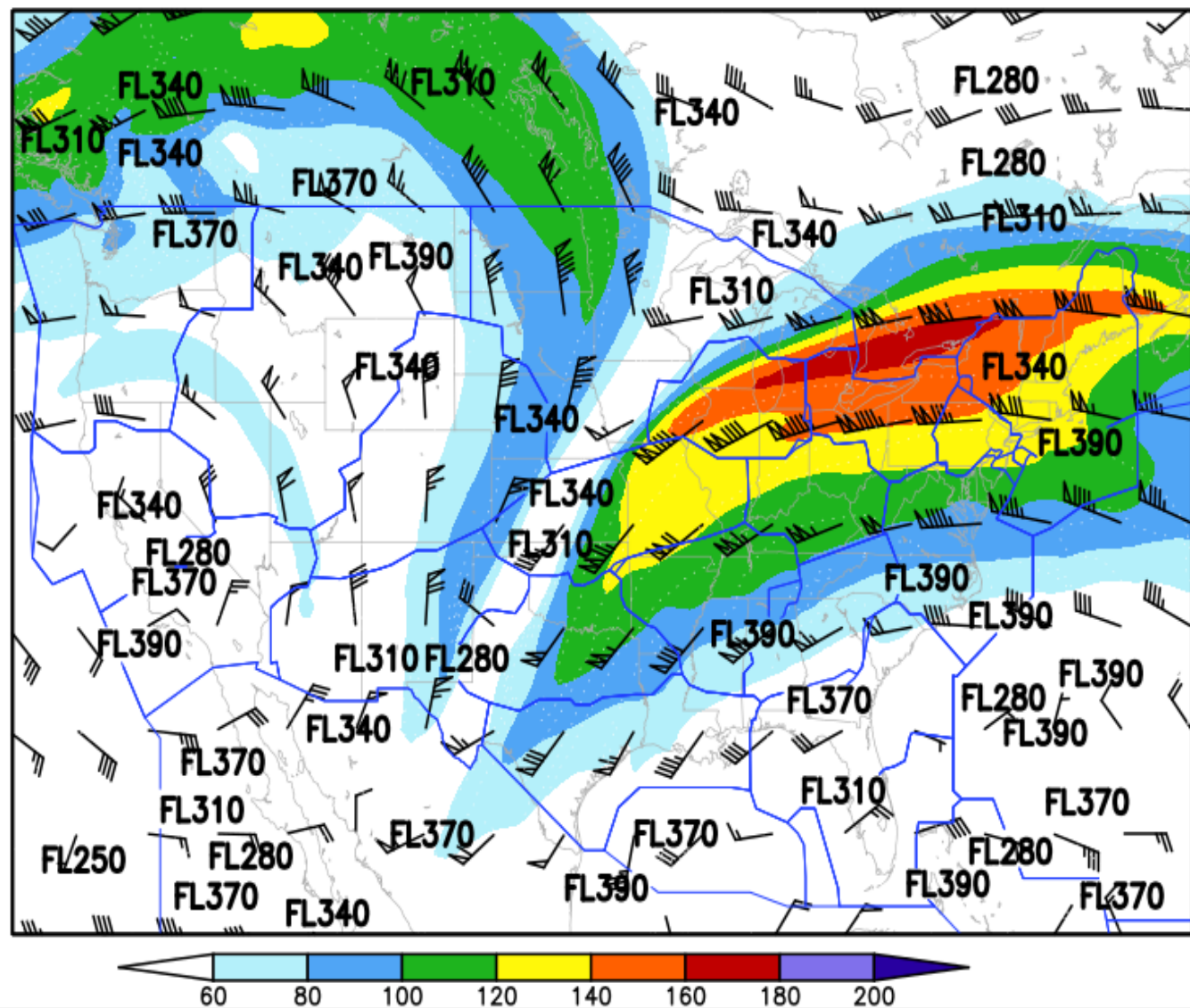


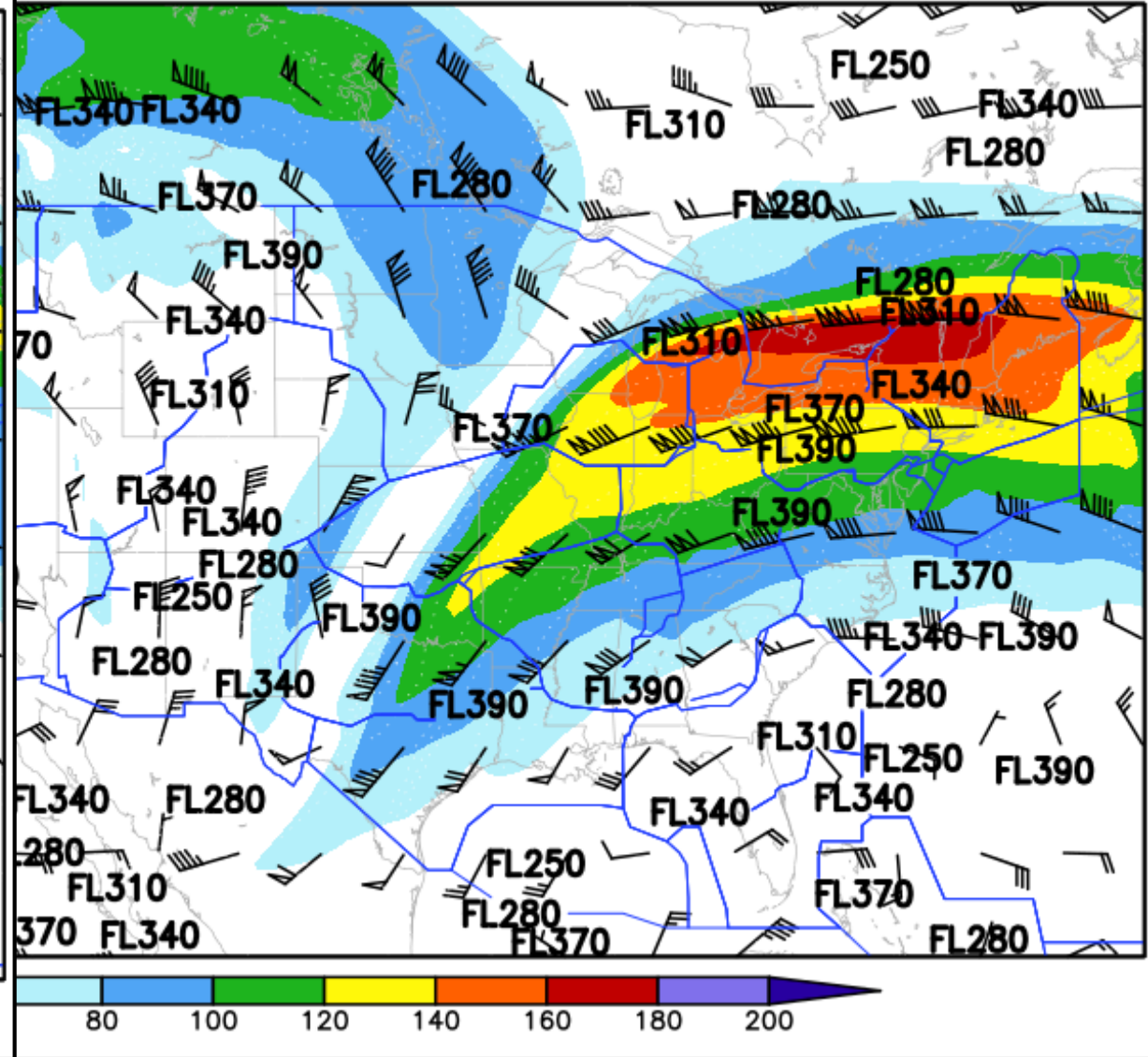
Severe Turbulence 25 October 2019

- SW jet 300-200mb 140-170kt
- Strong speed shear surrounded jet especially altitudes underneath the jet (below 300MB)
- Weaker NW flow below 300mb undercutting SW jet for added directional shear
- Strongest Bulk Shear Magnitude between 400-300mb (75-90kt) ... moved from SW ZAU across eastern ZAU (with narrow 100kt zone NW MO across SE IA 12-15z)
And 500-400mb shear zone increased by 21z to 65-75kt over MO-central IL
- Intense RAP ELLROD signature
- **18 Severe turbulence reports over ZAU FL210-360 between 12z-03z.**
- **11 other Severe turbulence reports west and south of ZAU over IA-MO 170-FL310**
- Over 100 Moderate turbulence reports in/near ZAU 170-FL430.
- ZAU TMU implemented altitude restrictions: All ORD westbound departures remained AOB FL200 climbing west across W IL-IA-N MO.

Jet Stream Forecast: valid 12Z25OCT2019 (Fri)

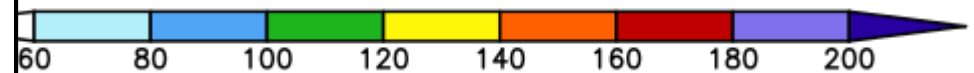
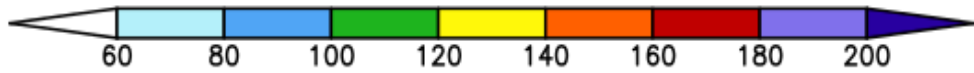
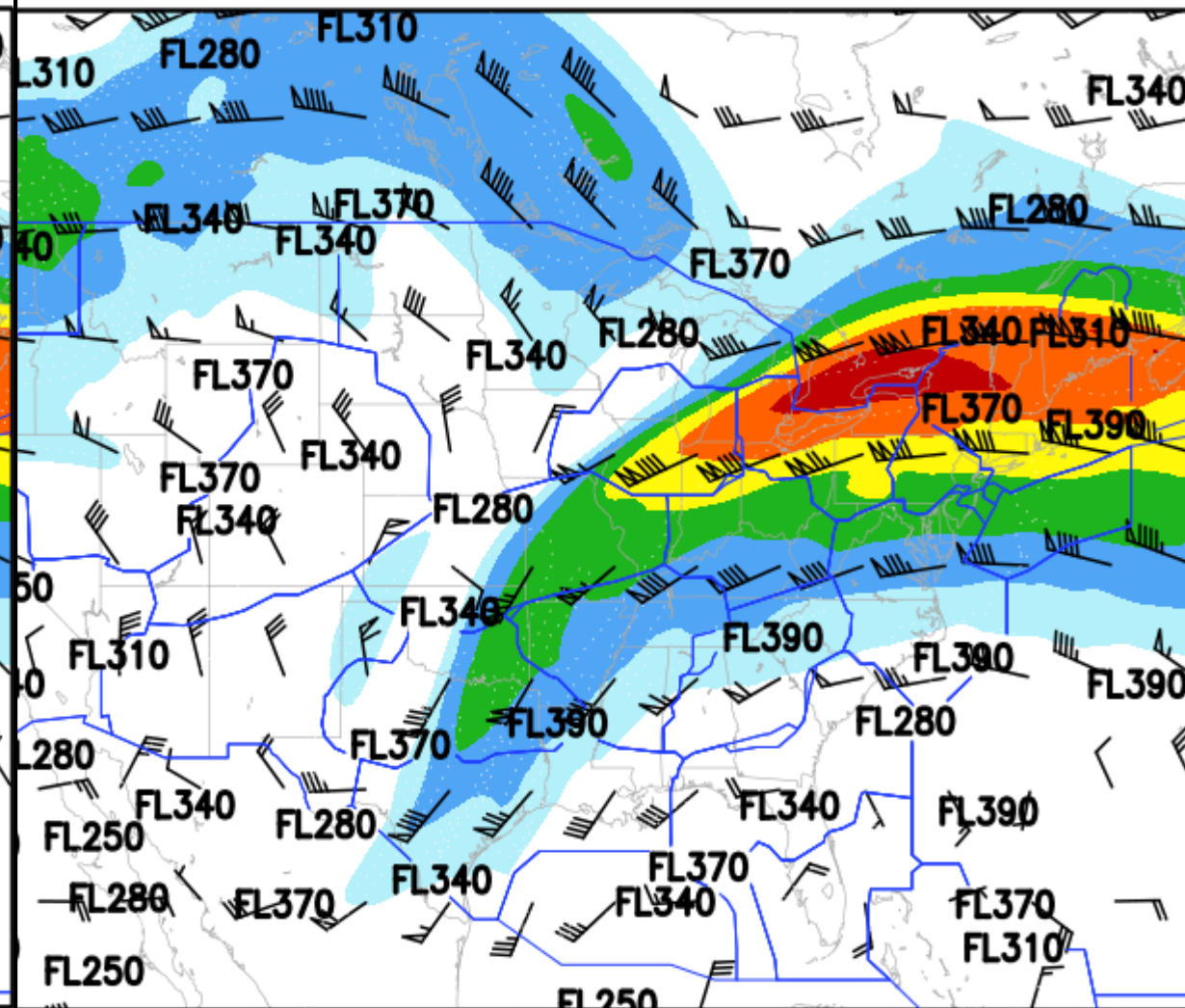
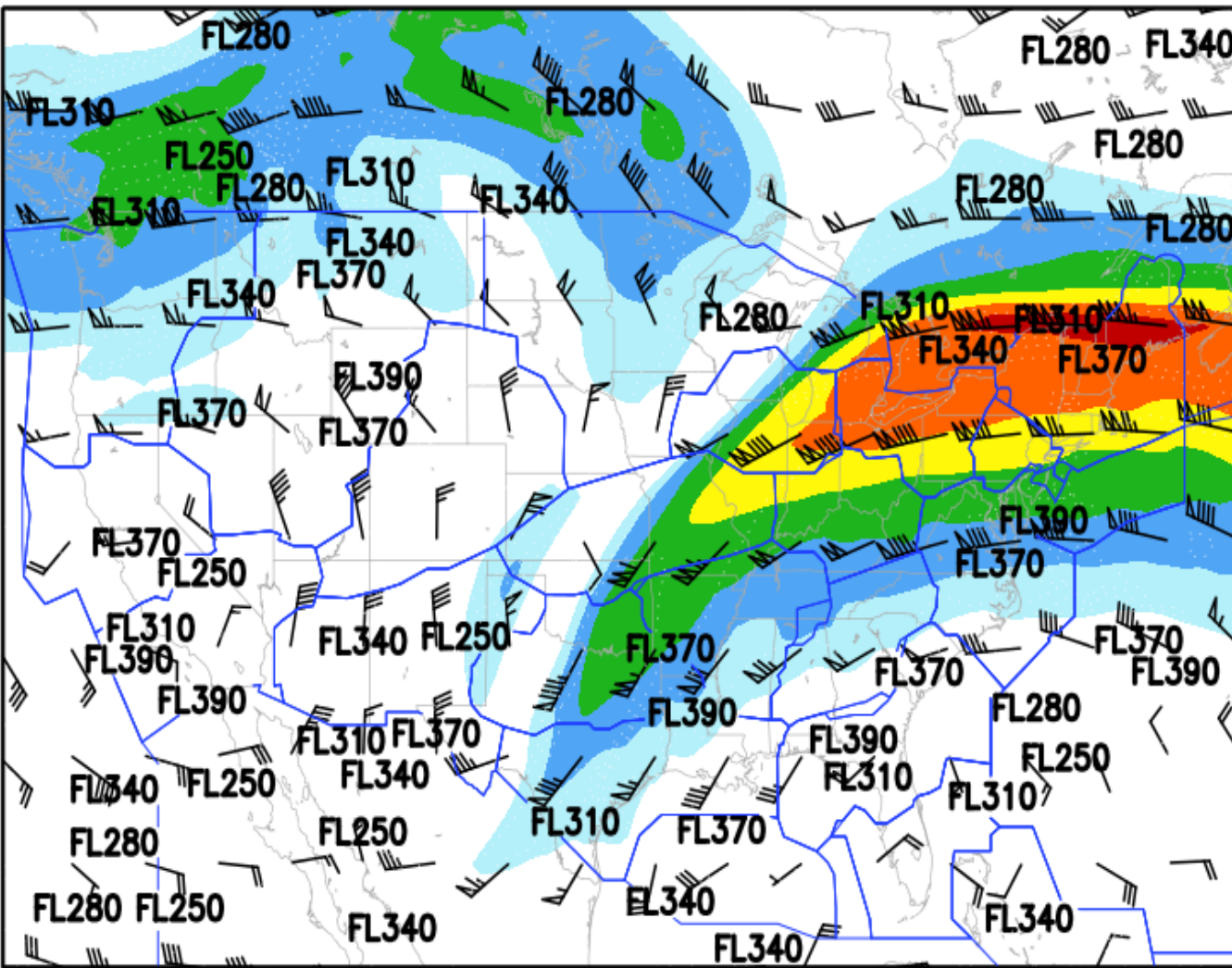


