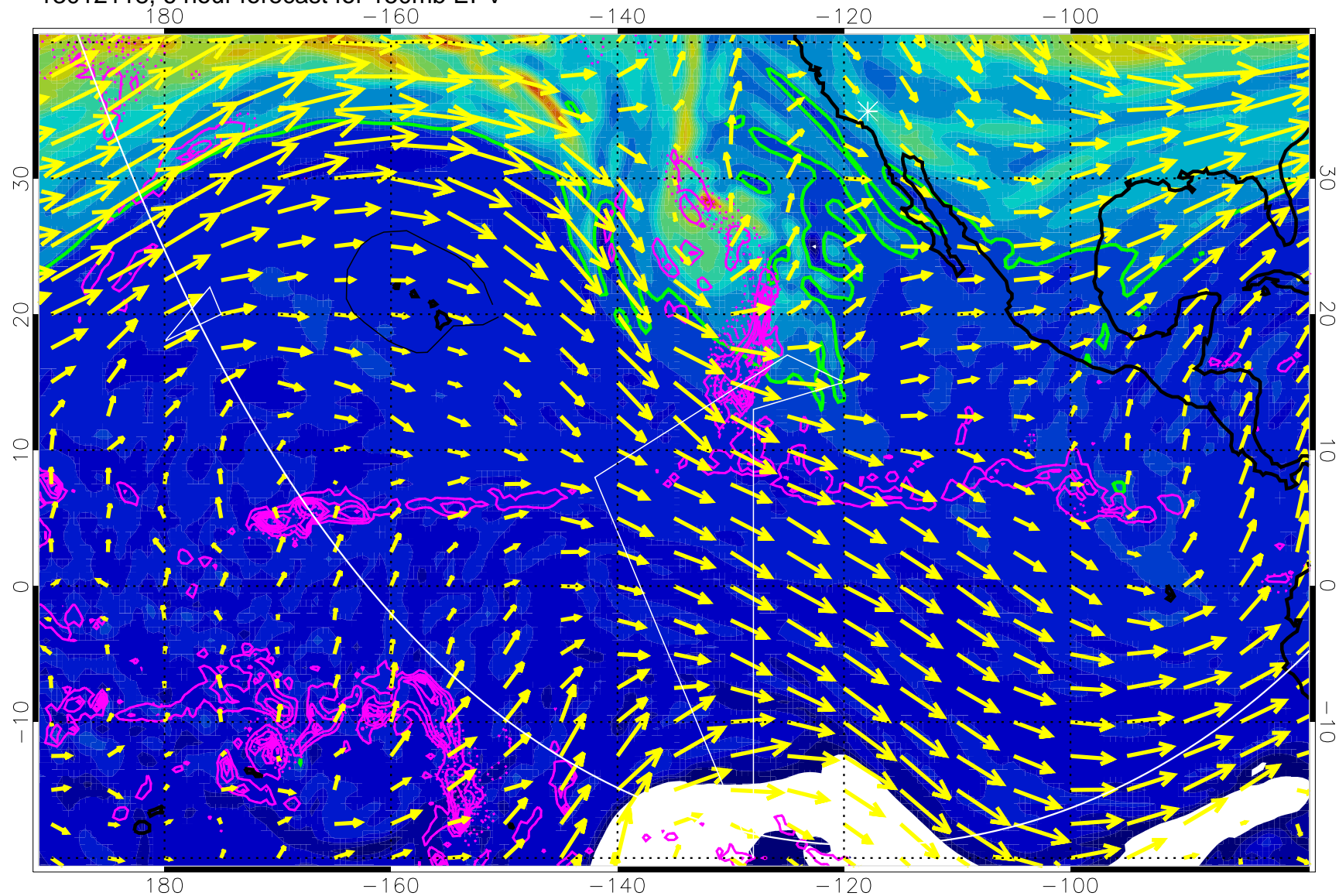


13012118, 6 hour forecast for 150mb EPV



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

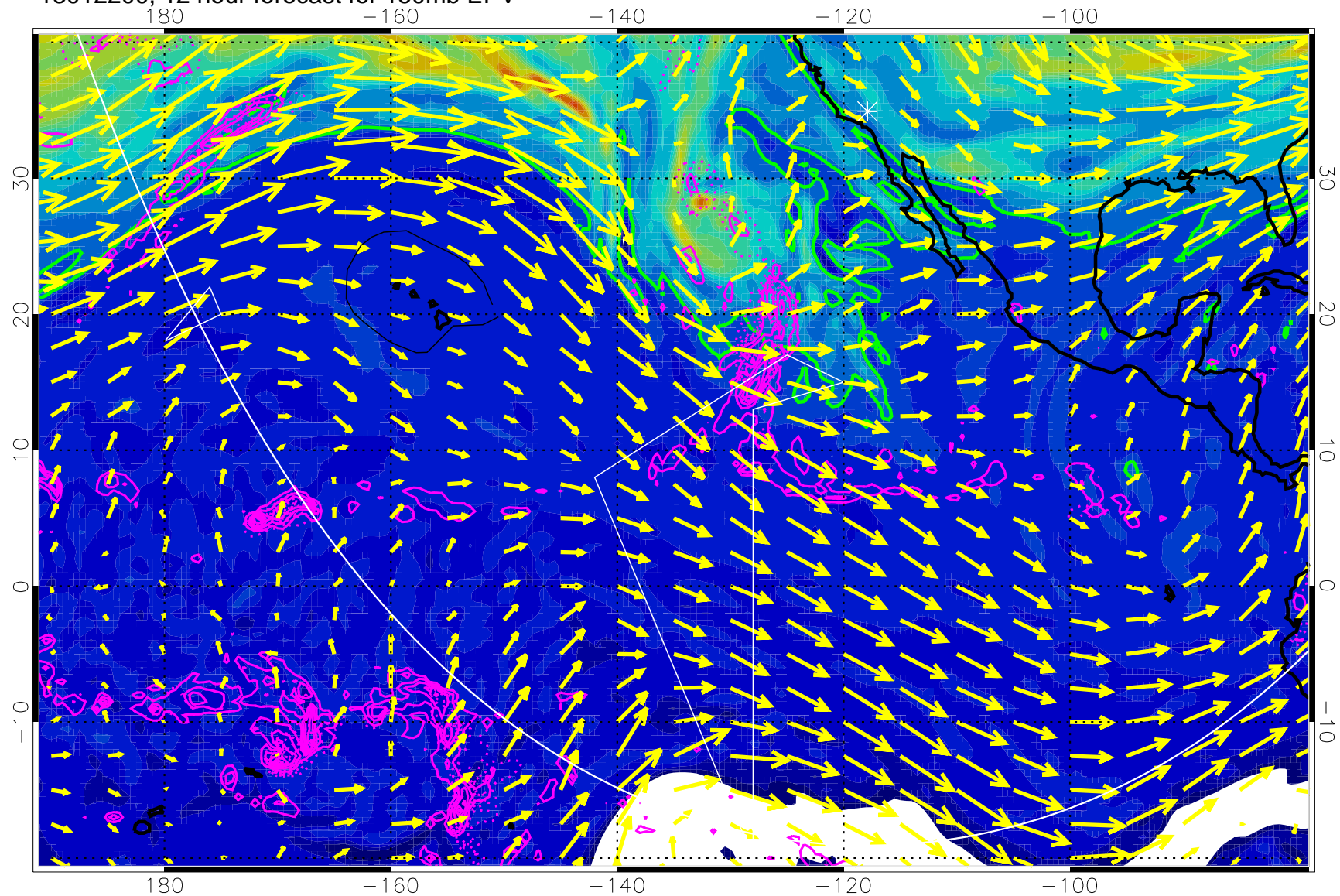
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012200, 12 hour forecast for 150mb EPV



0

$5.0 \cdot 10^{-6}$

$1.0 \cdot 10^{-5}$

$1.5 \cdot 10^{-5}$

PVU

Precip (tot dot, conv sol) past 6 hrs 6 kg/m<sup>2</sup> contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

