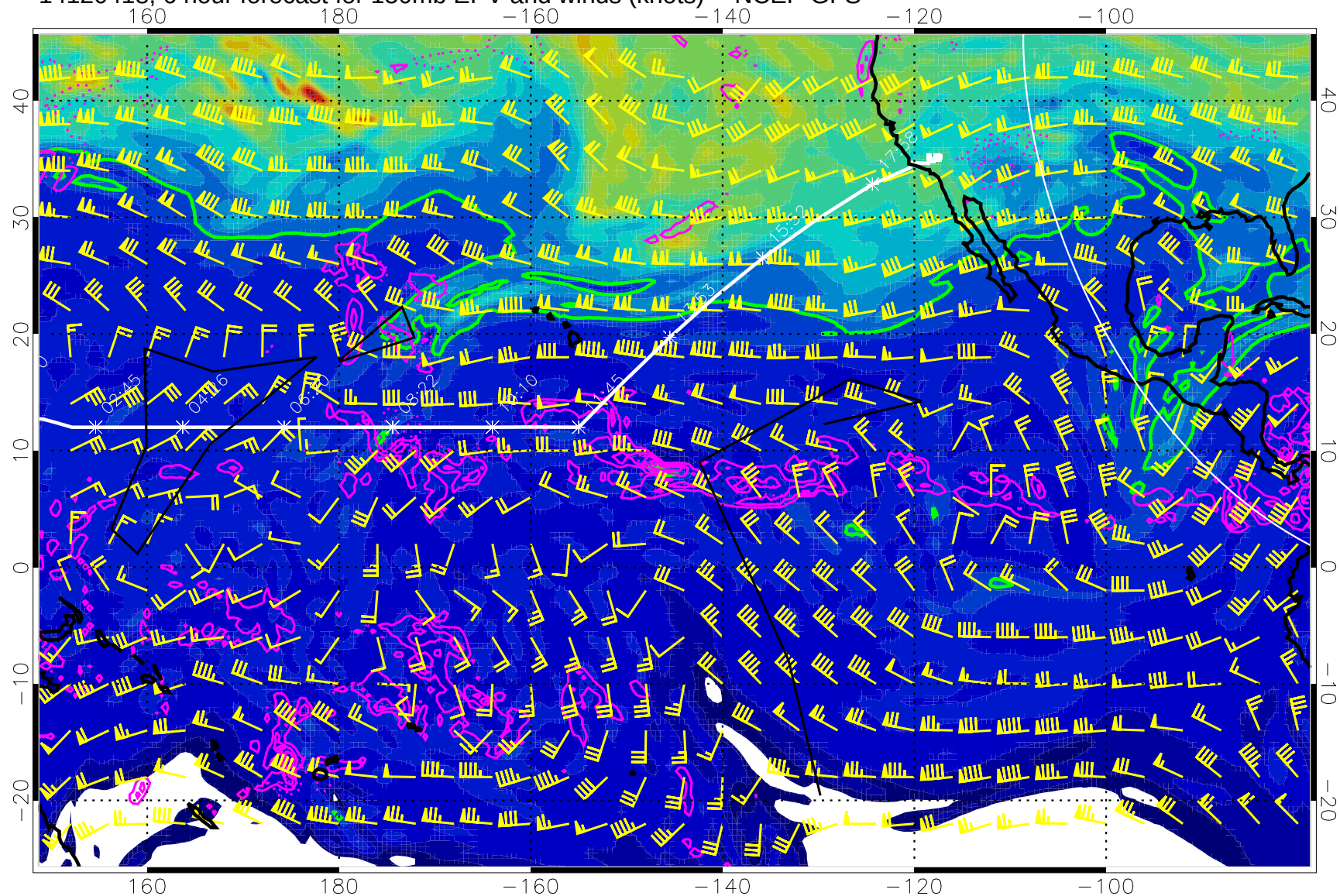


14120418, 6 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



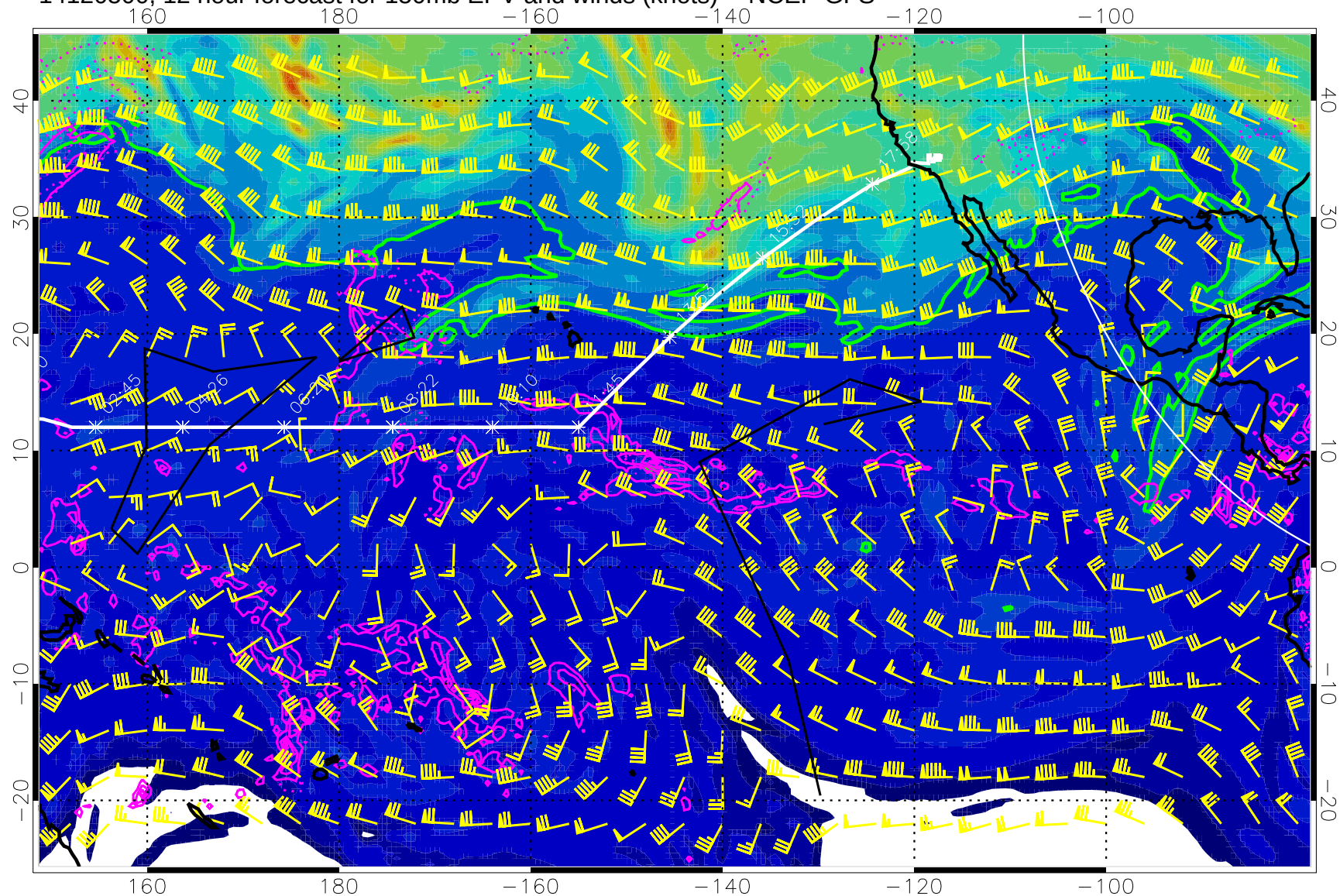
0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

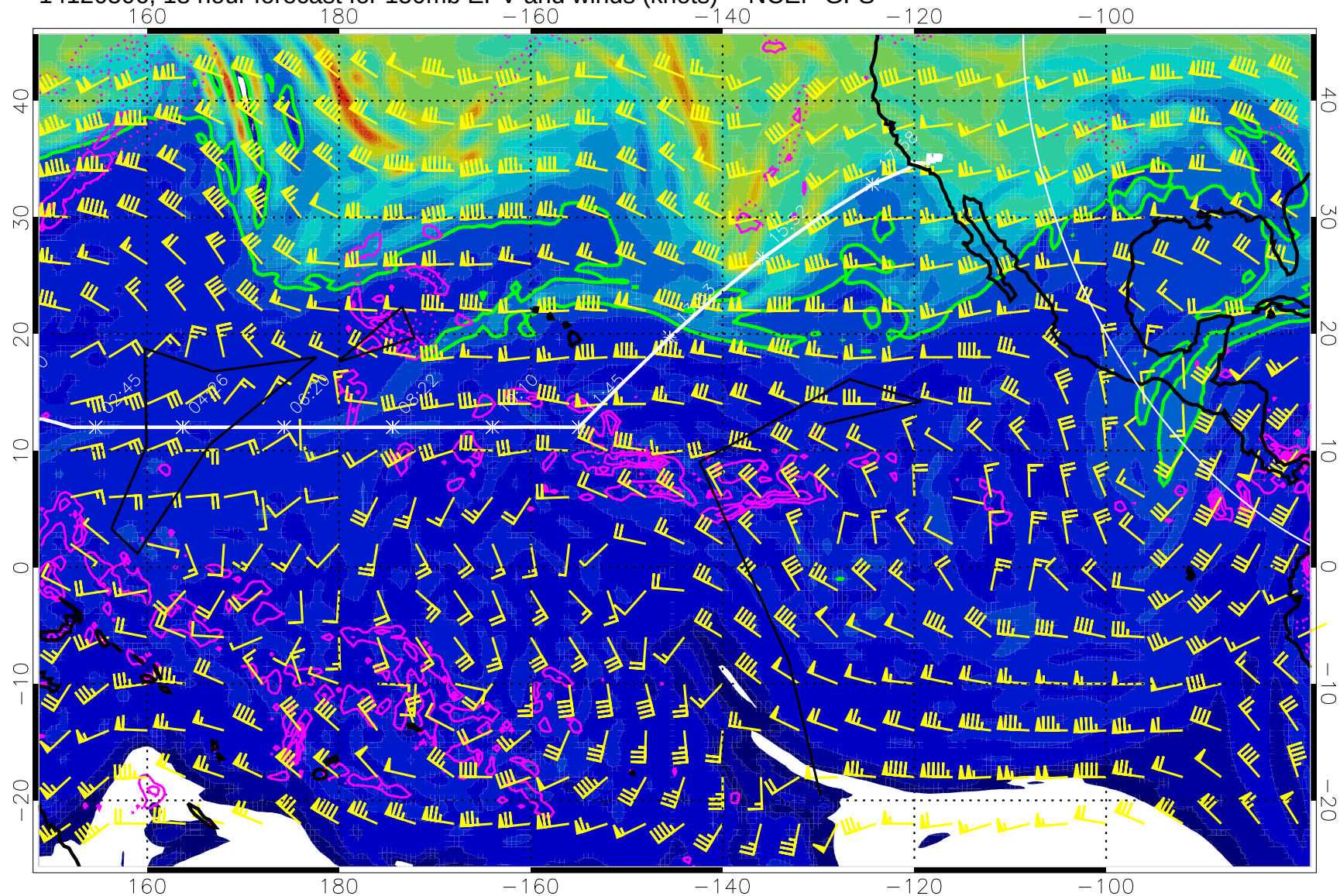
Range ring of 4055 km -- 13 hours GH round trip