Jet Stream Forecast: valid 15Z25OCT2019 (Fri)

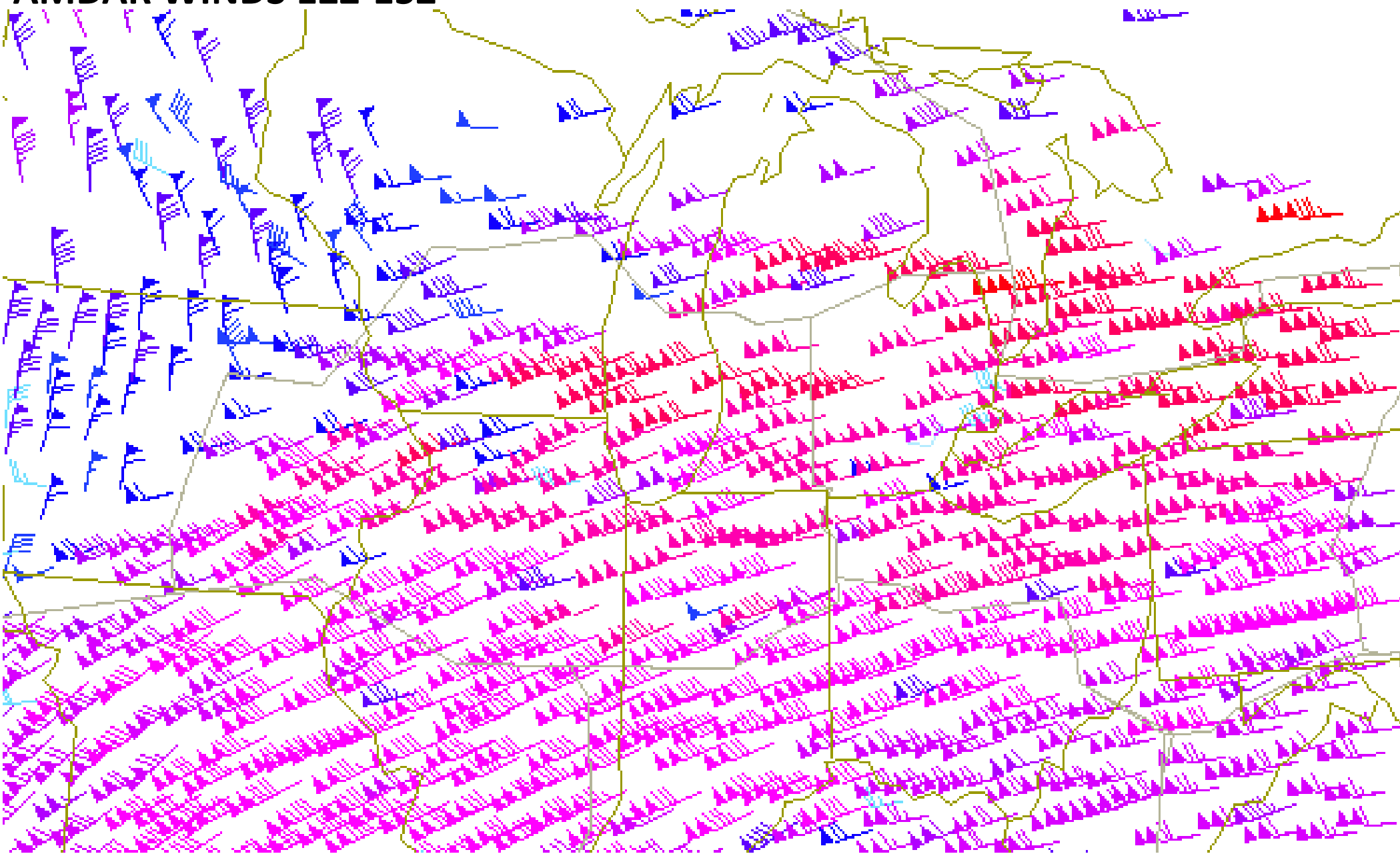


Jet Stream Forecast: valid 18Z25OCT2019 (Fri)

Jet Stream Forecast: valid 21Z25OCT2019 (Fri)