180	-160	-140	-120	-100
-----	------	------	------	------

 $5.0 \cdot 10^{-6}$  $1.0 \cdot 10^{-5}$  $1.5 \cdot 10^{-5}$ 

PVU

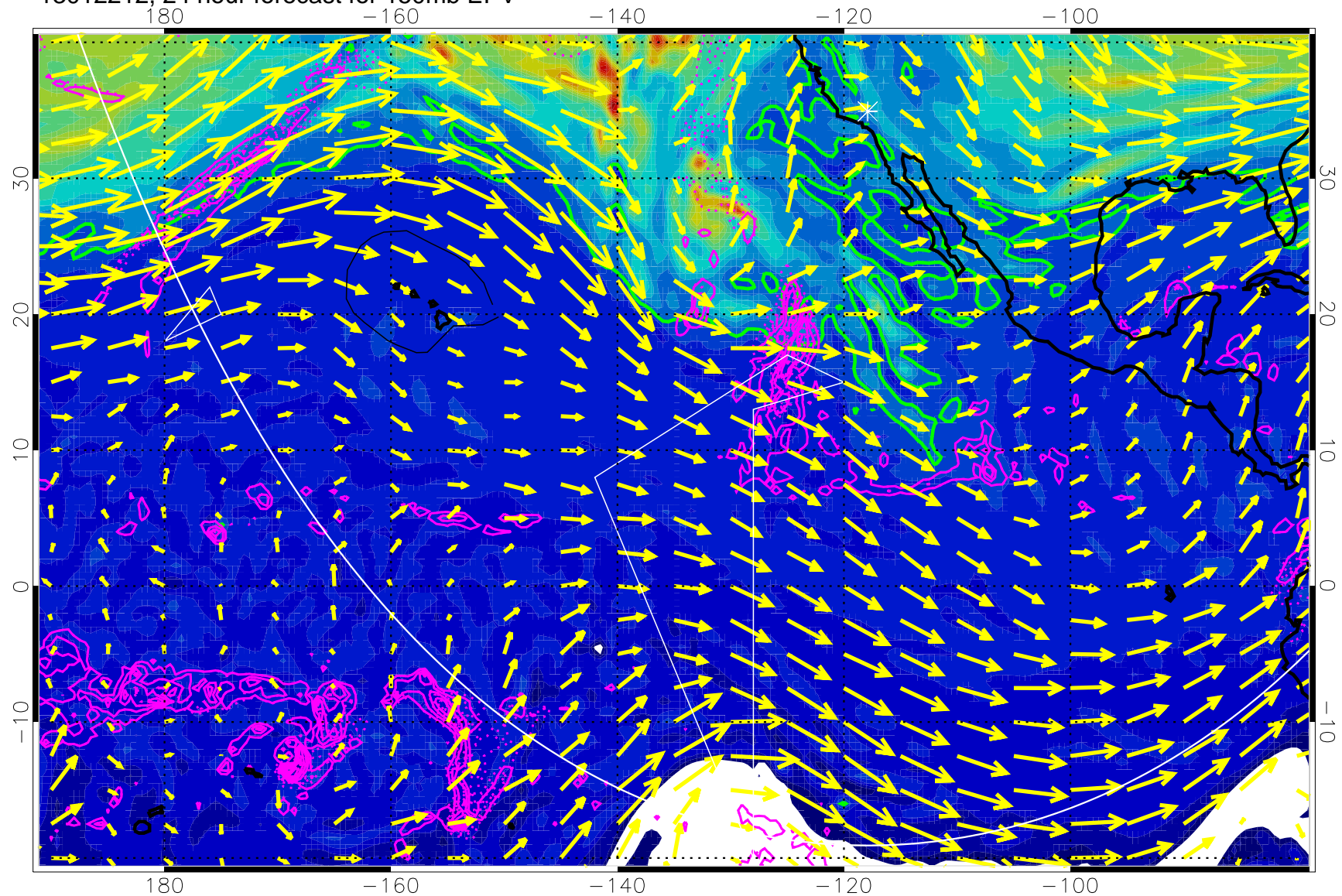
## EPV Tropopause (2 PVU) Position

→ 60 m/s

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



13012212, 24 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

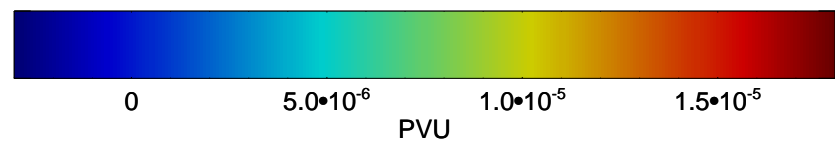
EPV Tropopause (2 PVU) Position

→ 60 m/s

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



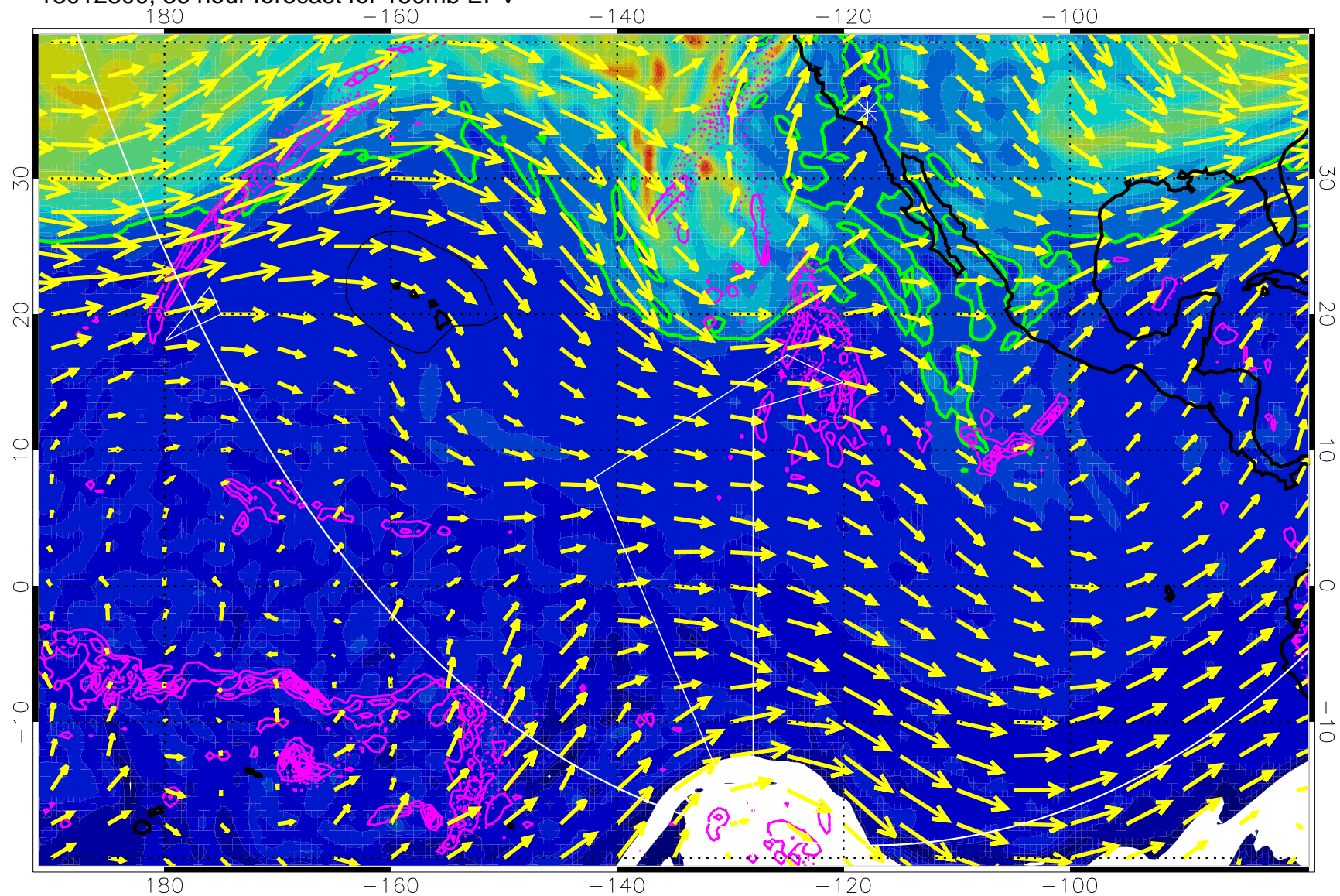
180	-160	-140	-120	-100
-----	------	------	------	------



