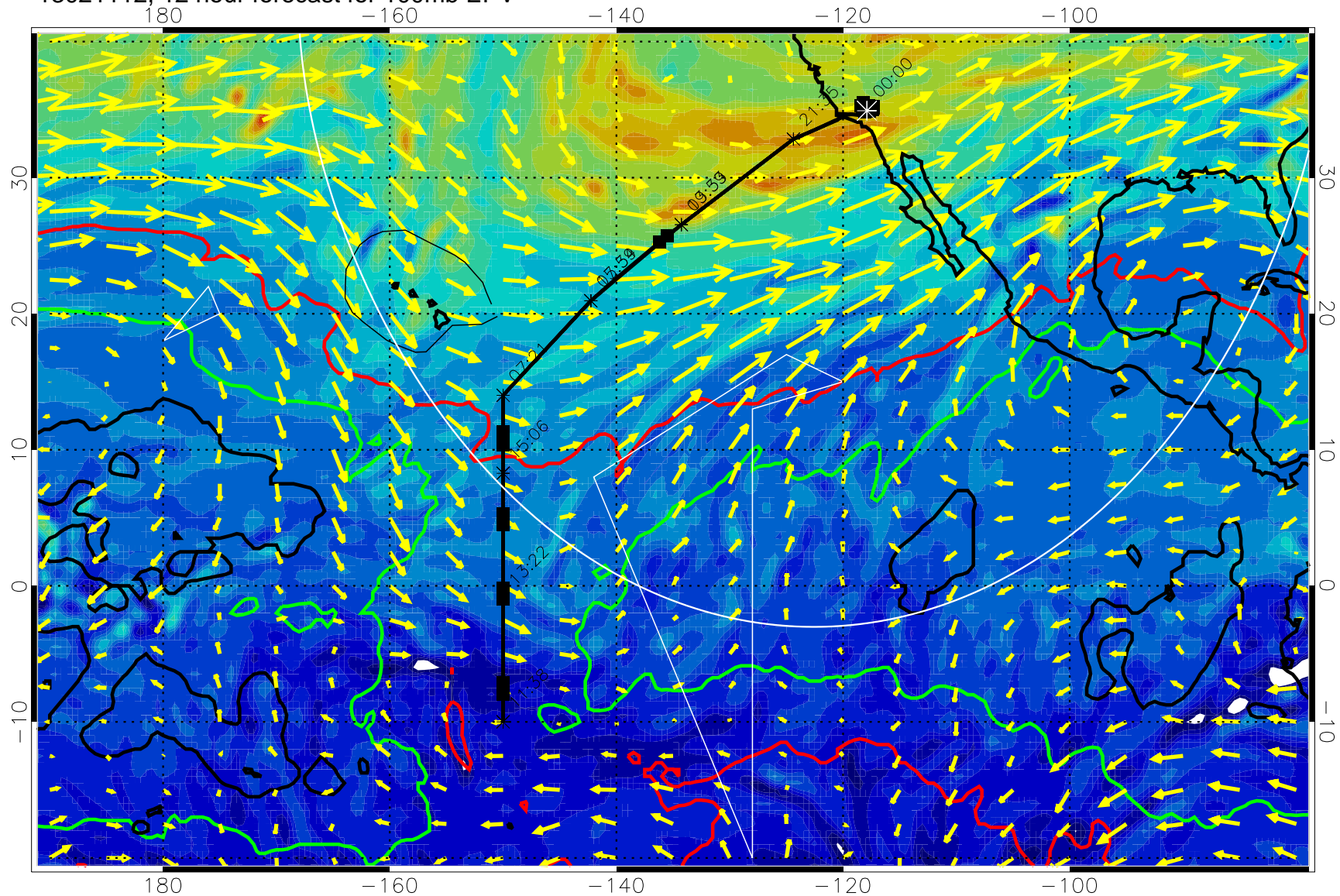


13021112, 12 hour forecast for 100mb EPV



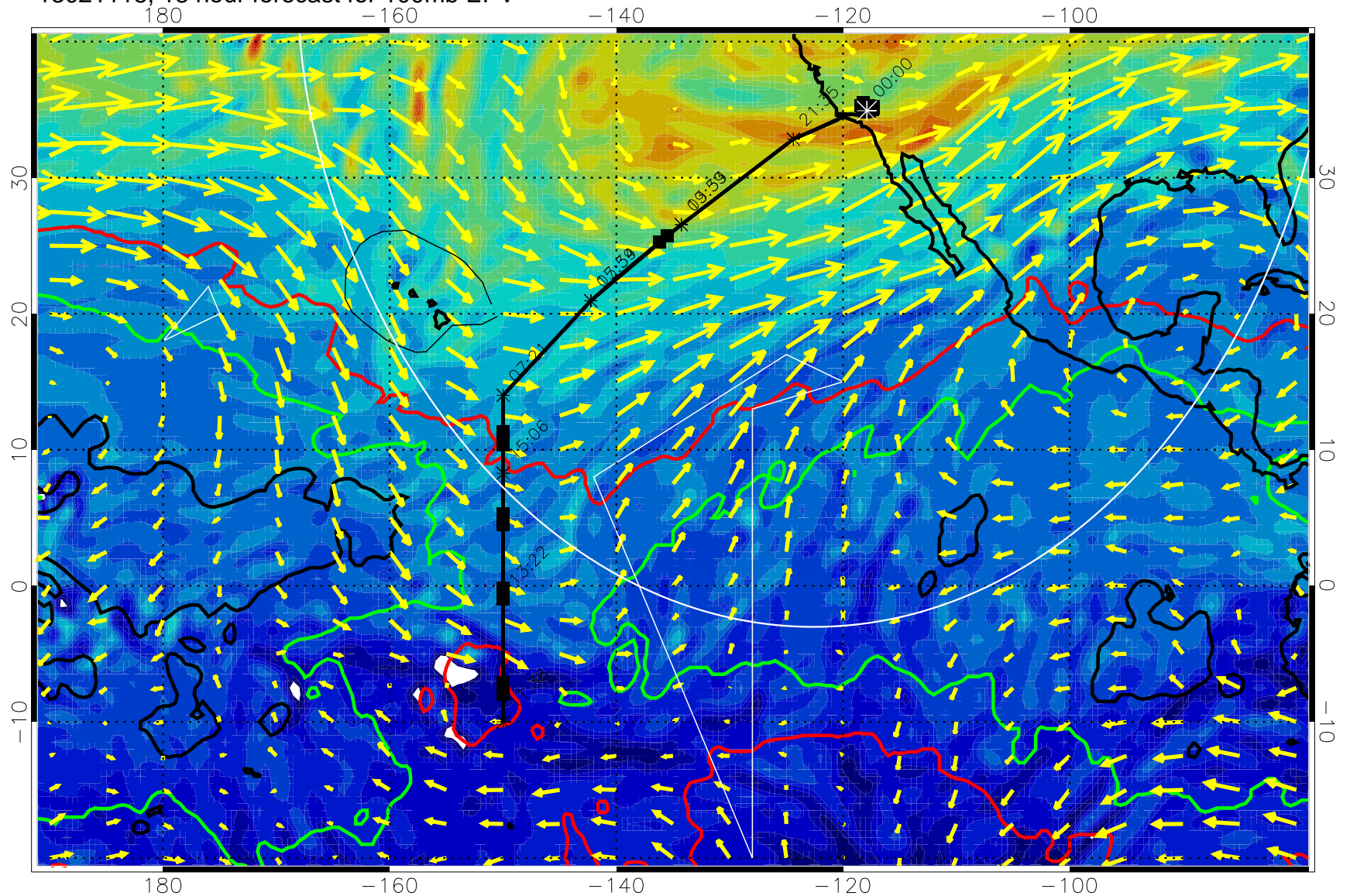
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021118, 18 hour forecast for 100mb EPV



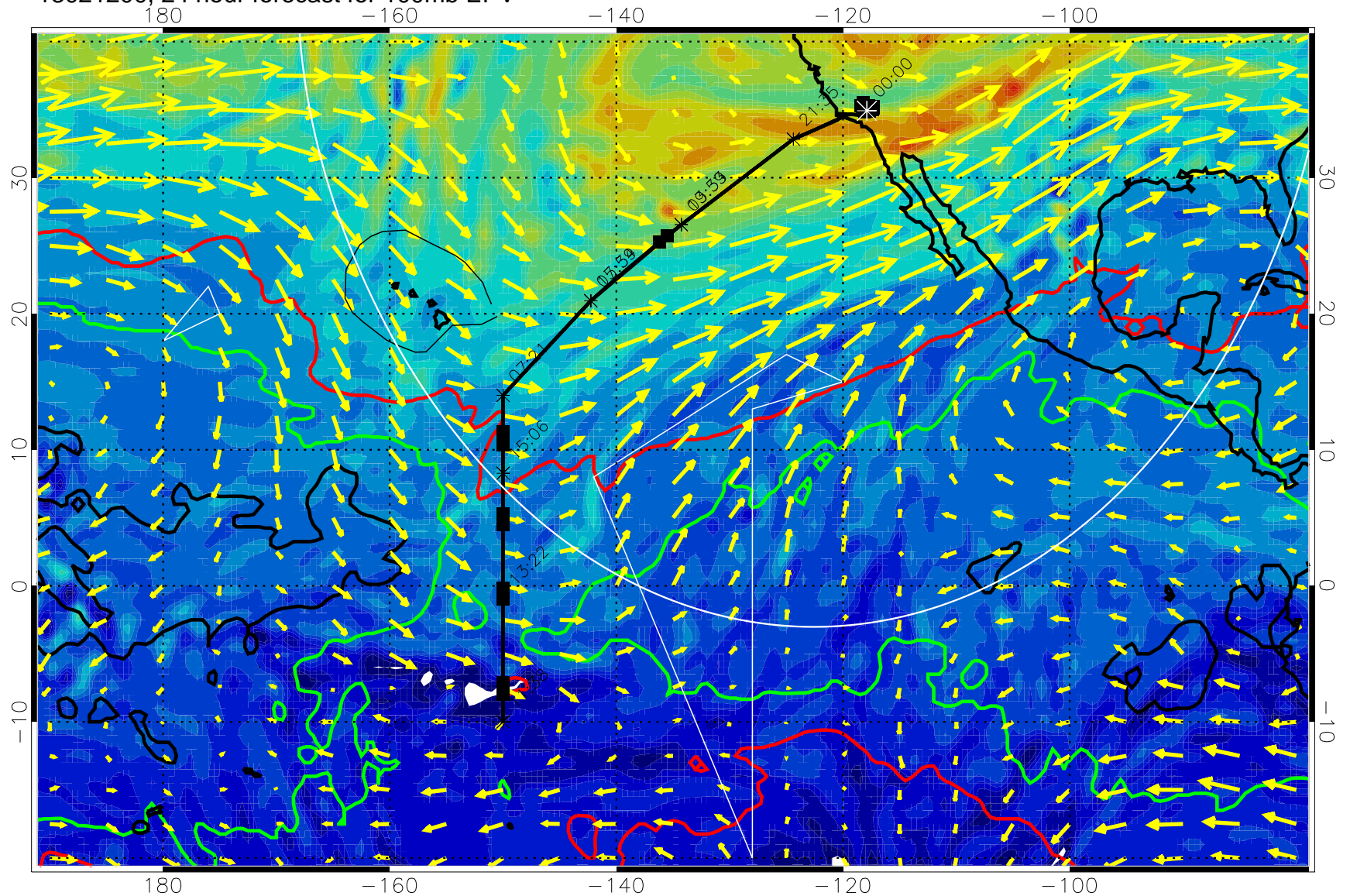
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021200, 24 hour forecast for 100mb EPV