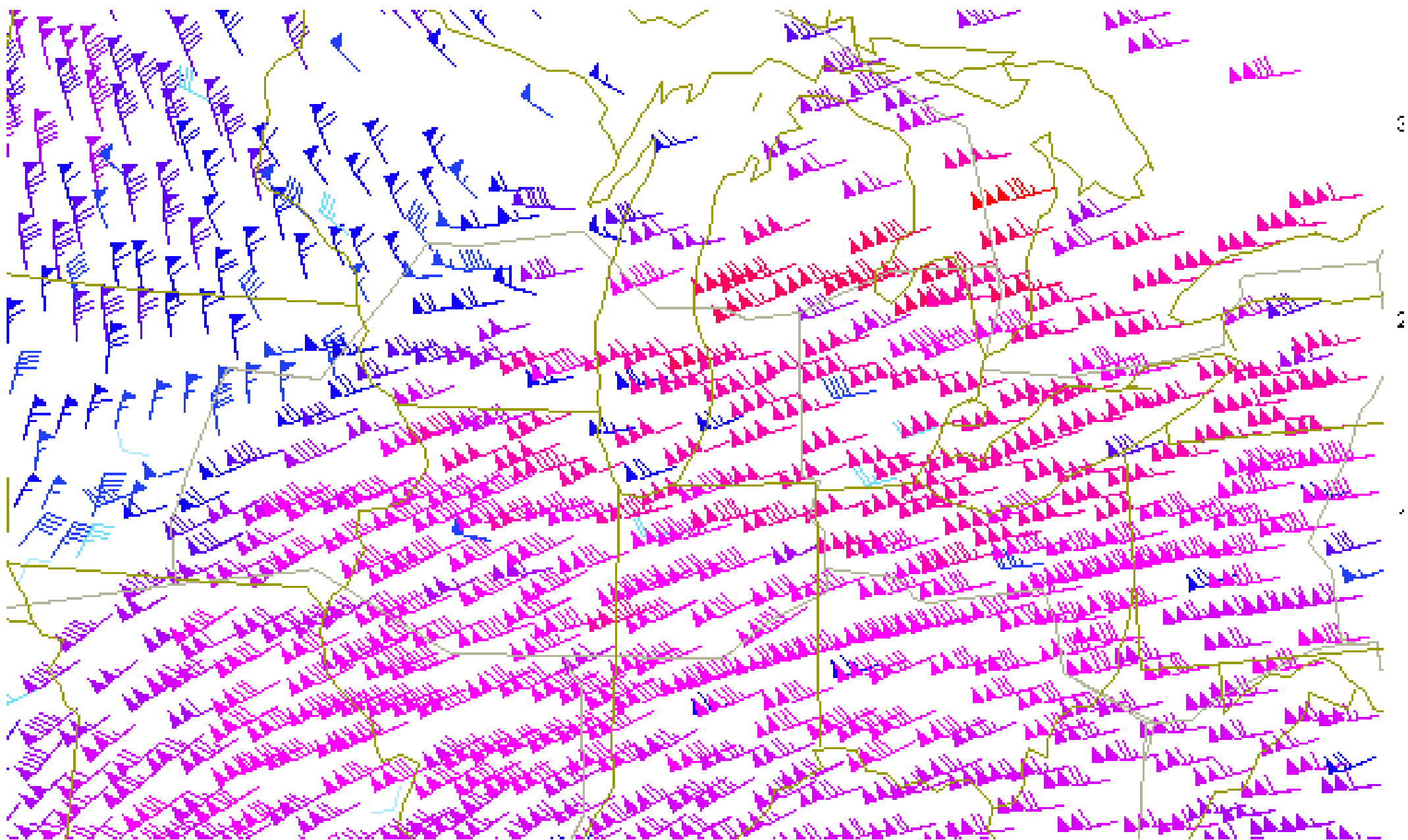


AMDAR WINDS 12Z-15Z



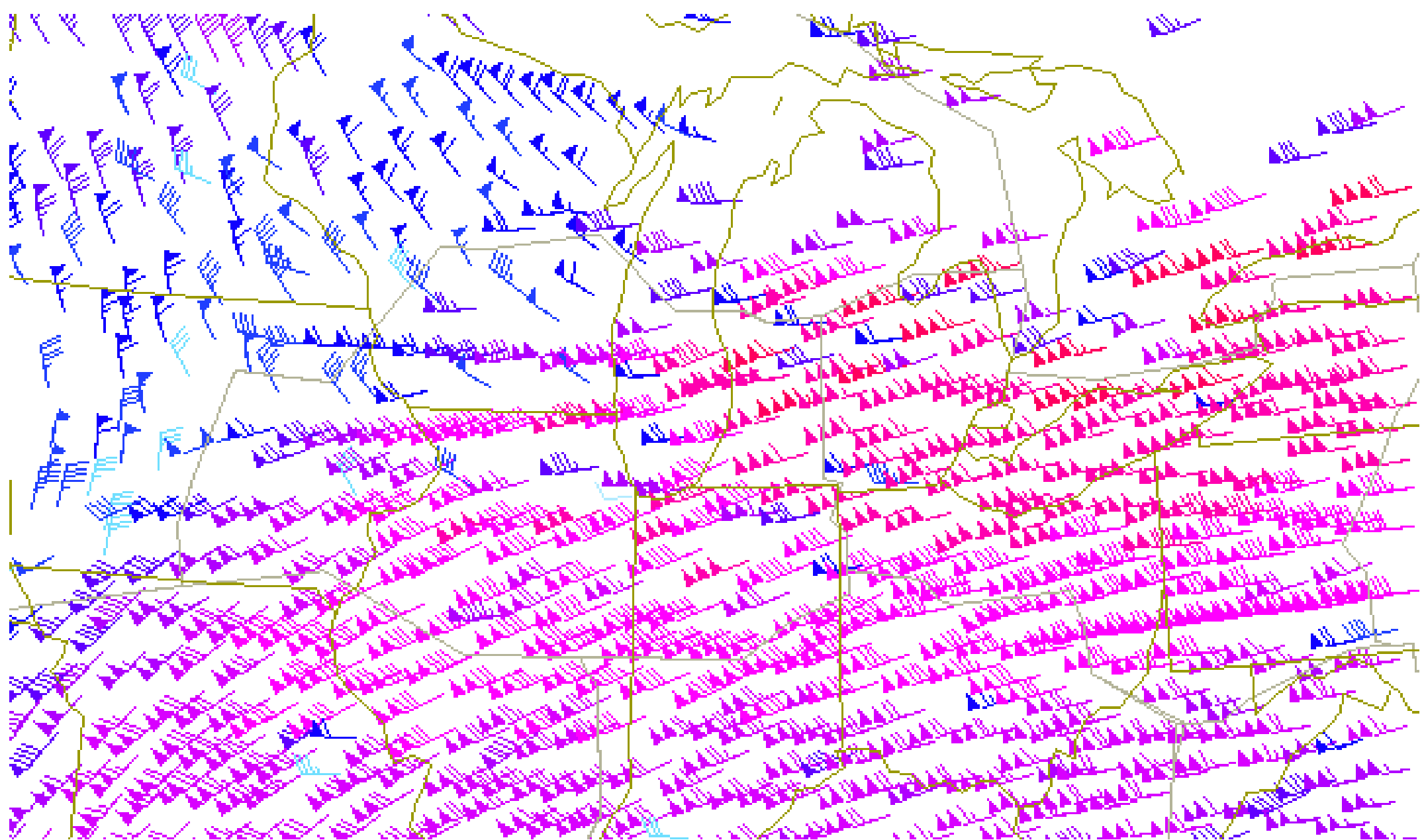
25-Oct-2019 12:00:00 -- 25-Oct-2019 14:59:59 (141109 obs loaded, 16349 in range, 587 shown)

AMDAR WINDS 15Z-18Z



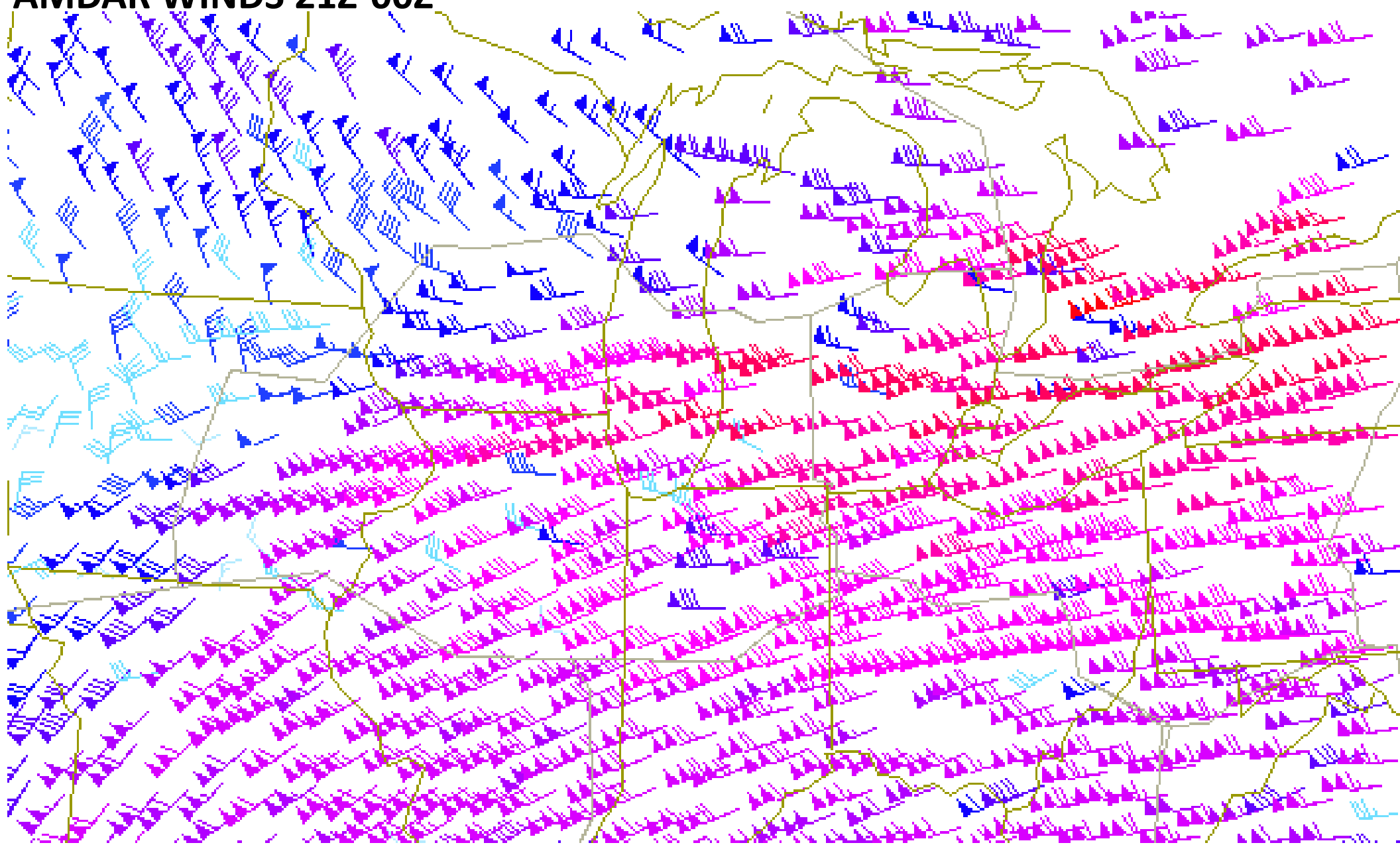
25-Oct-2019 15:00:00 -- 25-Oct-2019 17:59:59 (150037 obs loaded, 15767 in range, 579 shown)

AMDAR WINDS 18Z-21Z



25-Oct-2019 18:00:00 -- 25-Oct-2019 20:59:59 (149476 obs loaded, 17041 in range, 617 shown)

AMDAR WINDS 21Z-00Z



25-Oct-2019 21:00:00 -- 25-Oct-2019 23:59:59 (149334 obs loaded, 17492 in range, 665 shown)

NAM 400-300mb Bulk Shear Magnitude...12z-00z
and associated Moderate and Severe Turbulence plots

NAM 500-400mb Bulk Shear Magnitude...18-00z
and associated Moderate and Severe Turbulence plots

10

20

30

40

50

60

70

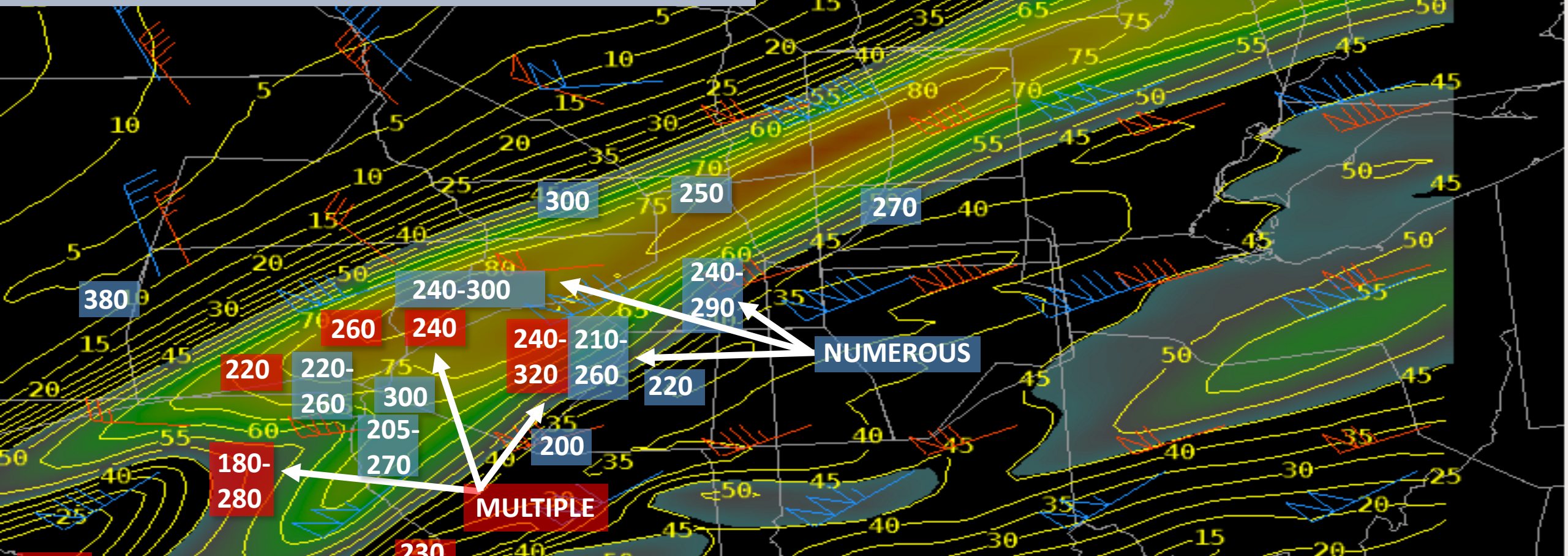
80

90

400MB-300MB 18Z

= SEVERE TURB = MOD TURB

(PIREPS 1640Z-1930Z)



205-220

220

180-280

220-260

260

205-270

230

240-300

240

MULTIPLE

240-320

200

300

220

240-290

210-260

220

250

NUMEROUS

270

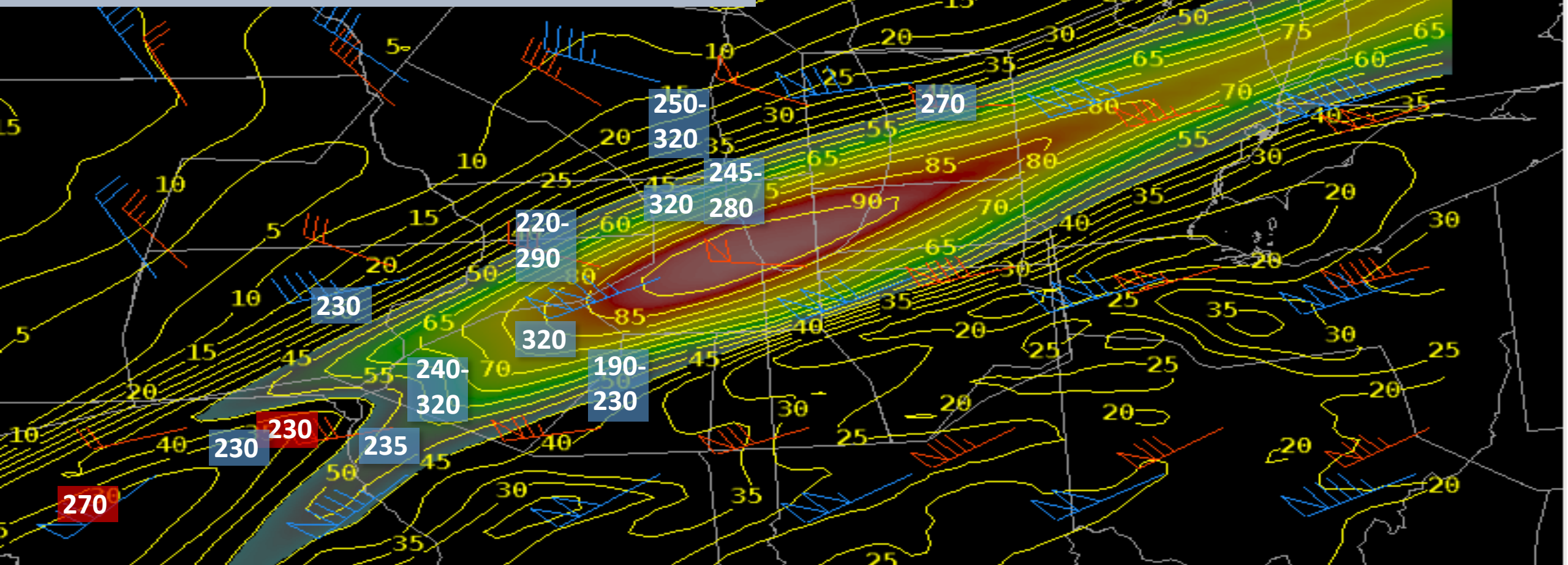
NAM12 400MB-300MB Total Deformation (/1e5s)	25.12	12	6HR	Fri	18:00Z	25-Oct-19
NAM12 300MB Wind (kts)	25.12	12	6HR	Fri	18:00Z	25-Oct-19
NAM12 400MB Wind (kts)	20	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 400MB-300MB Bulk Shear Magnitude (kts)	25.12	12	6HR	Fri	18:00Z	25-Oct-19
NAM12 400MB-300MB Total Deformation Img (/1e5s)	25.12	15	20HR	Fri	18:00Z	25-Oct-19
NAM12 400MB-300MB Bulk Shear Magnitude Img (kts)	25.12	15	6HR	Fri	18:00Z	25-Oct-19