## EPV Tropopause (2 PVU) Position

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

13012300, 36 hour forecast for 150mb EPV



0

$5.0 \cdot 10^{-6}$

$1.0 \cdot 10^{-5}$

$1.5 \cdot 10^{-5}$

PVU

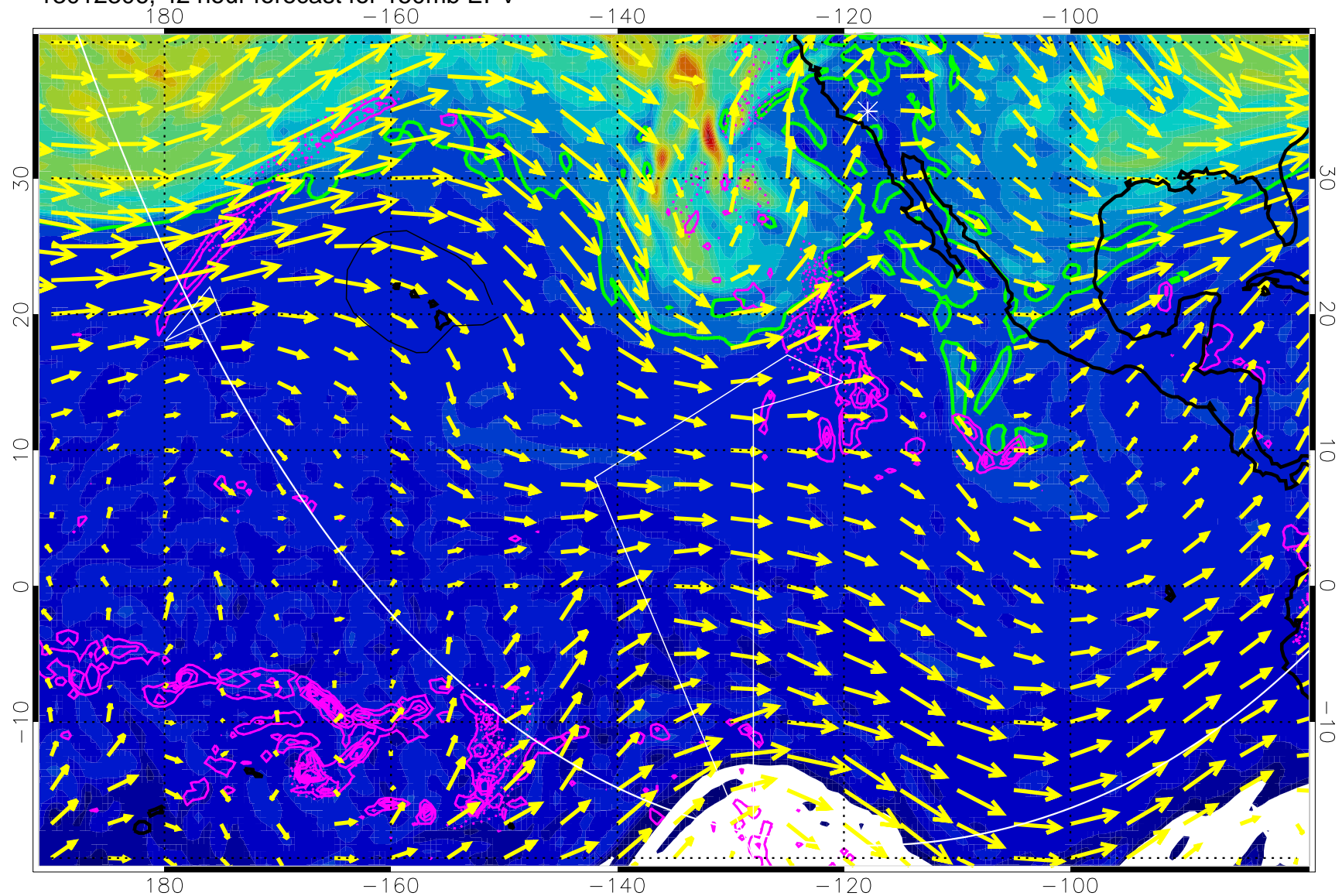
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012306, 42 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m<sup>2</sup> contours, min 4