14120500, 12 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS





14120506, 18 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



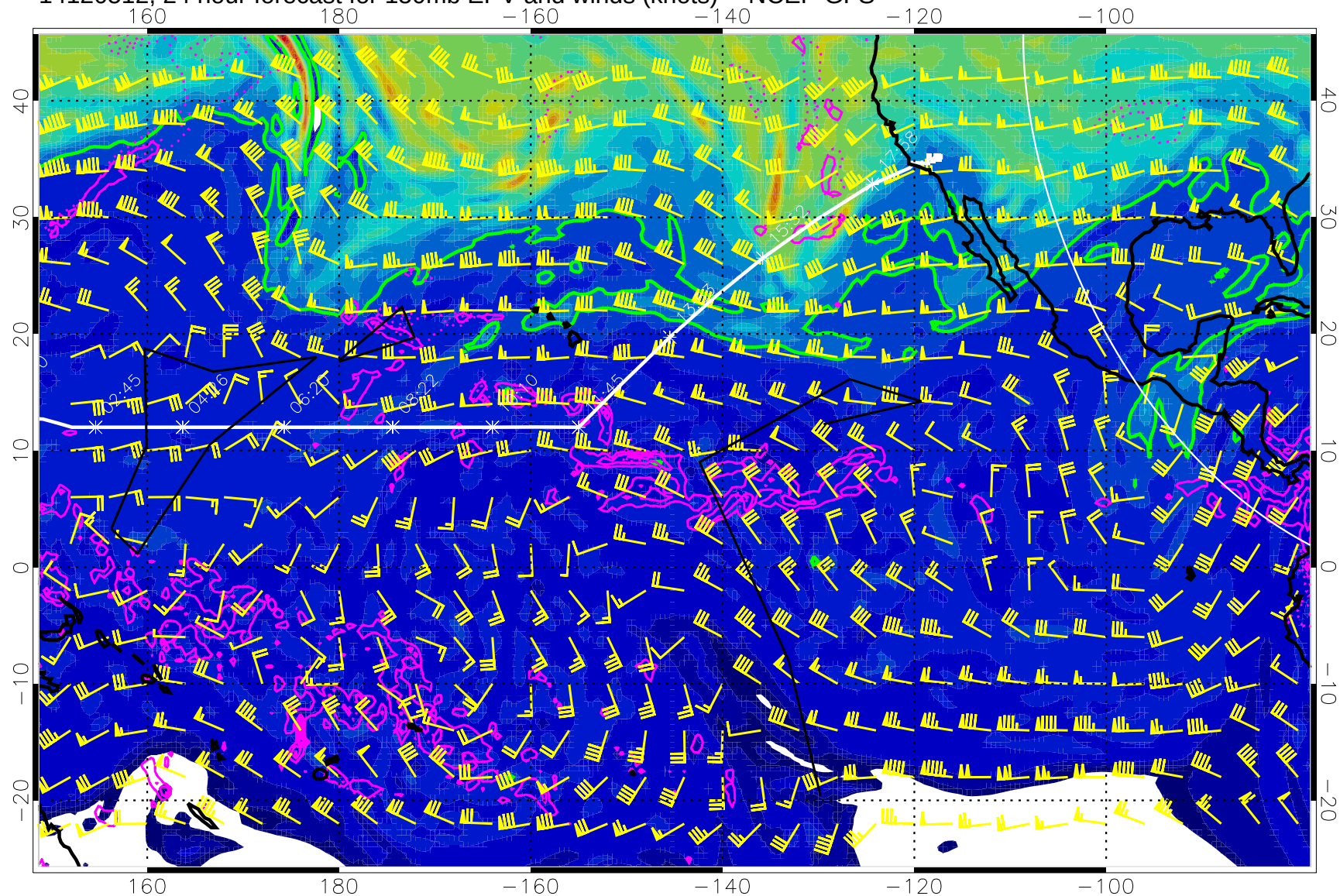
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120512, 24 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

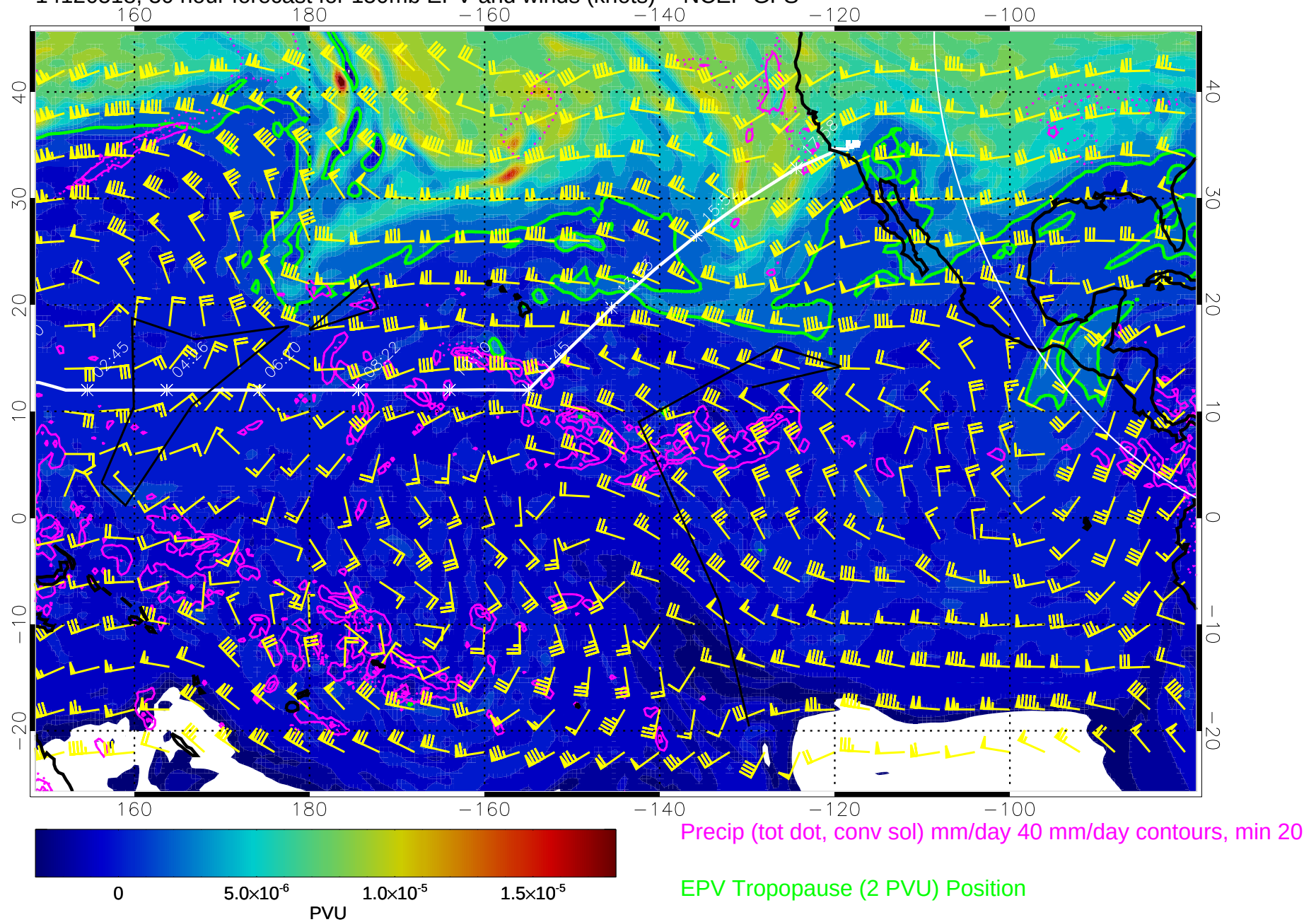
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