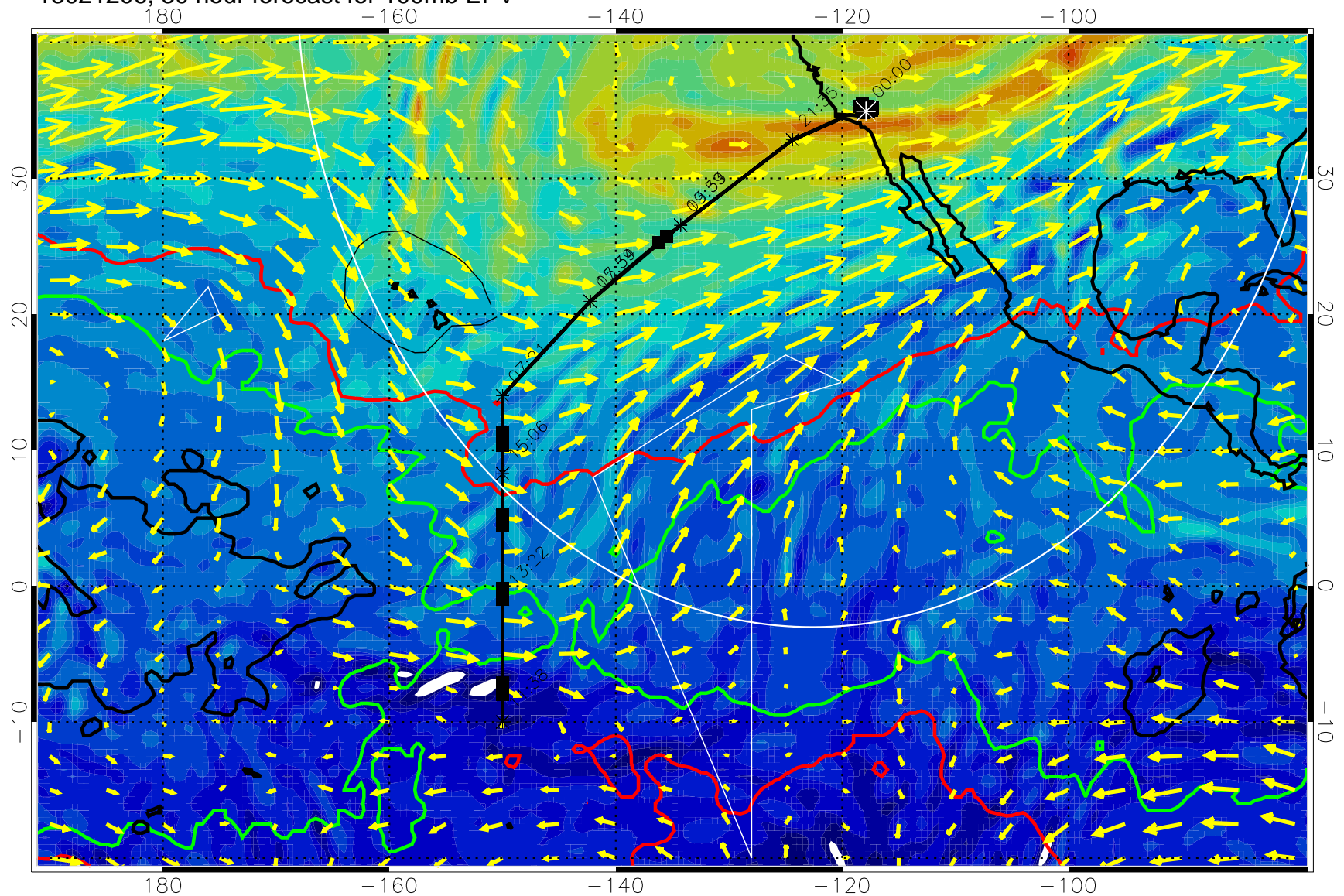
$-5.0 \cdot 10^{-6}$    0    $5.0 \cdot 10^{-6}$     $1.0 \cdot 10^{-5}$     $1.5 \cdot 10^{-5}$     $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm   192.5K Isotherm   195K Isotherm

→ 50 m/s

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

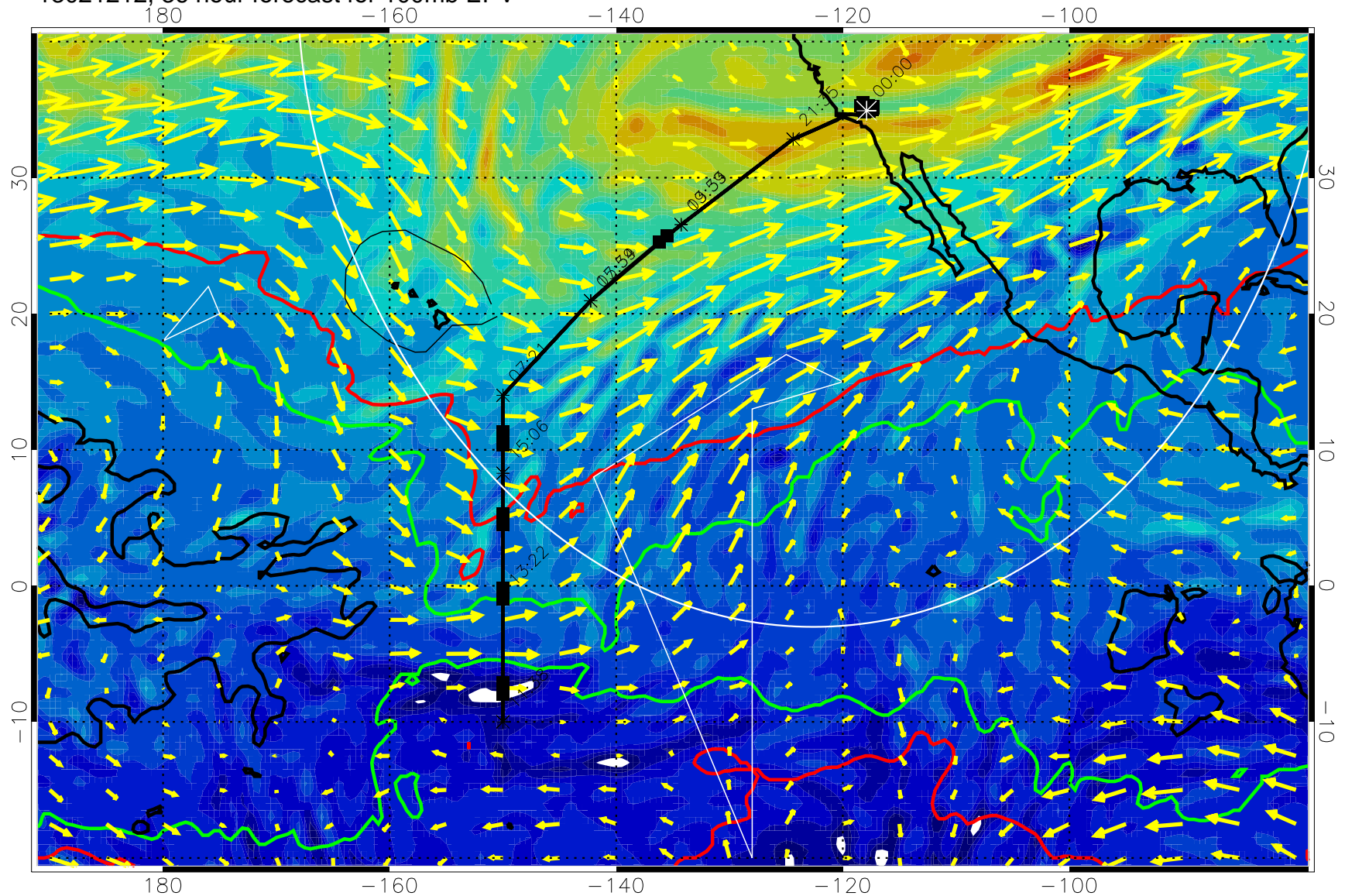
13021206, 30 hour forecast for 100mb EPV



