

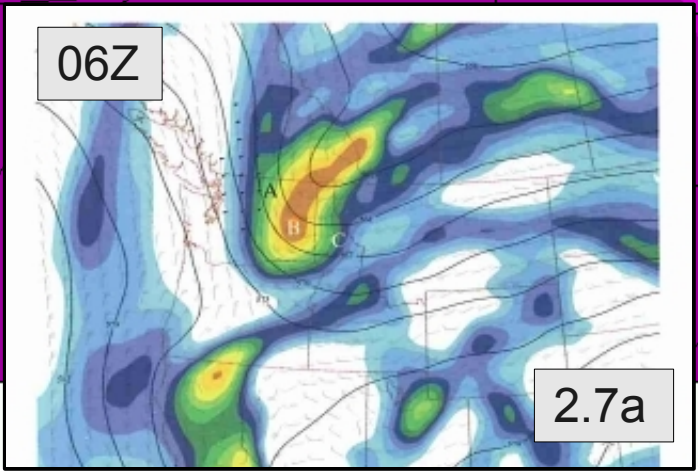
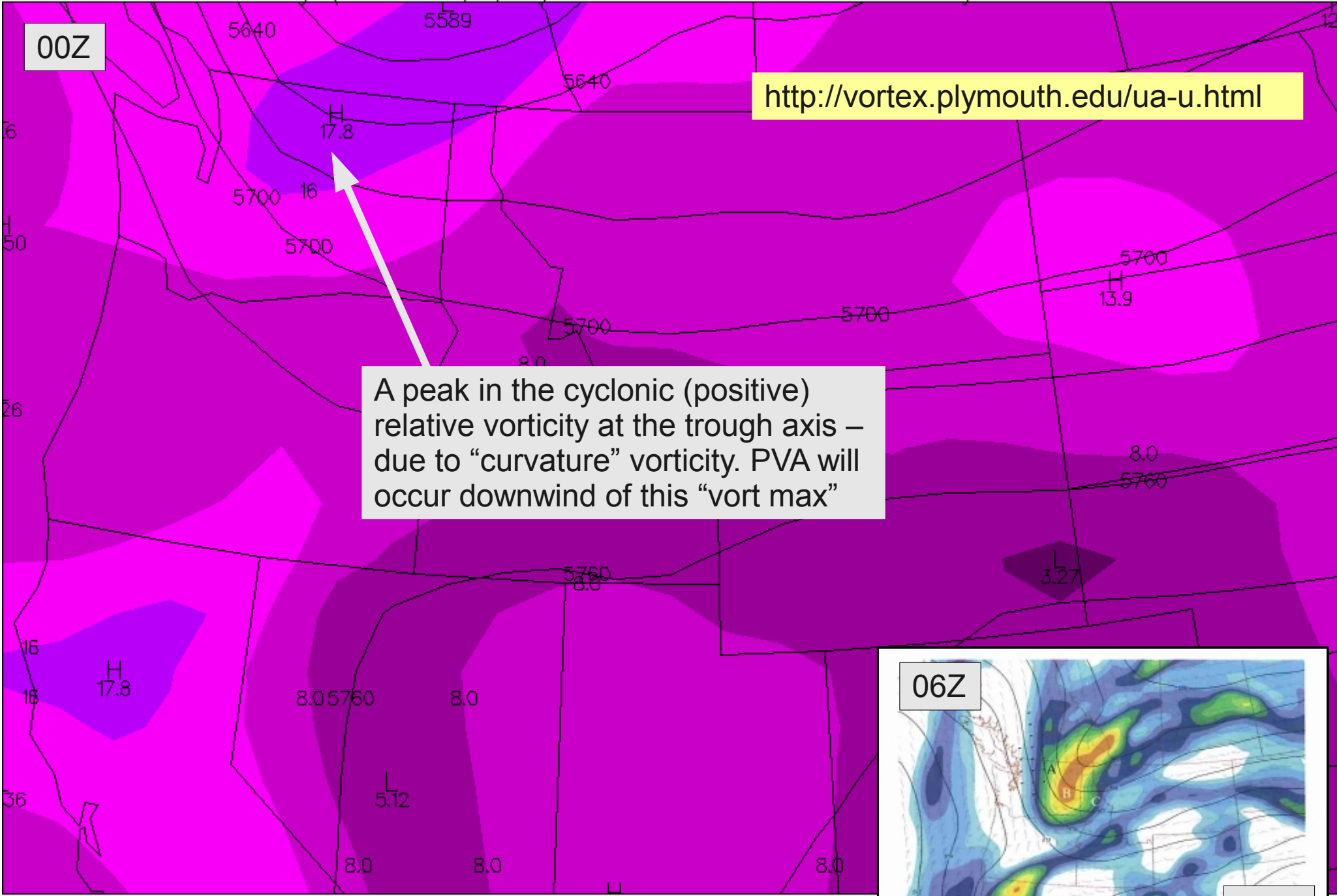
500 mb Geopotential Height (m)  
500 mb Abs vorticity ( $1e-05$  m/s/m)