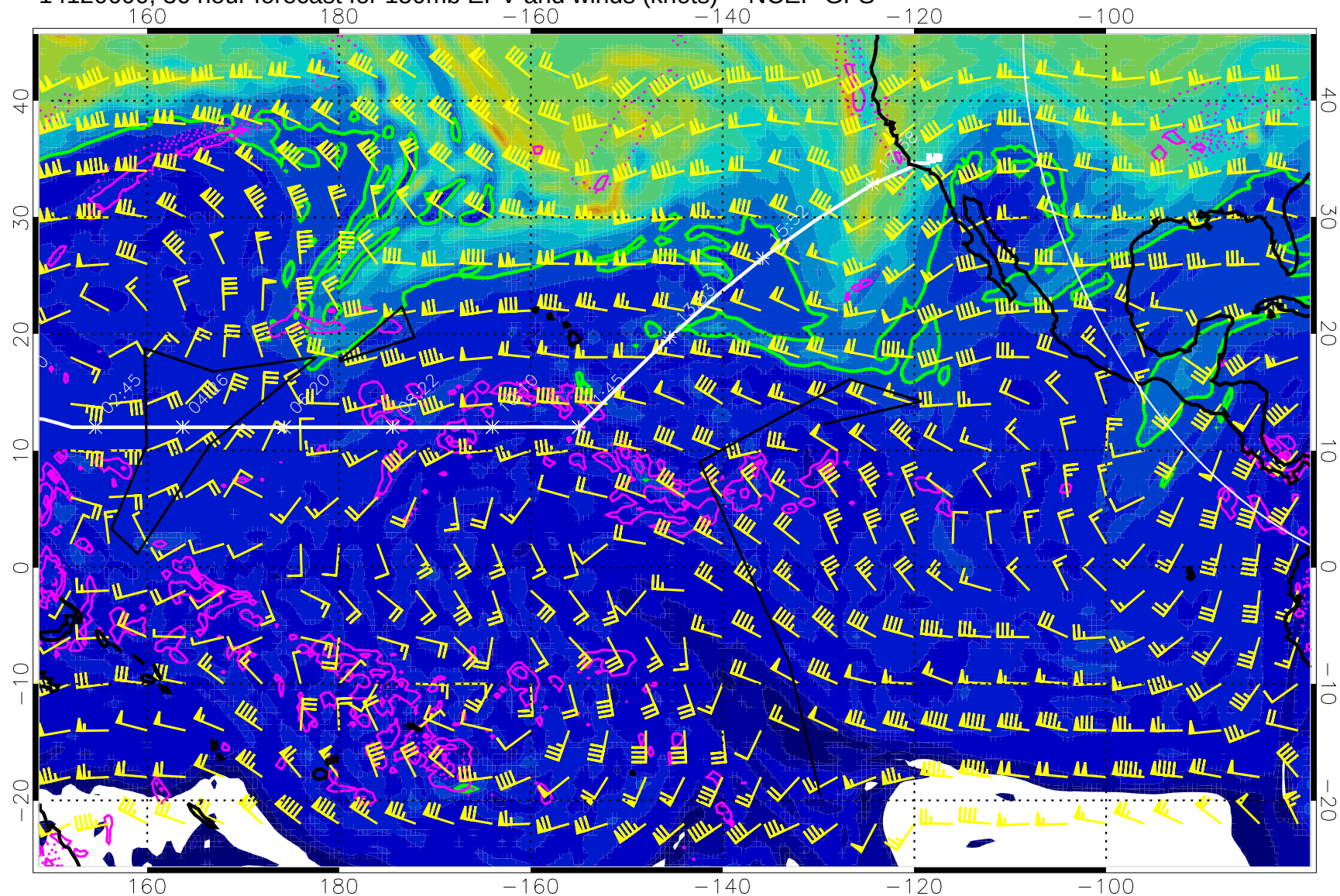


14120518, 30 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



Range ring of 4055 km -- 13 hours GH round trip

14120600, 36 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

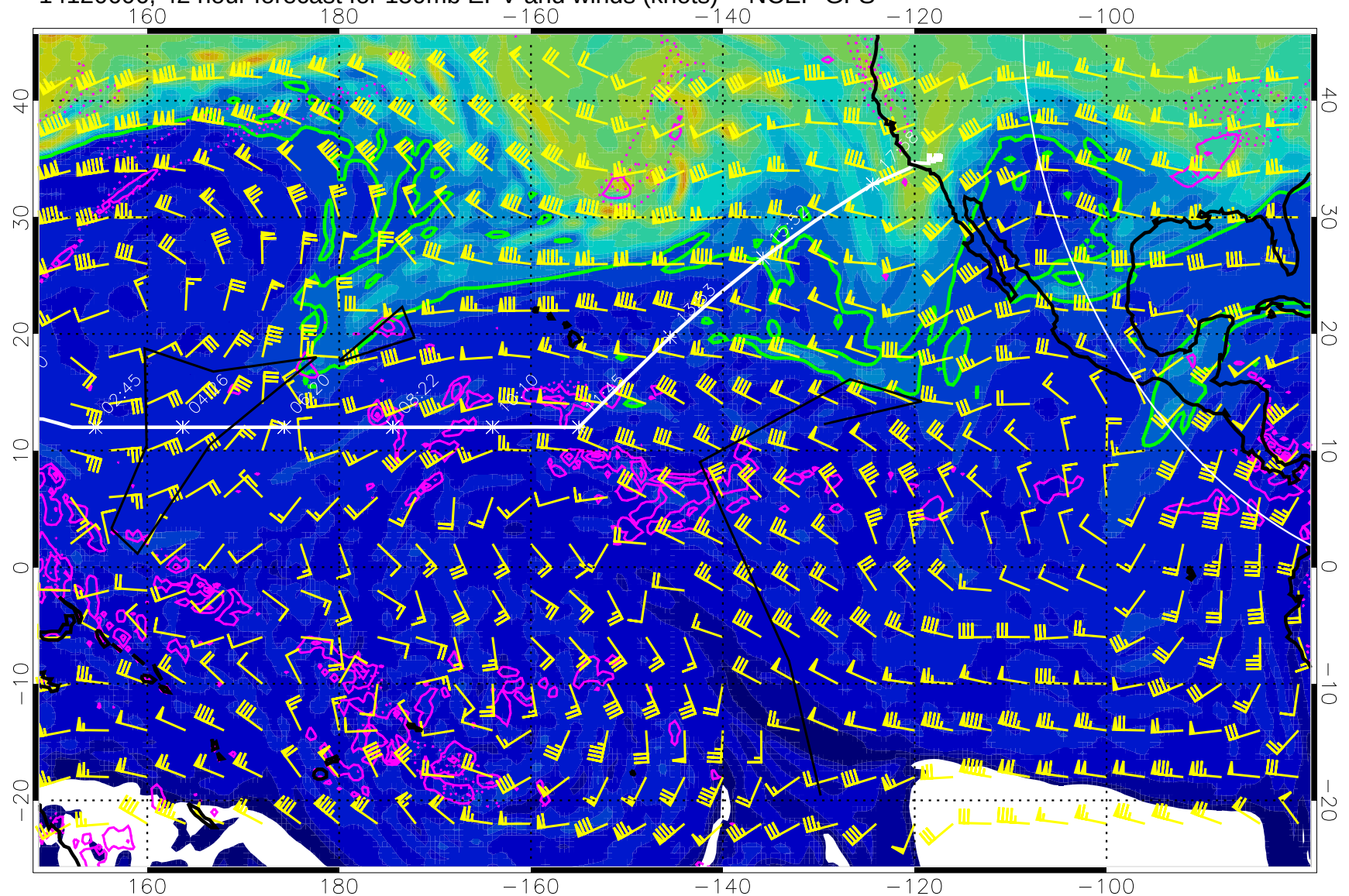
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip



14120606, 42 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



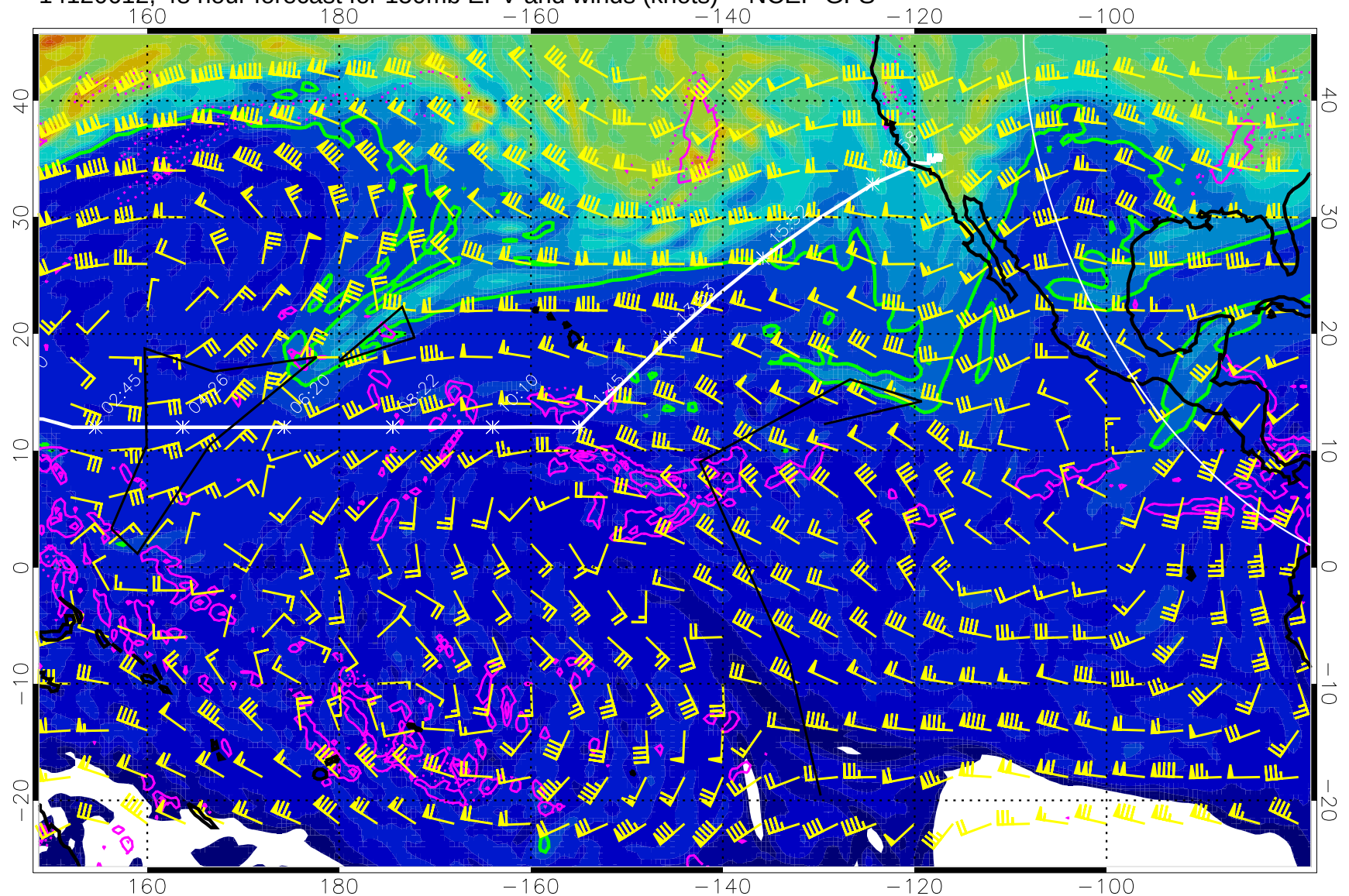
0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120612, 48 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