190K Isotherm 192.5K Isotherm 195K Isotherm

→ 50 m/s  
Range ring of 4055 km -- 13 hours GH round trip

13021212, 36 hour forecast for 100mb EPV



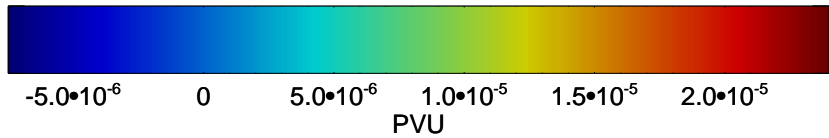
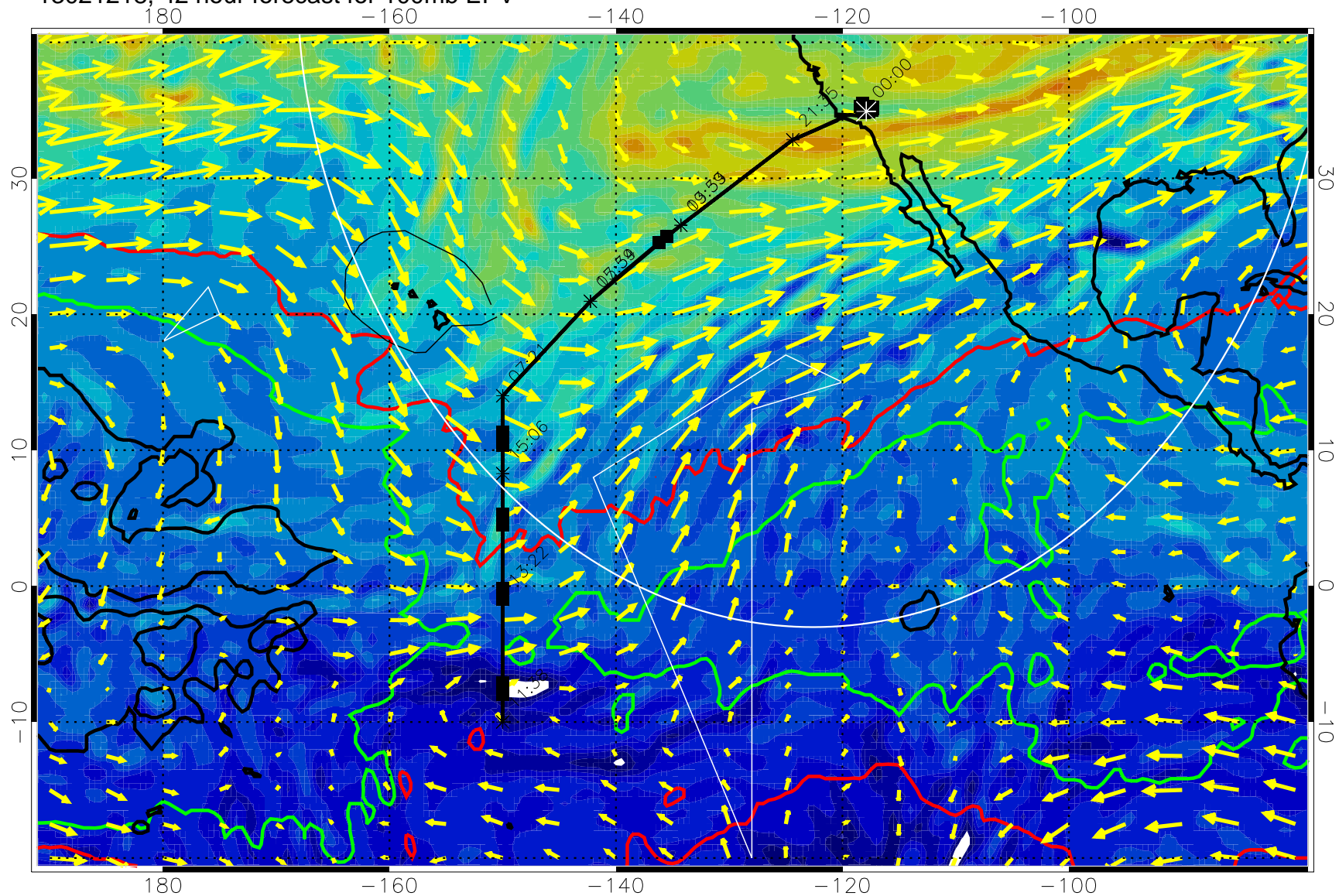
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021218, 42 hour forecast for 100mb EPV

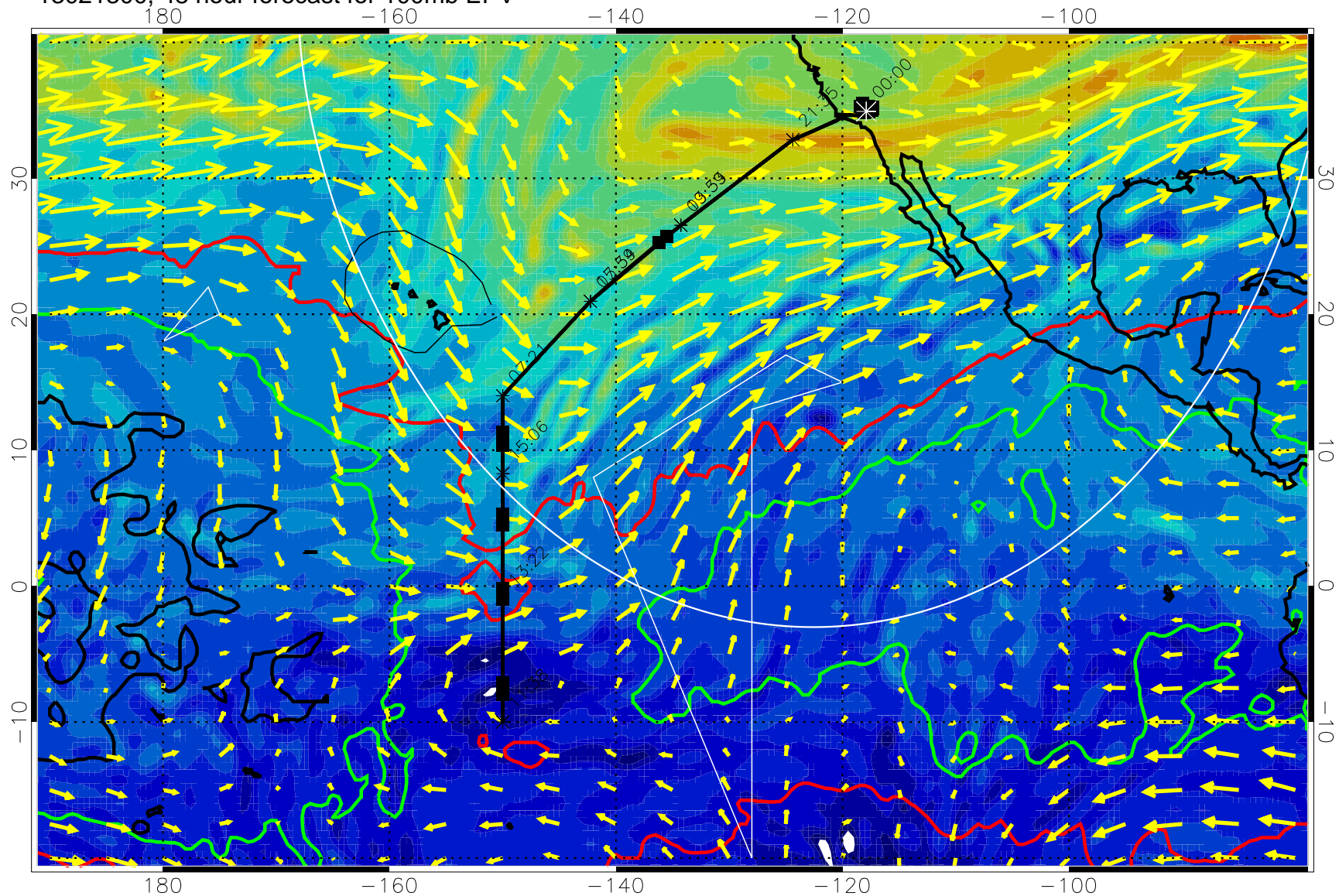


190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021300, 48 hour forecast for 100mb EPV



