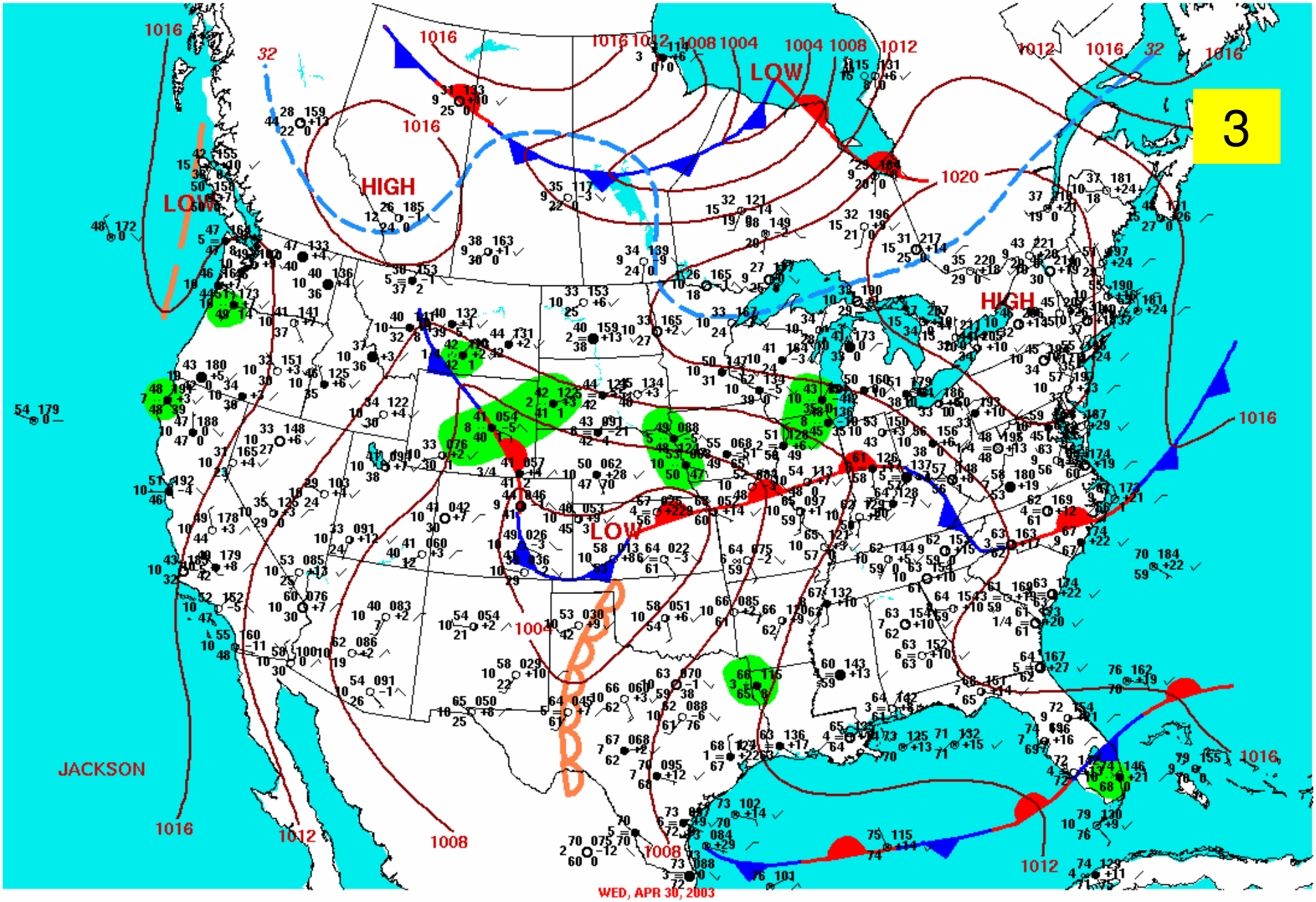
Case study

1

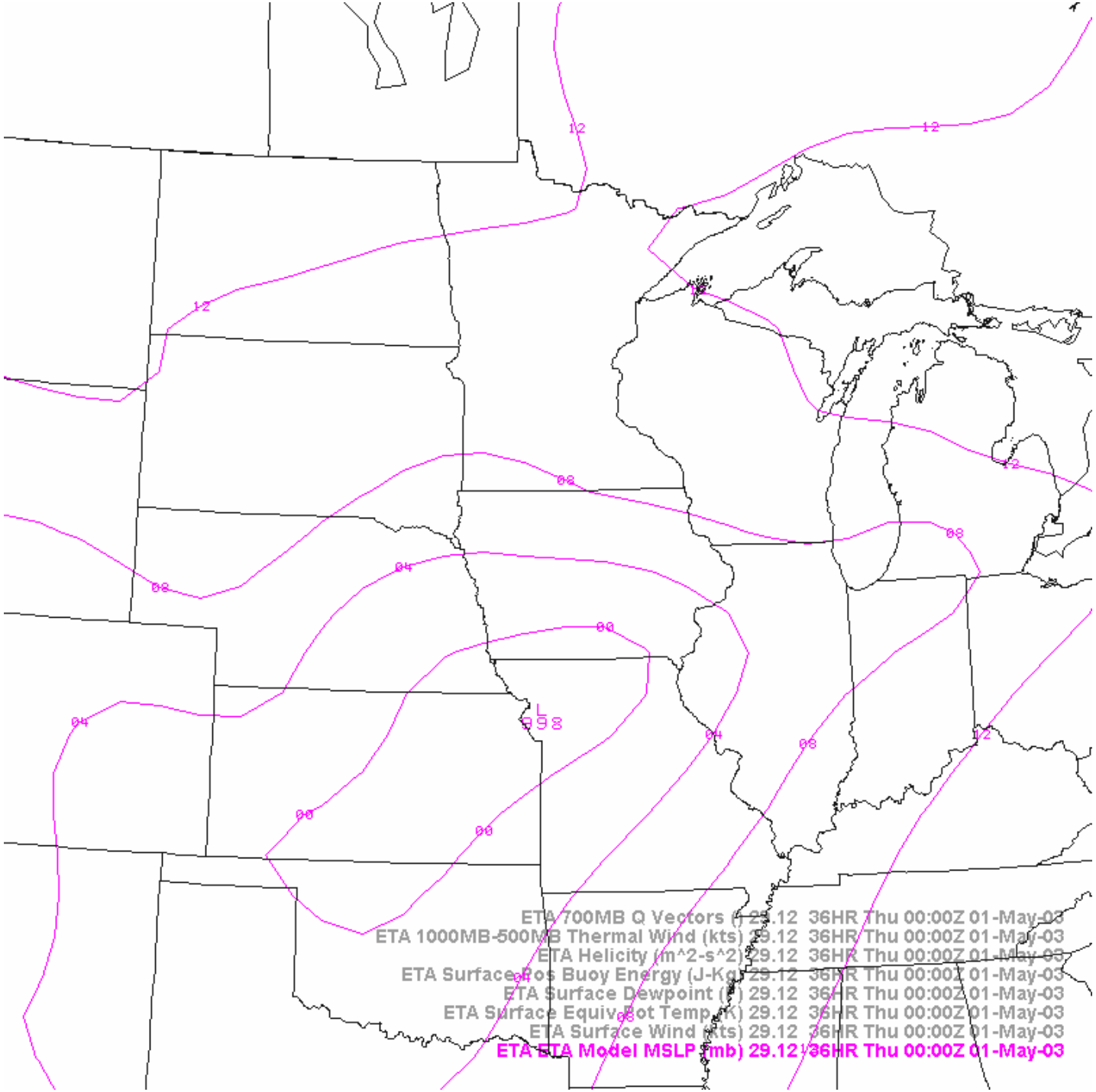
- Find general area on each image that is favorable for precipitation

Lab 13: Conceptual Models of Ascent

Concept	Level(s) to examine
large scale ascent caused by fronts	surface analyses
upper level divergence	at and around 300 mb
surface convergence (especially moisture convergence)	at and near the surface
jet streaks	at and around 300 mb
vorticity advection	500 mb
frontogenesis	850 mb
warm air advection	850 to 700 mb
cold frontogenesis aloft	700 to 500 mb



Surface Weather Map and Station Weather at 7:00 A.M. E.S.T.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ETA 700MB Q Vectors ( ) 29.12 36HR Thu 00:00Z 01-May-03
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ETA ETA Model MSLP (mb) 29.12 36HR Thu 00:00Z 01-May-03