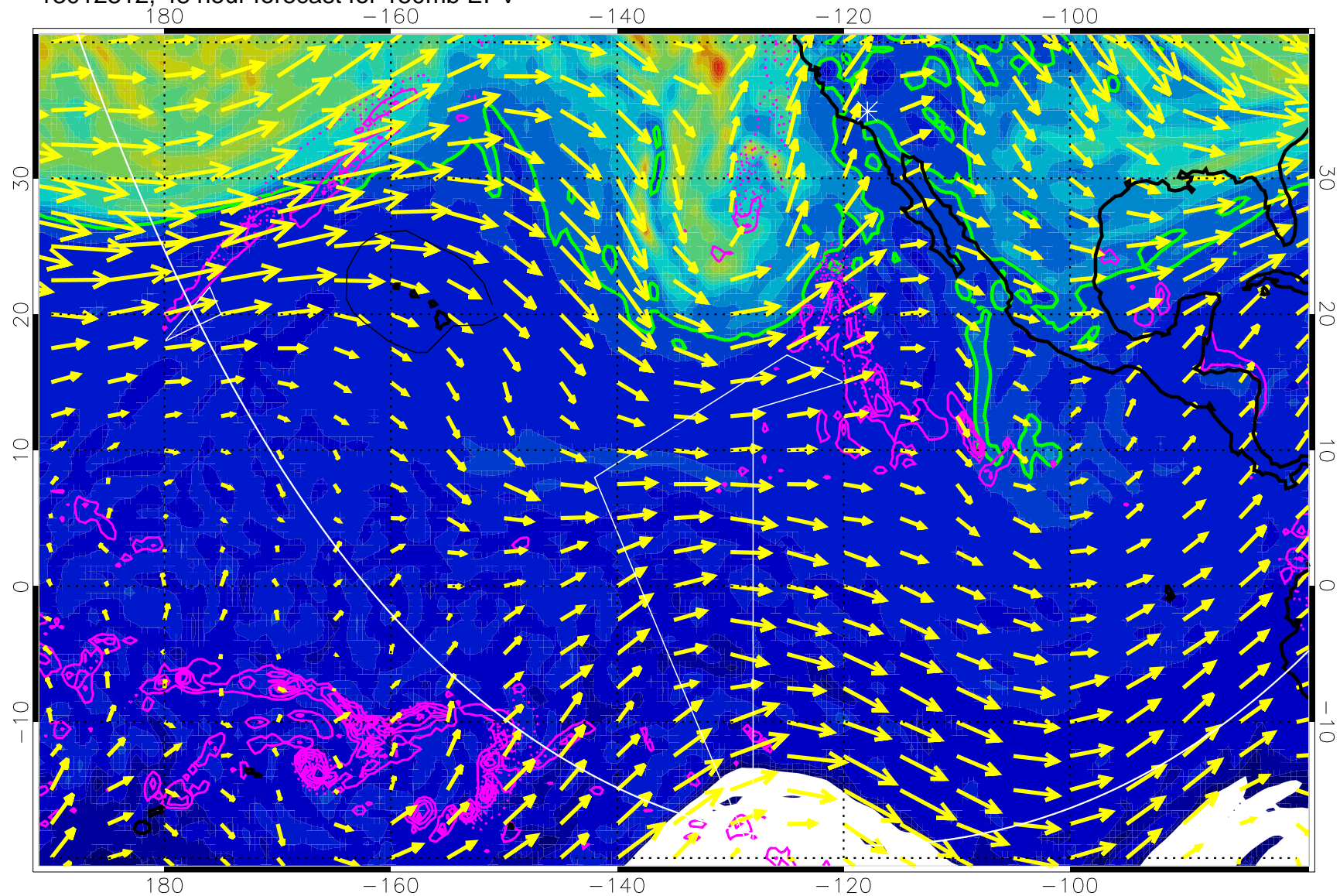
EPV Tropopause (2 PVU) Position

→ 60 m/s

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



13012312, 48 hour forecast for 150mb EPV



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

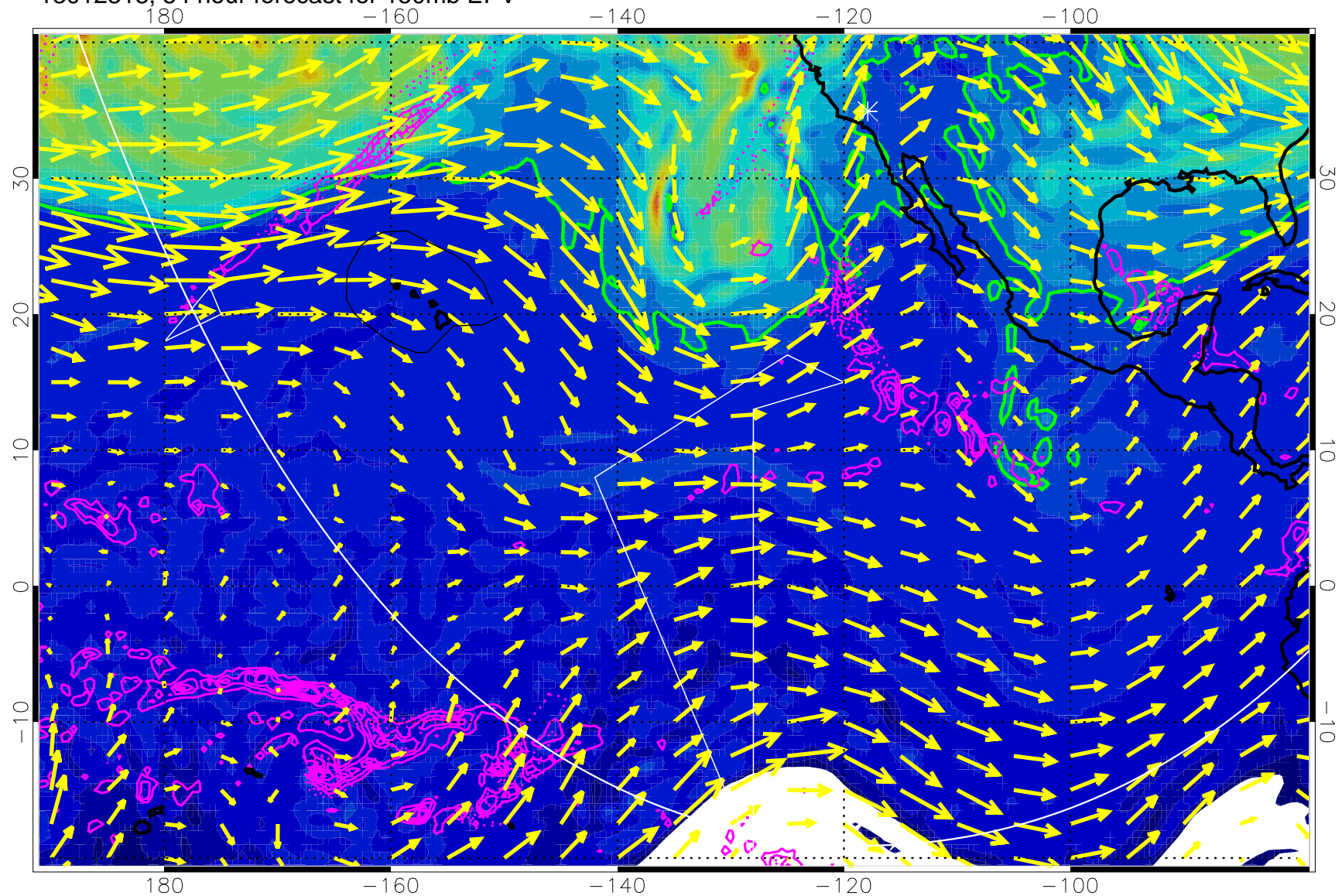
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012318, 54 hour forecast for 150mb EPV



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

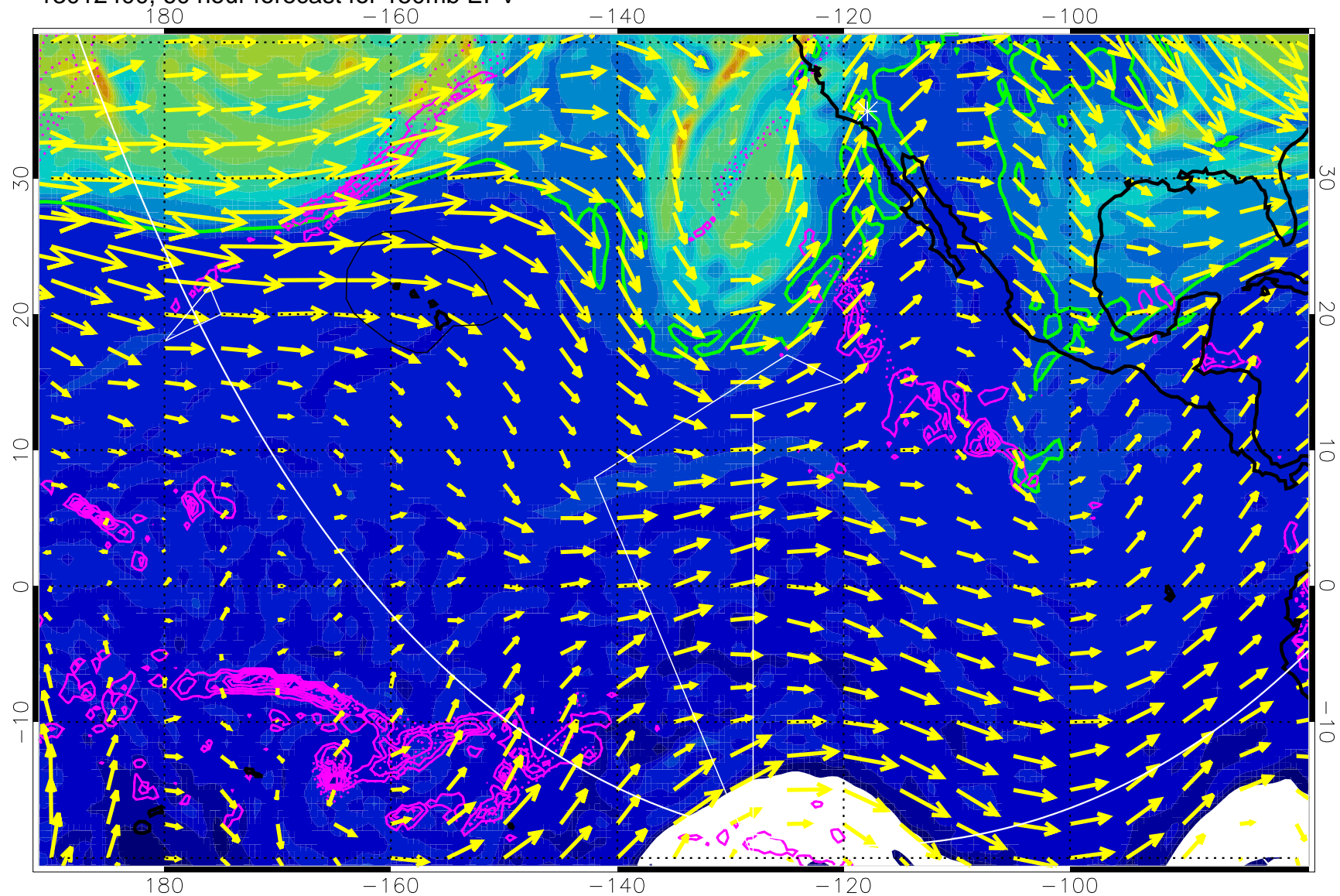
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012400, 60 hour forecast for 150mb EPV