10 20 30 40 50 60 70 80 90

400MB-300MB 21Z

 = SEVERE TURB = MOD TURB

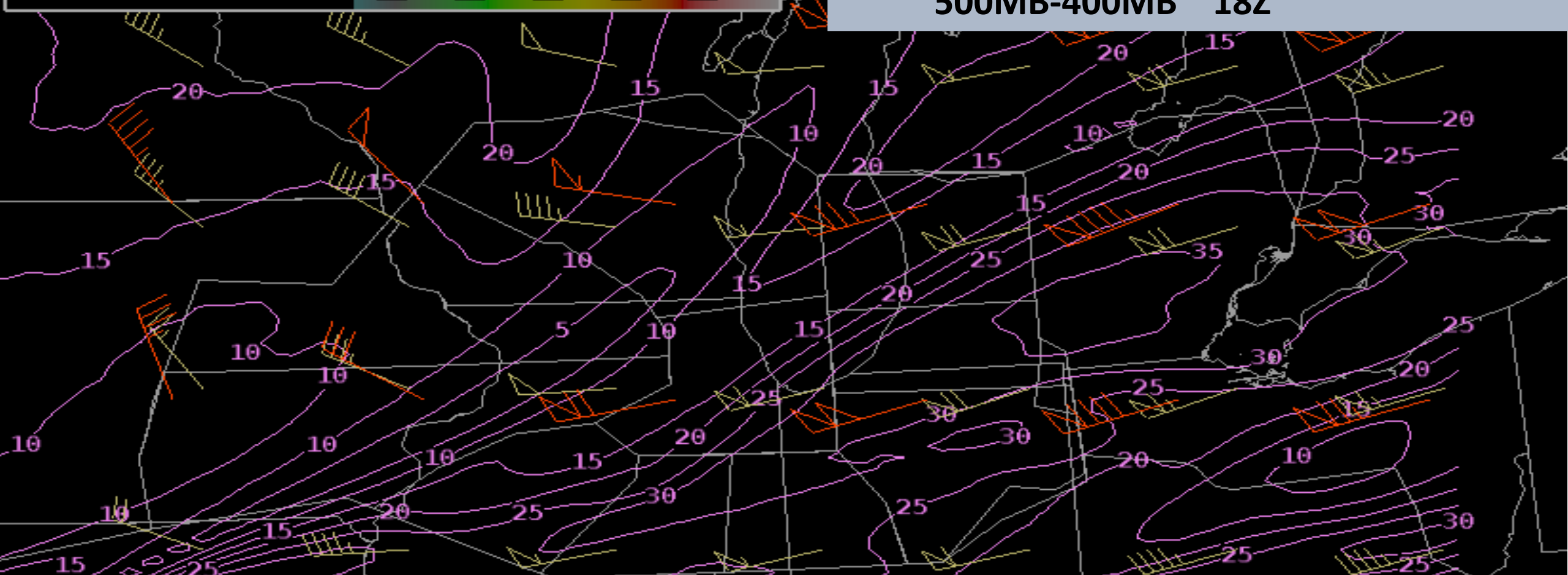
(PIREPS 1940Z-2230Z)



NAM12 400MB-300MB Total Deformation (1e5s)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 300MB Wind (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 400MB Wind (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 400MB-300MB Bulk Shear Magnitude (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 400MB-300MB Total Deformation Img (1e5s)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 400MB-300MB Bulk Shear Magnitude Img (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19

10 20 30 40 50 60 70 80 90

500MB-400MB 18Z



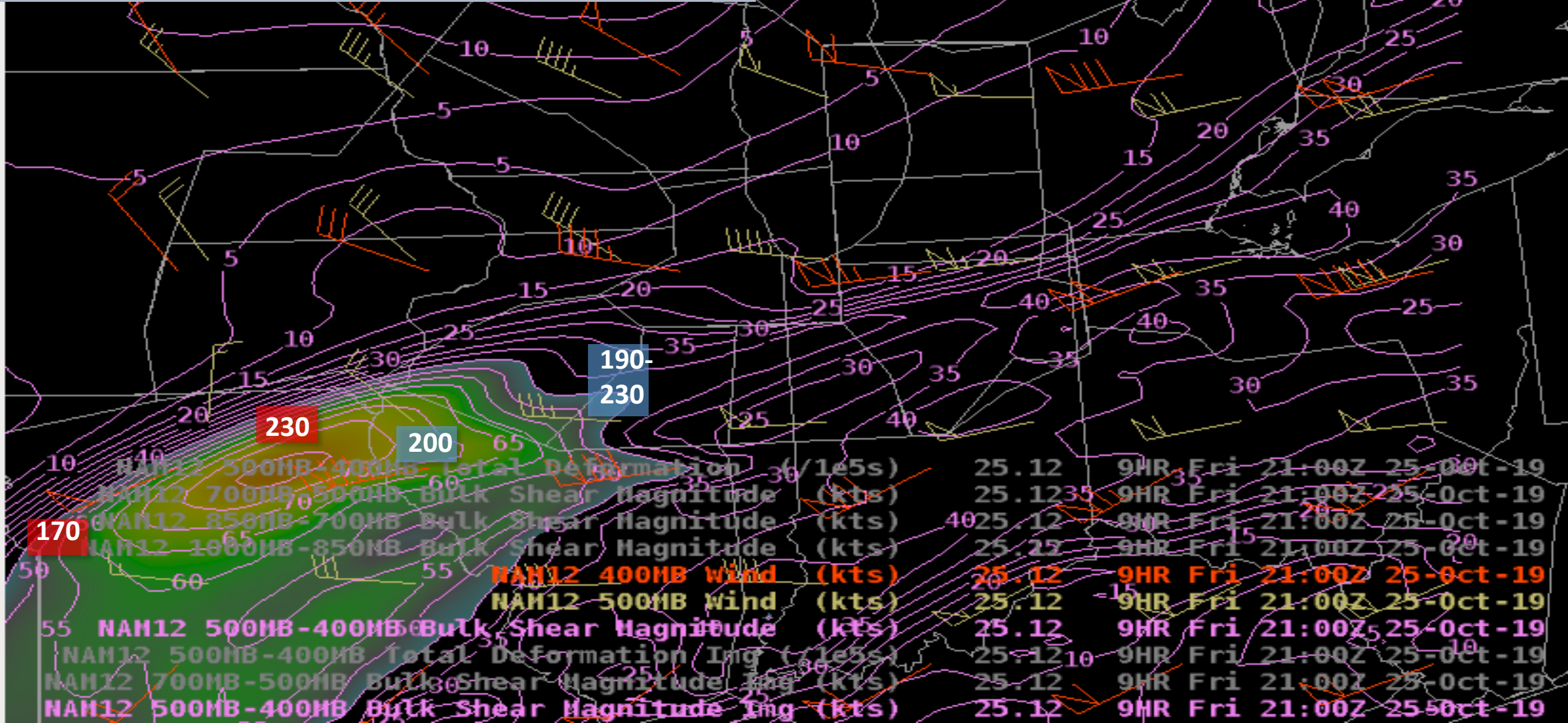
NAM12 500MB-400MB Total Deformation (/1e5s)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 700MB-500MB Bulk Shear Magnitude (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 850MB-700MB Bulk Shear Magnitude (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 1000MB-850MB Bulk Shear Magnitude (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 400MB Wind (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 500MB Wind (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 500MB-400MB Bulk Shear Magnitude (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 500MB-400MB Total Deformation Img (/1e5s)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 700MB-500MB Bulk Shear Magnitude Img (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19
NAM12 500MB-400MB Bulk Shear Magnitude Img (kts)	25.12	6HR	Fri	18:00Z	25-Oct-19



500MB-400MB 21Z

 = SEVERE TURB = MOD TURB

(PIREPS 1940Z-2230Z)



170

230

200

190-
230

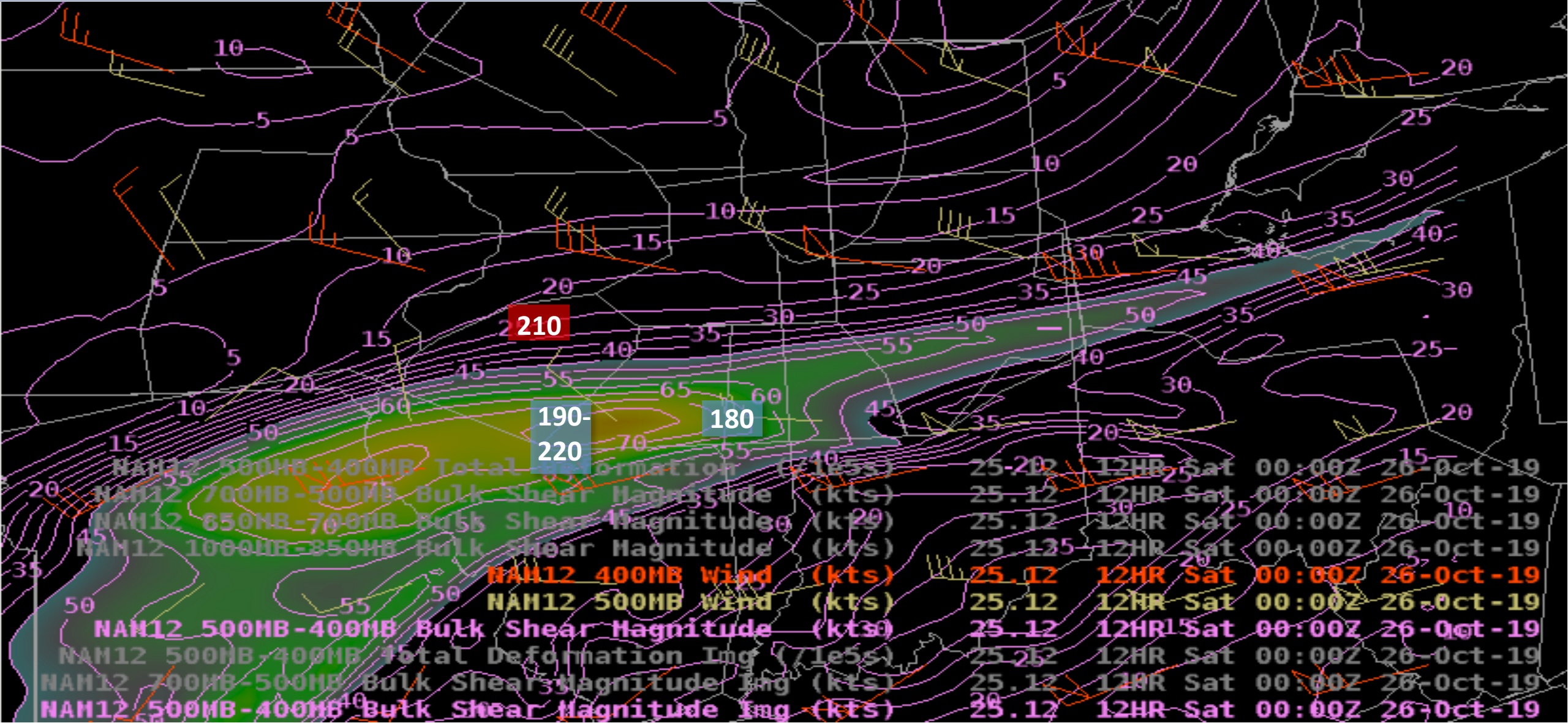
NAM12 500MB-400MB Total Deformation (1e5s)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 700MB-500MB Bulk Shear Magnitude (kts)	25.1235	9HR	Fri	21:00Z	25-Oct-19
NAM12 850MB-700MB Bulk Shear Magnitude (kts)	4025.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 1000MB-850MB Bulk Shear Magnitude (kts)	25.25	9HR	Fri	21:00Z	25-Oct-19
NAM12 400MB Wind (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 500MB Wind (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 500MB-400MB Bulk Shear Magnitude (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 500MB-400MB Total Deformation Inq (1e5s)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 700MB-500MB Bulk Shear Magnitude Inq (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19
NAM12 500MB-400MB Bulk Shear Magnitude Inq (kts)	25.12	9HR	Fri	21:00Z	25-Oct-19