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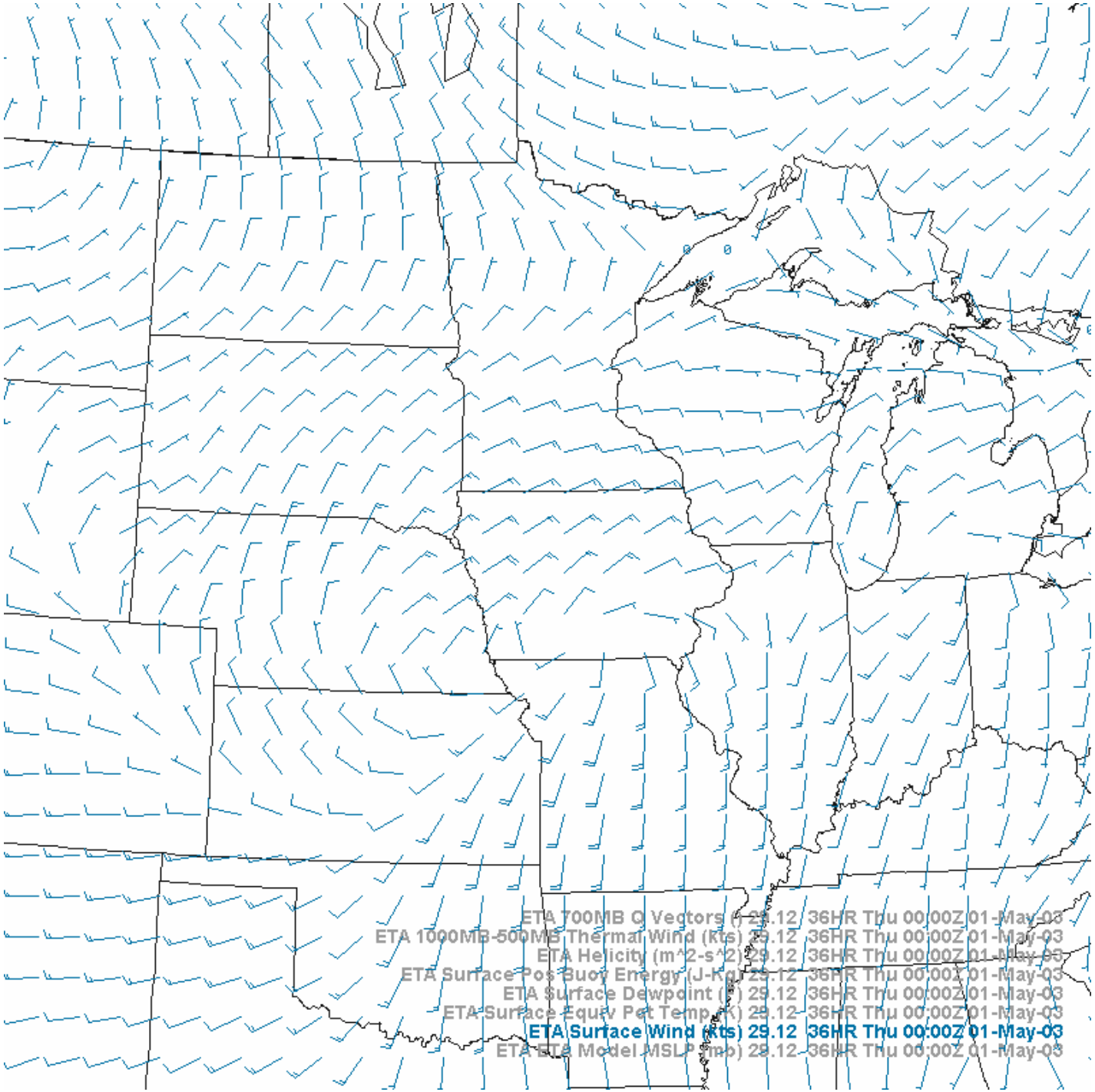
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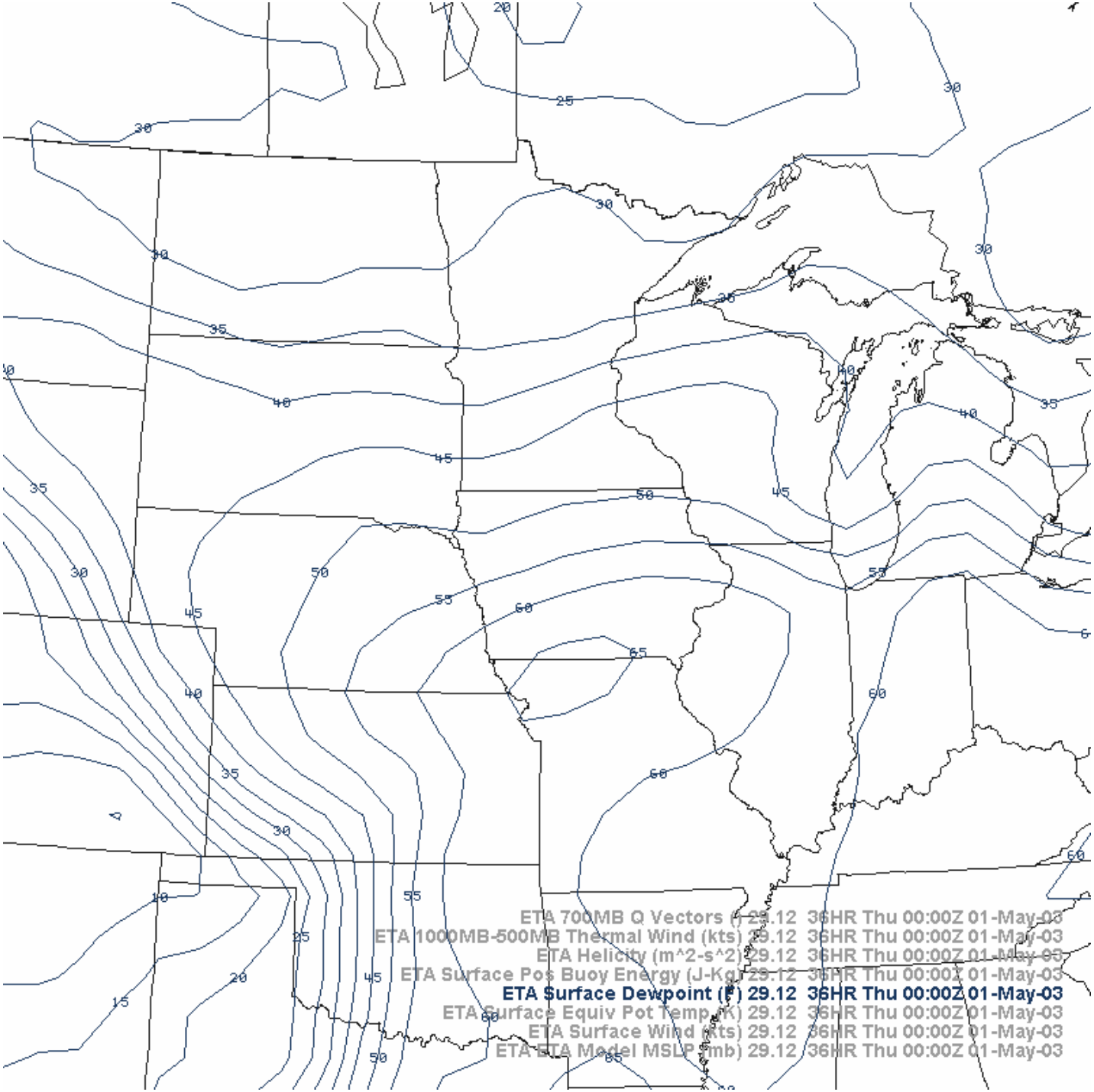
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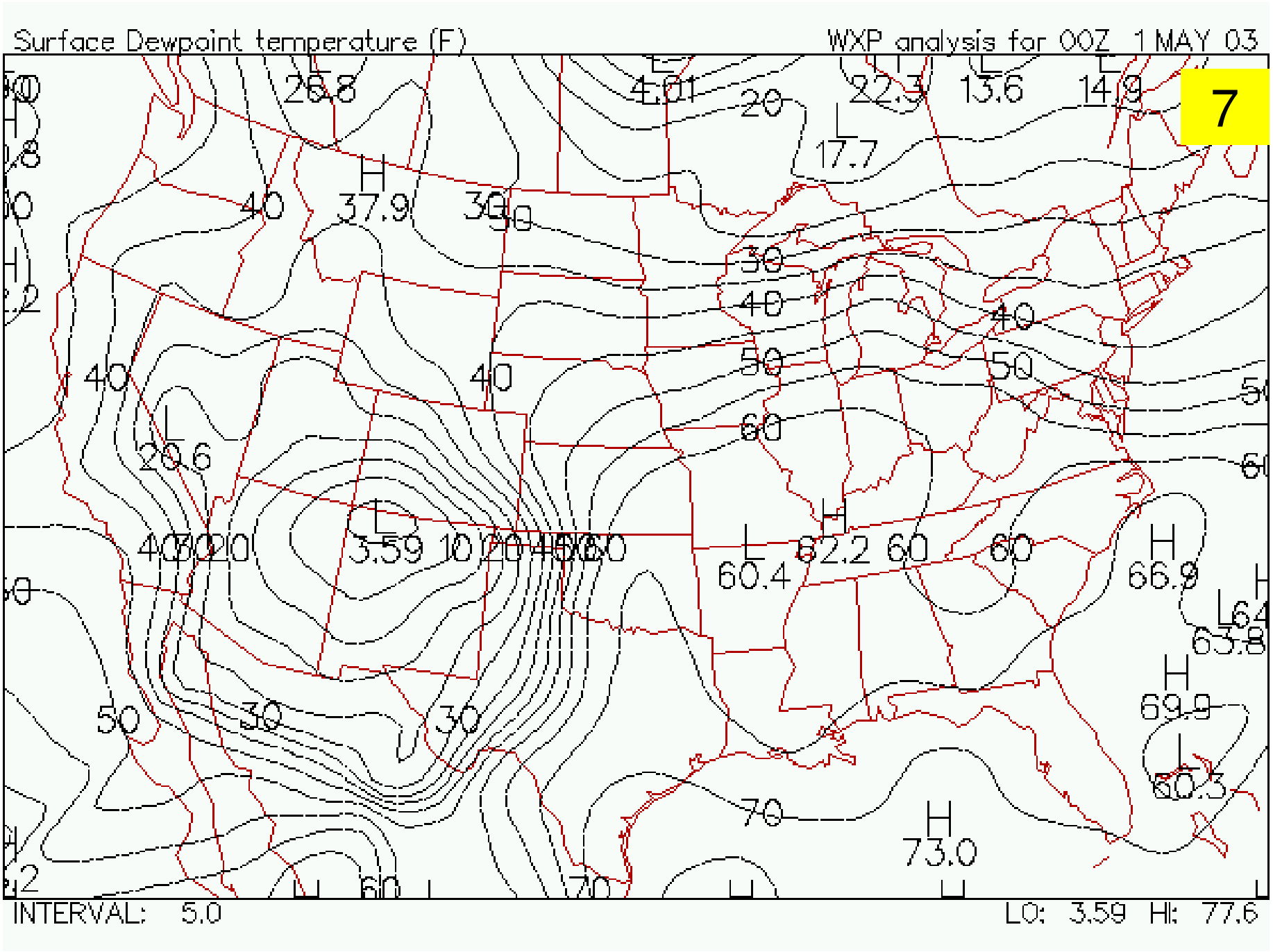