WXP analysis for 0000Z 10 SEP 08  
WXP analysis for 0000Z 10 SEP 08

00Z

<http://vortex.plymouth.edu/ua-u.html>

A peak in the cyclonic (positive) relative vorticity at the trough axis – due to “curvature” vorticity. PVA will occur downwind of this “vort max”



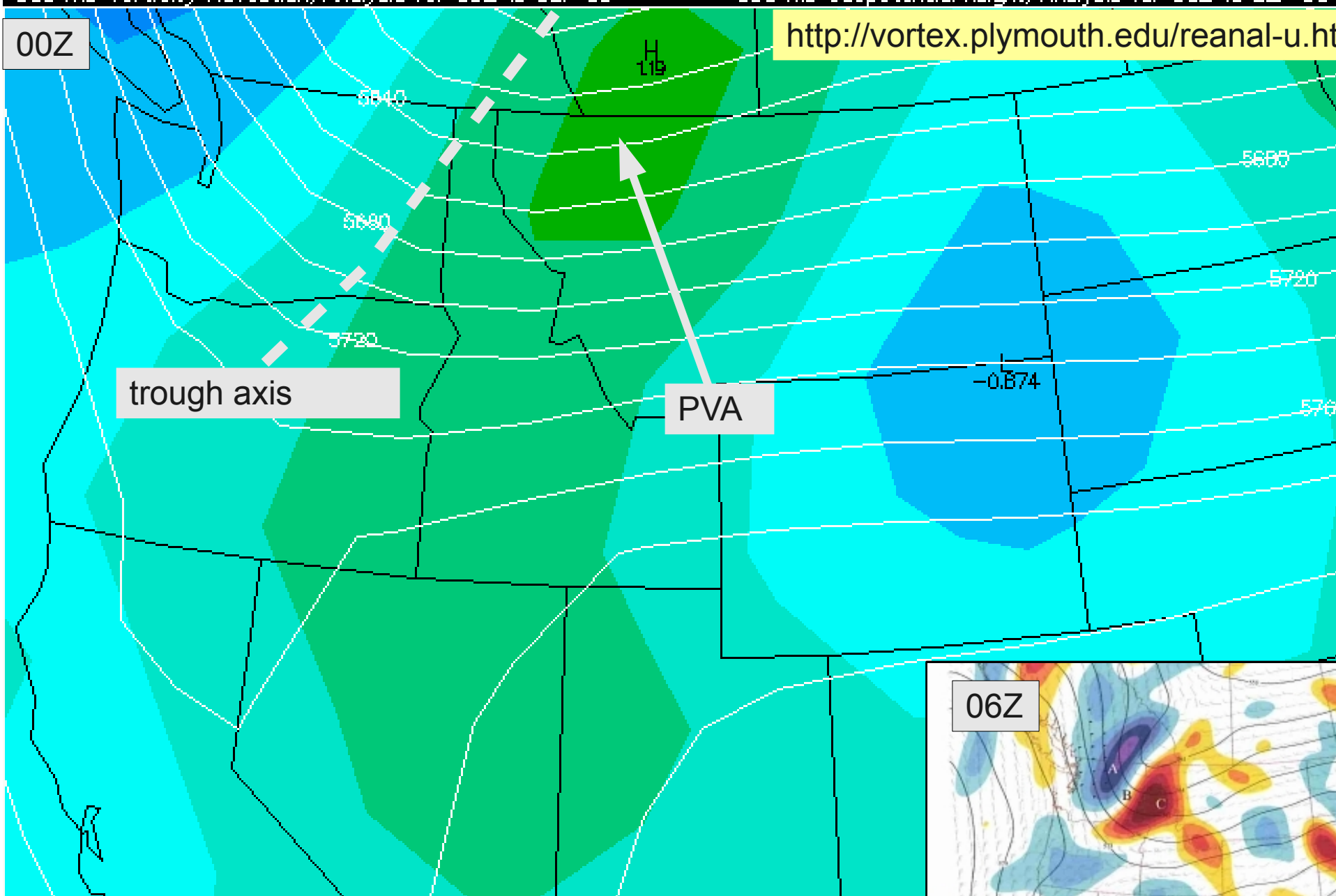
# Plymouth State Weather Center

500 mb Verticity Advection/Analysis for 00Z 10 SEP 08

500 mb Geopotential height/Analysis for 00Z 10 SEP 08

00Z

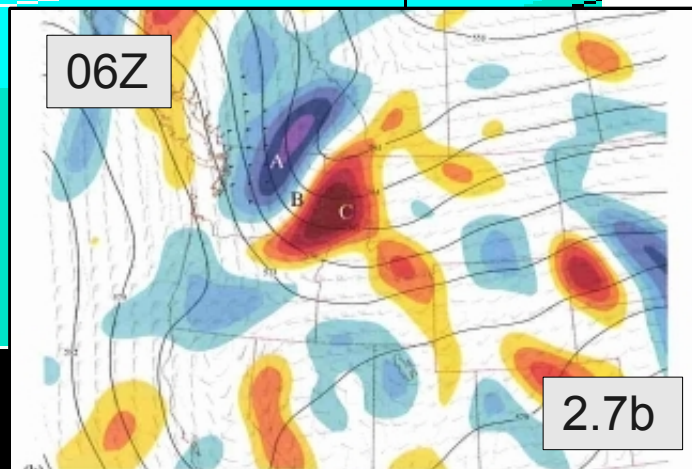
<http://vortex.plymouth.edu/reanal-u.html>



