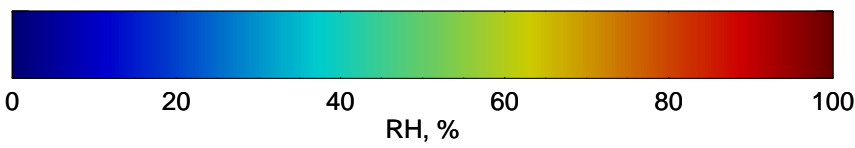
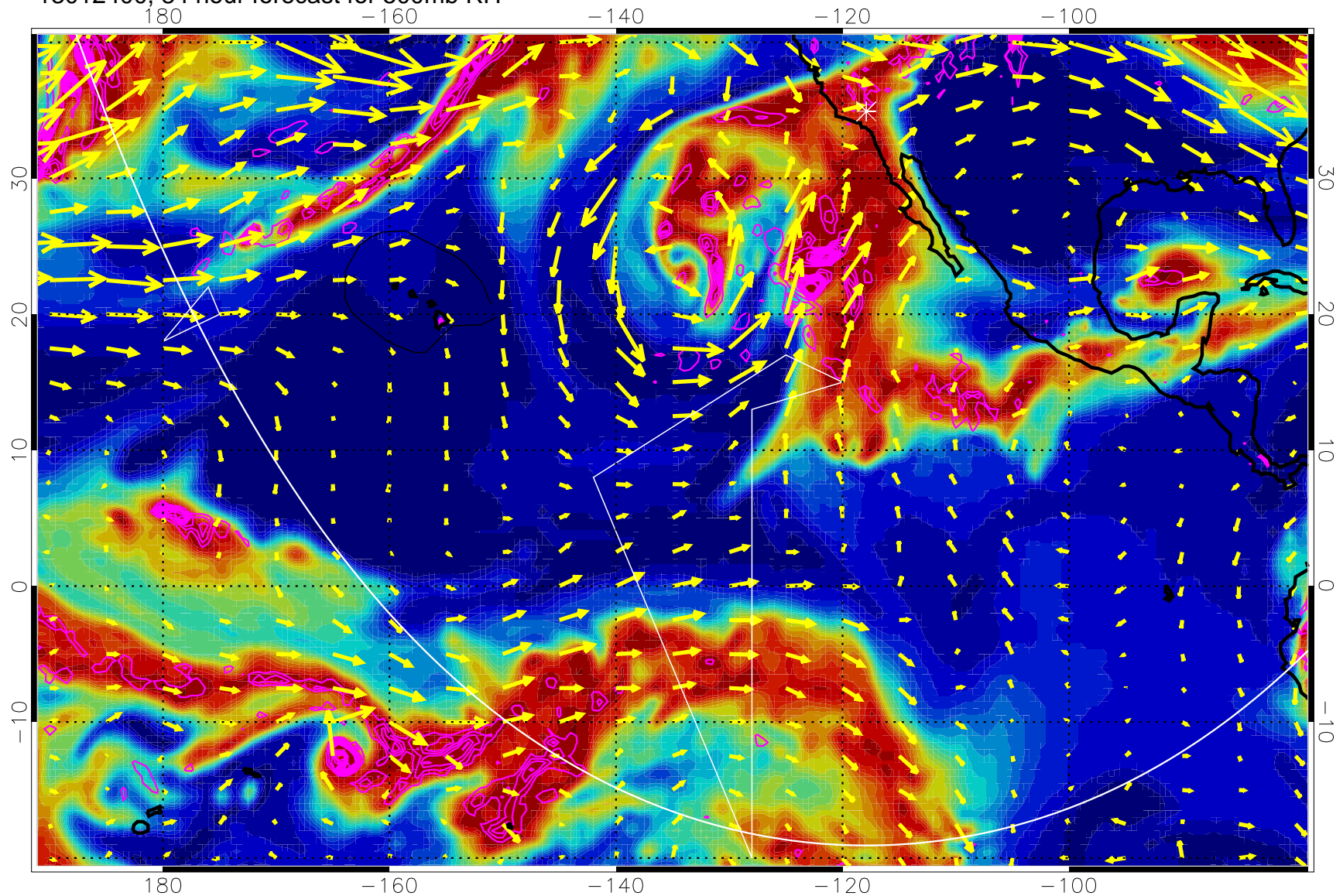
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause ( $2$  PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012400, 84 hour forecast for 500mb RH