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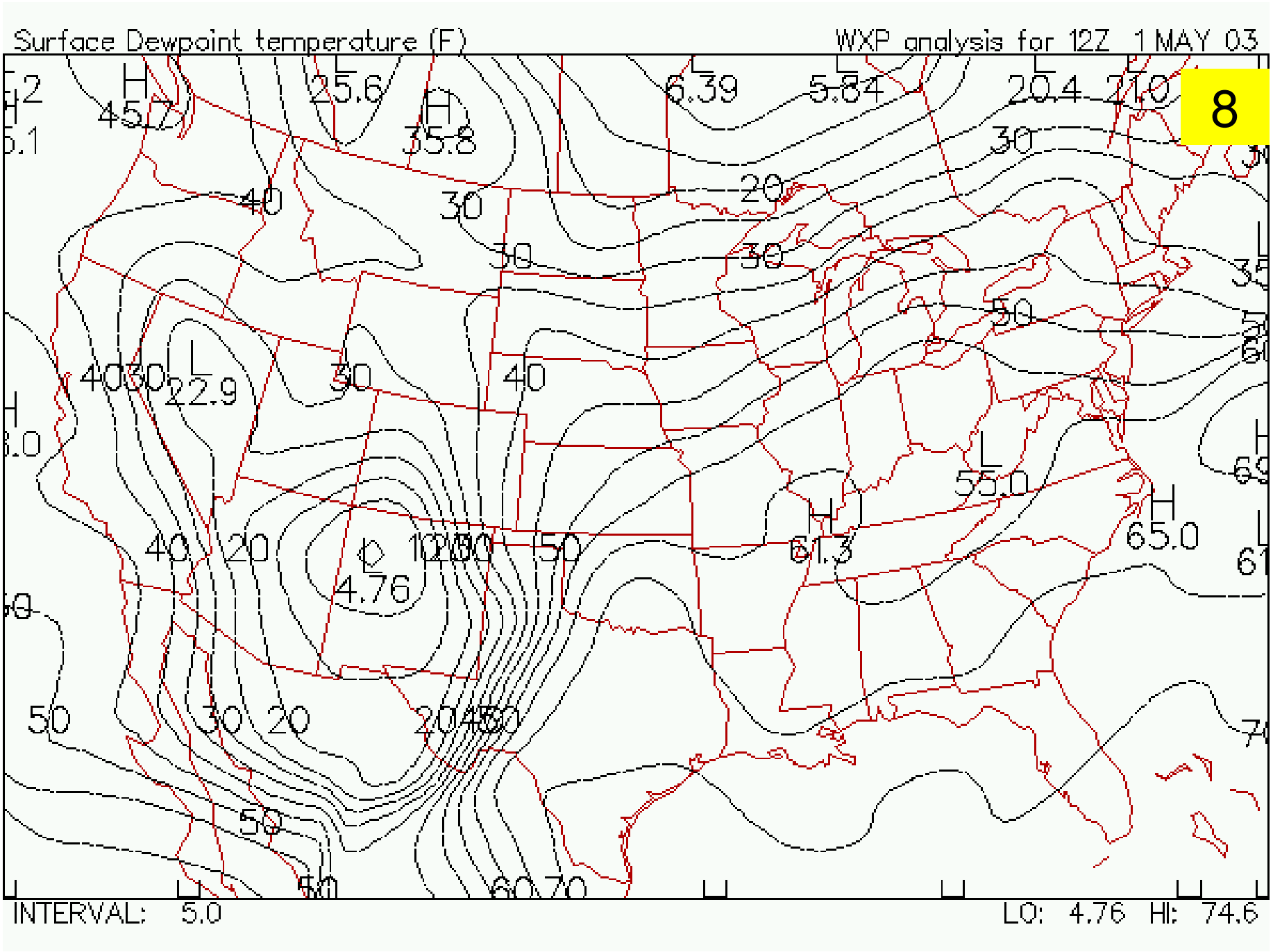