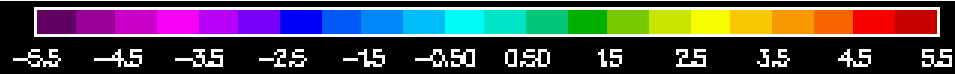
trough axis

PVA

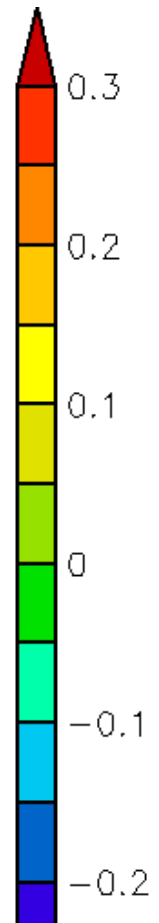
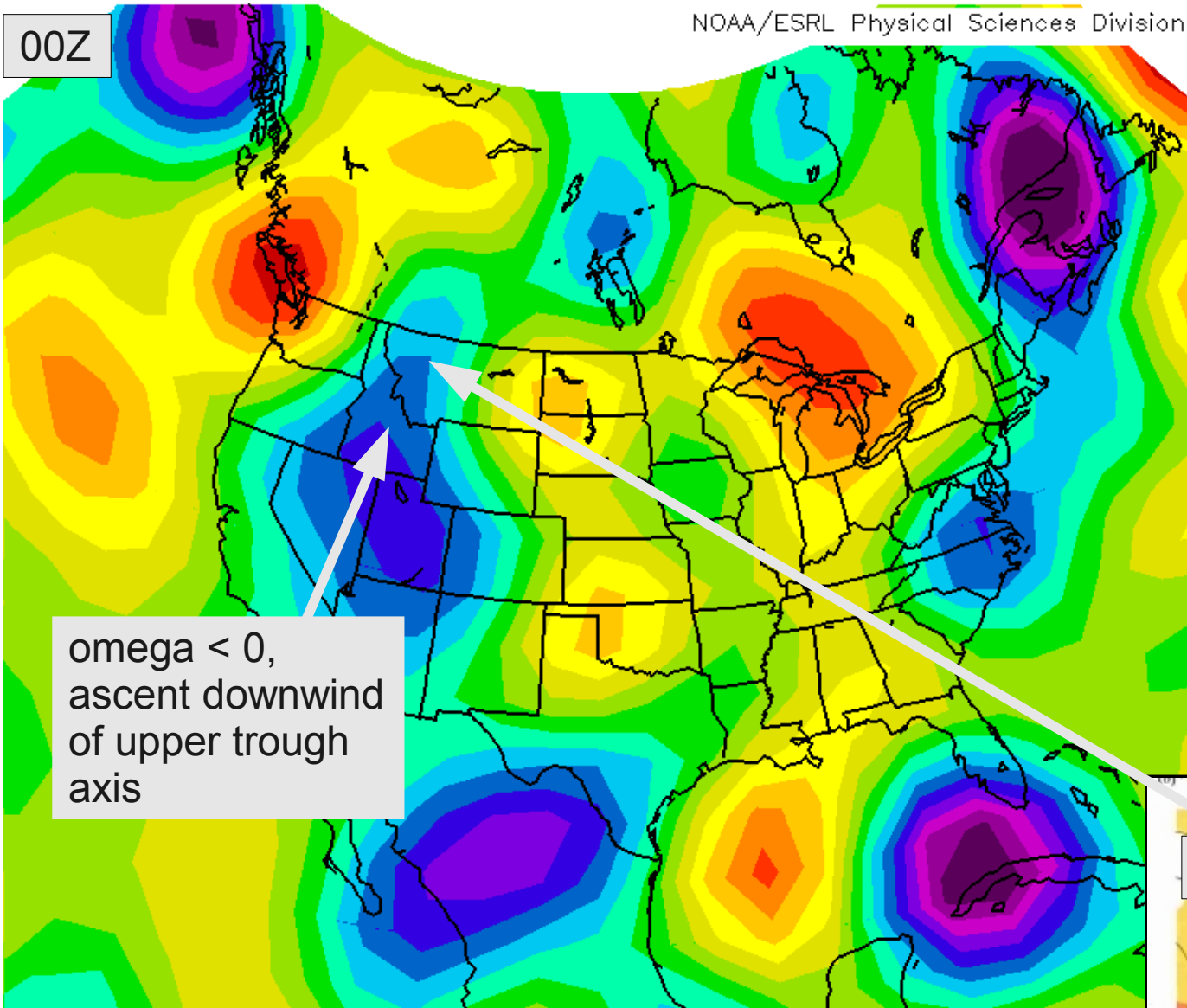
06Z