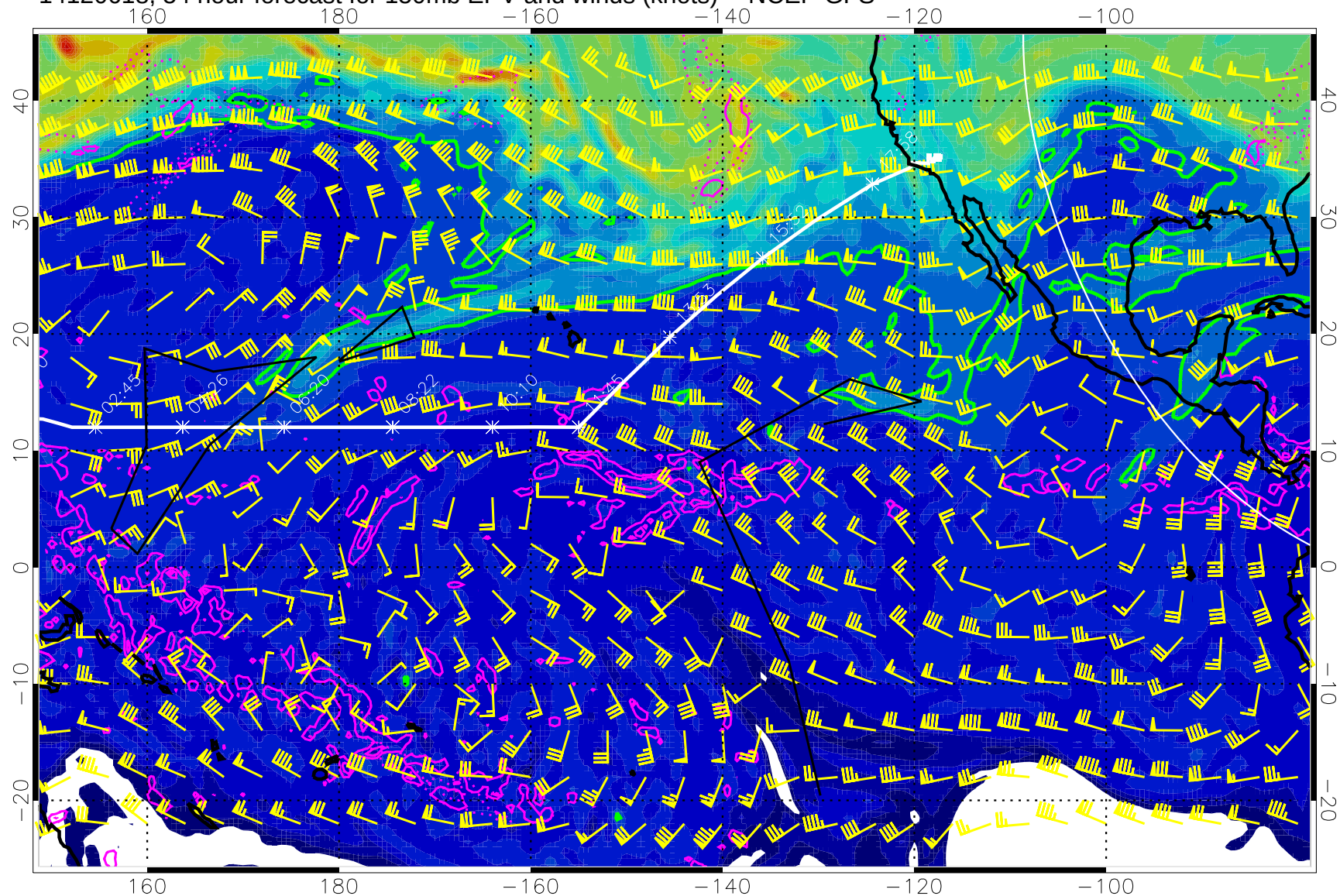
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip



14120618, 54 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



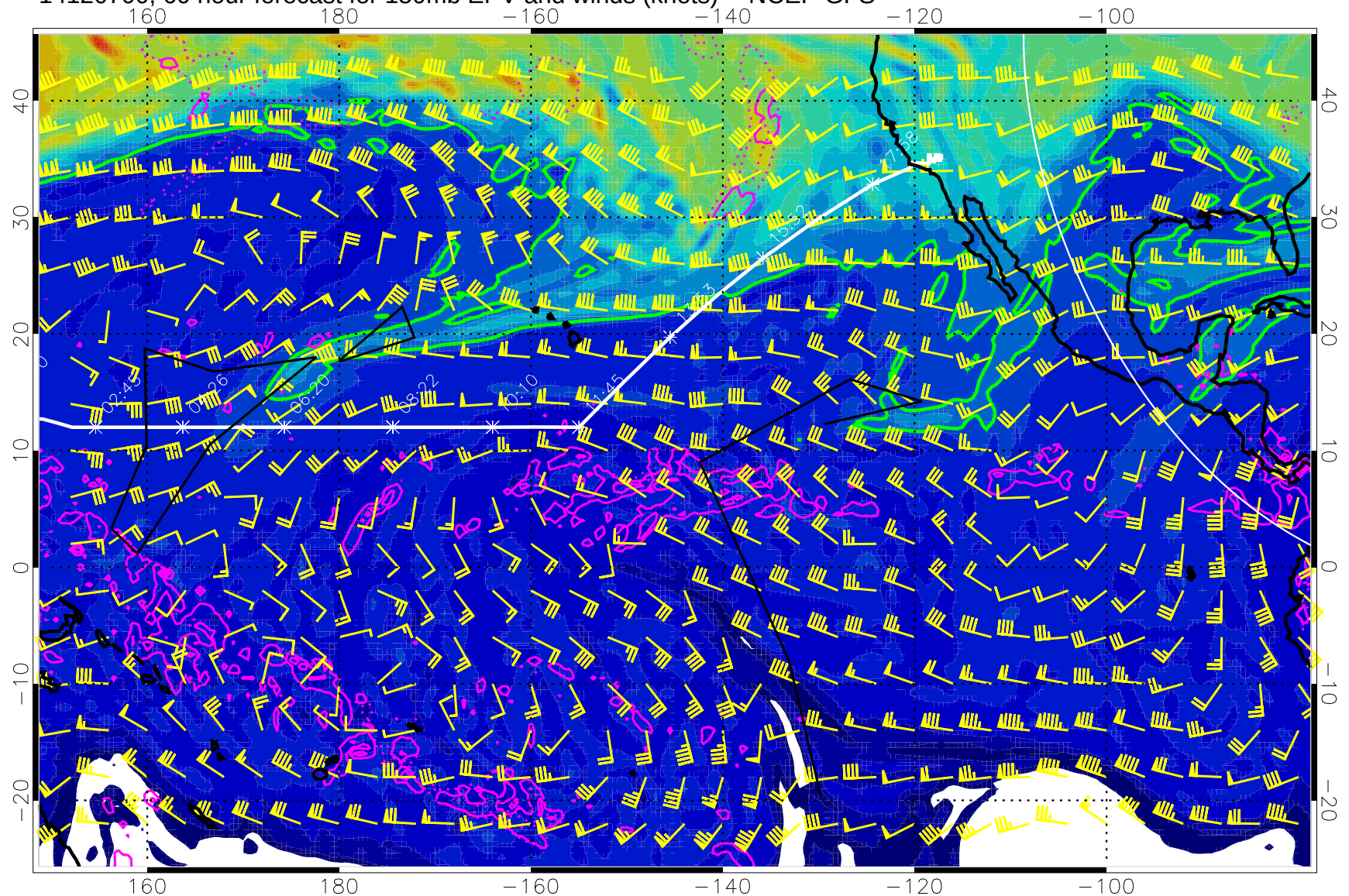
0 5.0x10<sup>-6</sup> 1.0x10<sup>-5</sup> 1.5x10<sup>-5</sup>  
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120700, 60 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