10 20 30 40 50 60 70 80 90

500MB-400MB 00Z

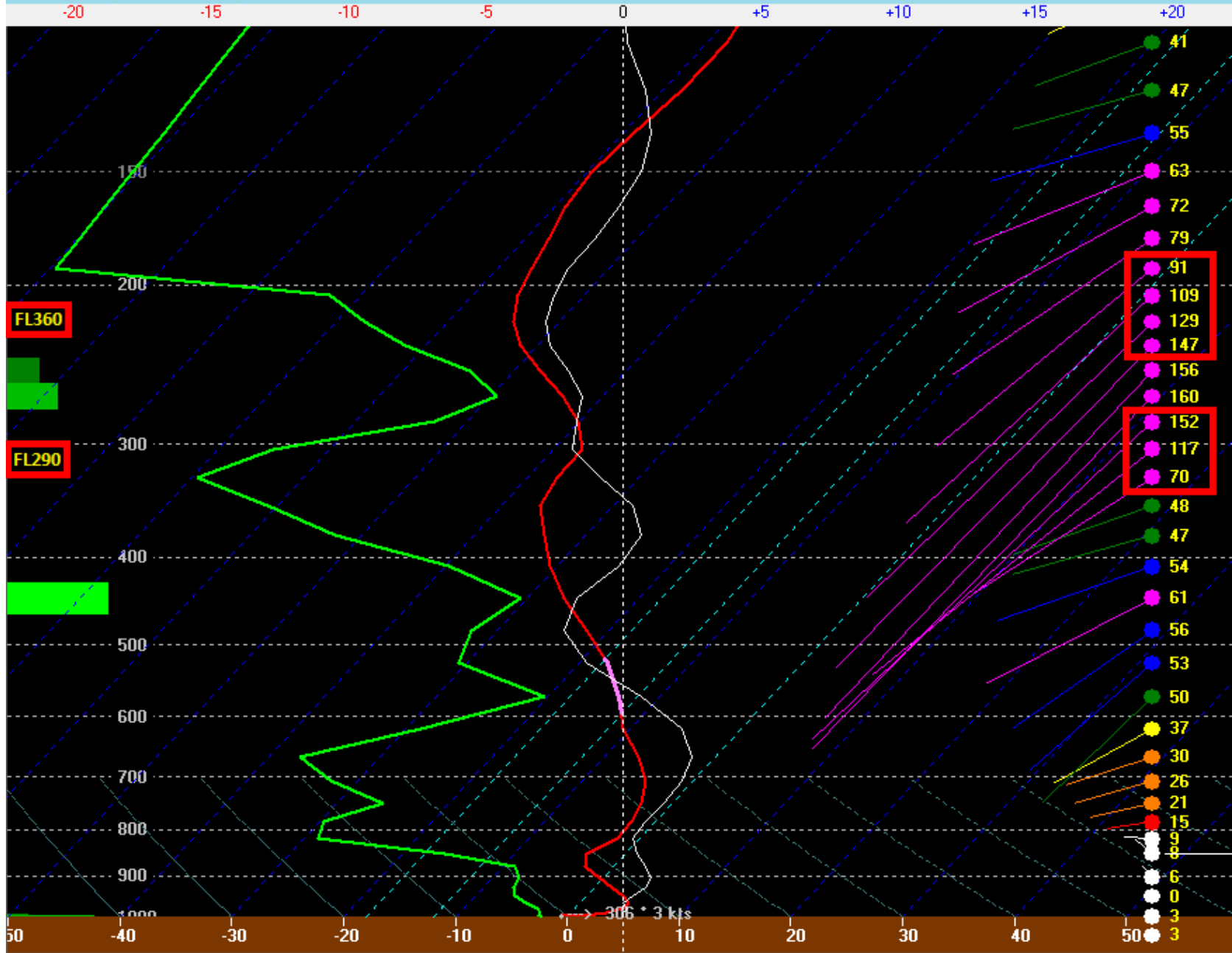
= SEVERE TURB = MOD TURB

(PIREPS 2240Z-0325Z)



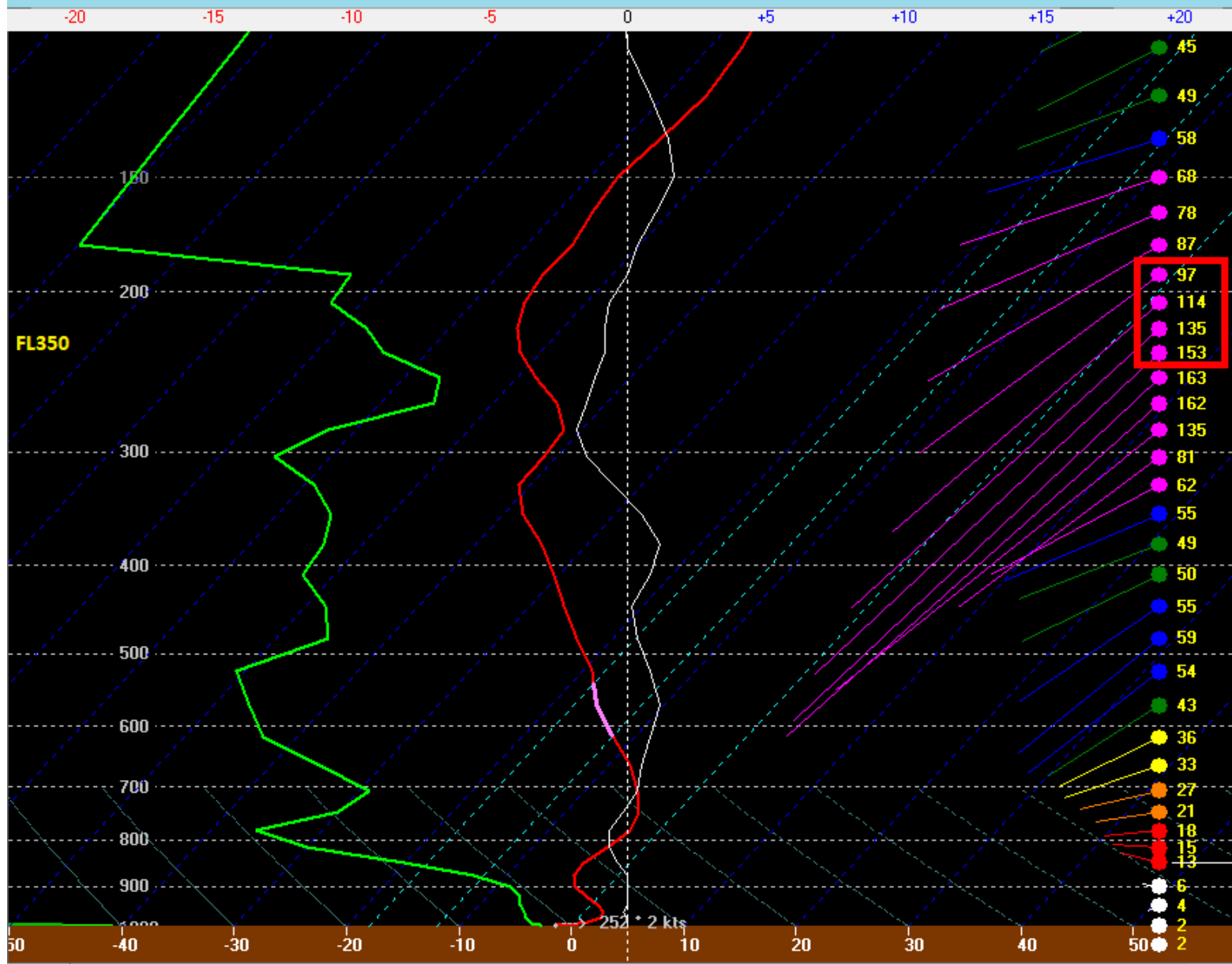
Bufkit Soundings associated with Severe Pireps

CID UA /TM 1210/FL 285-330/TP CRJ9/TB SEV TURB
CID UA /TM 1222/FL290/TP E75L/ TB MOD-SEV TURB
IOW UA /OV IOW270010/TM 1225/FL 360/TP 737/ TB MOD-SEV TURB