0

$5.0 \cdot 10^{-6}$

$1.0 \cdot 10^{-5}$

$1.5 \cdot 10^{-5}$

PVU

Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

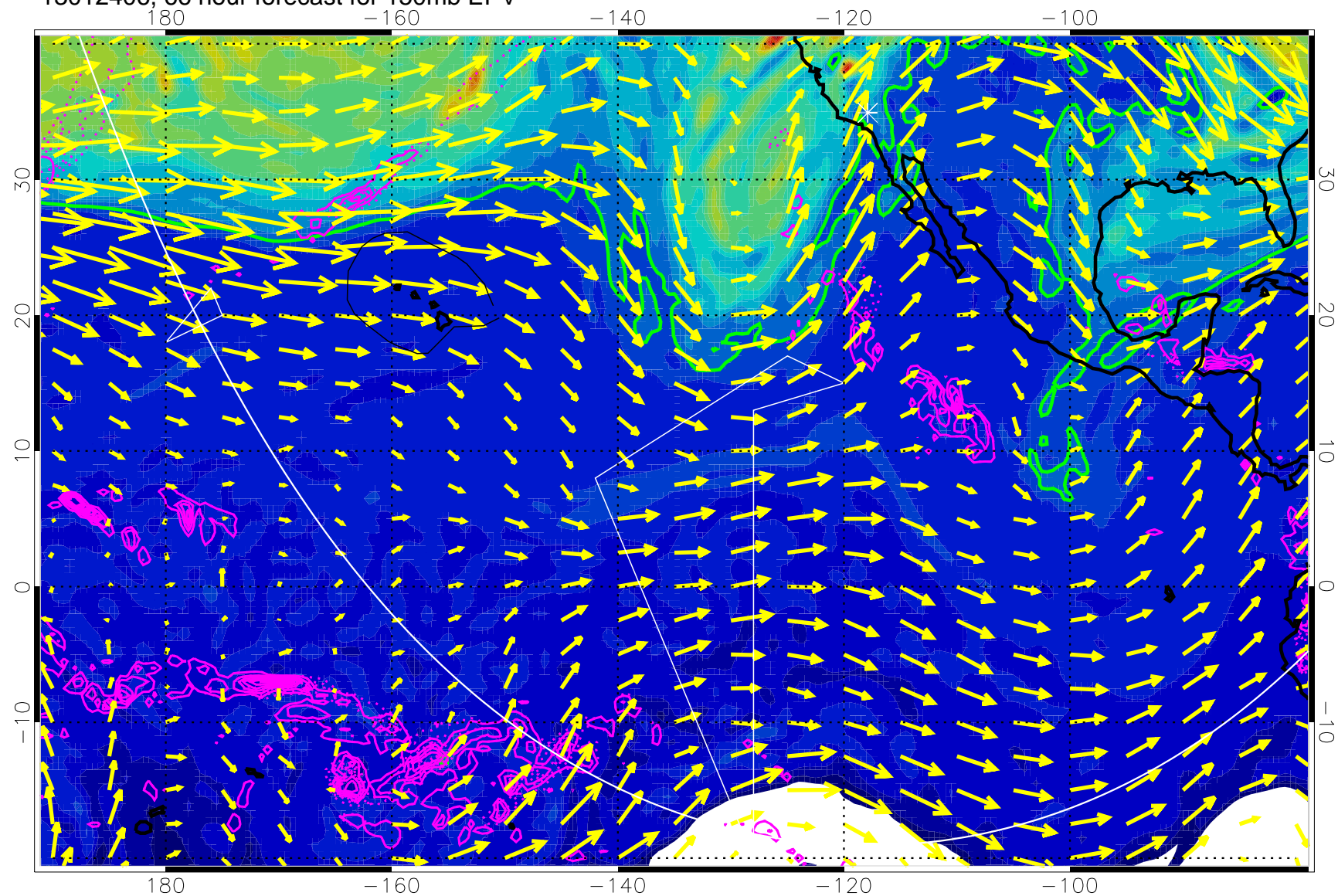
EPV Tropopause (2 PVU) Position

→ 60 m/s

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



13012406, 66 hour forecast for 150mb EPV



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

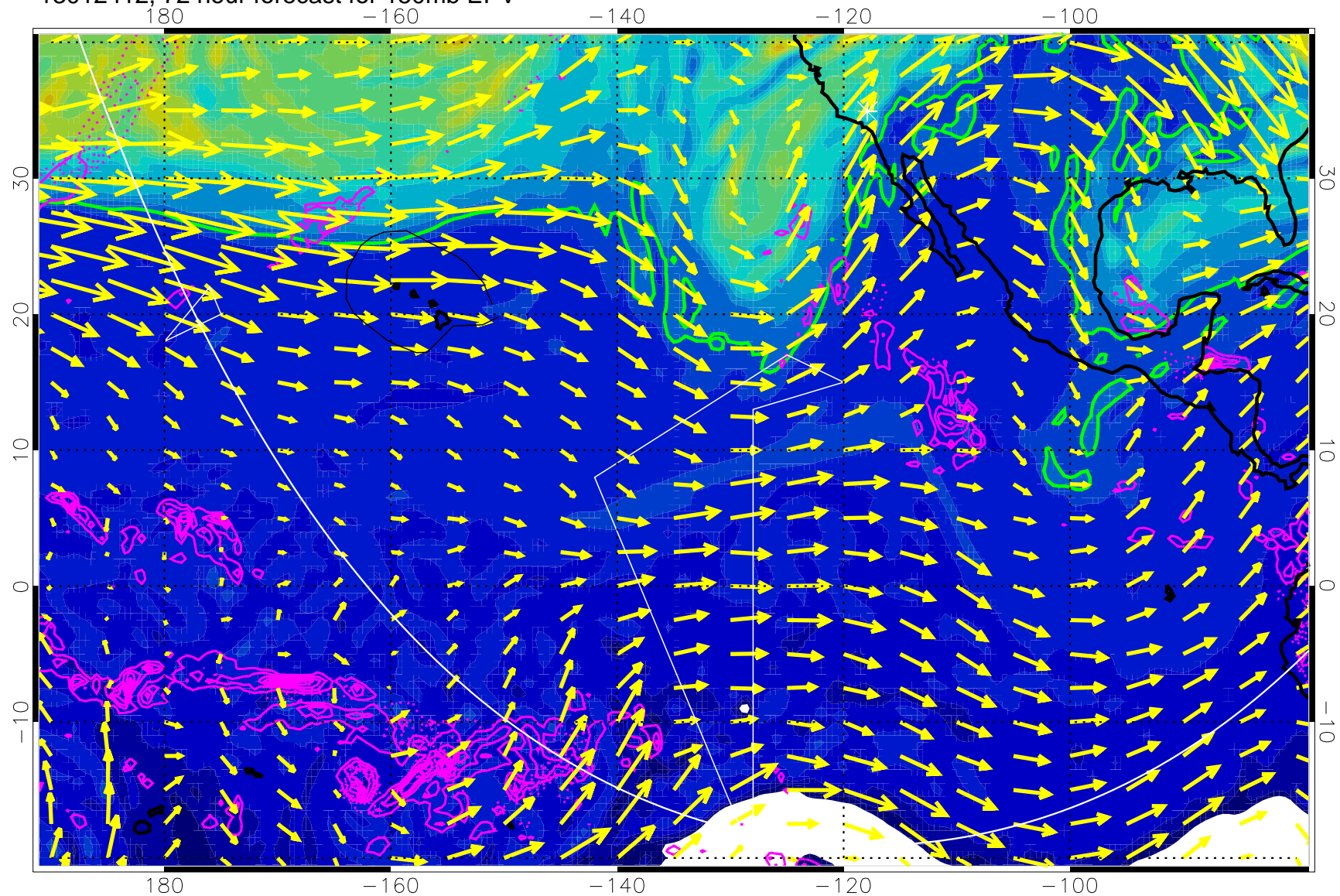
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012412, 72 hour forecast for 150mb EPV