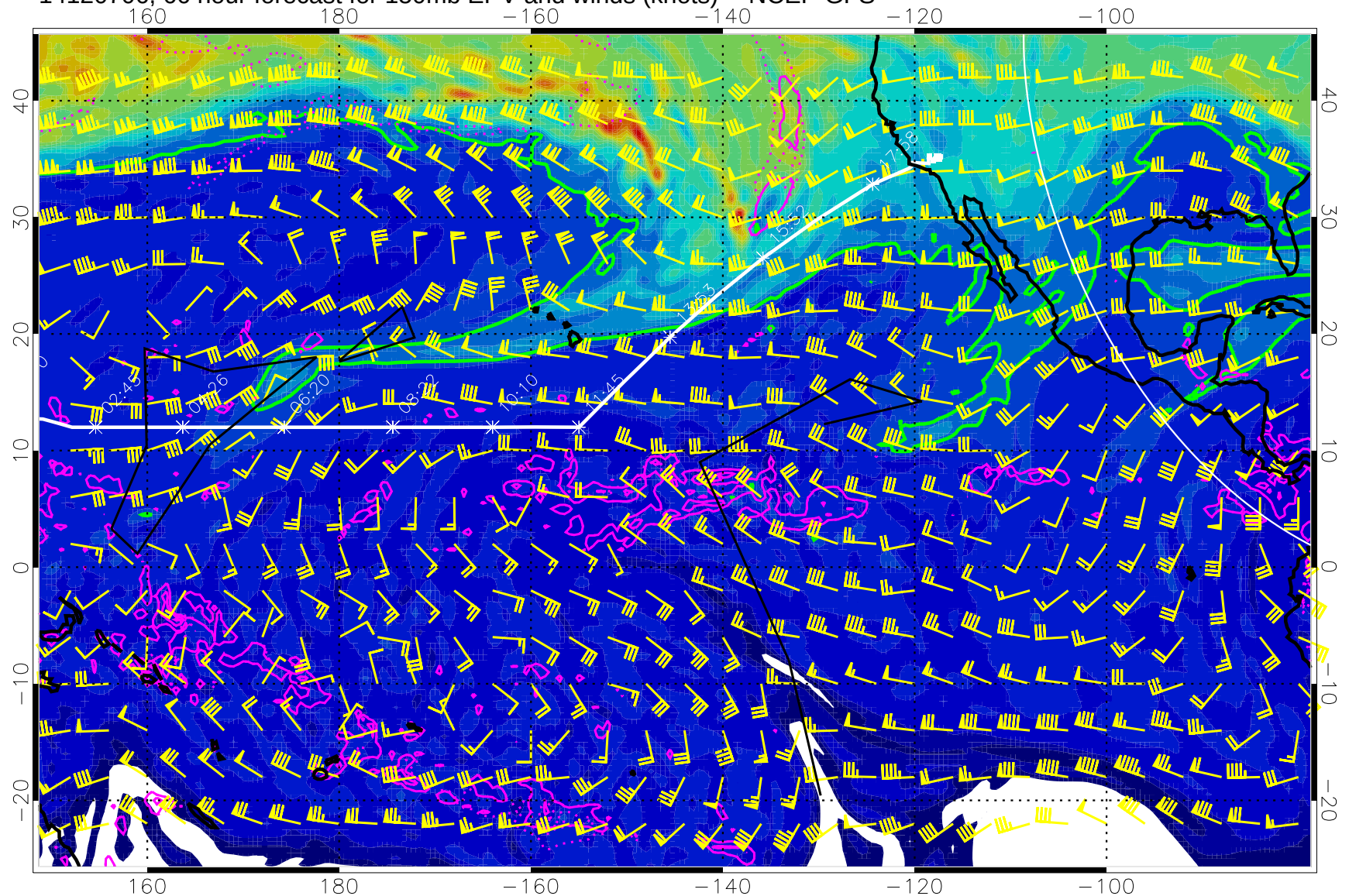
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip



14120706, 66 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



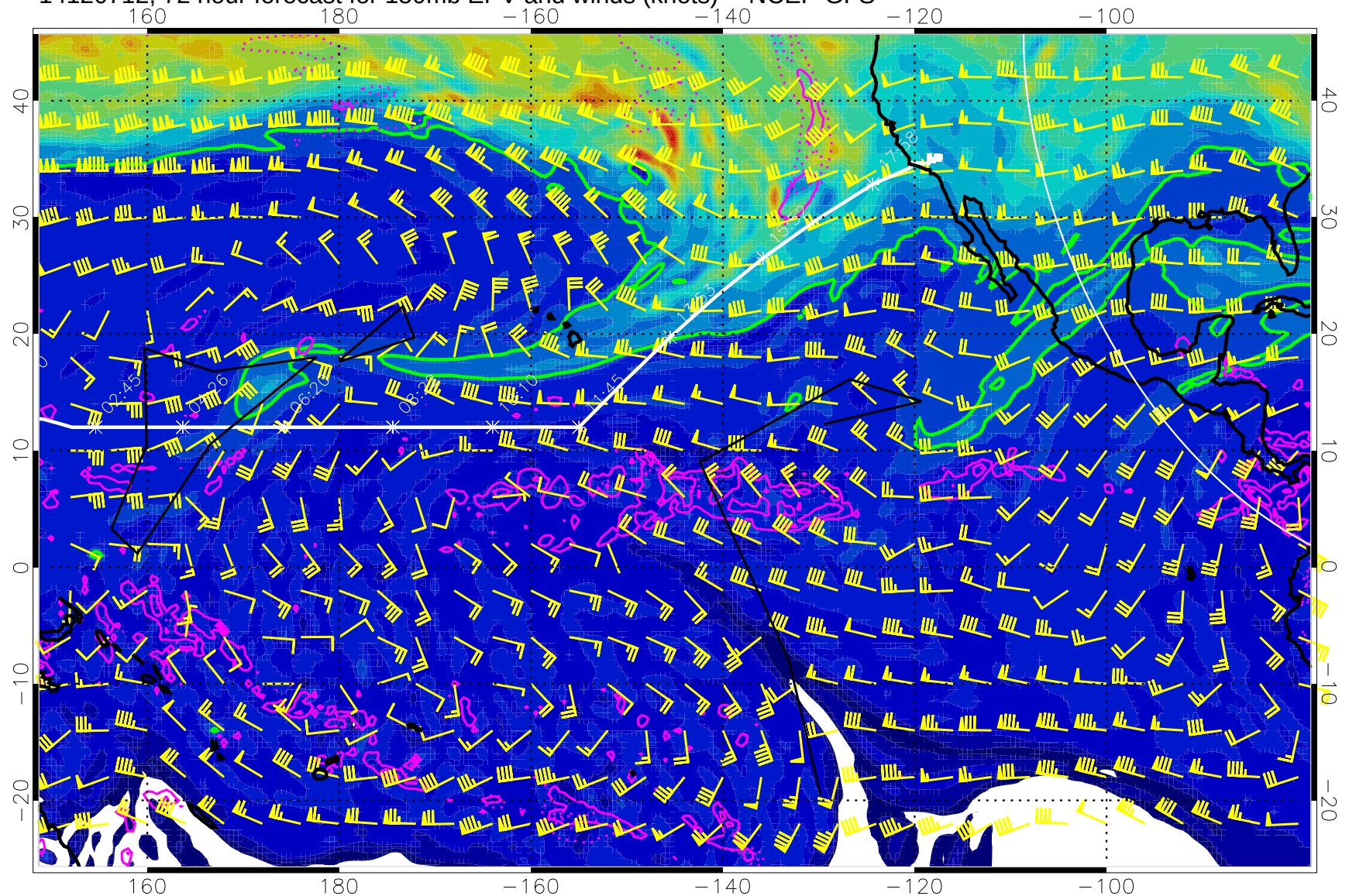
0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120712, 72 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

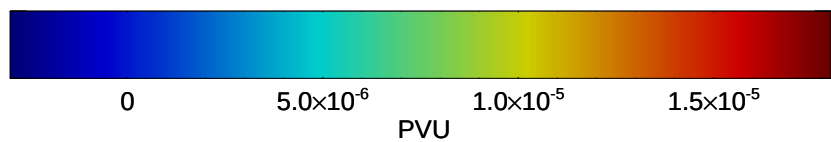
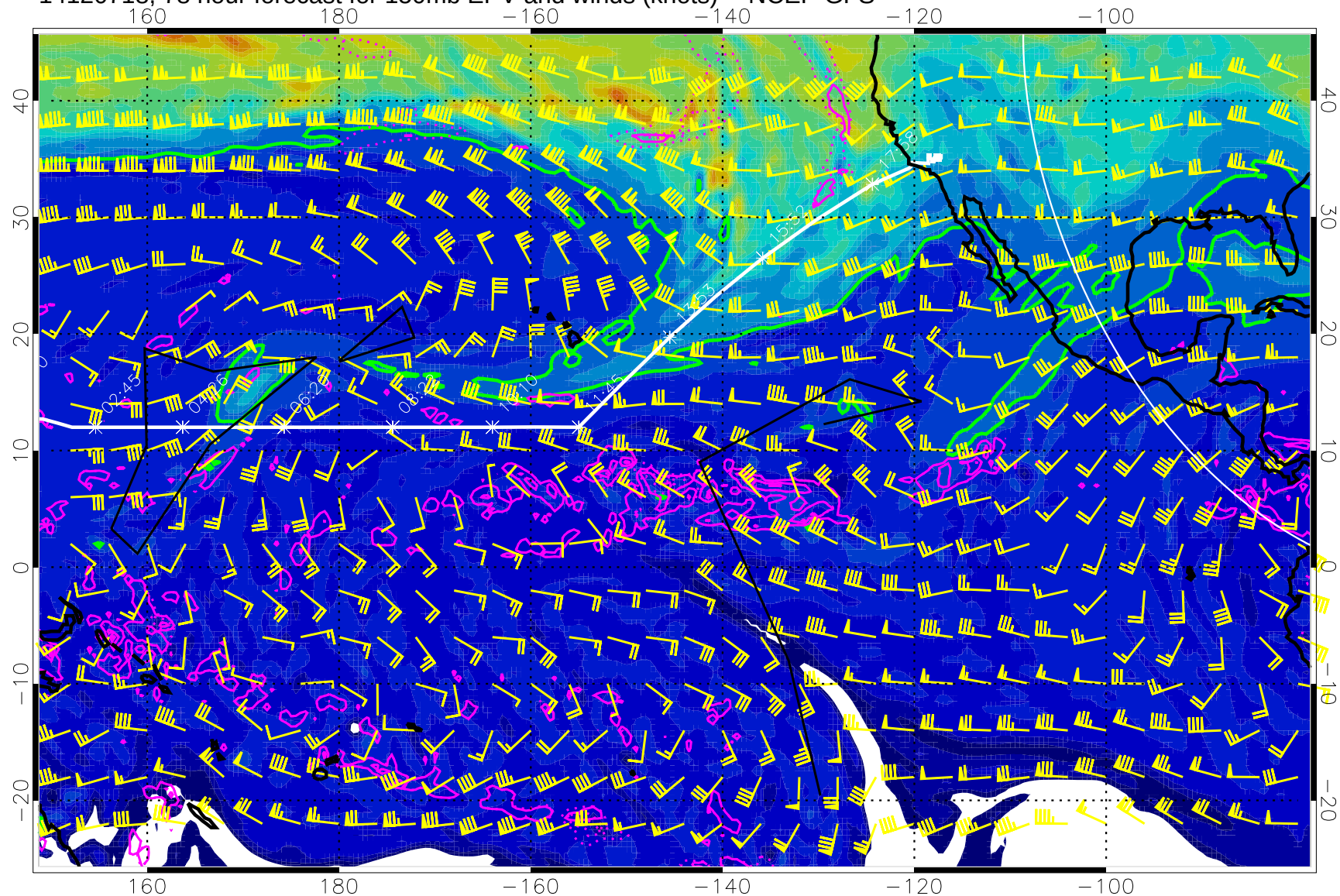
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip



14120718, 78 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS

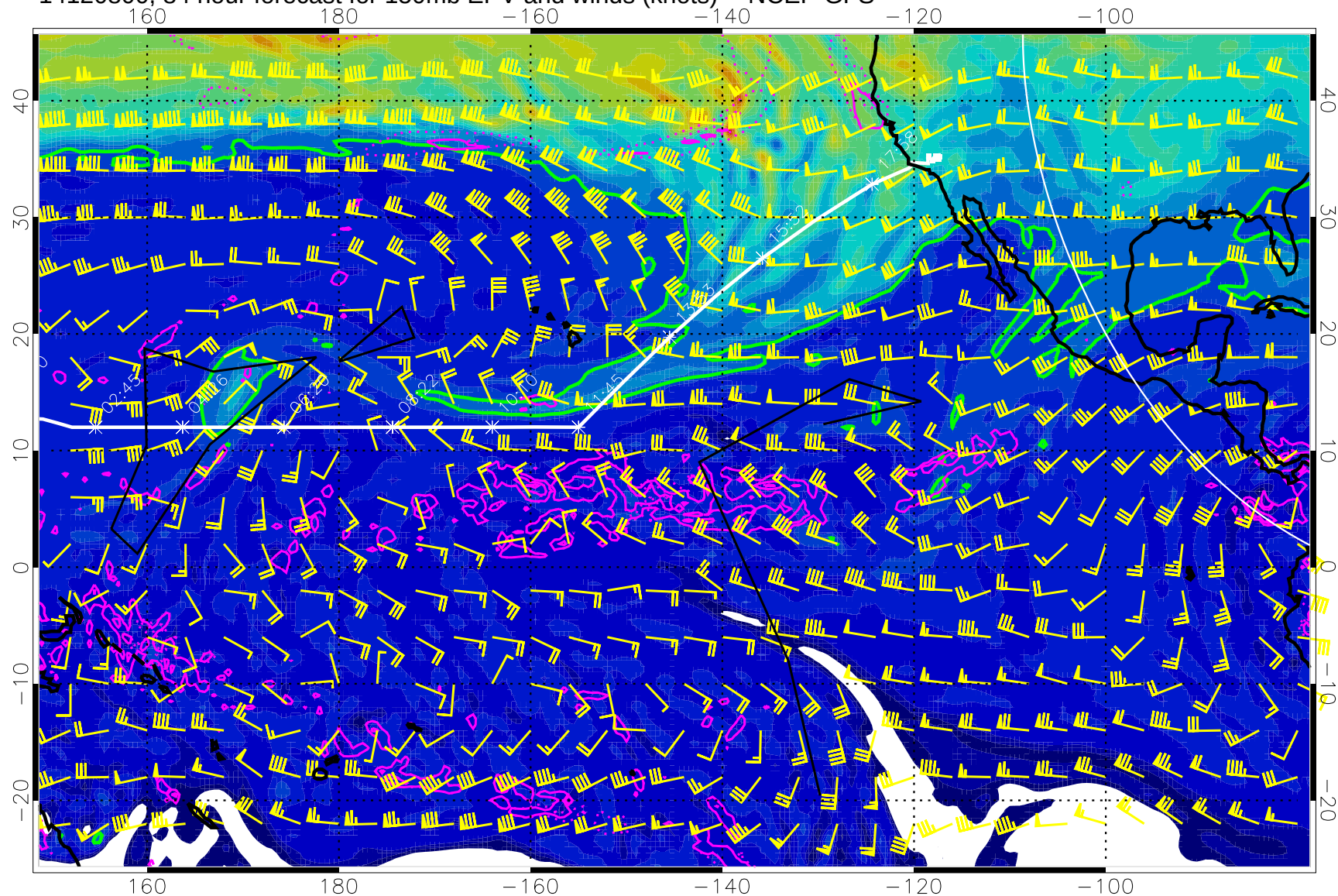


Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120800, 84 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

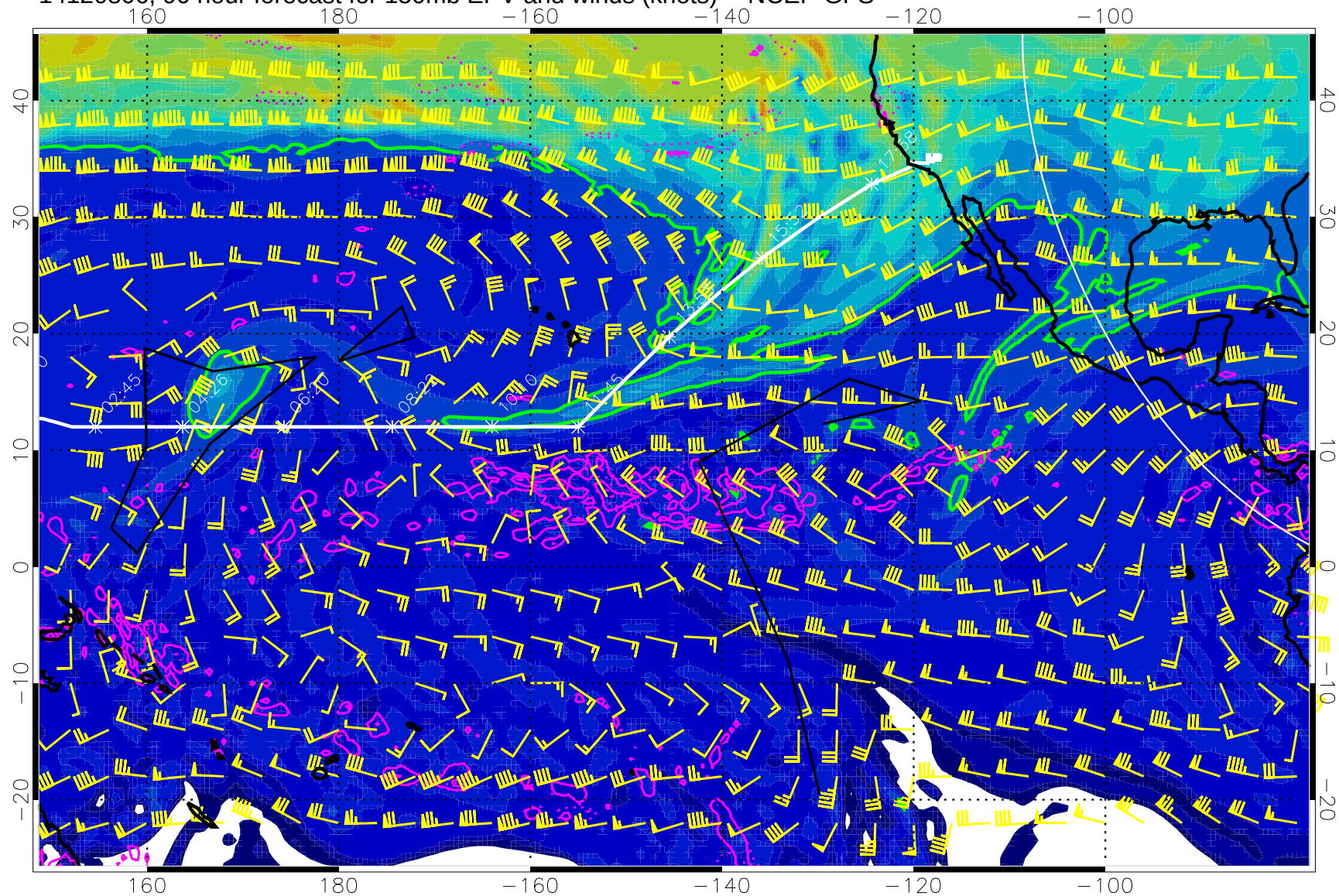
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip



14120806, 90 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



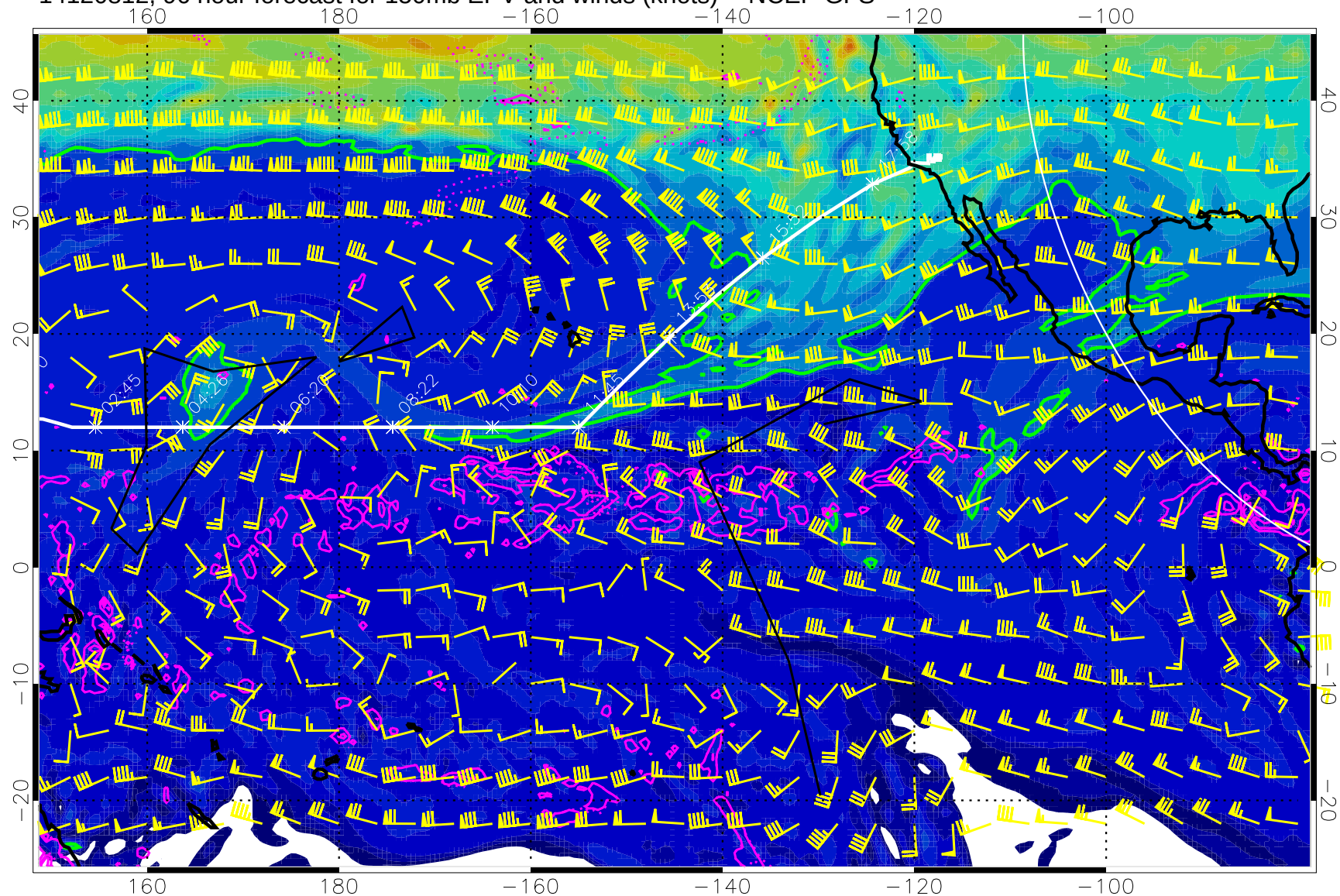
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120812, 96 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

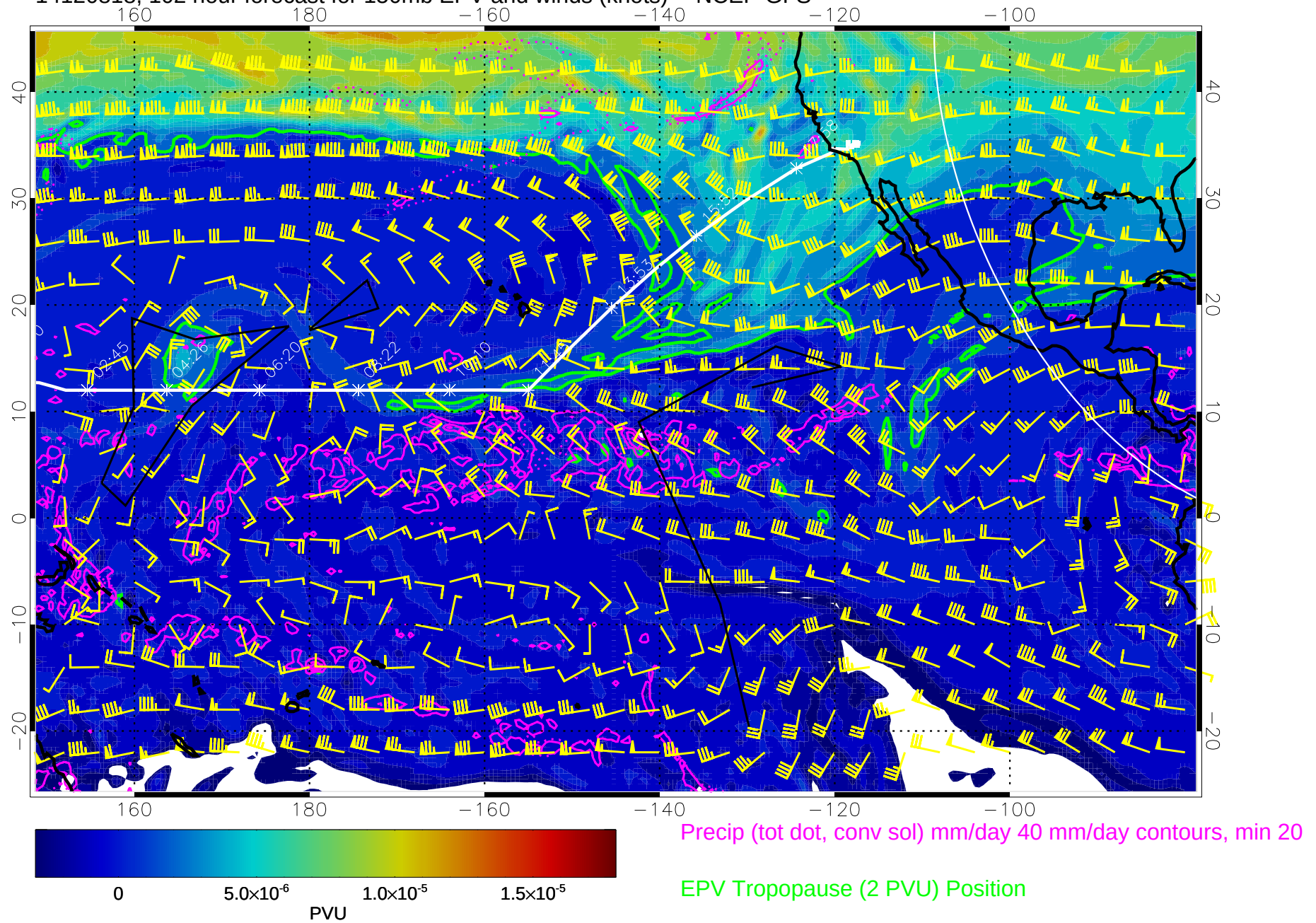
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

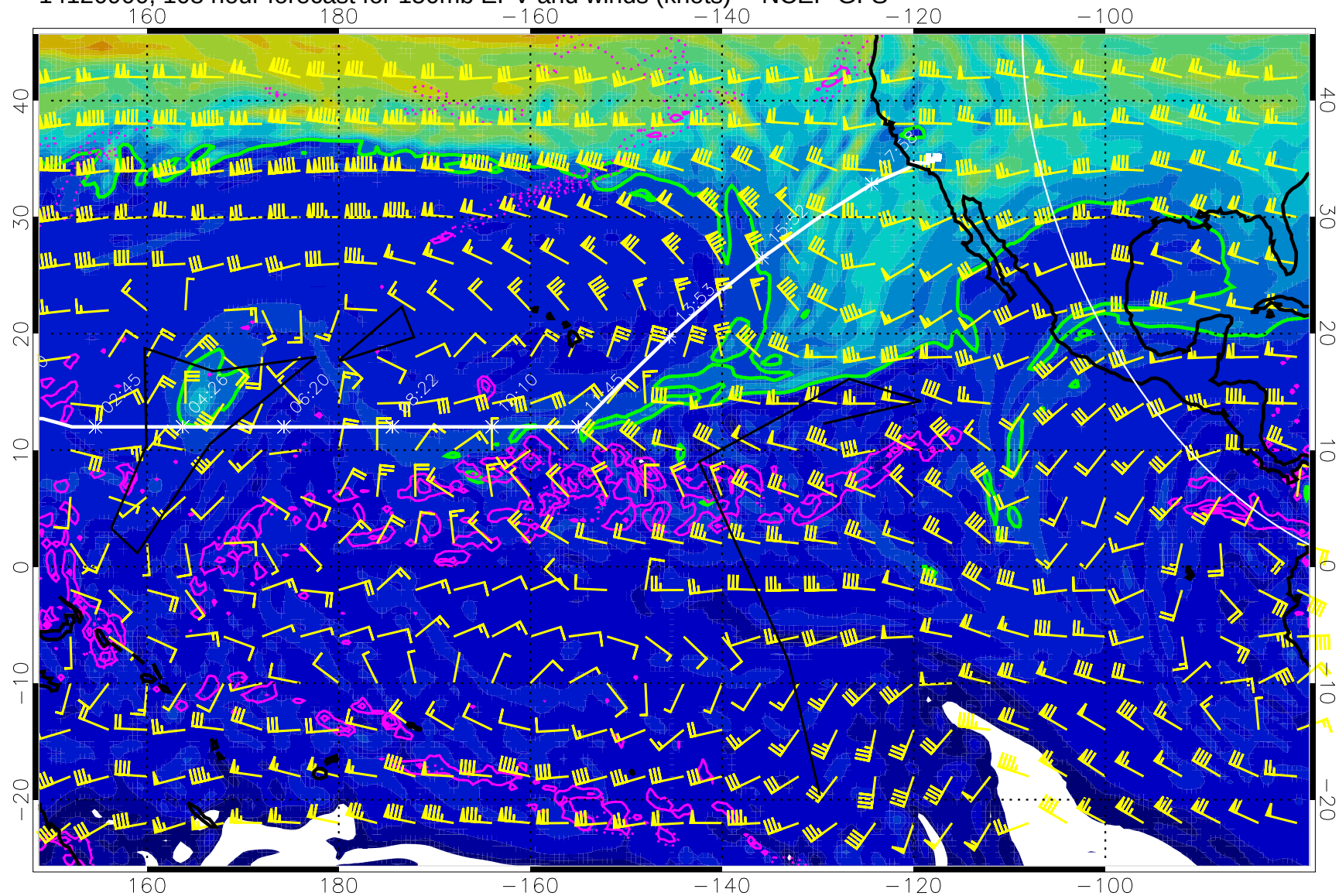
Range ring of 4055 km -- 13 hours GH round trip