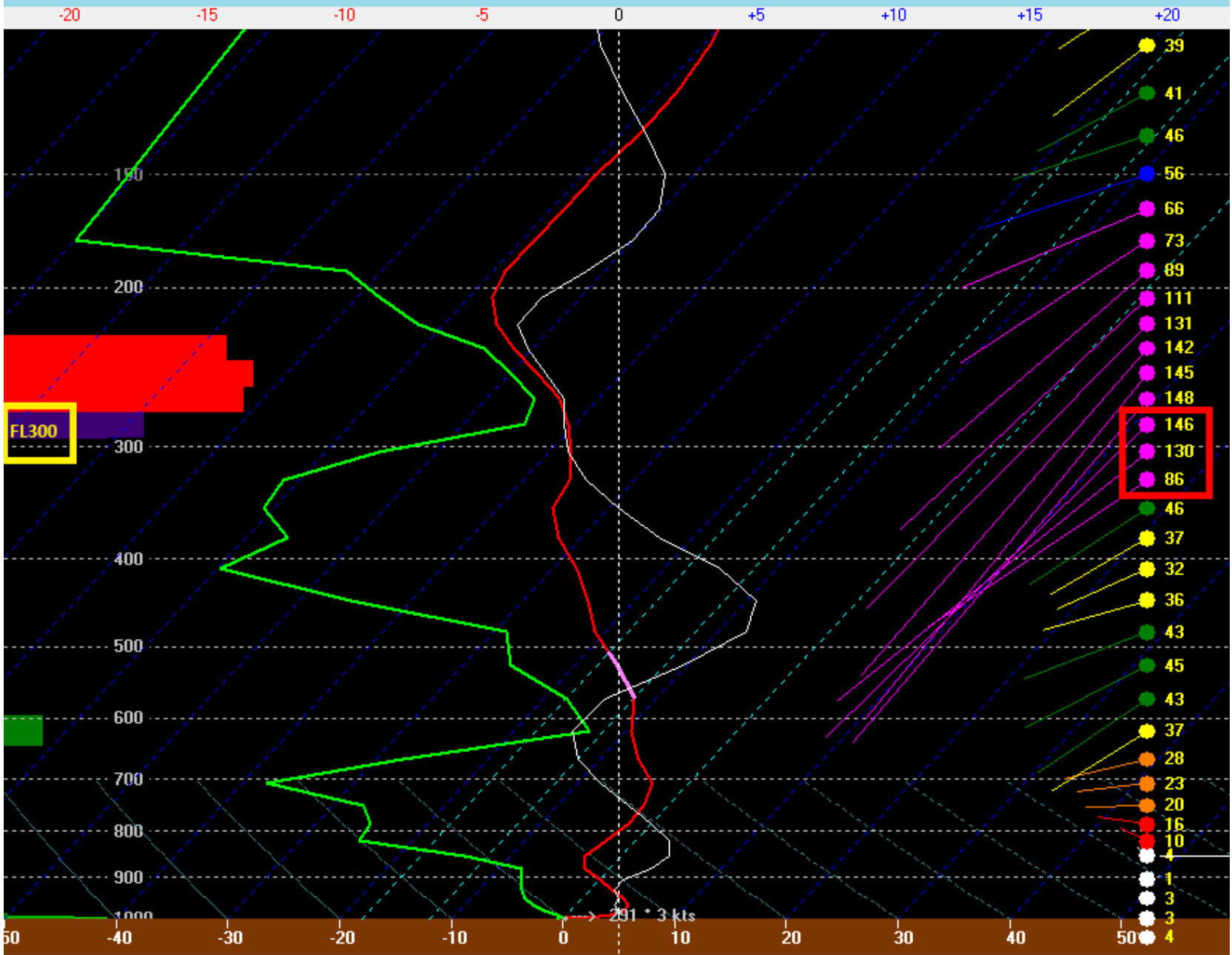
RAP sounding
For CID at 12Z

DLL UA /TM 1230/FL 360/TP A319/TB SEV
BAE UA /TM 1238/FL 350/TP A320/RM MOD-SEV TURB

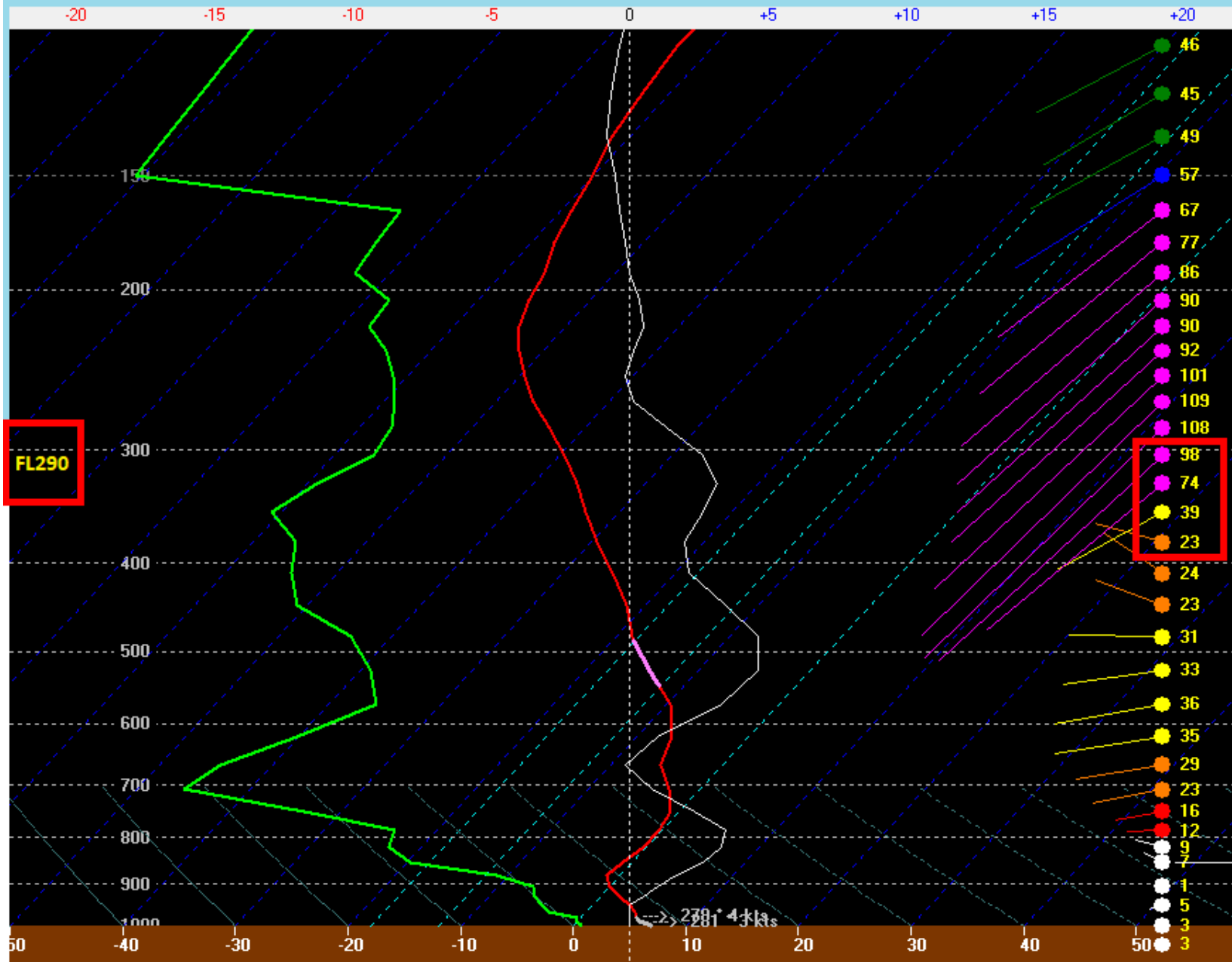


RAP sounding
For MSN at 13Z

LMN UA /TM 1259/FL 290/TP A320/TB CONS SEV TURB
LMN UA /TM 1302/FL 310/TP 737/TB CONS SEV TURB



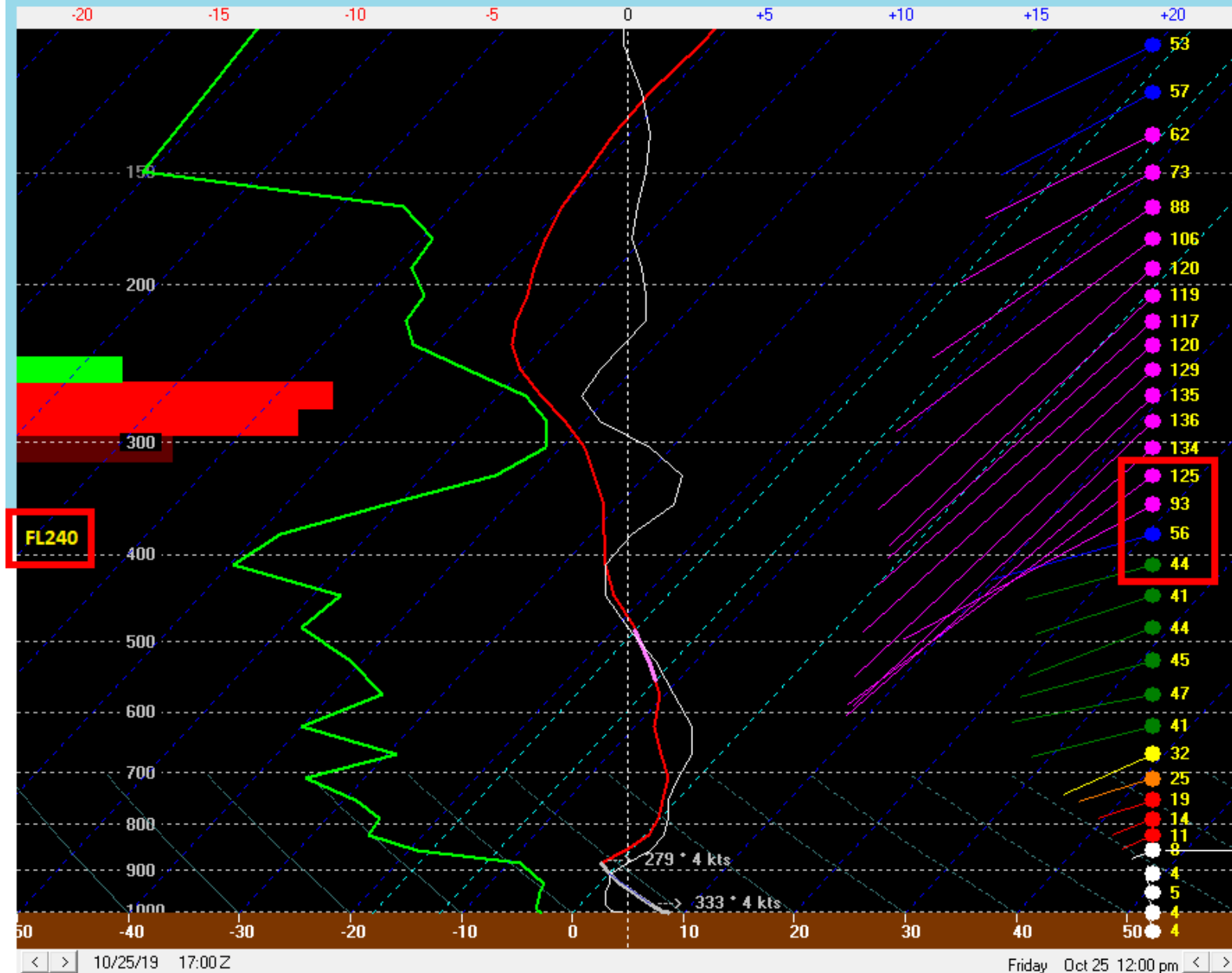
RAP sounding
For OTM at 13Z



RAP sounding
For OTM at 16Z

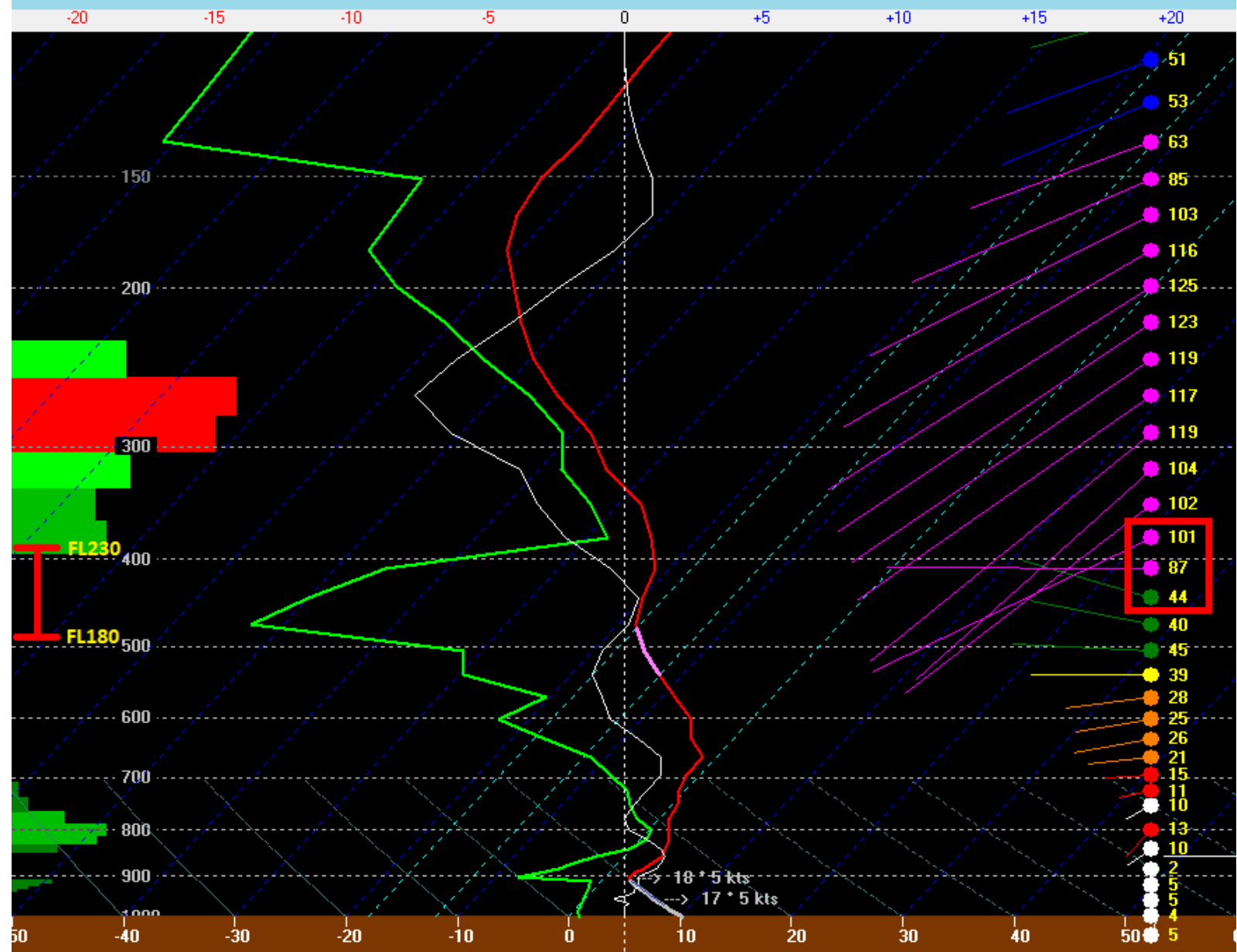
OTM UA /OV OTM180005/TM 1642/FL220/TP A321/RM SEV TURB
IOW UA /OV IOW330060/TM 1716/FL260/TP TBM9/RM MOD-SEV TURB