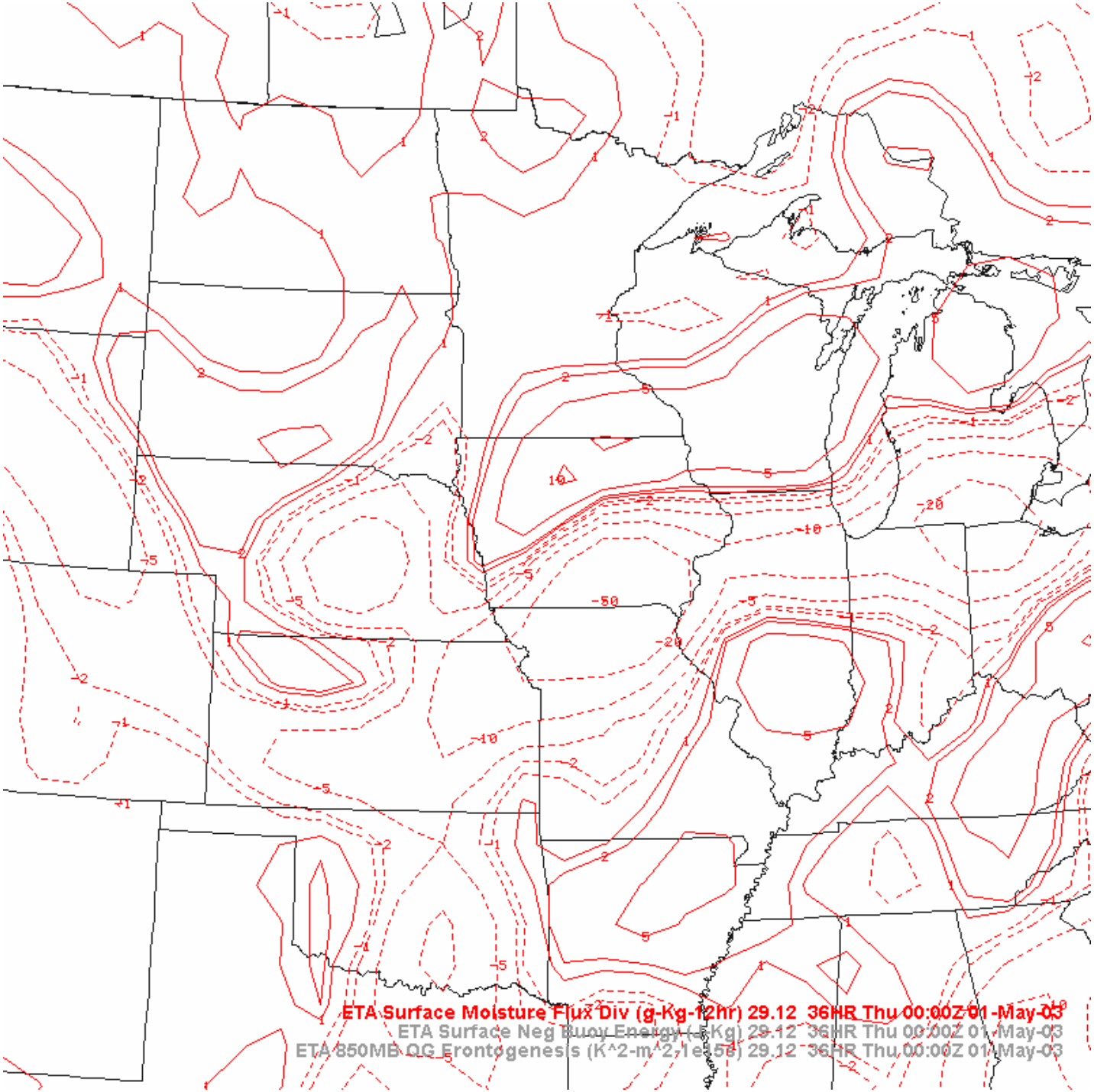
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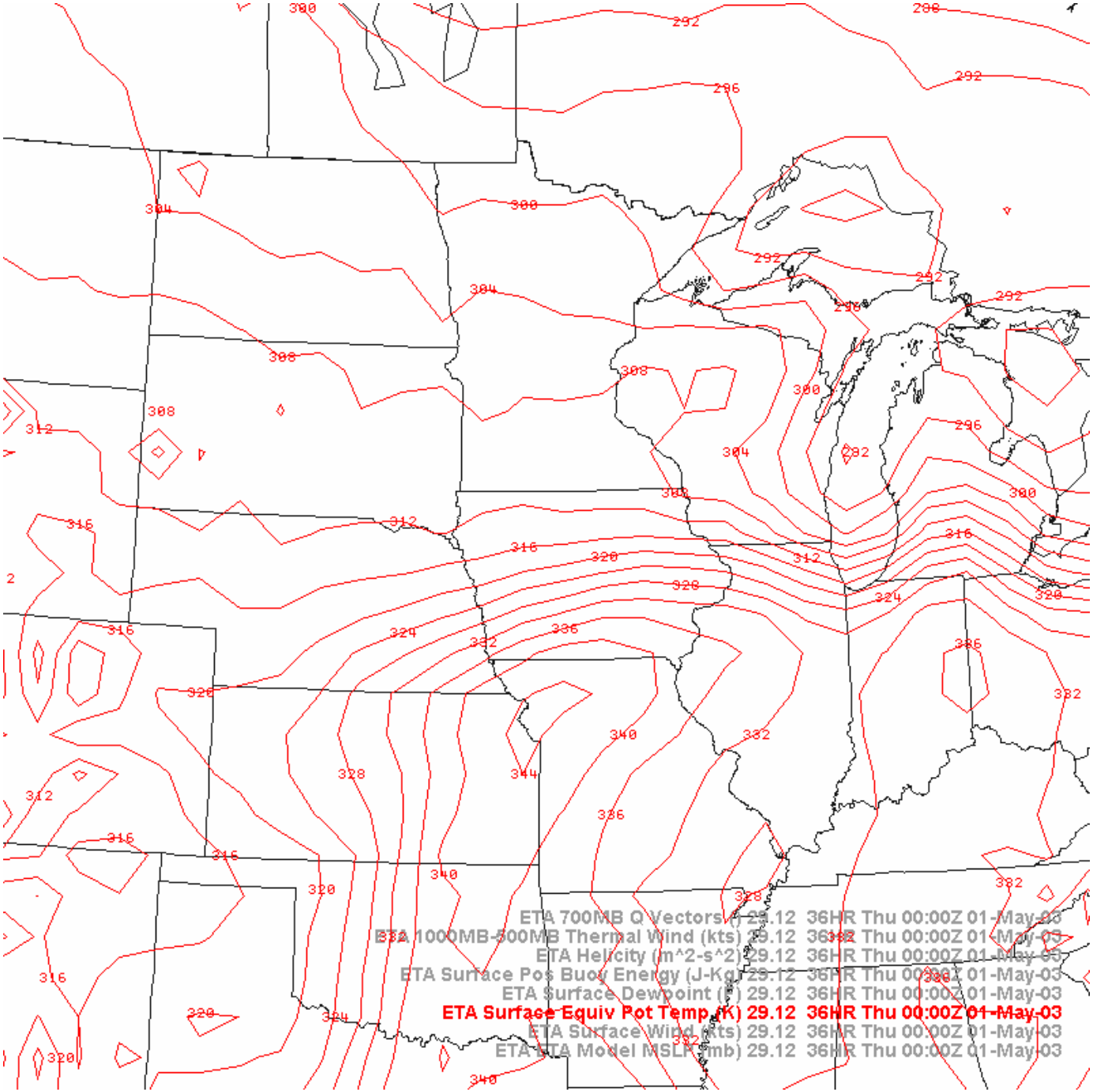
ETA Surface Neg Buoy Energy (-J/Kg) 29.12 36HR Thu 00:00Z 01-May-03
ETA 850MB QG Frontogenesis (K^2-m^2,1e-15s) 29.12 36HR Thu 00:00Z 01-May-03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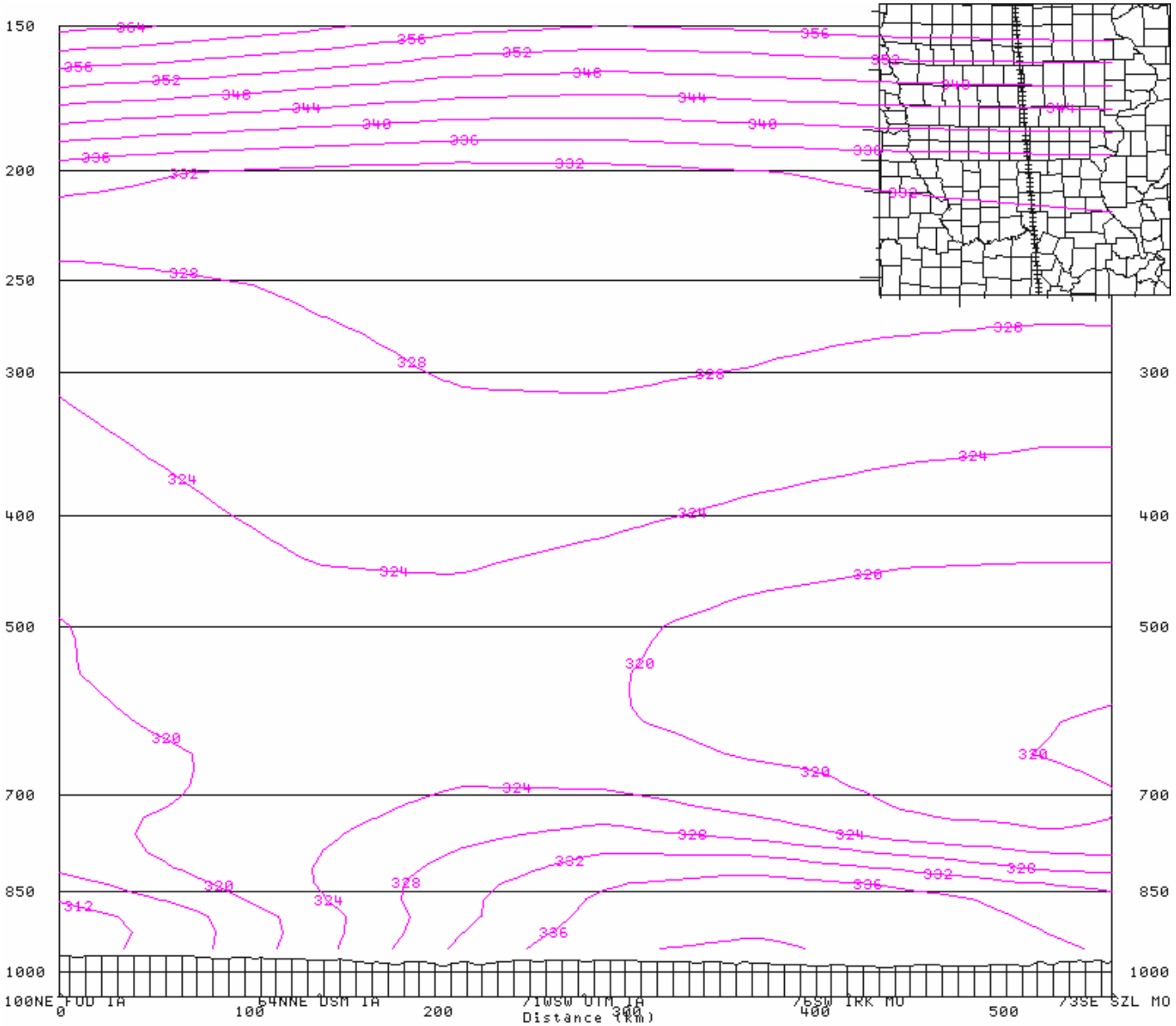