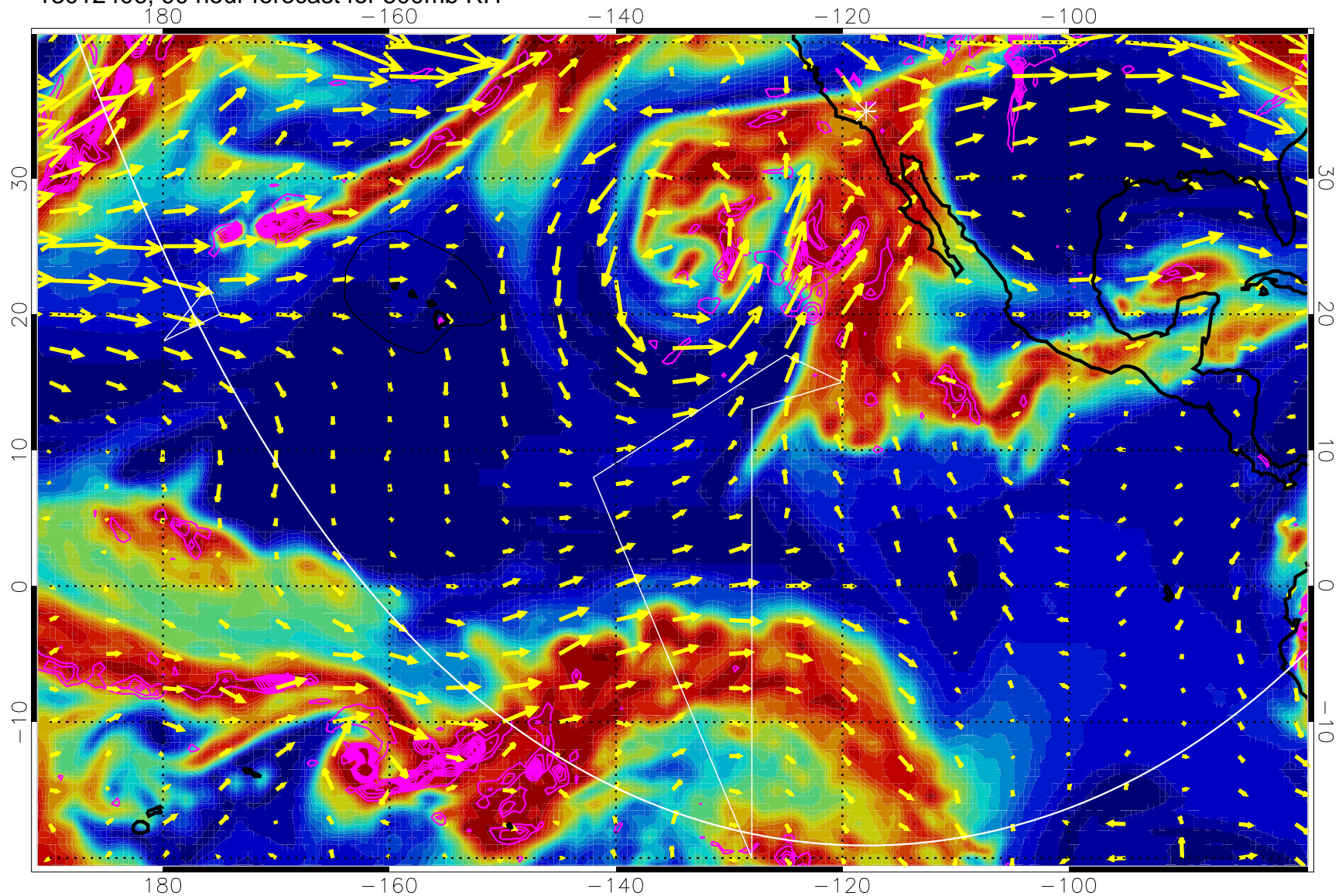
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012406, 90 hour forecast for 500mb RH