2.7b

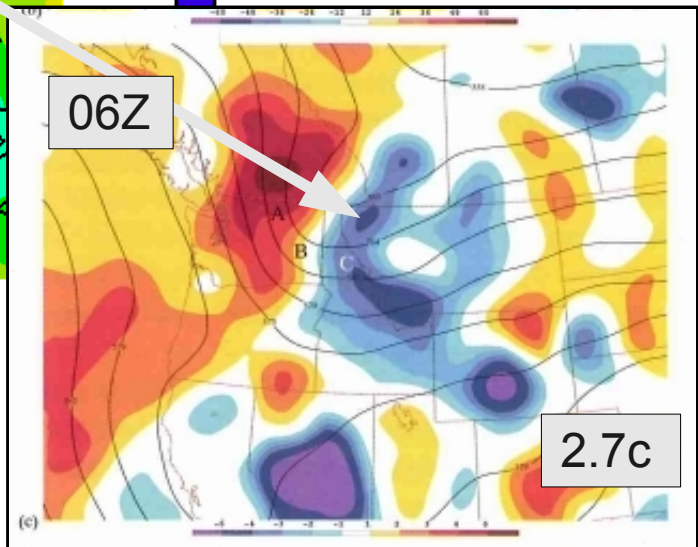


NOAA/ESRL Physical Sciences Division



omega < 0,  
ascent downwind  
of upper trough  
axis

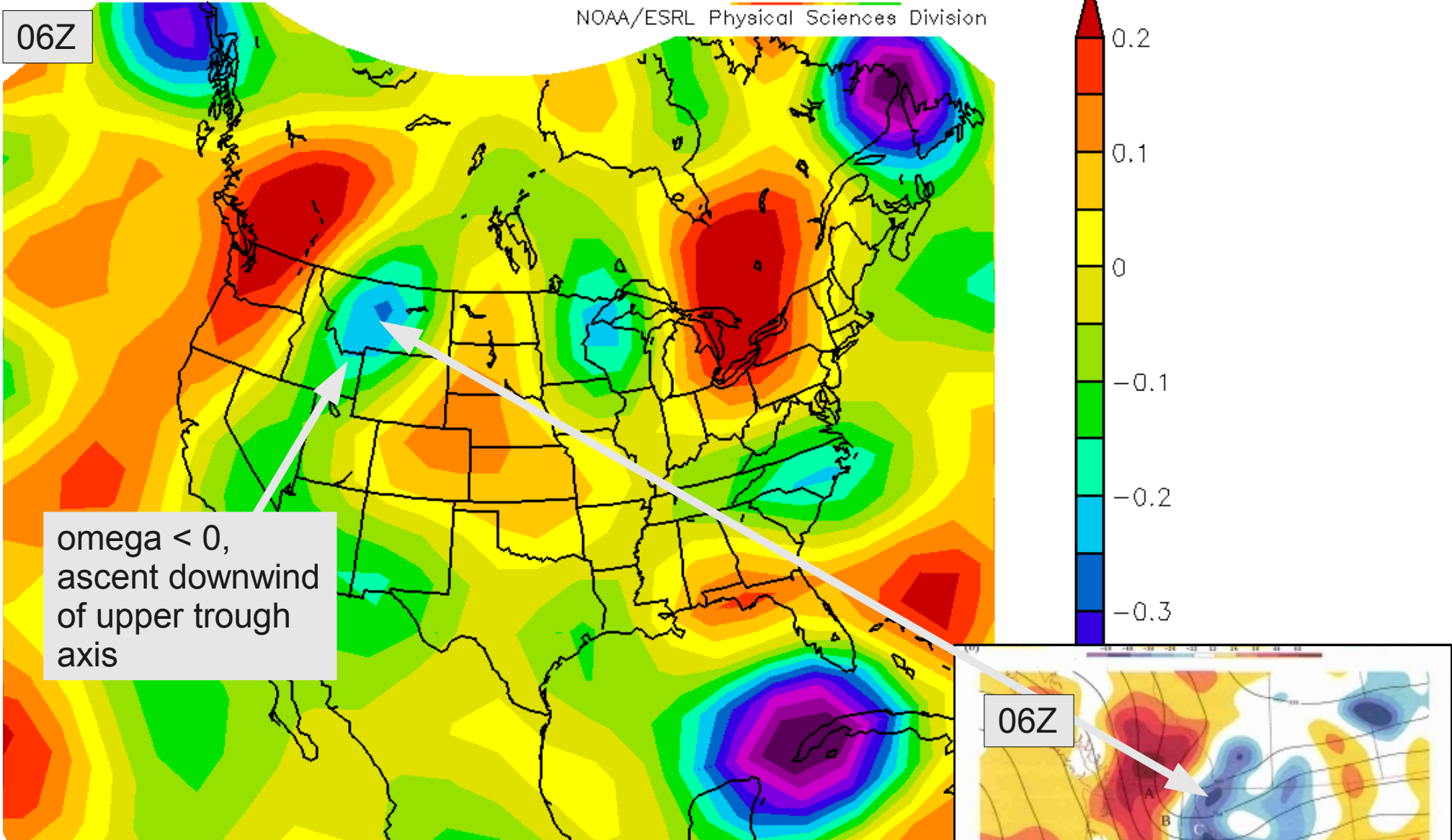
500mb Omega (Pa/s) Composite Mean  
9/10/08 0z to 9/10/08 0z  
NCEP/NCAR Reanalysis



06Z

2.7c

NOAA/ESRL Physical Sciences Division



500mb Omega (Pa/s) Composite Mean  
9/10/08 6z to 9/10/08 6z  
NCEP/NCAR Reanalysis