ETA LineF QG Frontogenesis (K^2-m^2-1e15s) 29.12 36HR Thu 00:00Z 01-May-03

ETA LineF Equiv Pot Temp (K) 29.12 36HR Thu 00:00Z 01-May-03

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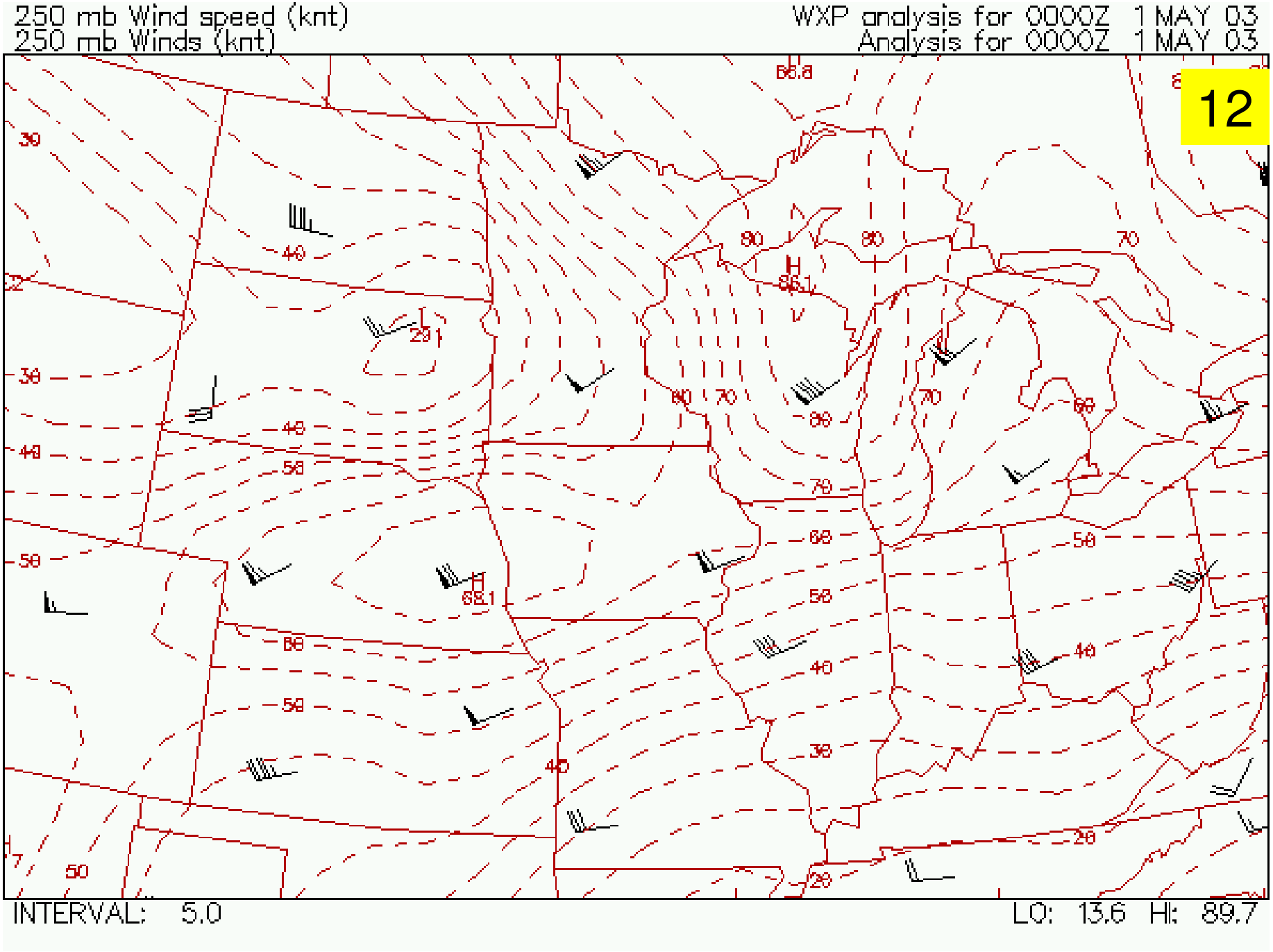

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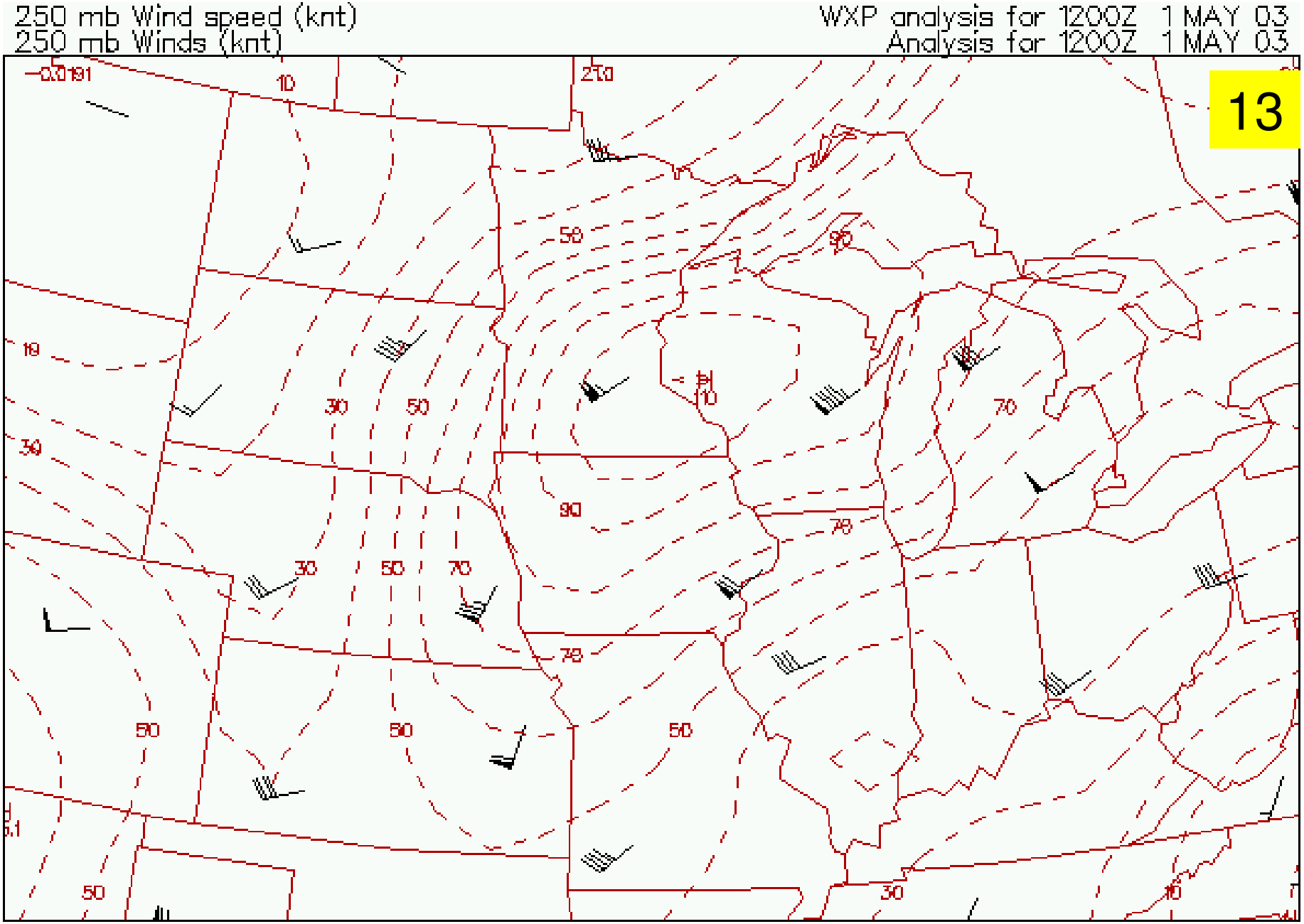