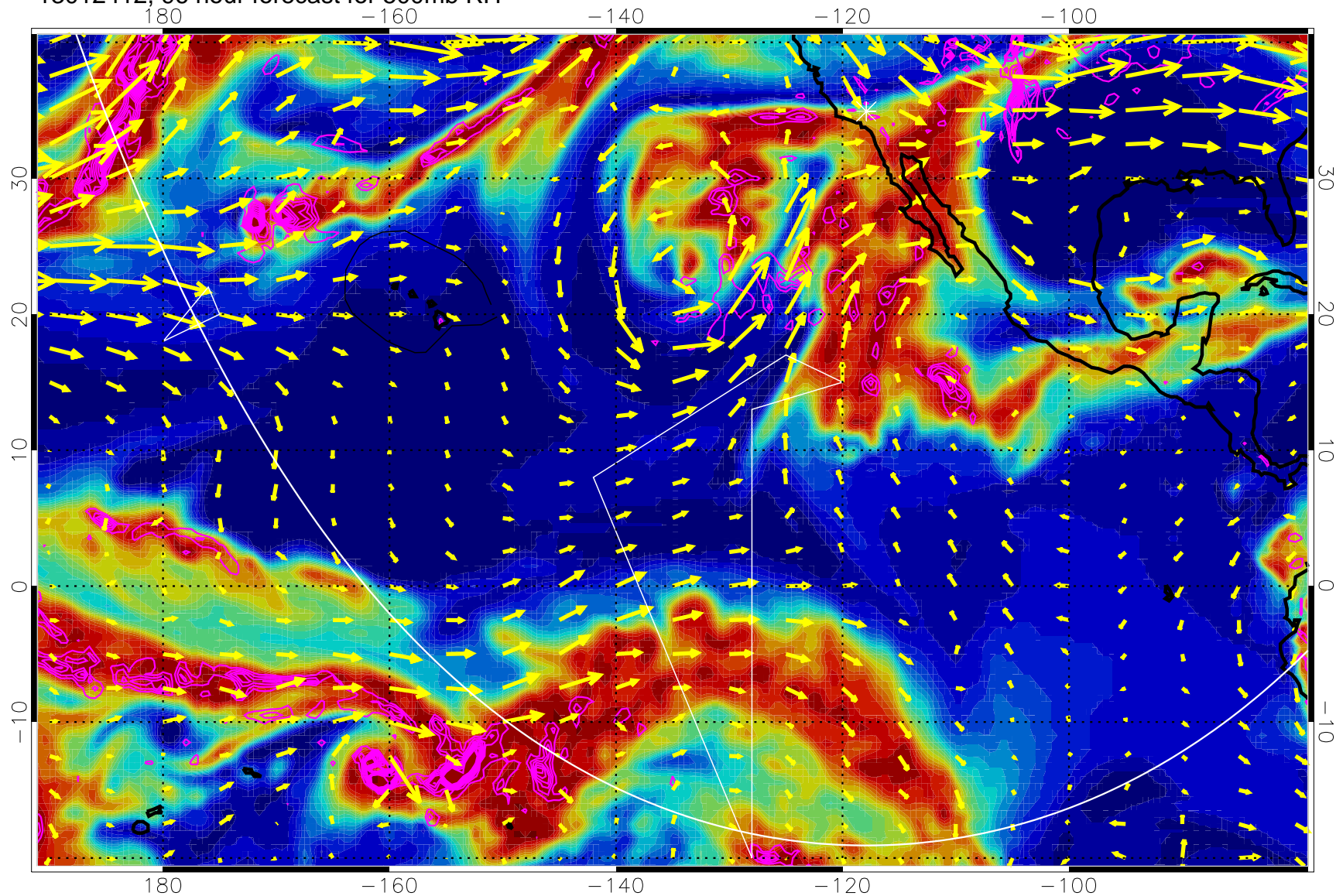
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012412, 96 hour forecast for 500mb RH



Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

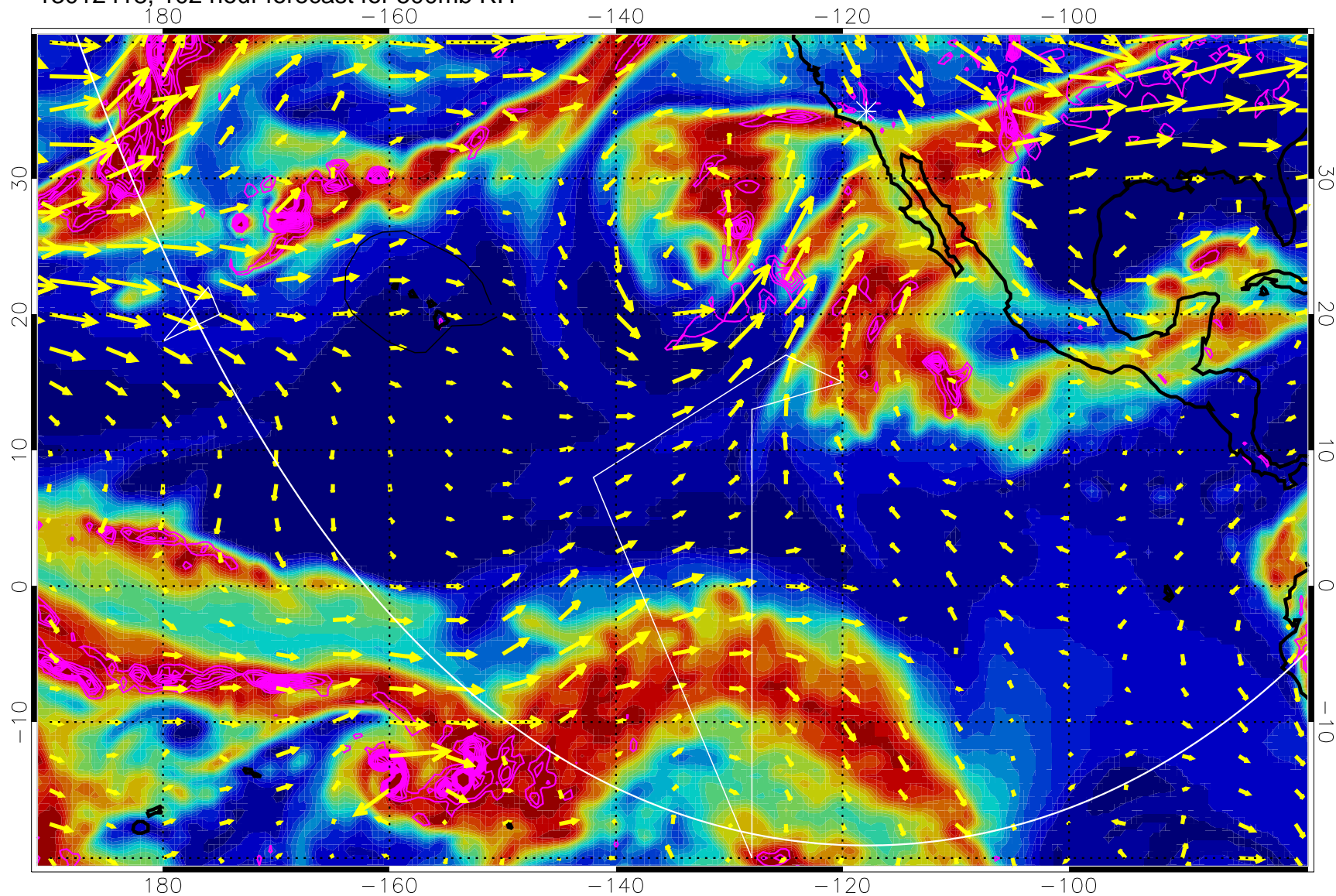
EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip



13012418, 102 hour forecast for 500mb RH



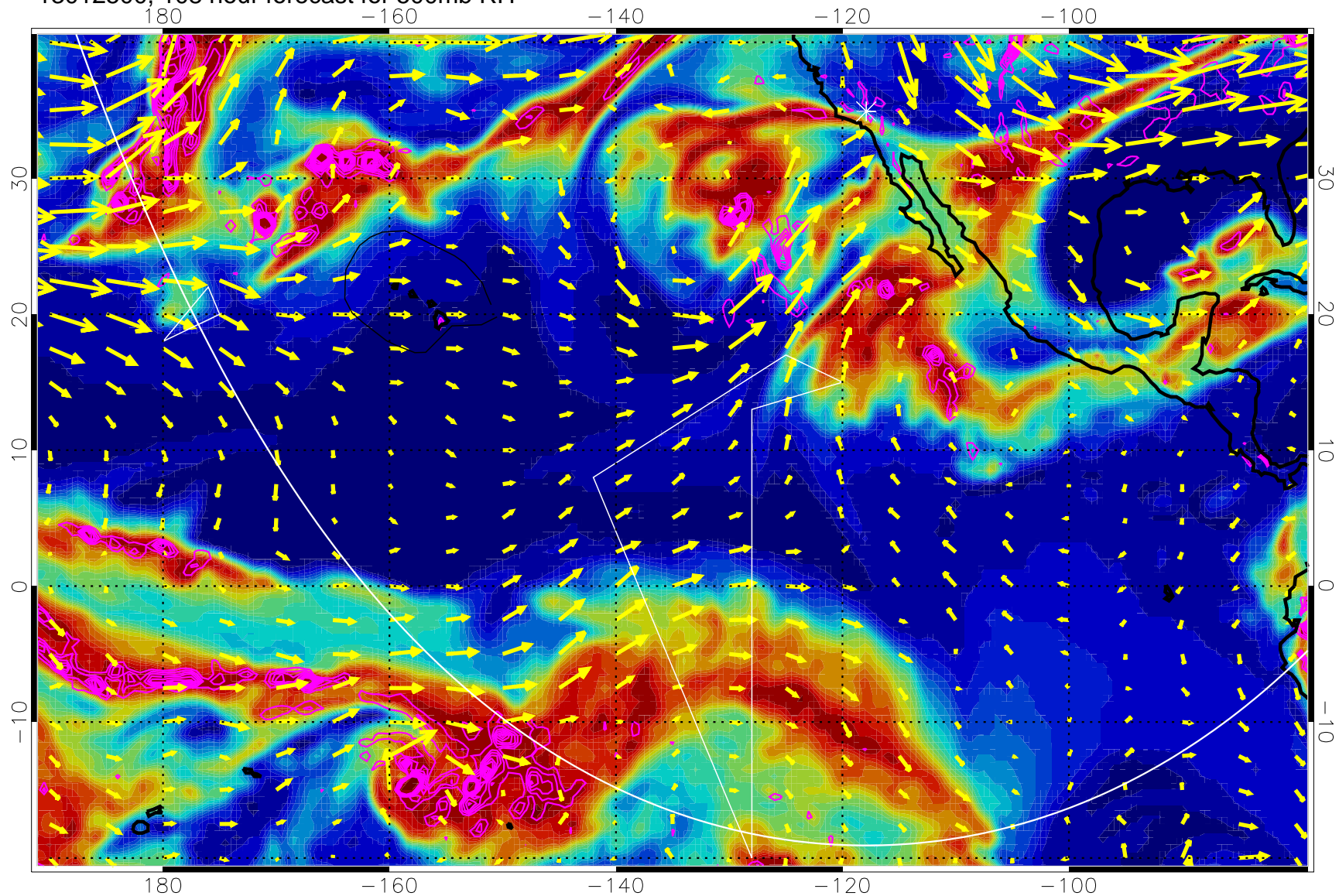
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012500, 108 hour forecast for 500mb RH