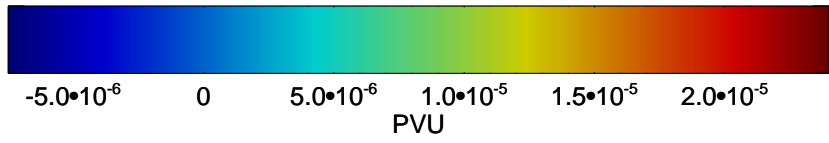
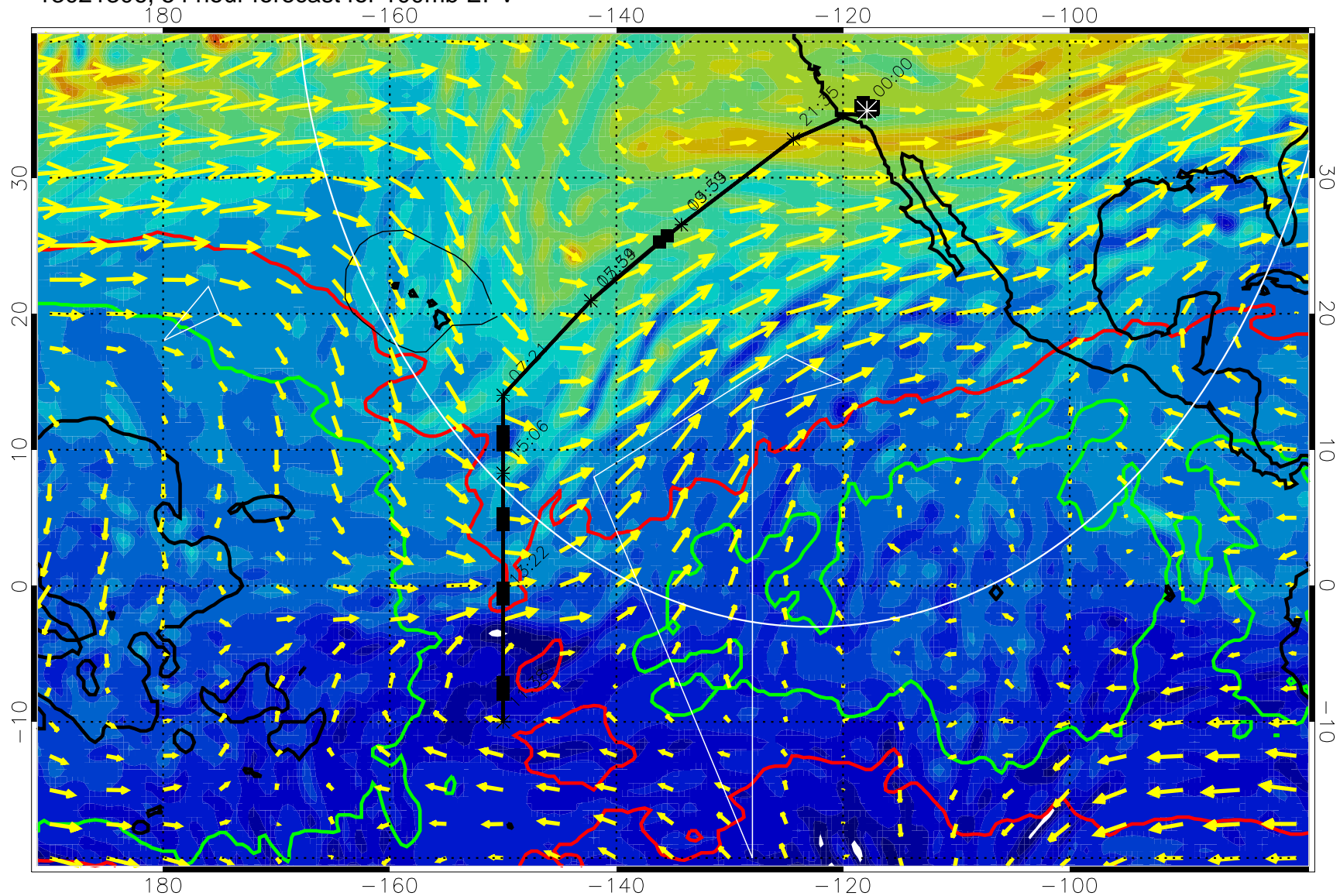
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021306, 54 hour forecast for 100mb EPV

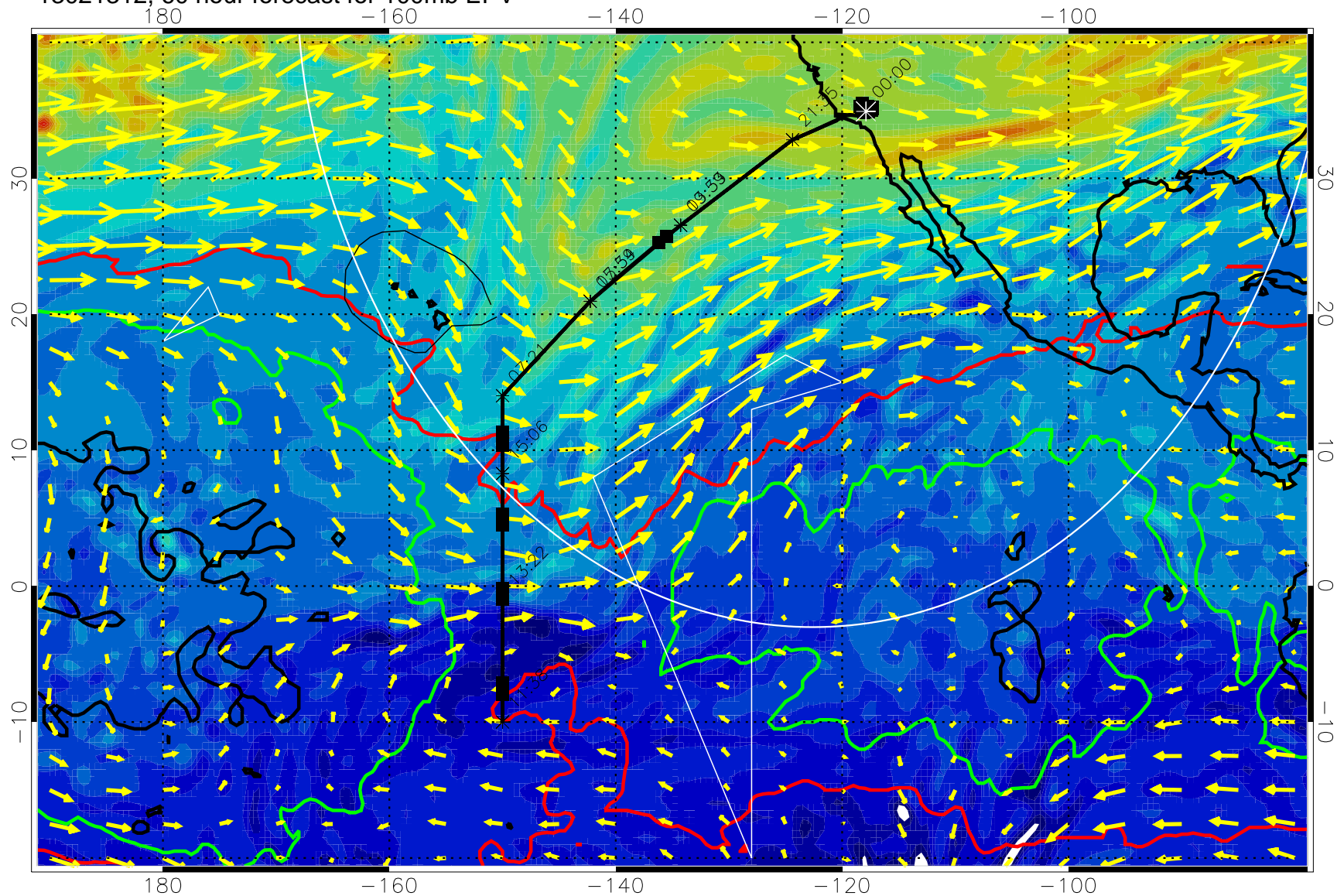


190K Isotherm 192.5K Isotherm 195K Isotherm

→ 50 m/s  
Range ring of 4055 km -- 13 hours GH round trip



13021312, 60 hour forecast for 100mb EPV



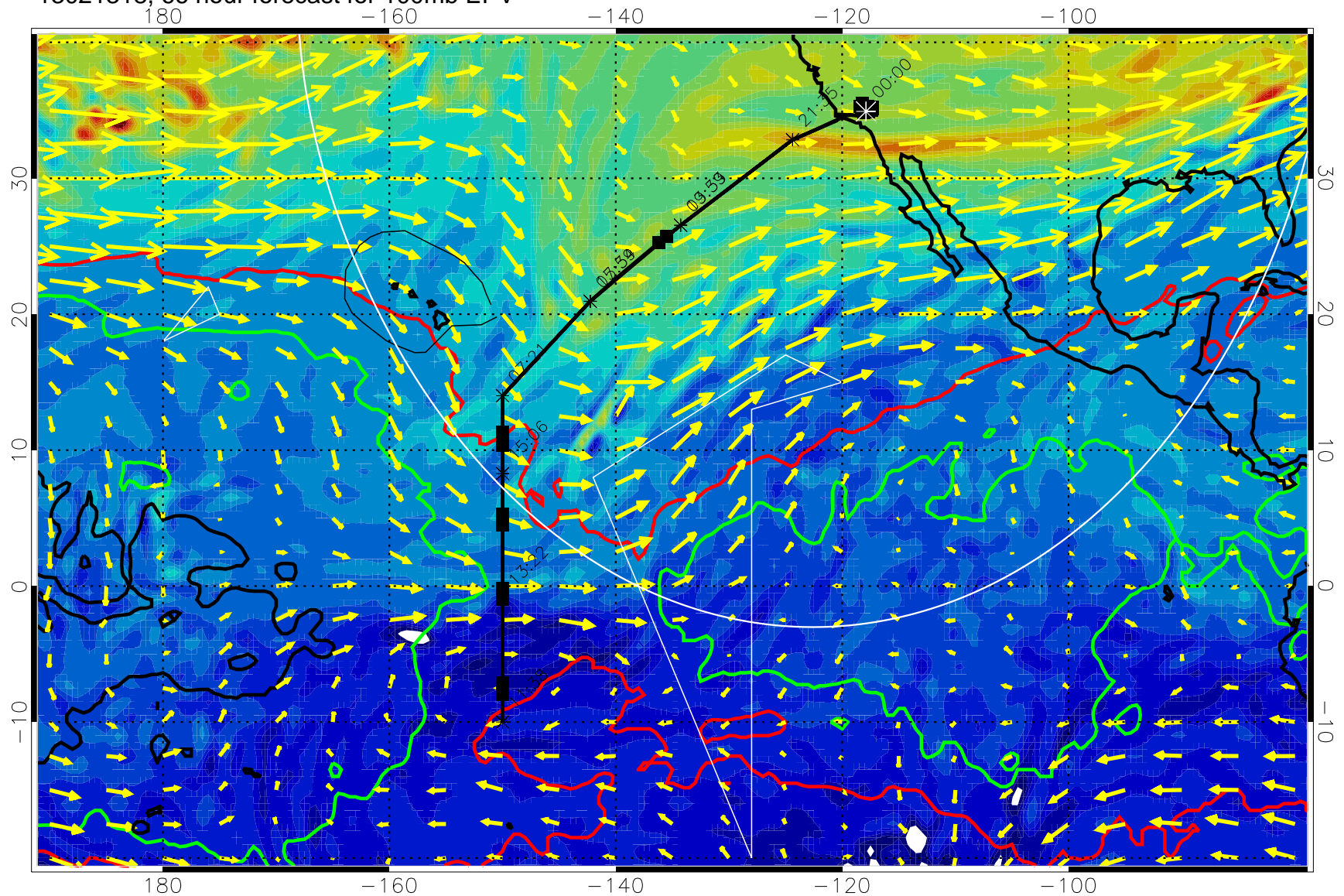
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021318, 66 hour forecast for 100mb EPV