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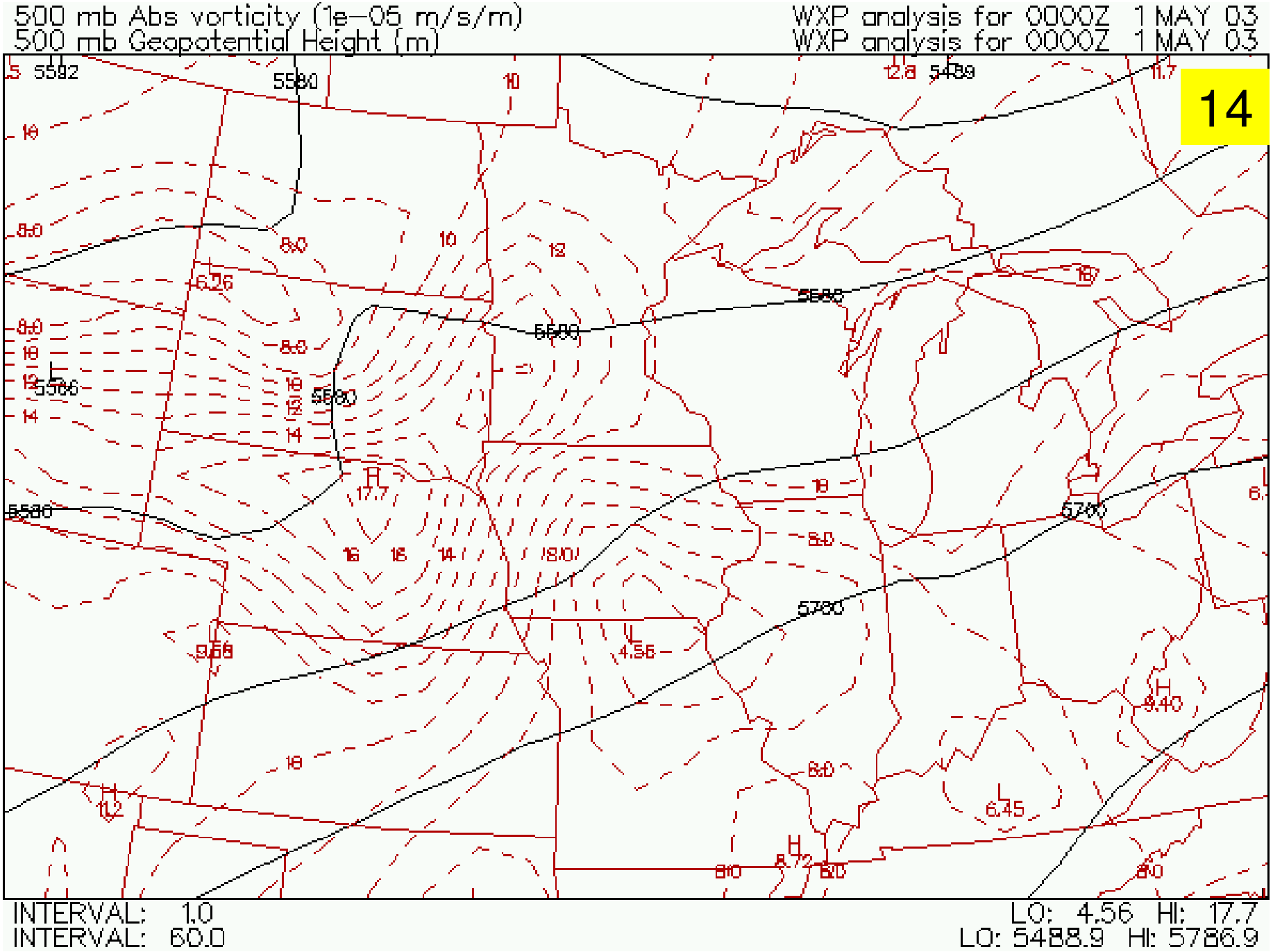

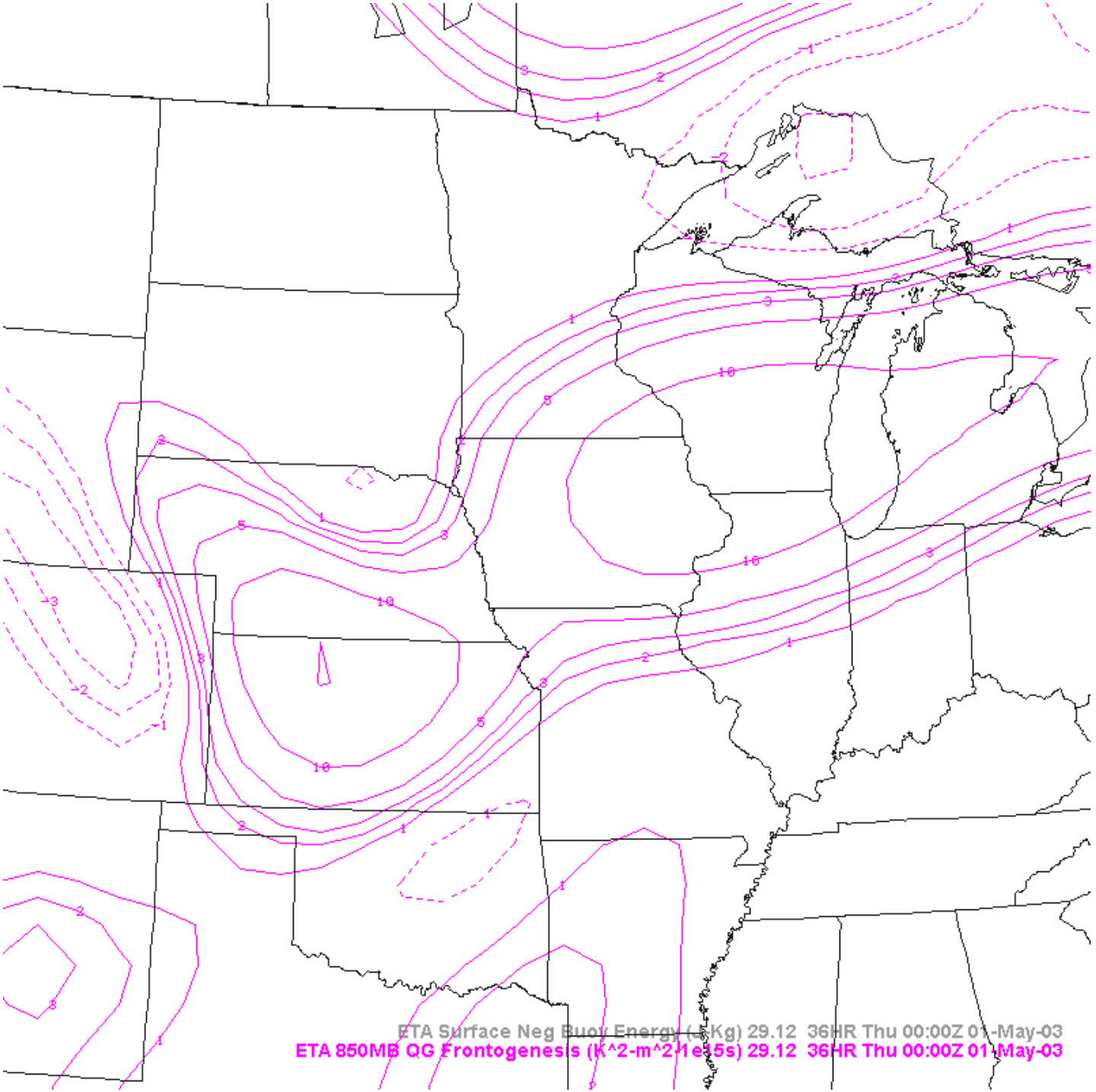
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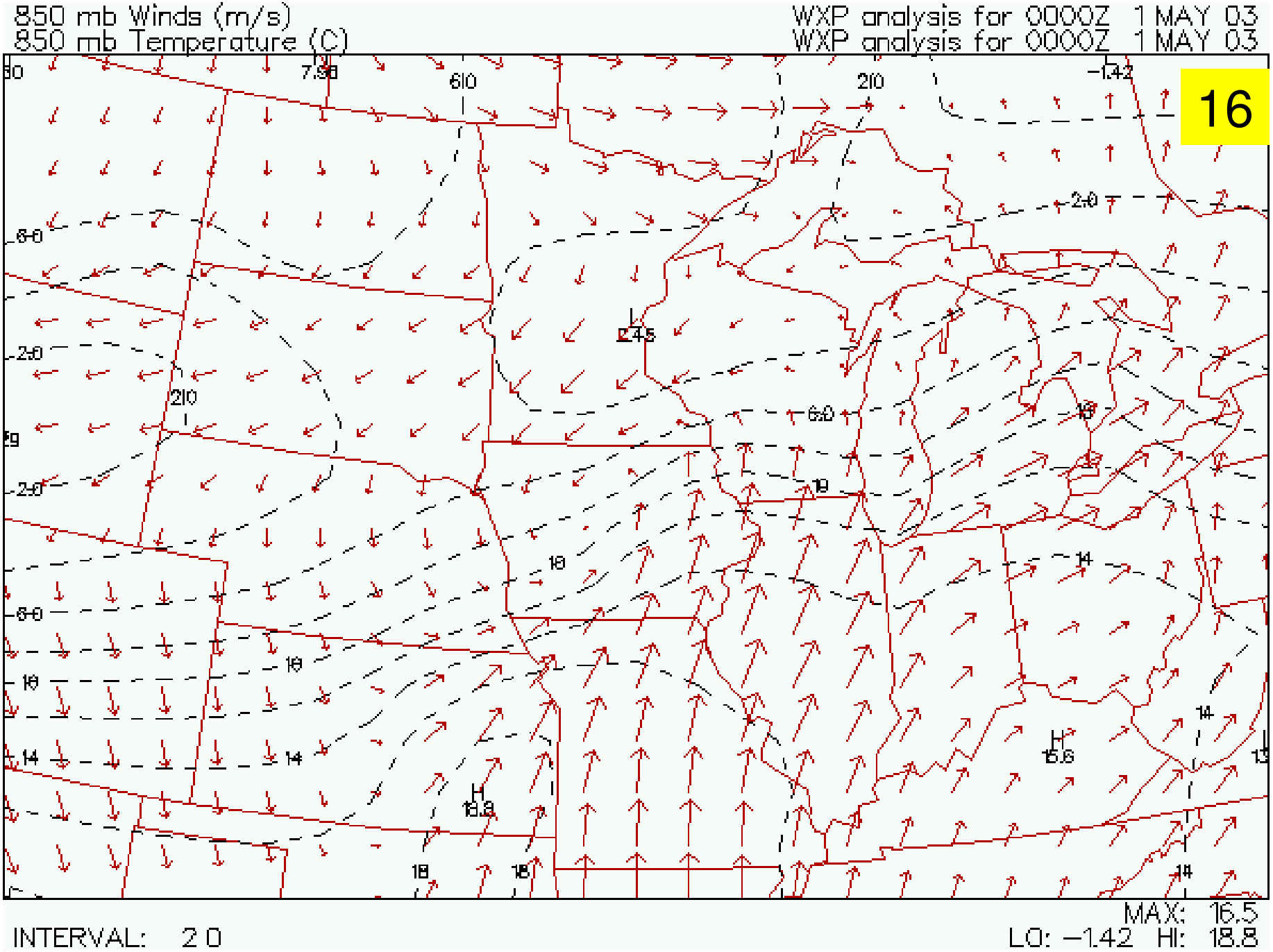