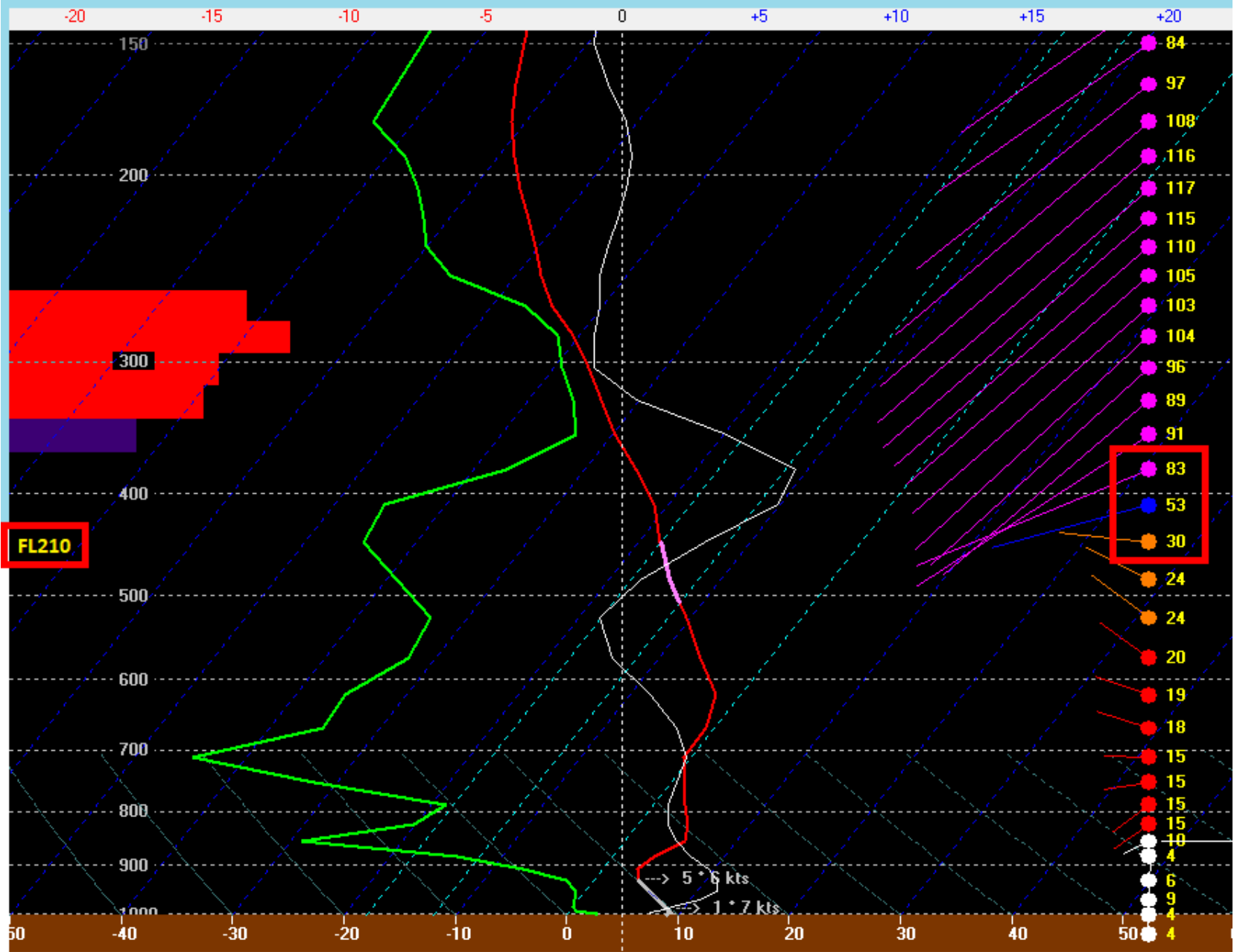
RAP sounding
For MLI at 17Z



IRK UA /OV IRK360010/TM 1849/FL180/TP A320/RM MOD-SEV TURB 500FT WINDSHEAR +-25 KT
IRK UA /OV IRK270035/TM 1907/FL190/TP E145/RM SEV TURB
IRK UA /OV IRK/TM 1913/FL220-230/TP CRJ7/RM MOD-SEV TURB

RAP sounding
For UIN at 19Z





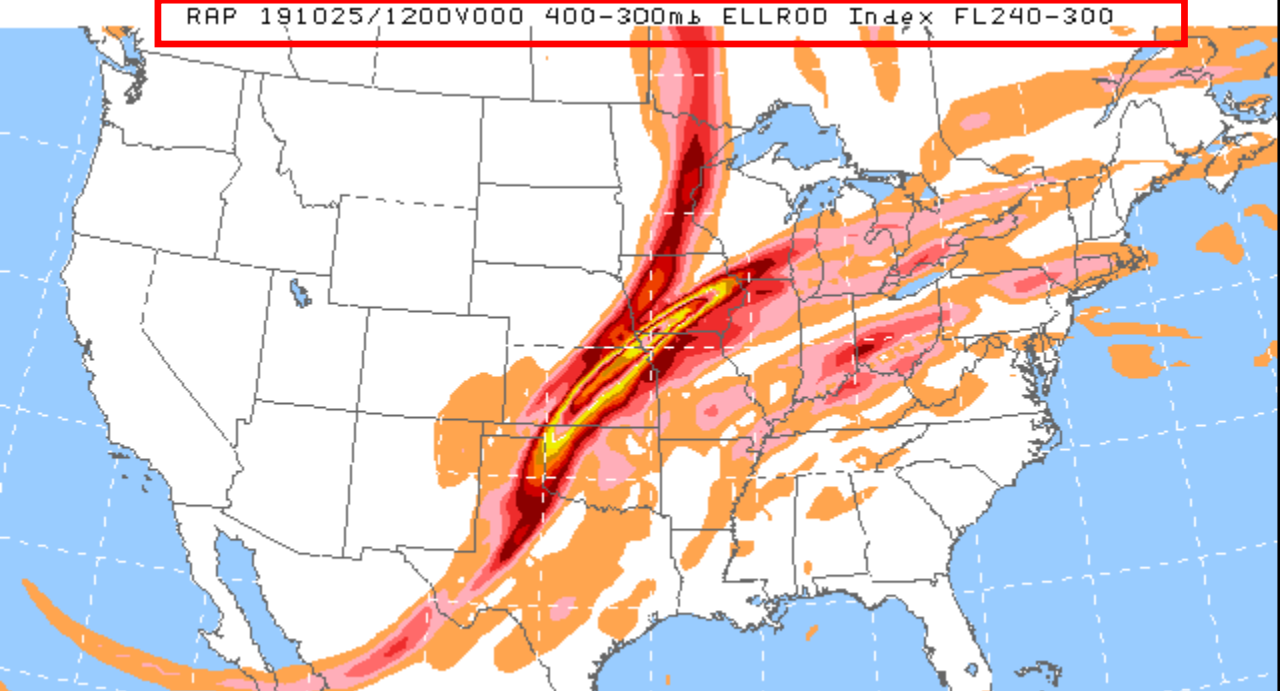
RAP sounding
For PIA at 23Z

RAP ELLROD INDEX

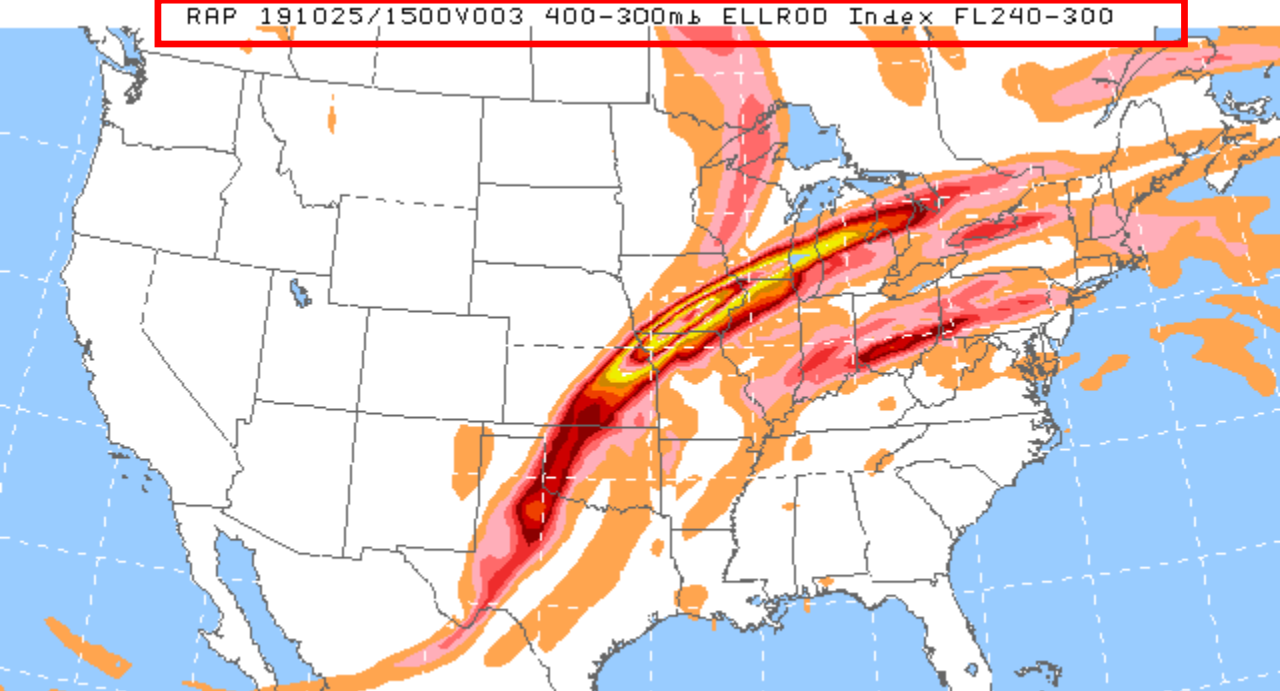
For future Ellrod guidance can be found at....

<https://www.aviationweather.gov/turbulence/ellrod?mod=rap>

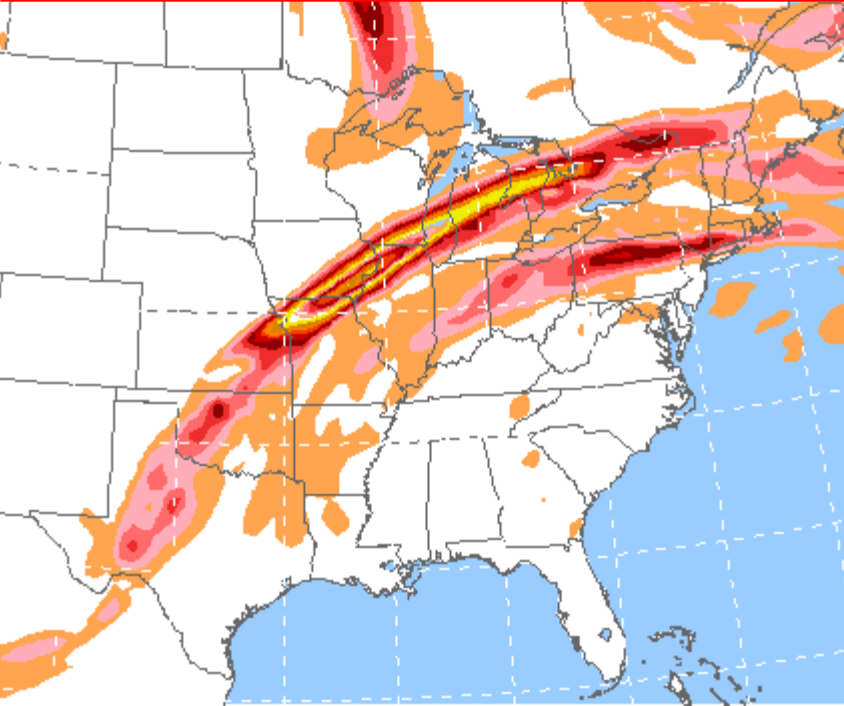
RAP 191025/1200V000 400-300mb ELLROD Index FL240-300



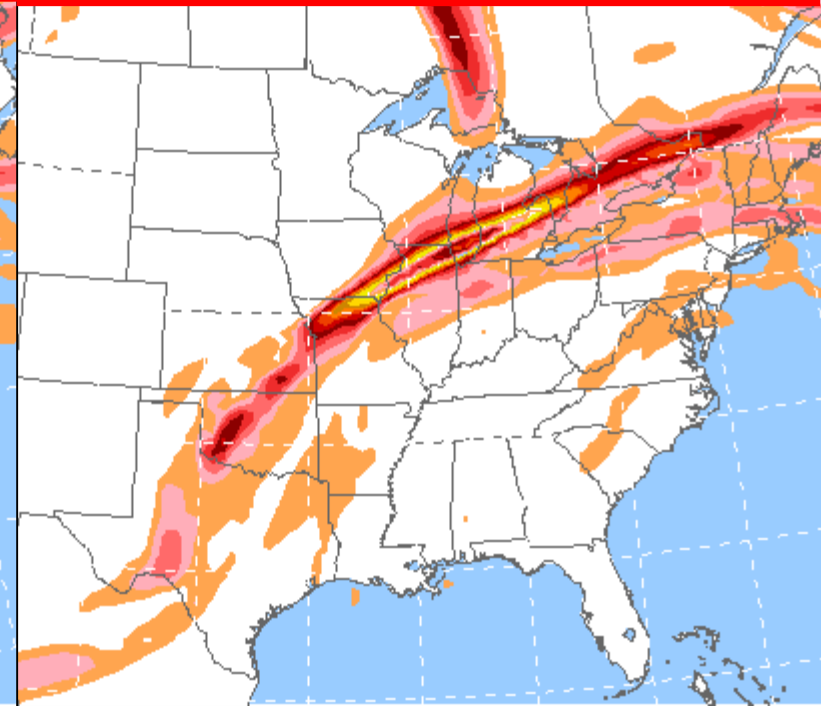
RAP 191025/1500V003 400-300mb ELLROD Index FL240-300