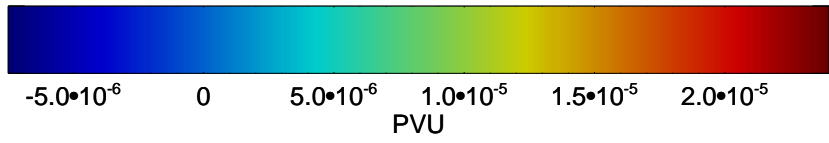
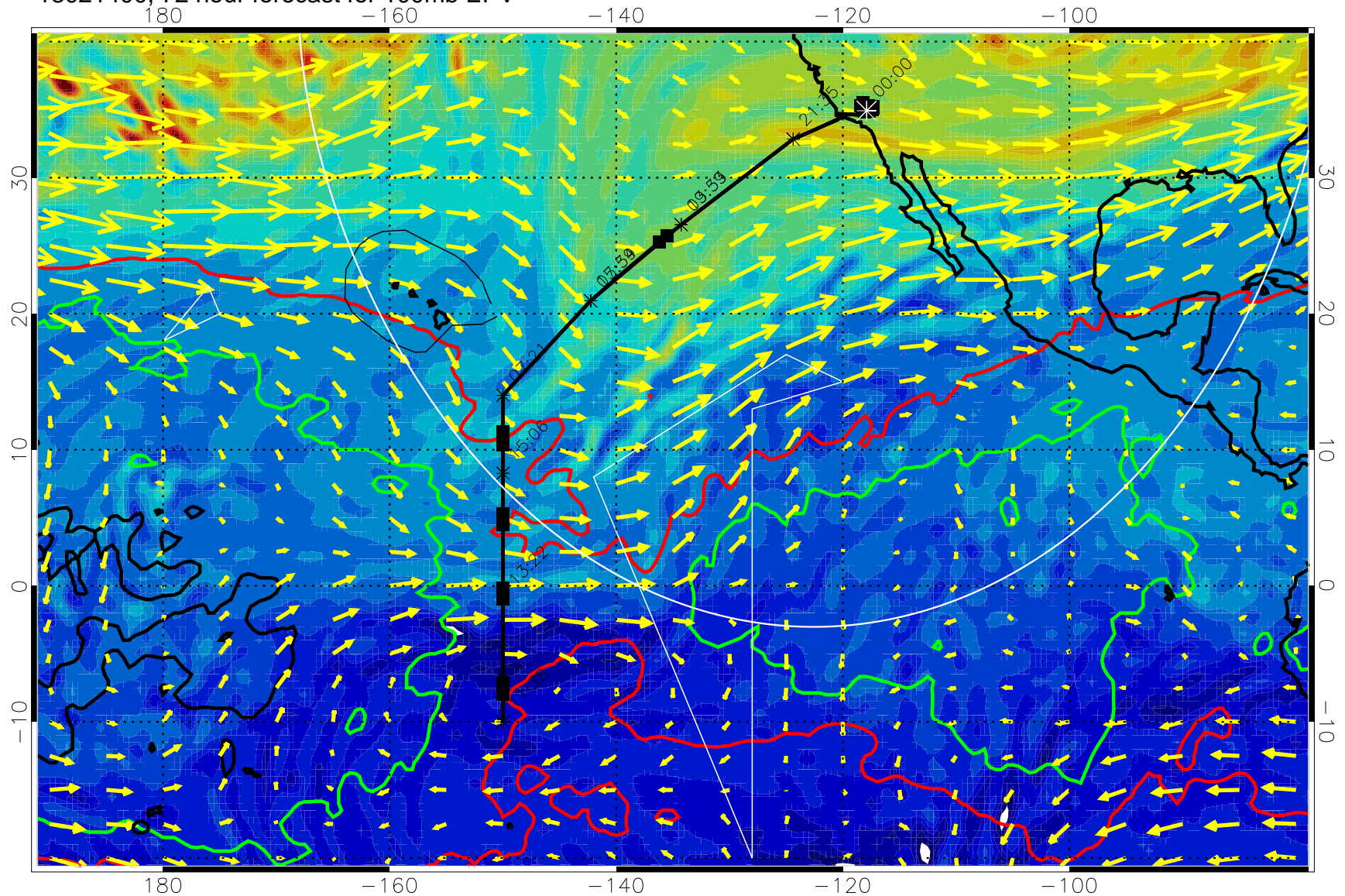


190K Isotherm 192.5K Isotherm 195K Isotherm

→ 50 m/s

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

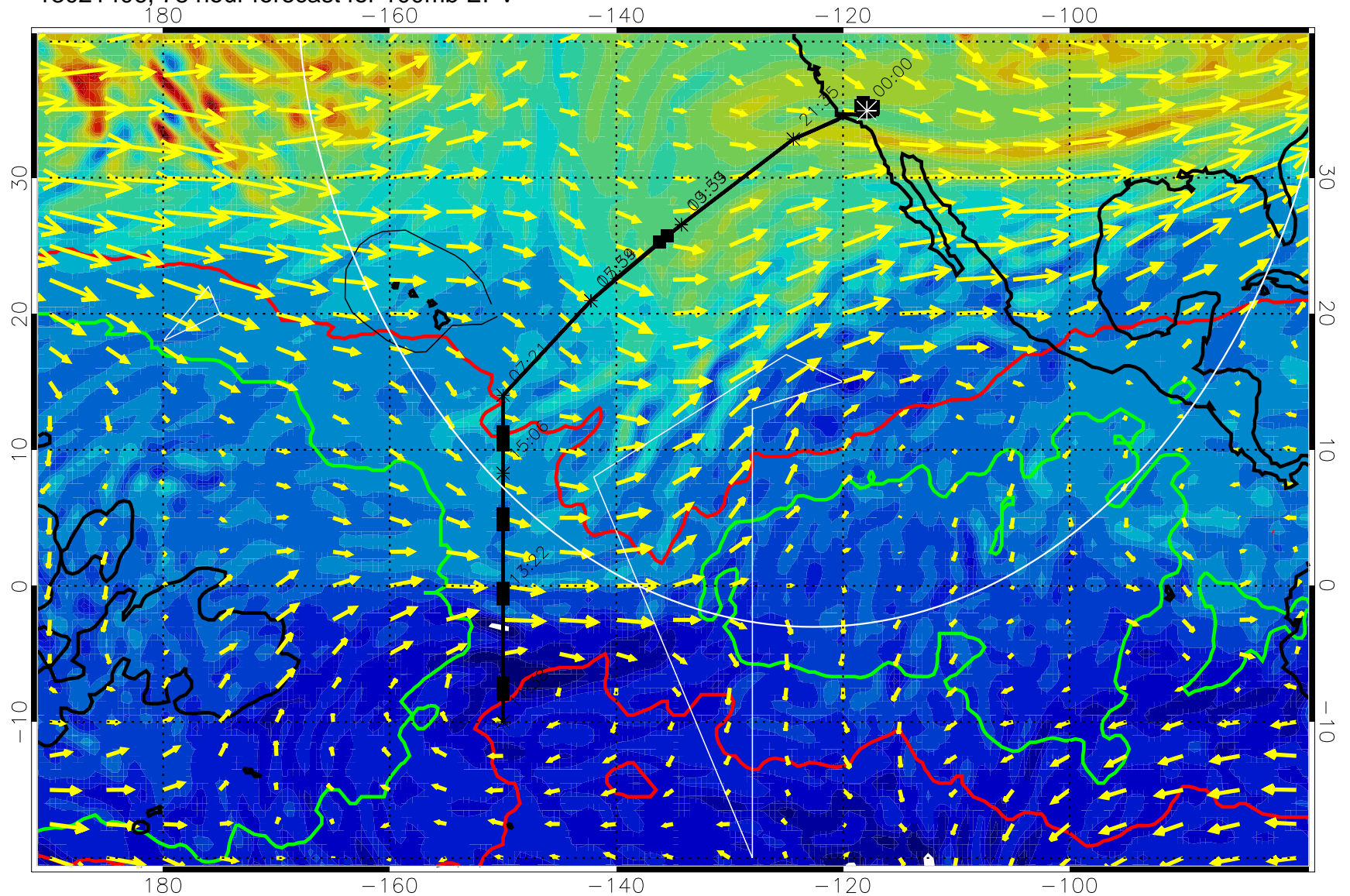
13021400, 72 hour forecast for 100mb EPV