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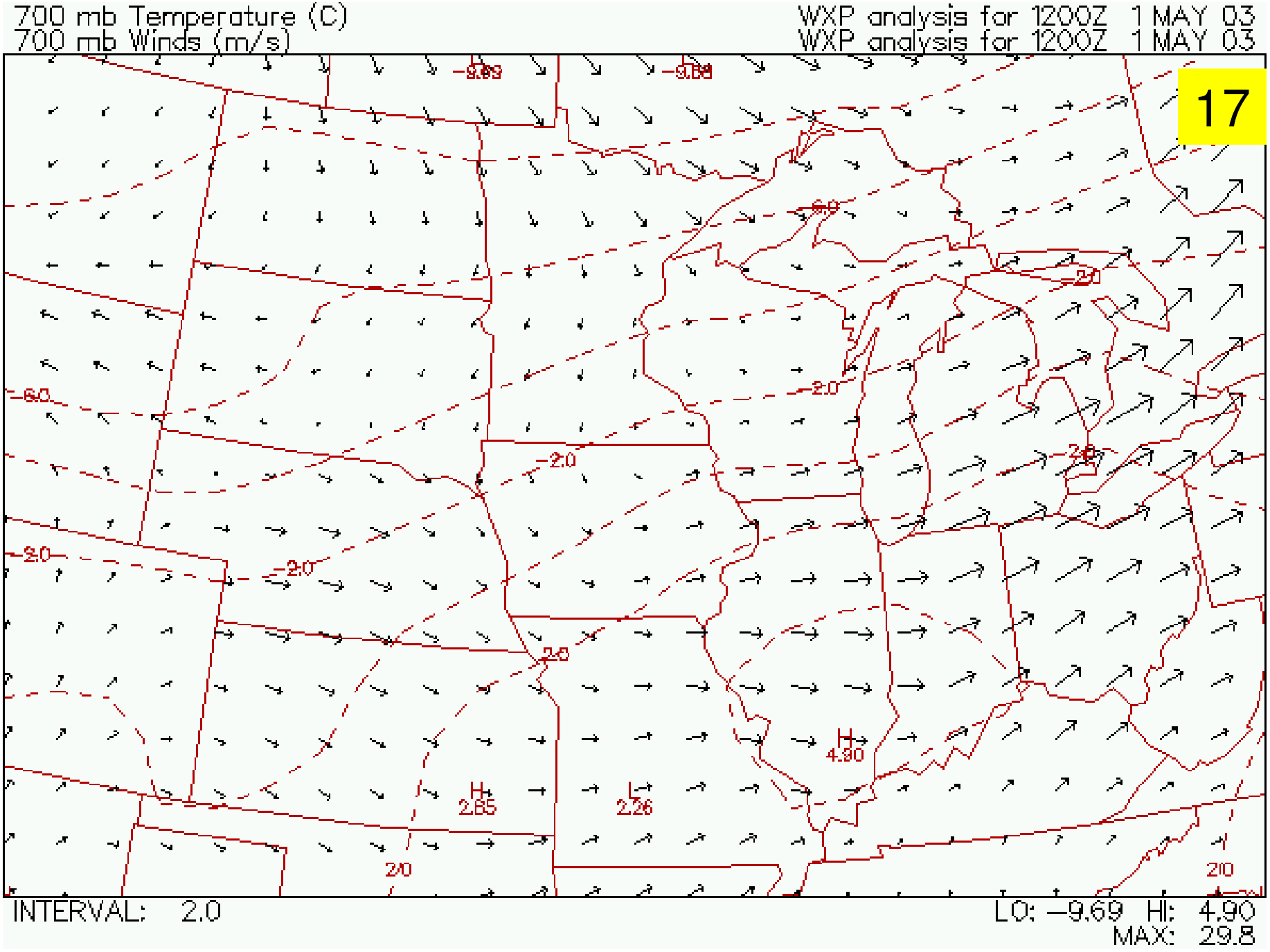