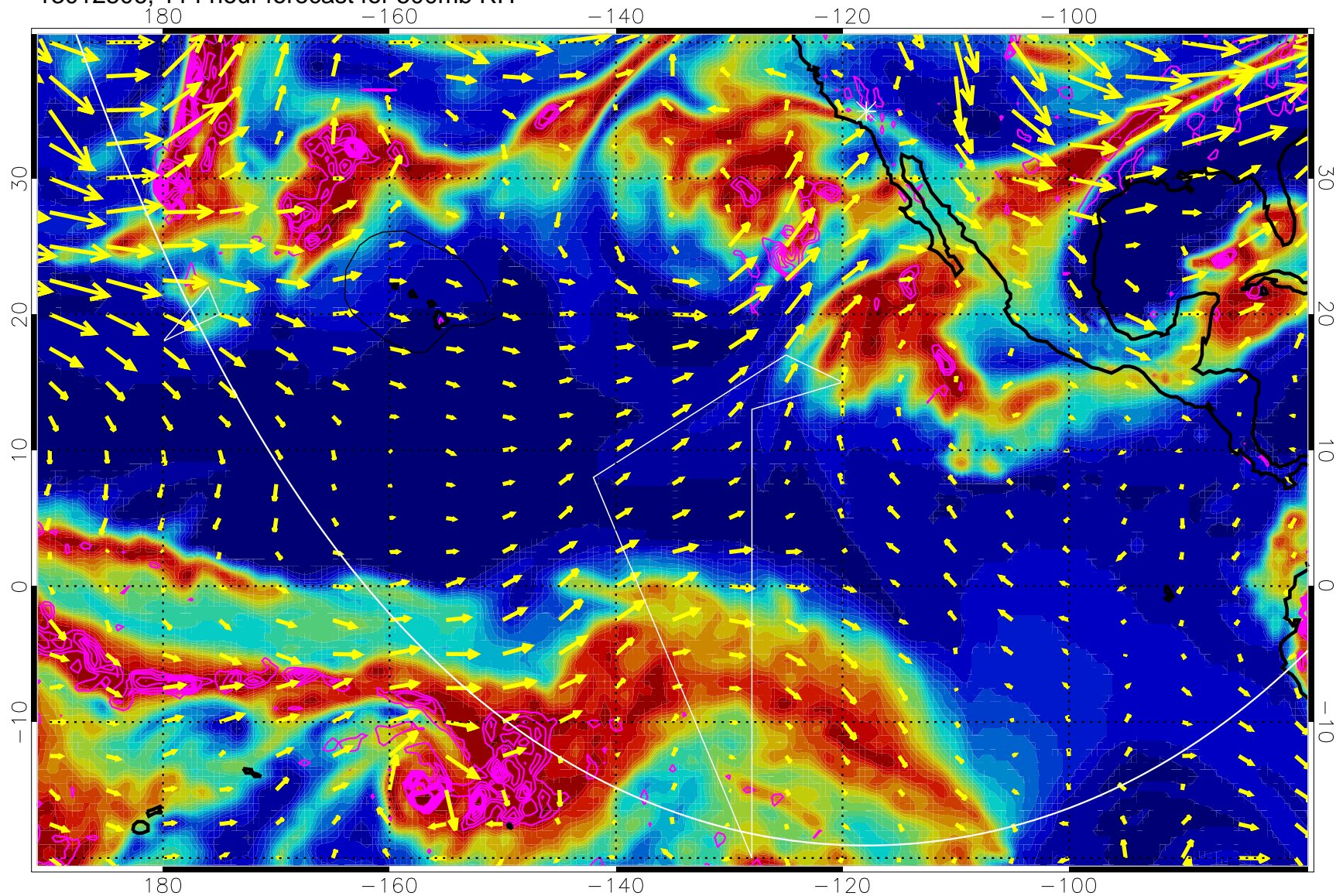
Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012506, 114 hour forecast for 500mb RH



Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

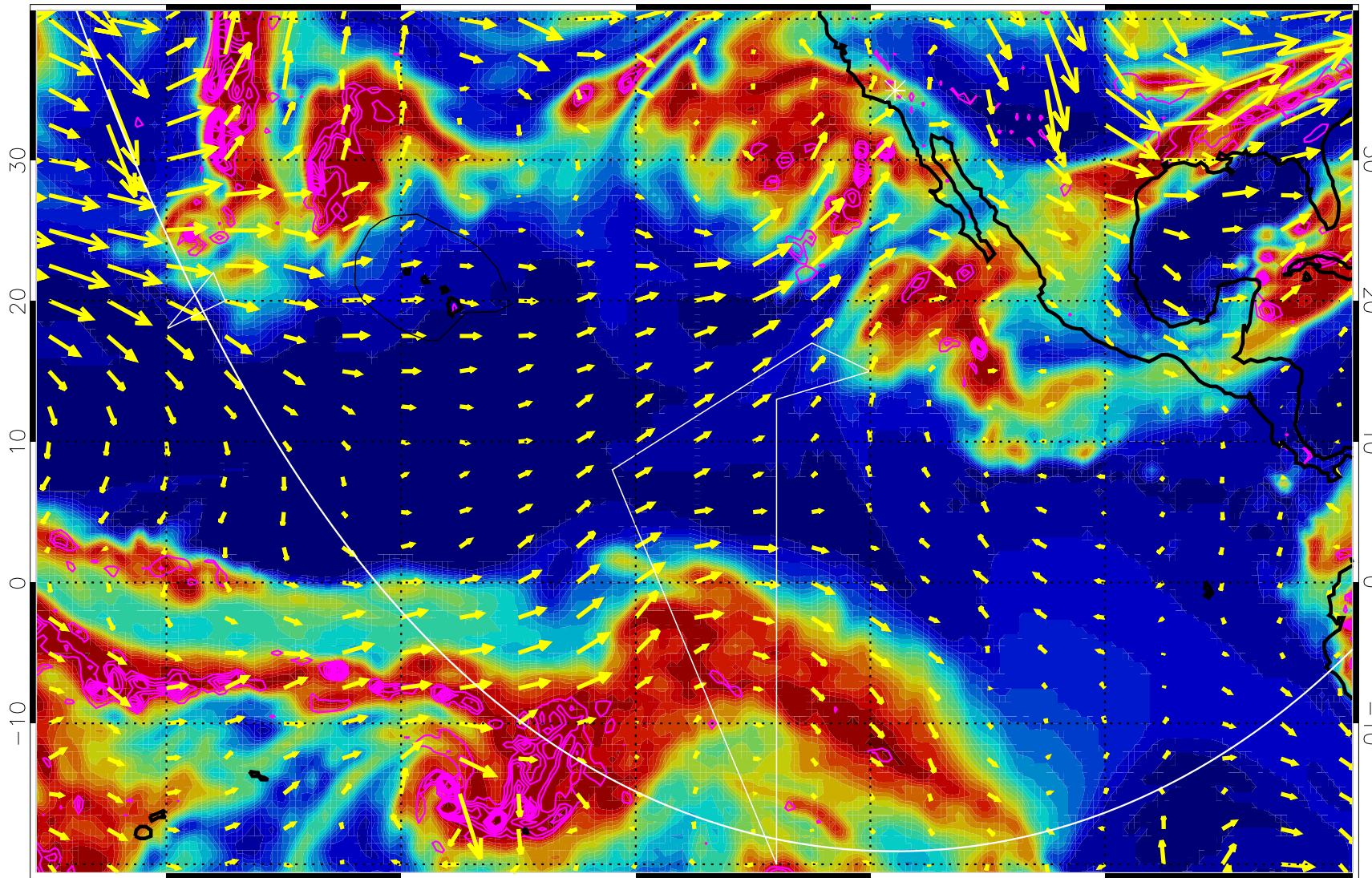
EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip

13012512, 120 hour forecast for 500mb RH

180 -160 -140 -120 -100



0 20 40 60 80 100  
RH, %

Negative Omegas less than  $-0.3$ , contours of  $0.3$  Pa/s

EPV Tropopause (2 PVU) Position

→ 40 m/s

Range ring of 6000 km -- 19 hours GH round trip