190K Isotherm 192.5K Isotherm 195K Isotherm

→ 50 m/s  
Range ring of 4055 km -- 13 hours GH round trip

13021406, 78 hour forecast for 100mb EPV



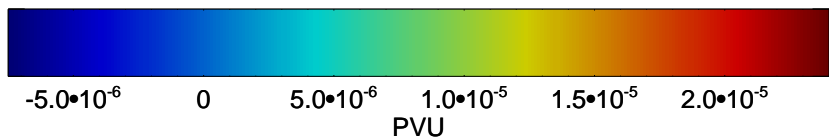
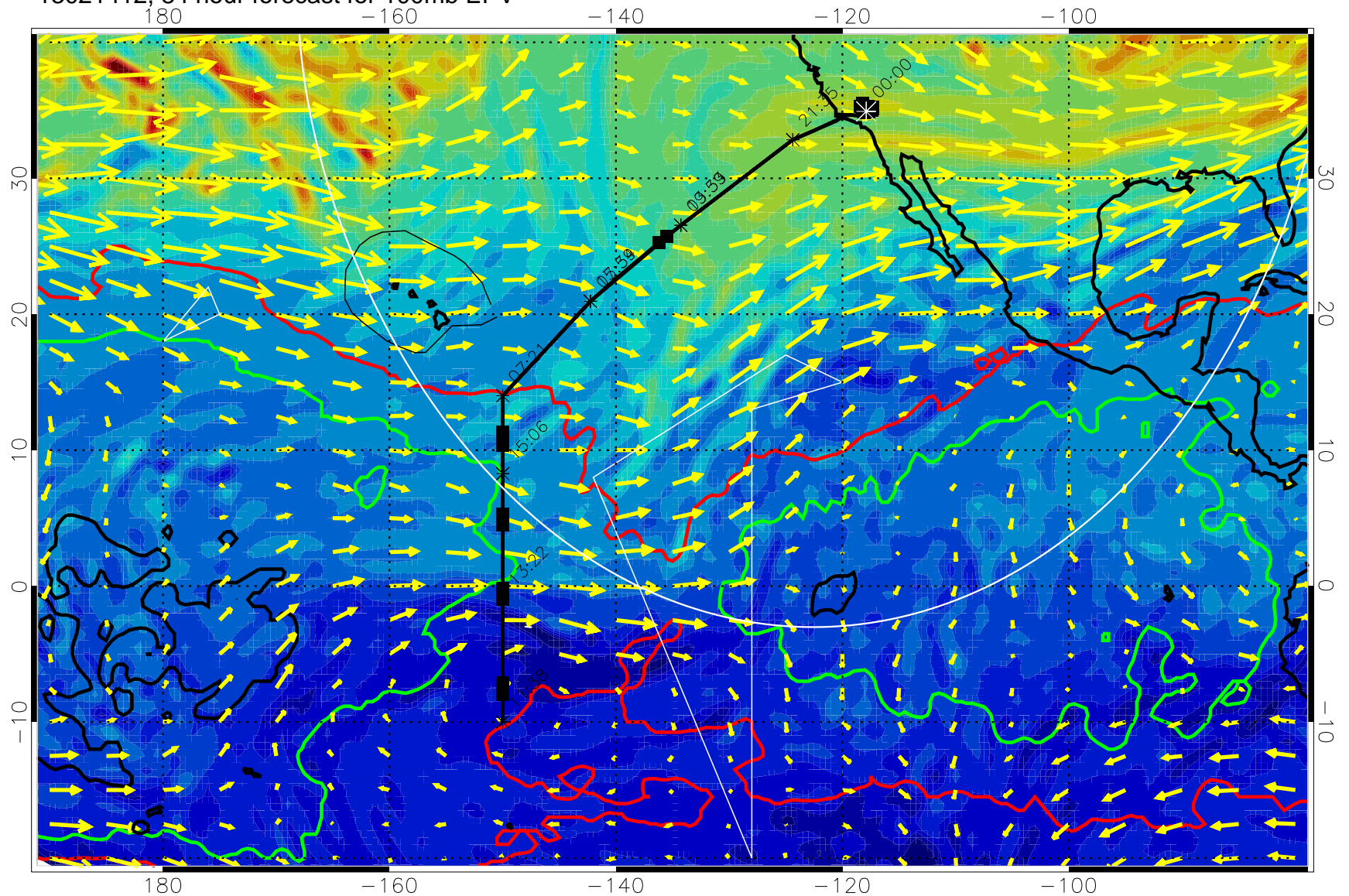
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021412, 84 hour forecast for 100mb EPV

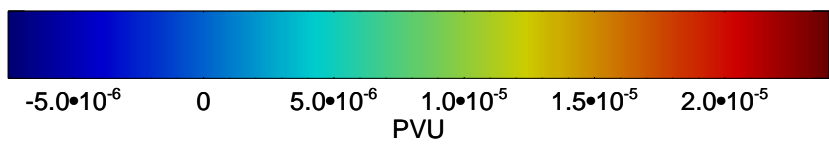
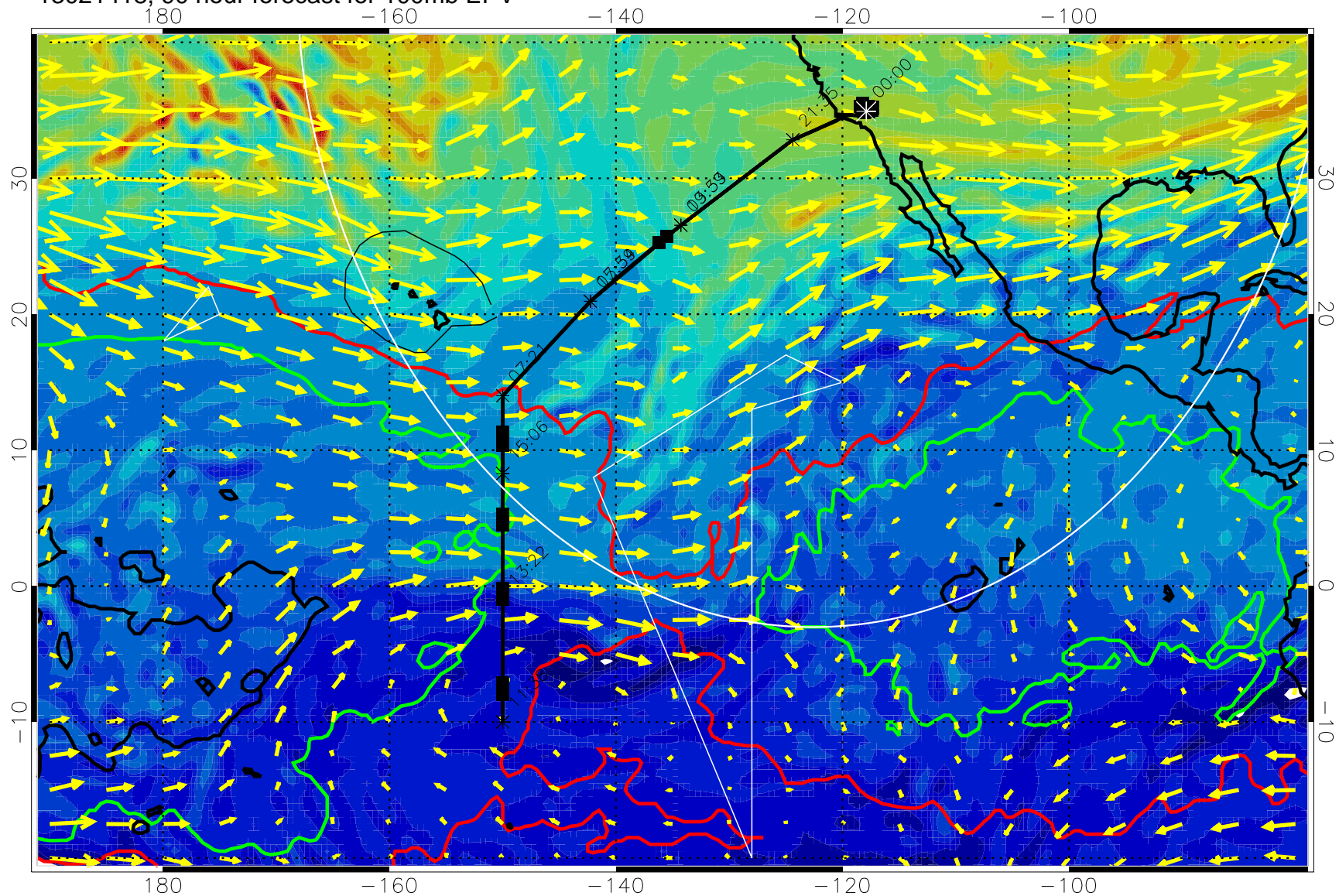


190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021418, 90 hour forecast for 100mb EPV