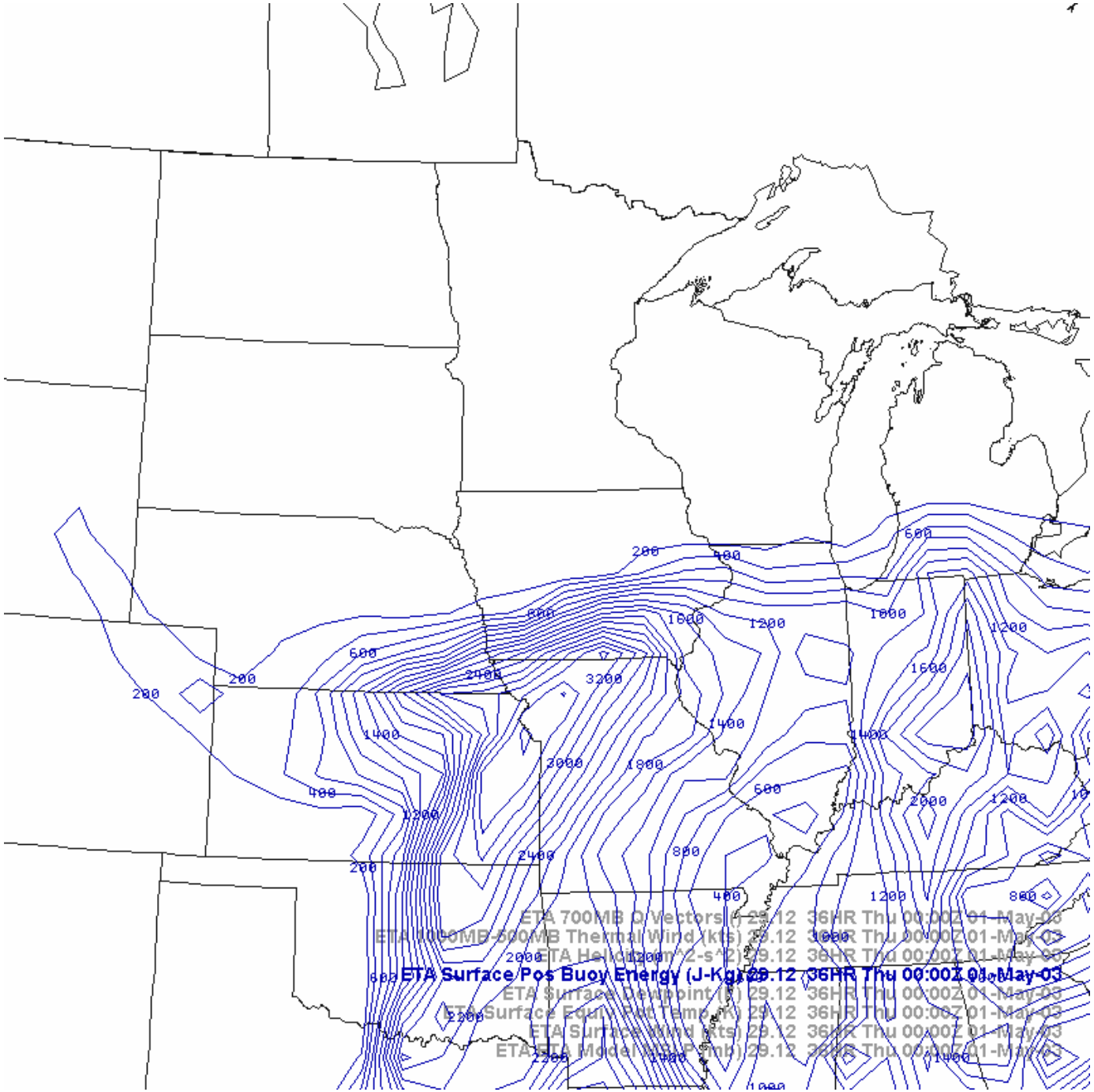
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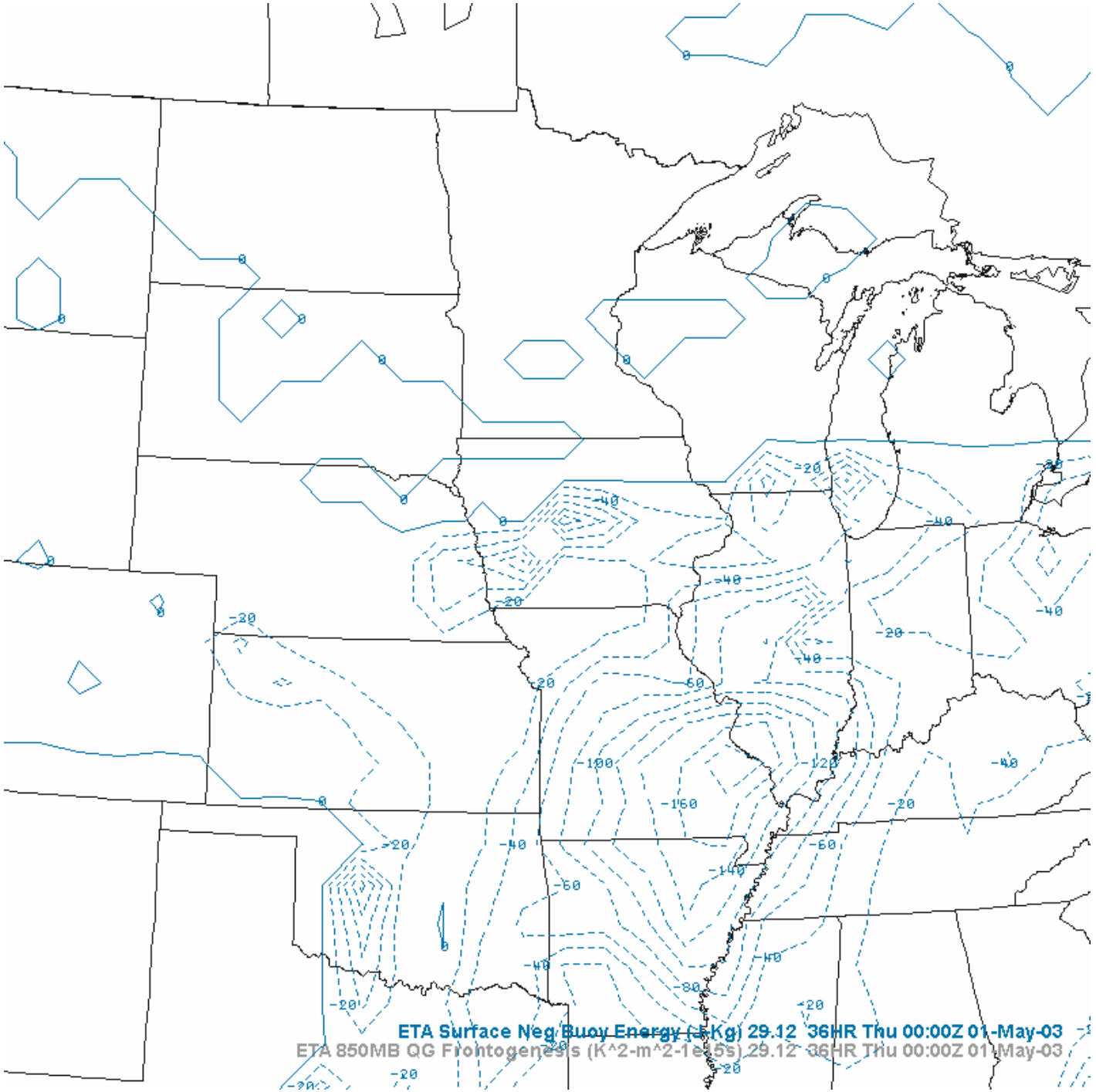
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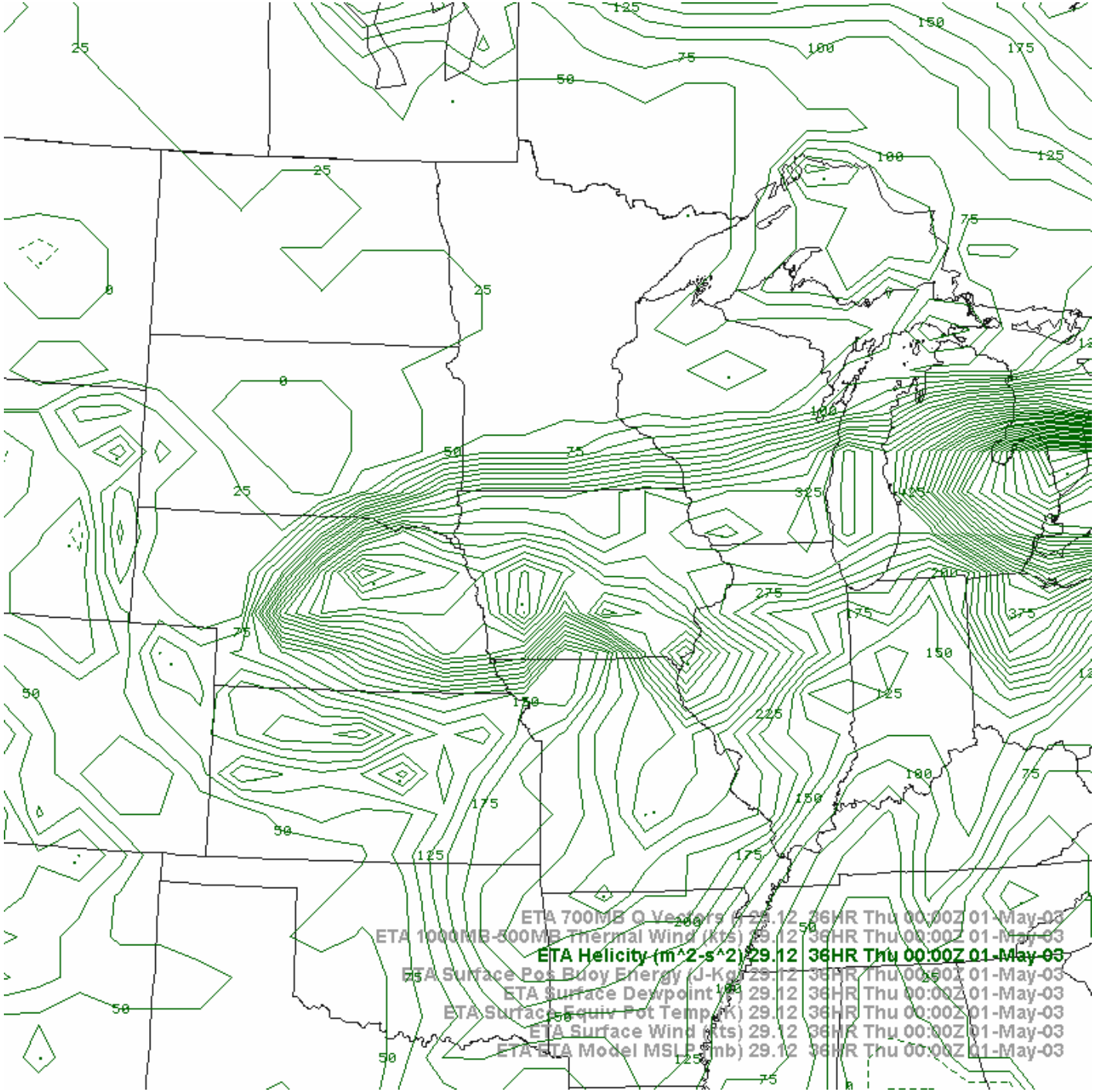
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