0

$5.0 \cdot 10^{-6}$

$1.0 \cdot 10^{-5}$

$1.5 \cdot 10^{-5}$

PVU

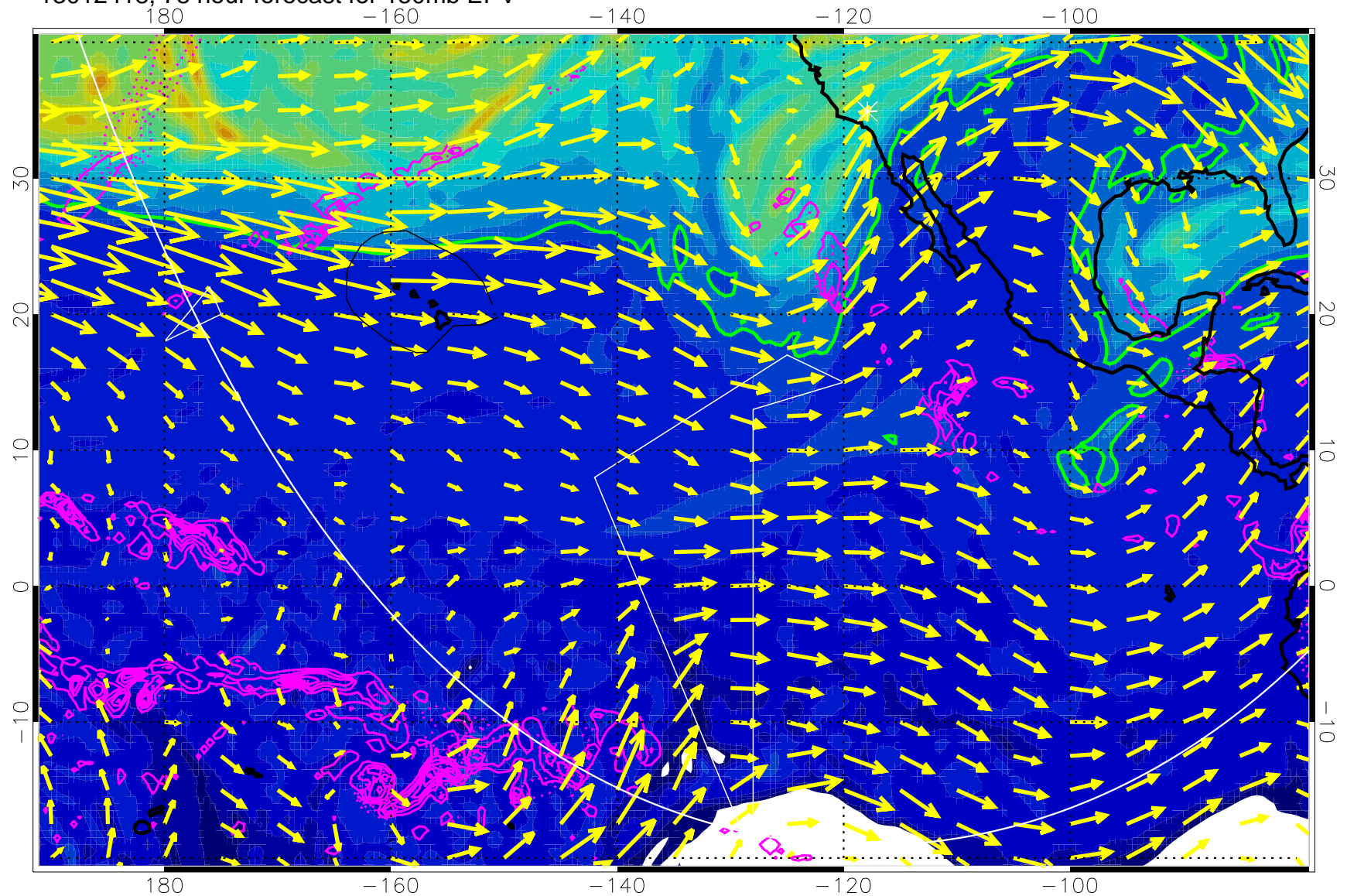
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012418, 78 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

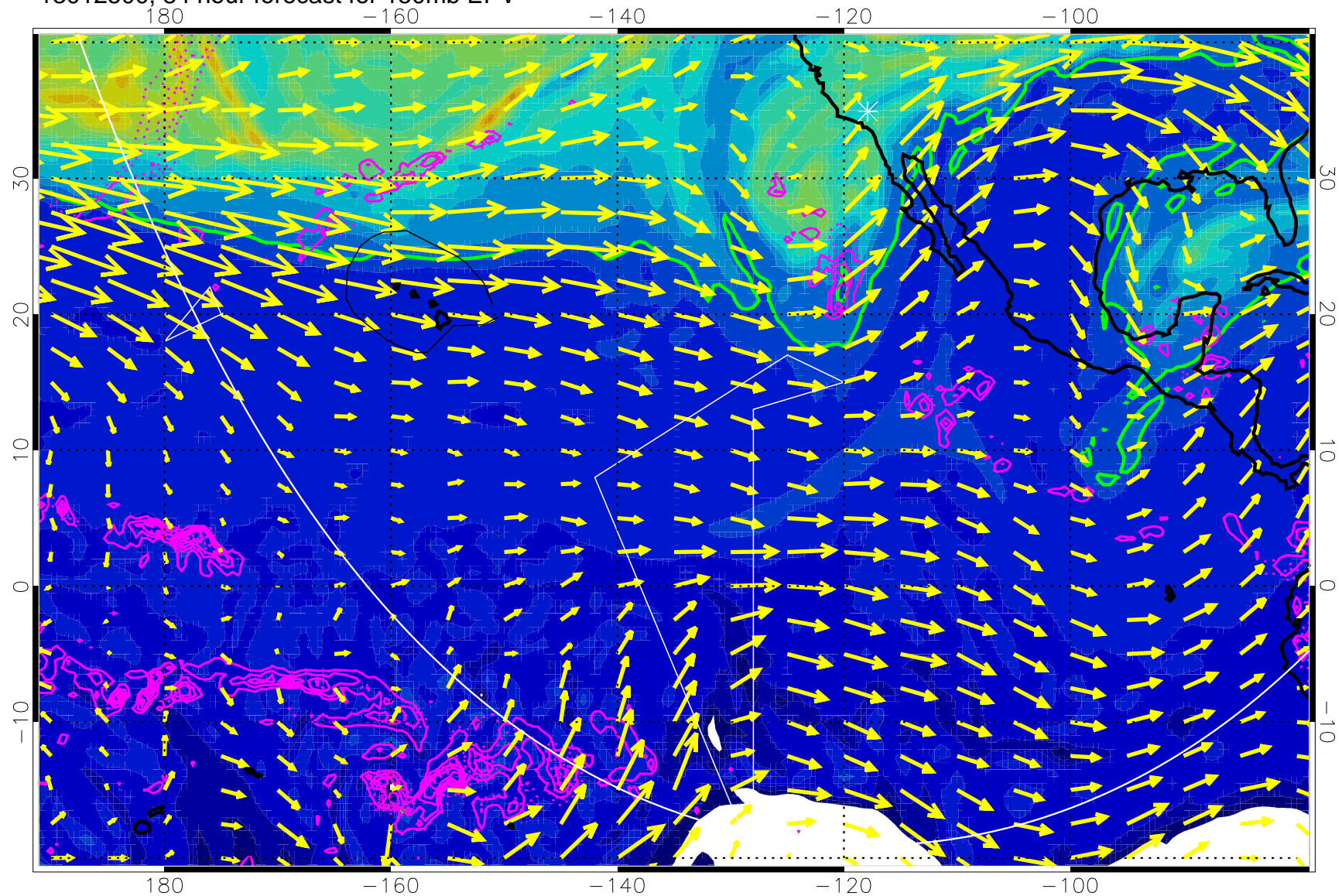
EPV Tropopause (2 PVU) Position

→ 60 m/s

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



13012500, 84 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m<sup>2</sup> contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