**Plymouth State Weather Center**

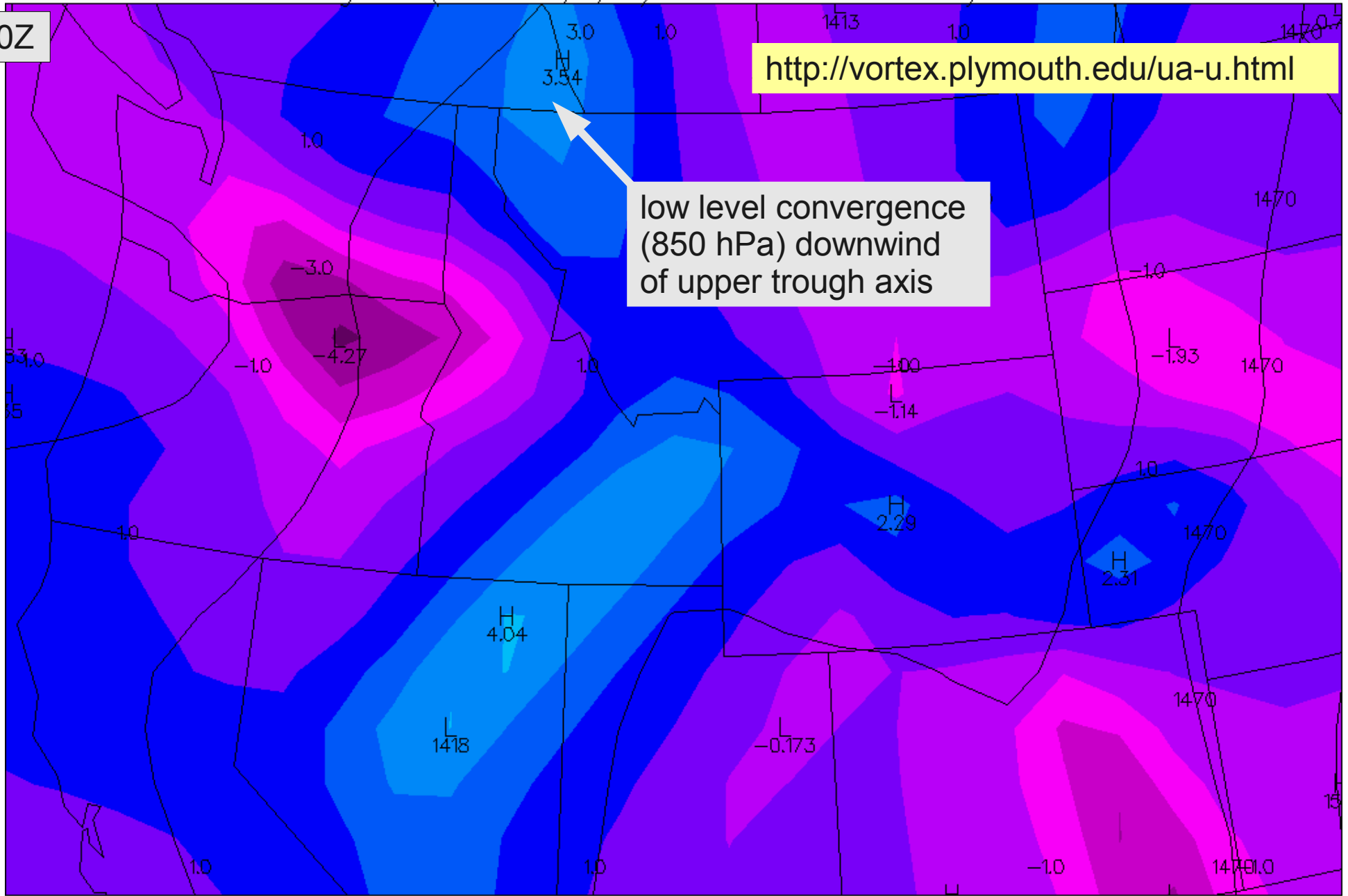
850 mb Geopotential Height (m)  
850 mb v-999 Convergence ( $1e-05$  m/s/m)