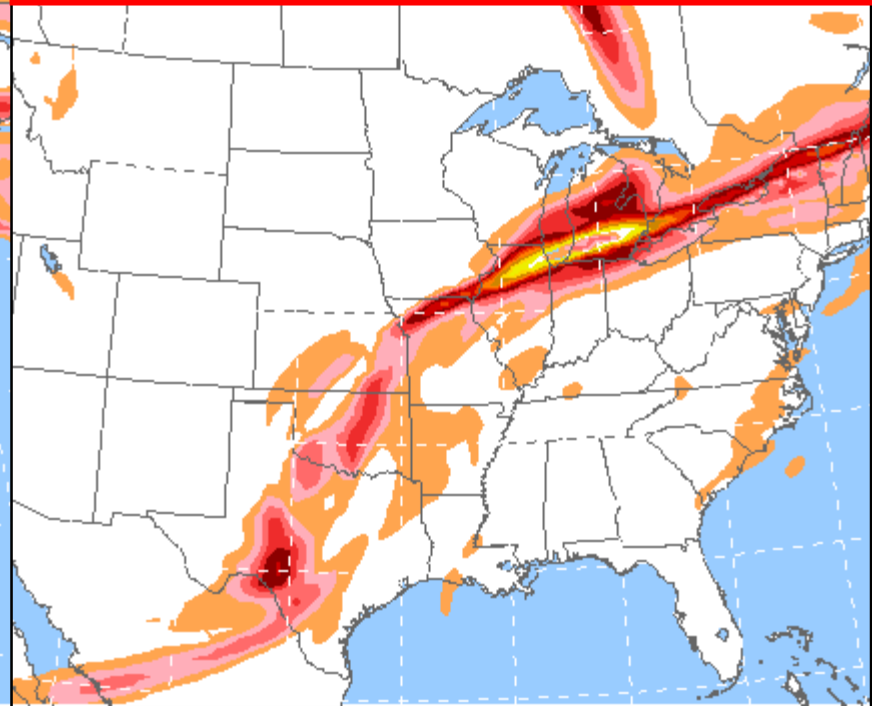
1800V006 400-300mb ELLROD Index FL240-300



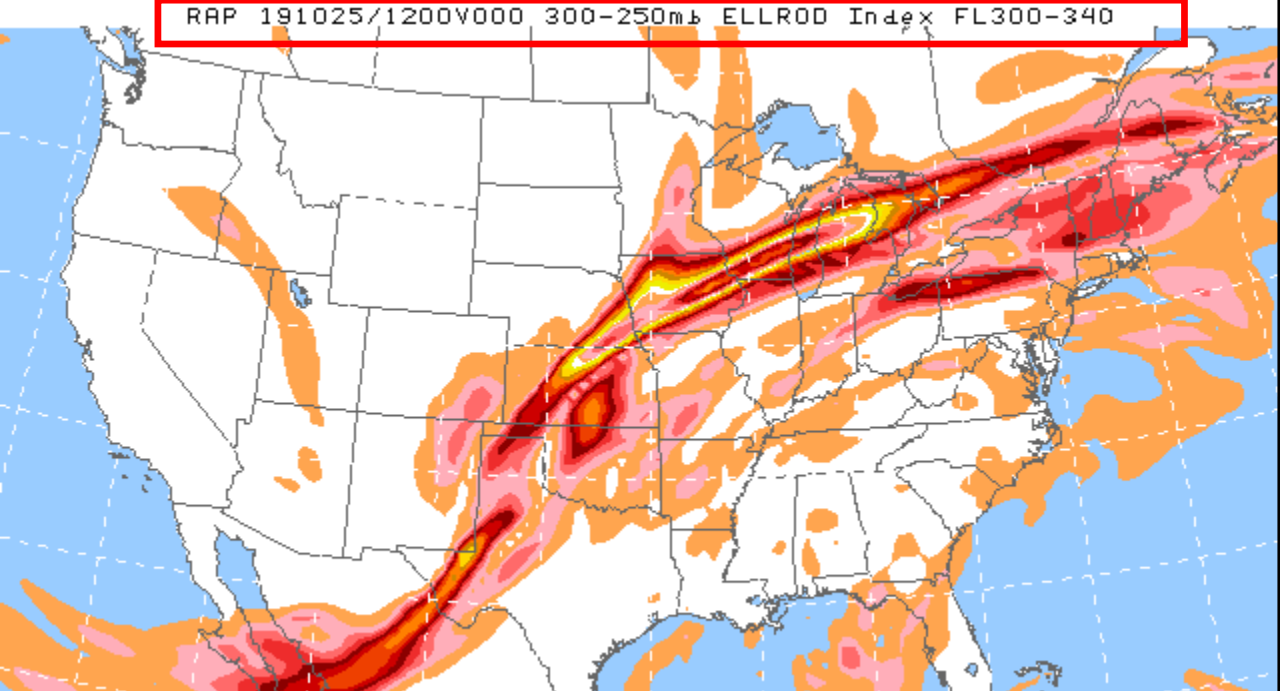
2100V009 400-300mb ELLROD Index FL240-300



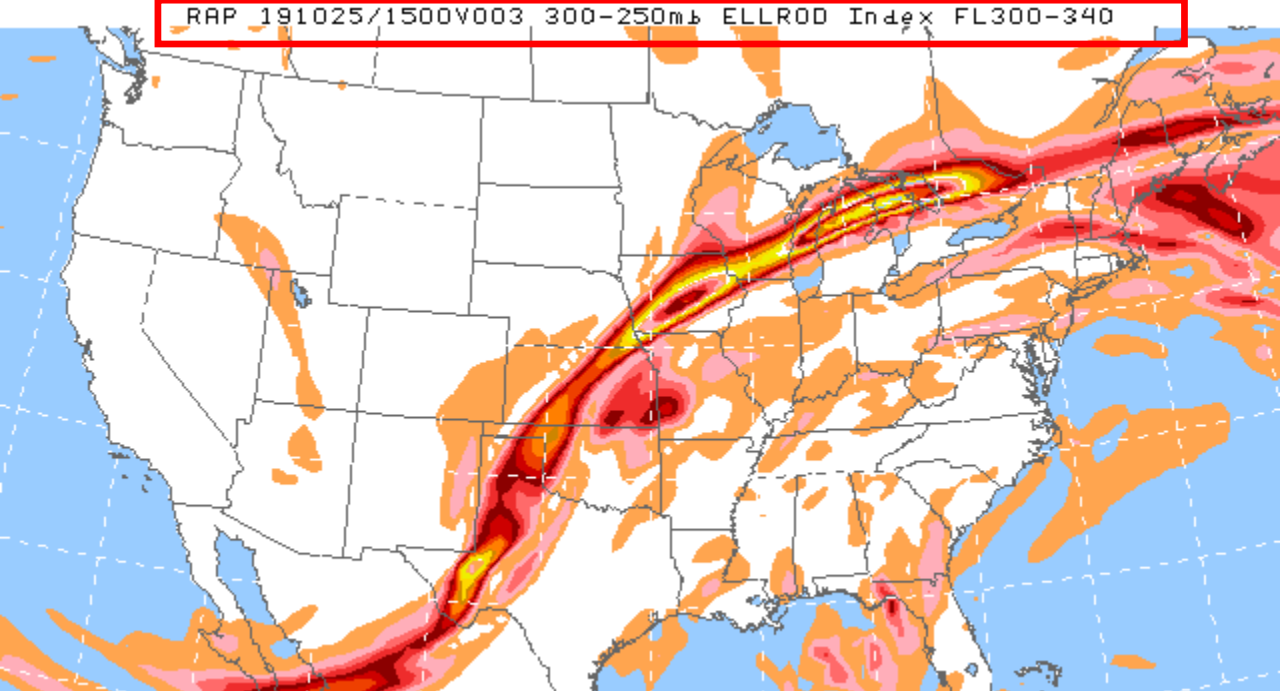
91026/0000V012 400-300mb ELLROD Index FL240-300



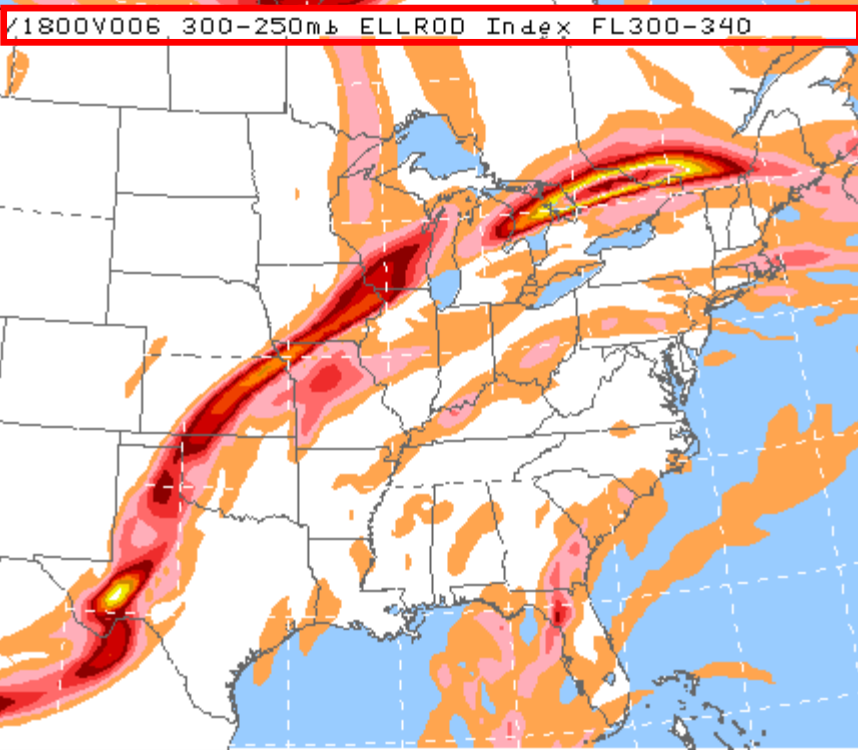
RAP 191025/1200V000 300-250mb ELLROD Index FL300-340



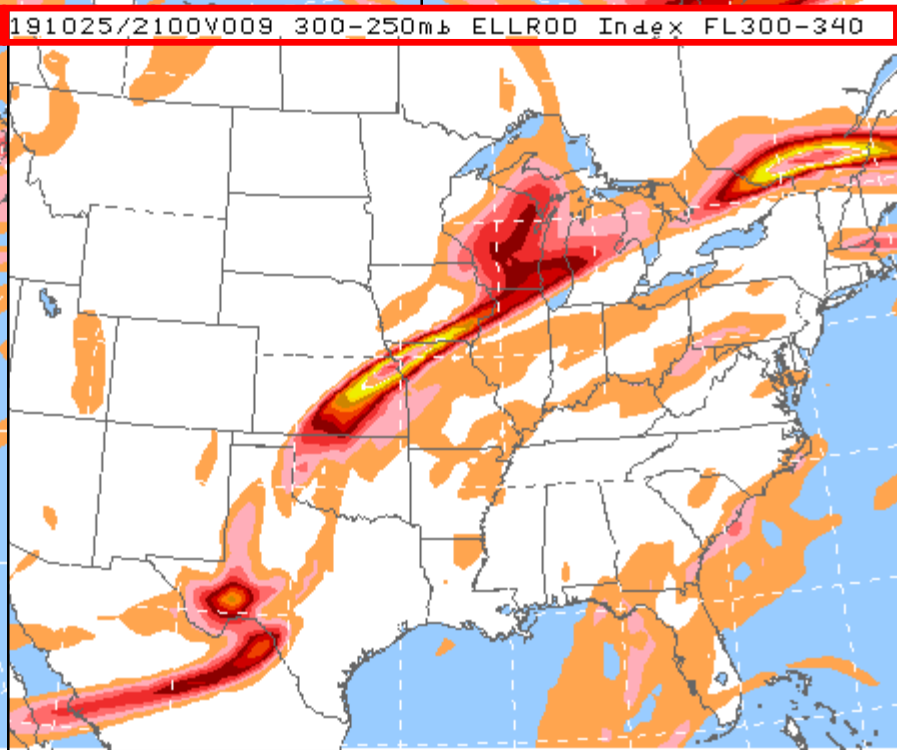
RAP 191025/1500V003 300-250mb ELLROD Index FL300-340



1800V006 300-250mb ELLROD Index FL300-340



191025/2100V009 300-250mb ELLROD Index FL300-340



0000V012 300-250mb ELLROD Index FL300-340