180	-160	-140	-120	-100
-----	------	------	------	------



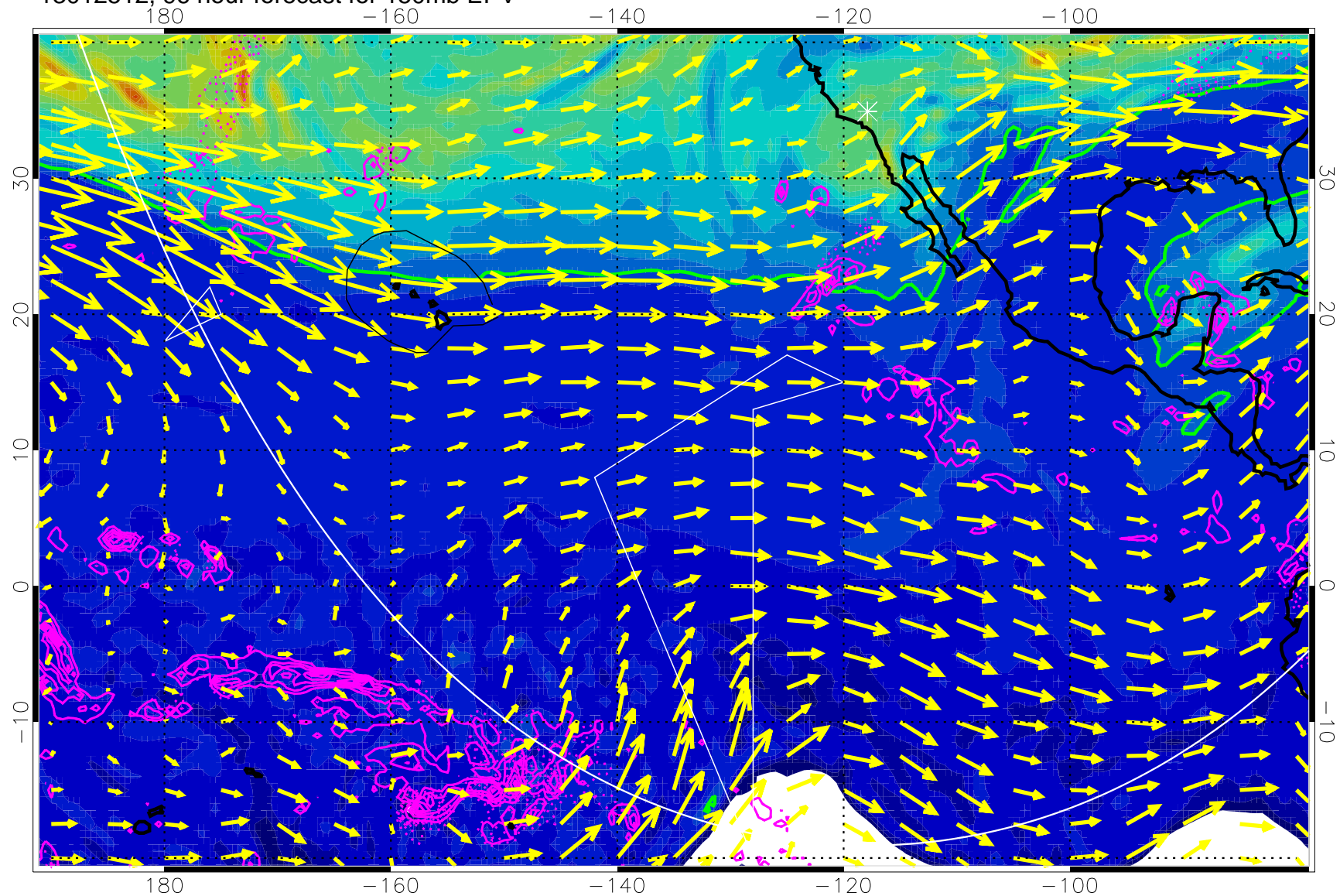
Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

## EPV Tropopause (2 PVU) Position

→ 60 m/s

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

13012512, 96 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m<sup>2</sup> contours, min 4

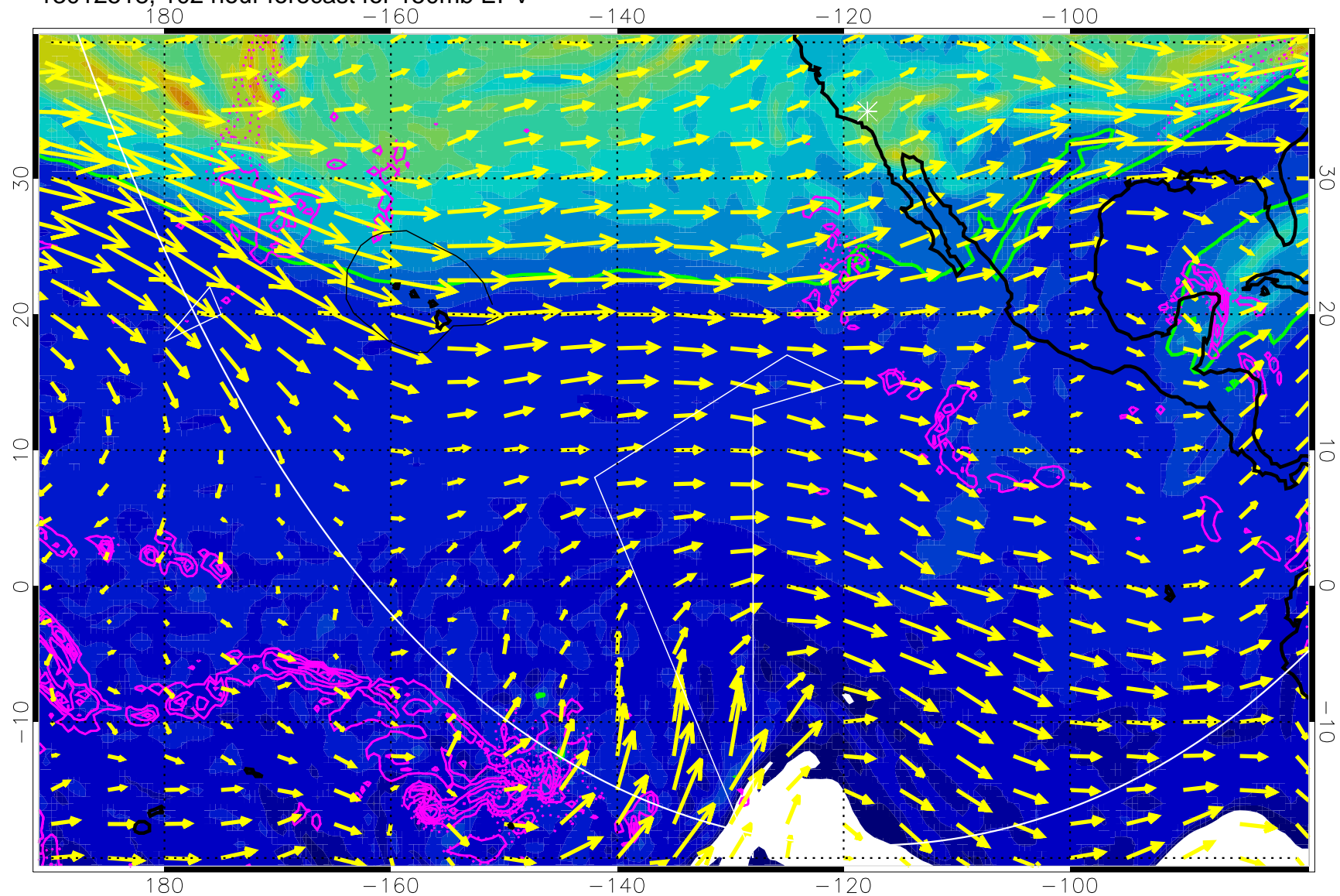
EPV Tropopause (2 PVU) Position

→ 60 m/s

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



13012518, 102 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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