14120818, 102 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



14120900, 108 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

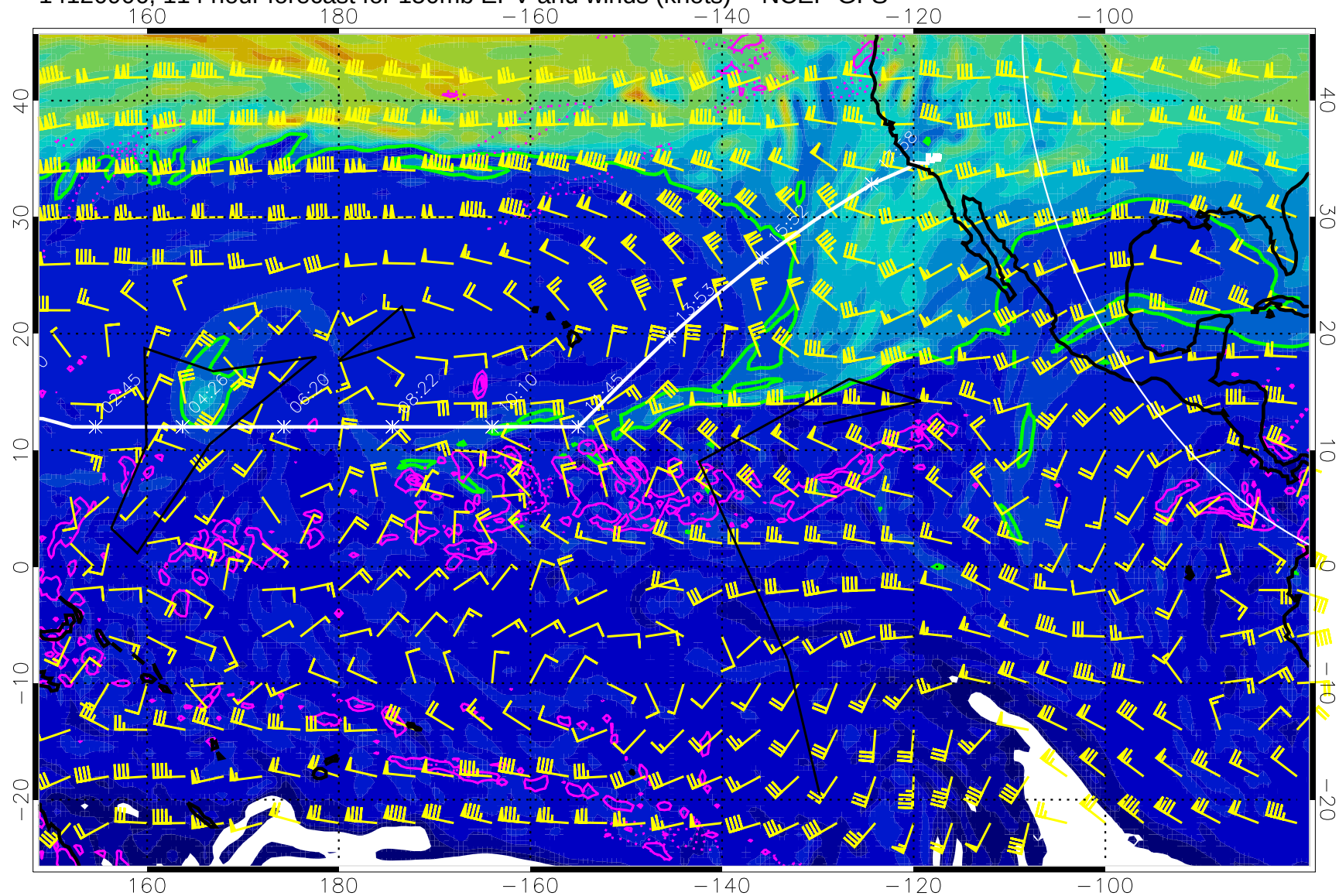
Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip



14120906, 114 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



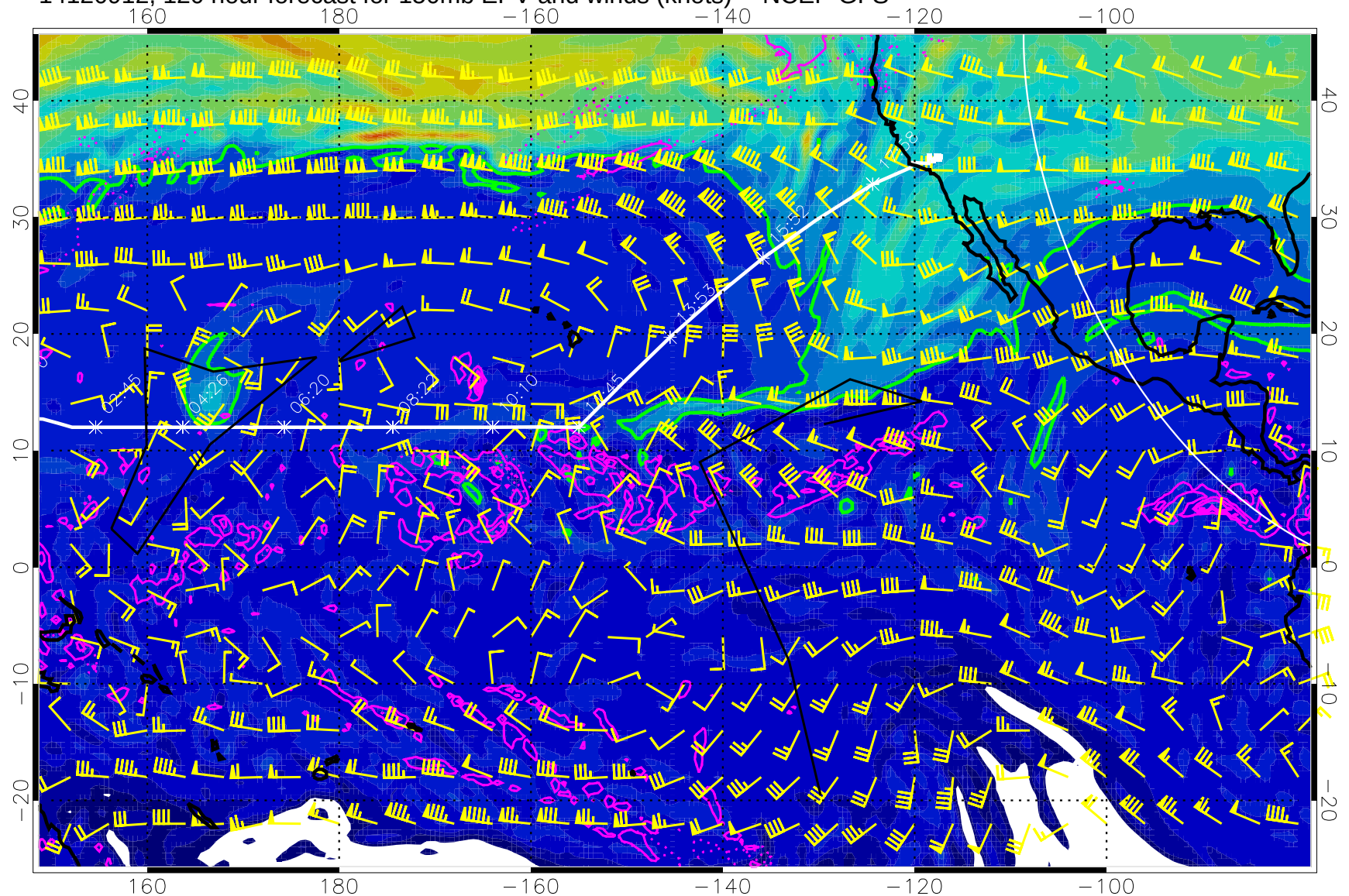
0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip

14120912, 120 hour forecast for 150mb EPV and winds (knots) -- NCEP GFS



0  $5.0 \times 10^{-6}$   $1.0 \times 10^{-5}$   $1.5 \times 10^{-5}$   
PVU

Precip (tot dot, conv sol) mm/day 40 mm/day contours, min 20

EPV Tropopause (2 PVU) Position

Range ring of 4055 km -- 13 hours GH round trip