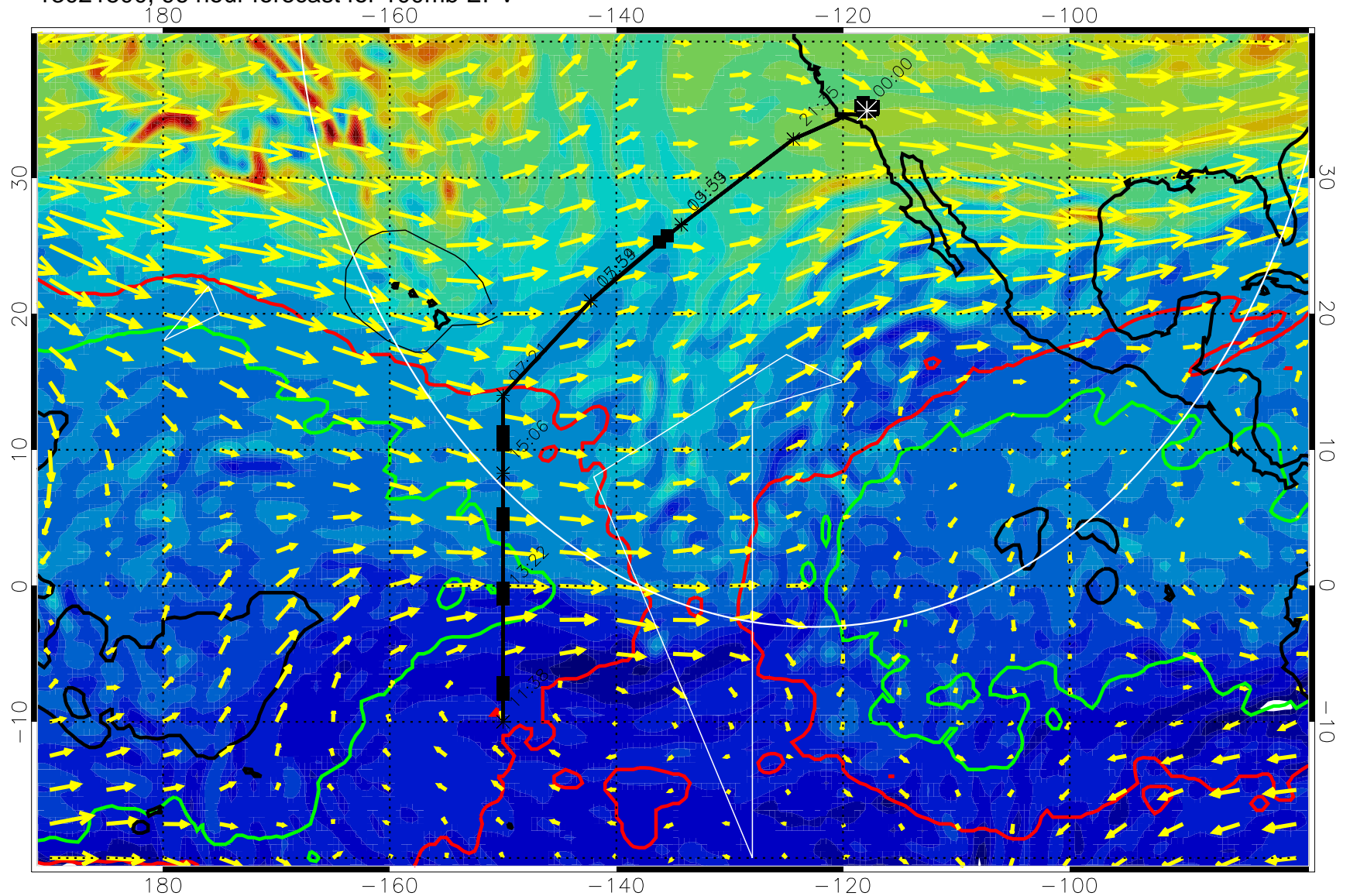


190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021500, 96 hour forecast for 100mb EPV



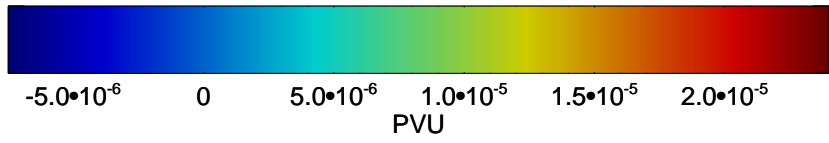
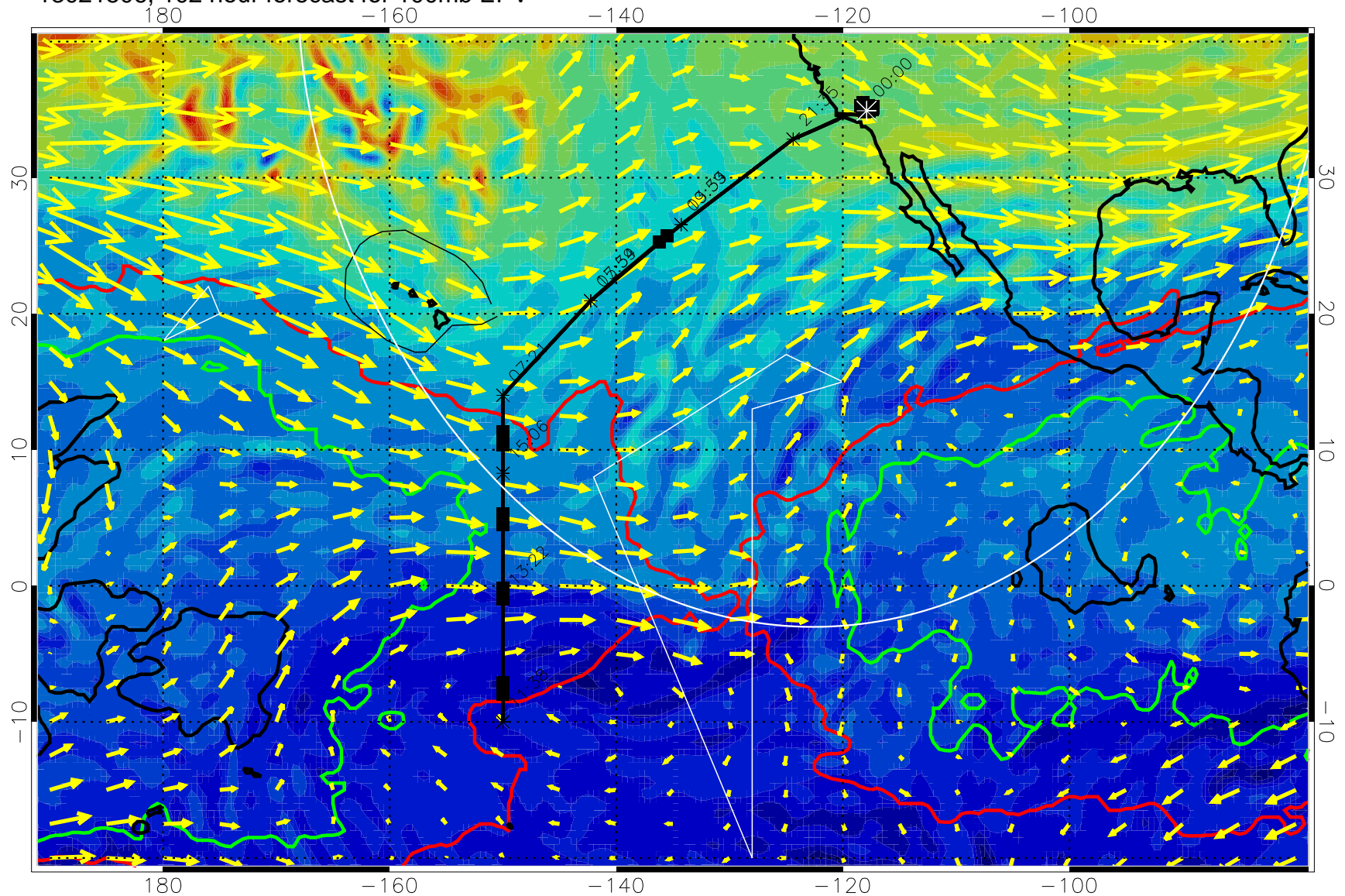
$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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

13021506, 102 hour forecast for 100mb EPV

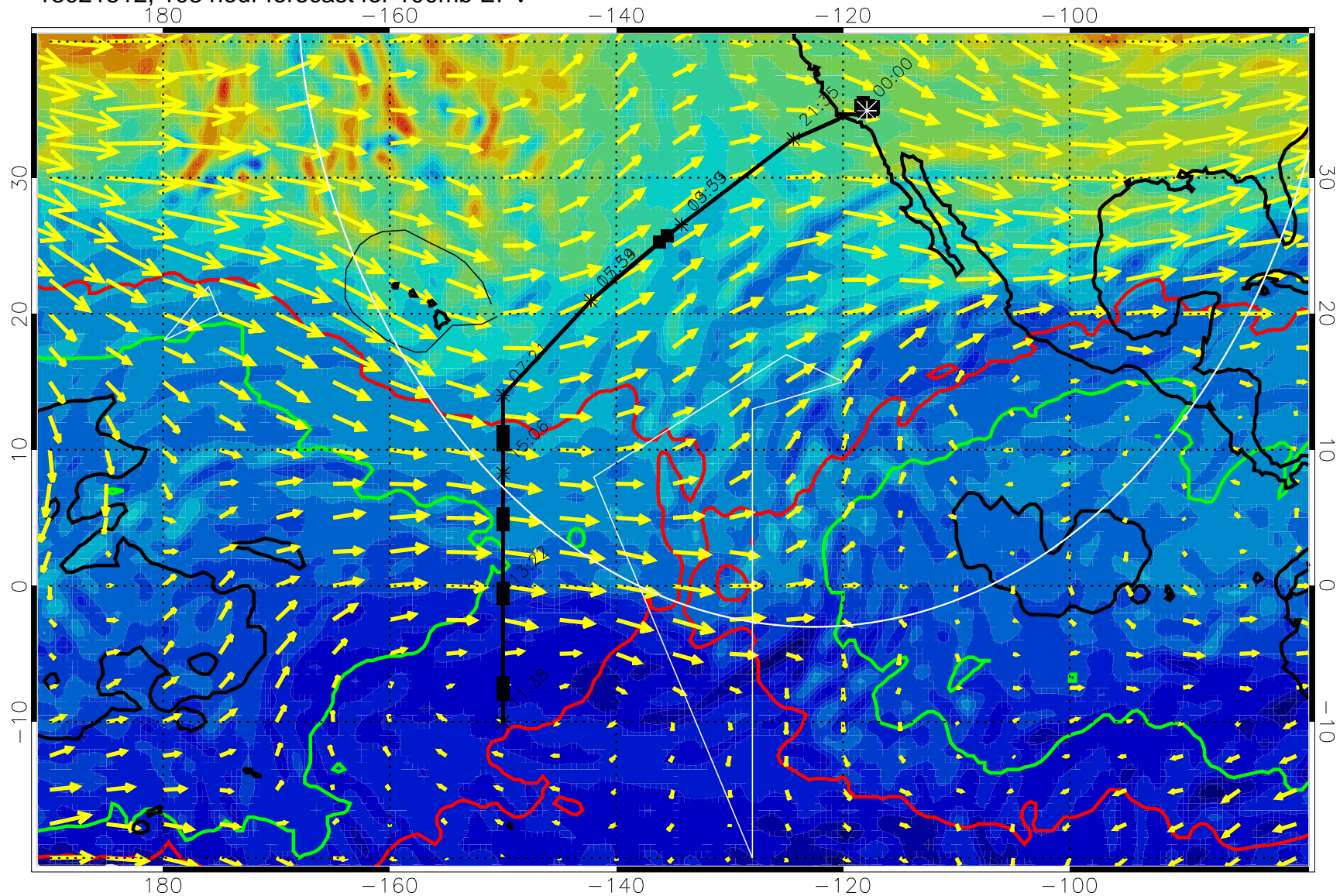


190K Isotherm 192.5K Isotherm 195K Isotherm

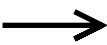
→ 50 m/s  
Range ring of 4055 km -- 13 hours GH round trip