180	-160	-140	-120	-100
-----	------	------	------	------

 $5.0 \cdot 10^{-6}$  $1.0 \cdot 10^{-5}$  $1.5 \cdot 10^{-5}$ 

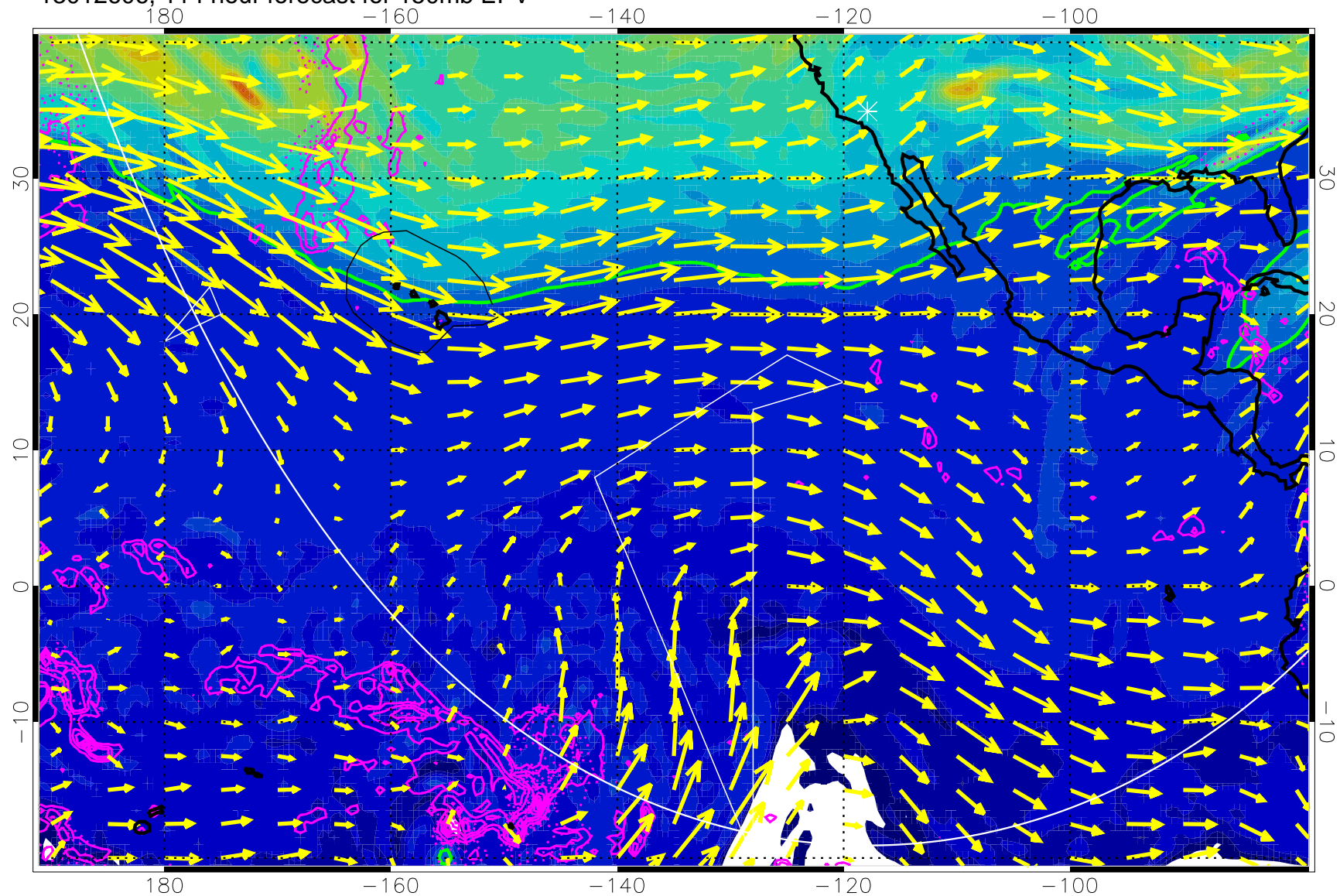
PVU

## EPV Tropopause (2 PVU) Position

$\rightarrow 60 \text{ m/s}$

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

13012606, 114 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

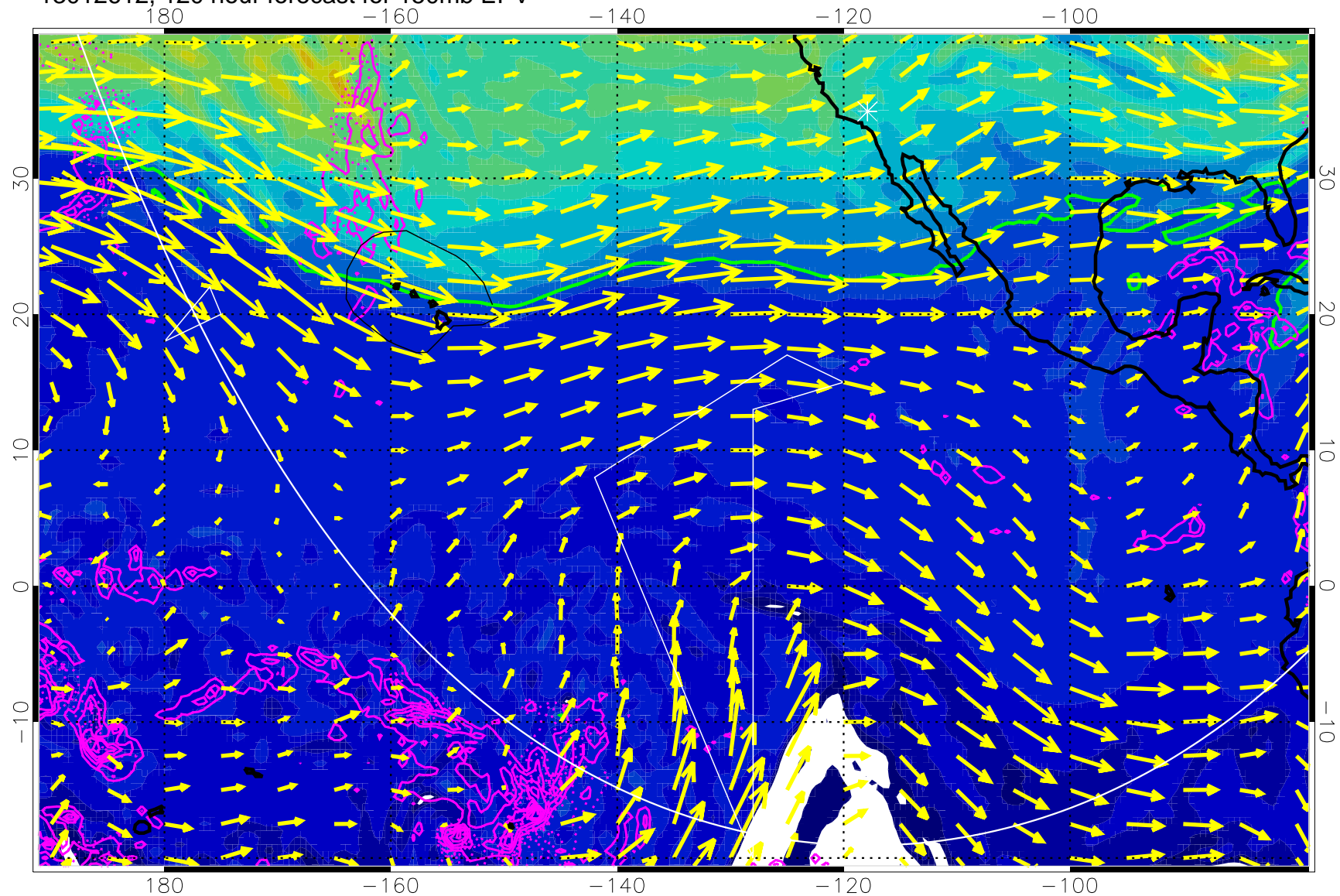
EPV Tropopause (2 PVU) Position

→ 60 m/s

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



13012612, 120 hour forecast for 150mb EPV



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

Precip (tot dot, conv sol) past 6 hrs 6 kg/m2 contours, min 4

EPV Tropopause (2 PVU) Position

→ 60 m/s

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