WXP analysis for 0000Z 10 SEP 08  
WXP analysis for 0000Z 10 SEP 08

00Z

<http://vortex.plymouth.edu/ua-u.html>

low level convergence  
(850 hPa) downwind  
of upper trough axis



LO: 1412.7 HI: 1501.0  
LO: -4.27 HI: 4.04

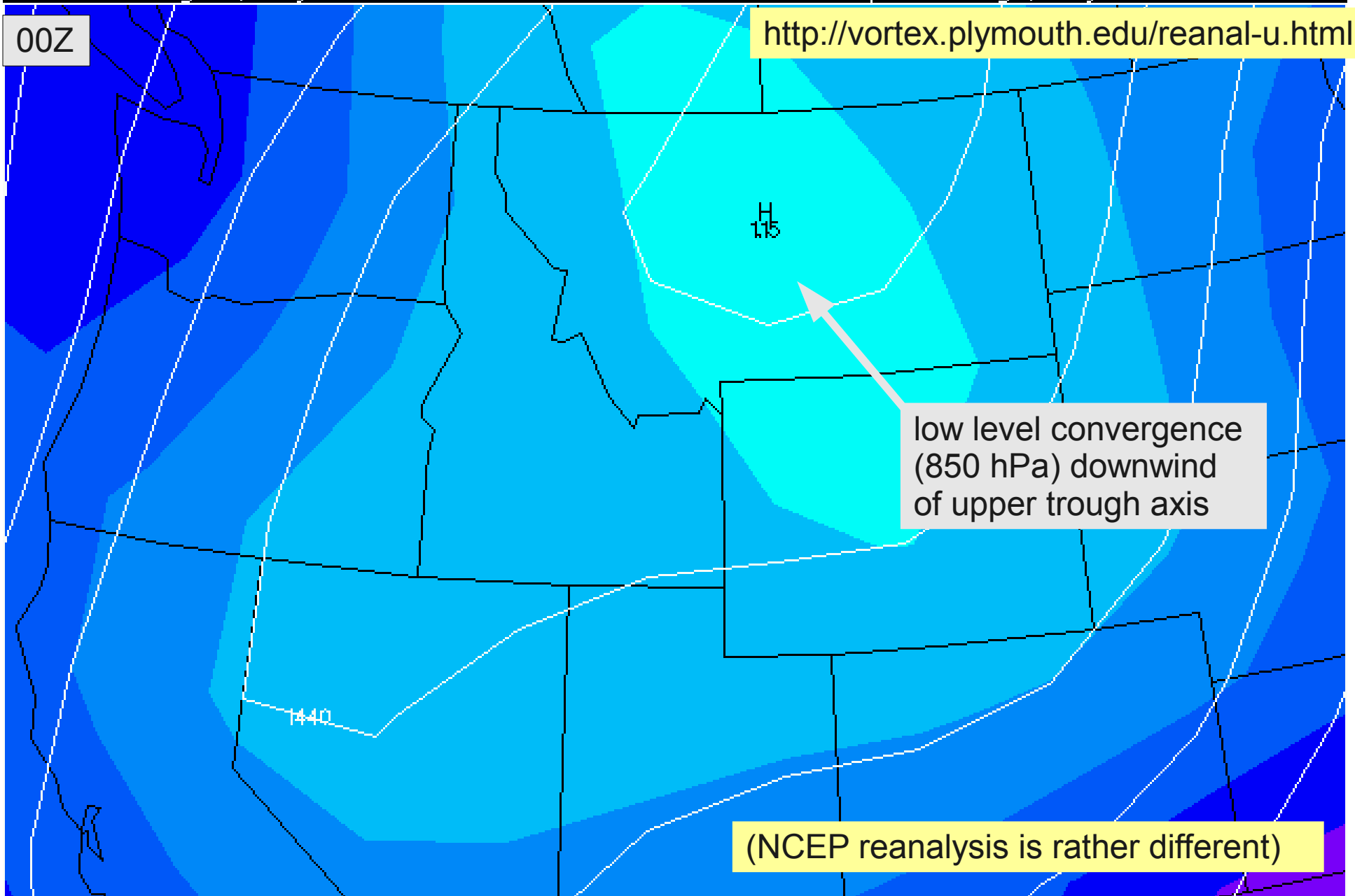
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850 mb Convergence/Analysis for 00Z 10 SEP 08

850 mb Geopotential height/Analysis for 00Z 10 SEP 08

00Z

<http://vortex.plymouth.edu/reanal-u.html>



low level convergence  
(850 hPa) downwind  
of upper trough axis

(NCEP reanalysis is rather different)

-4.0 -3.5 -3.0 -2.5 -2.0 -1.5 -1.0 -0.50 0 0.50 1.0 1.5 2.0 2.5 3.0