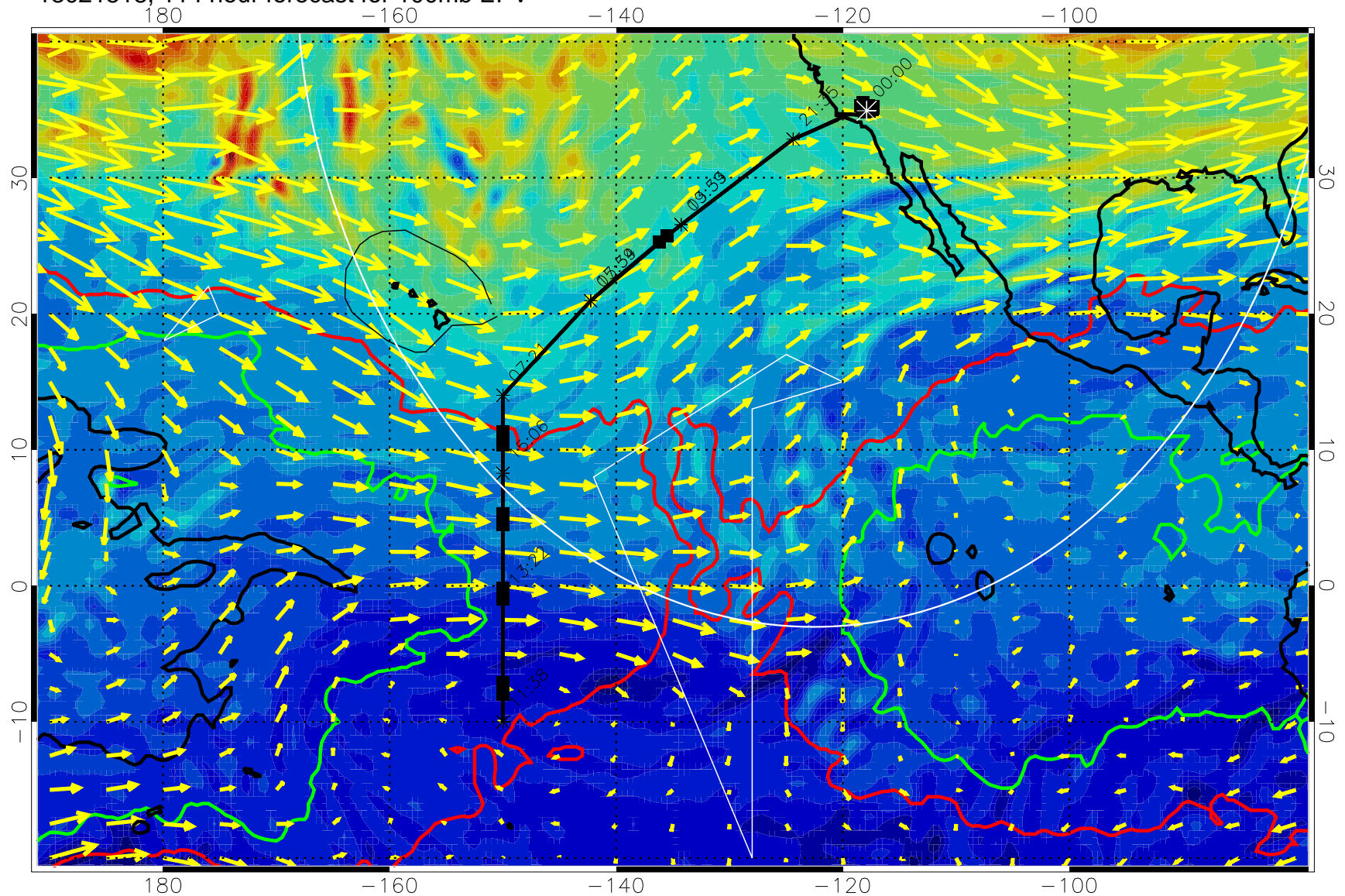
13021512, 108 hour forecast for 100mb EPV



190K Isotherm    192.5K Isotherm    195K Isotherm

 50 m/s  
 Range ring of 4055 km -- 13 hours GH round trip

13021518, 114 hour forecast for 100mb EPV

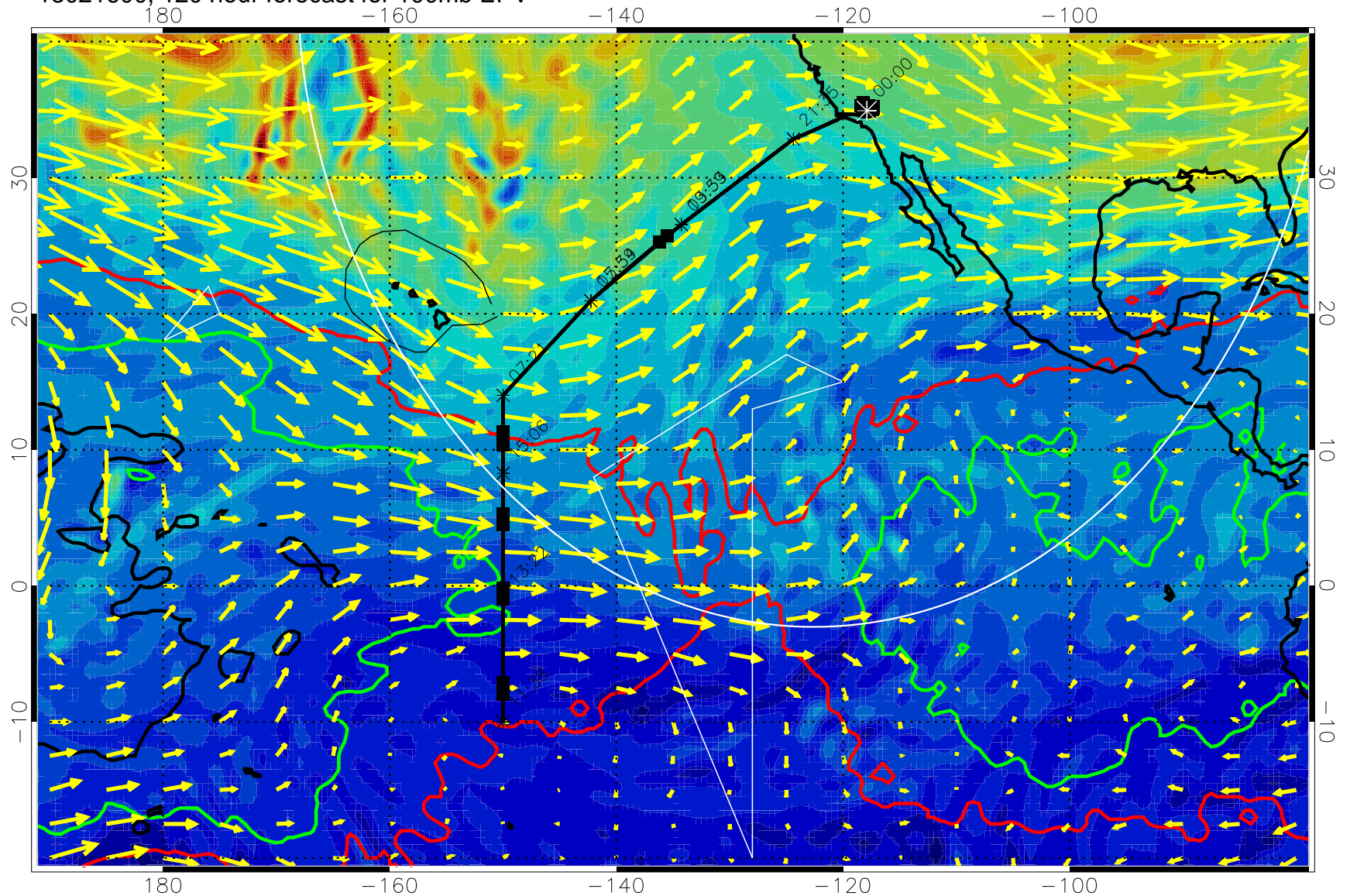


190K Isotherm 192.5K Isotherm 195K Isotherm

→ 50 m/s

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

13021600, 120 hour forecast for 100mb EPV



$-5.0 \cdot 10^{-6}$     0     $5.0 \cdot 10^{-6}$      $1.0 \cdot 10^{-5}$      $1.5 \cdot 10^{-5}$      $2.0 \cdot 10^{-5}$   
PVU

190K Isotherm    192.5K Isotherm    195K Isotherm

→ 50 m/s

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