

Weather Package for:

DL957 BZN-ATL

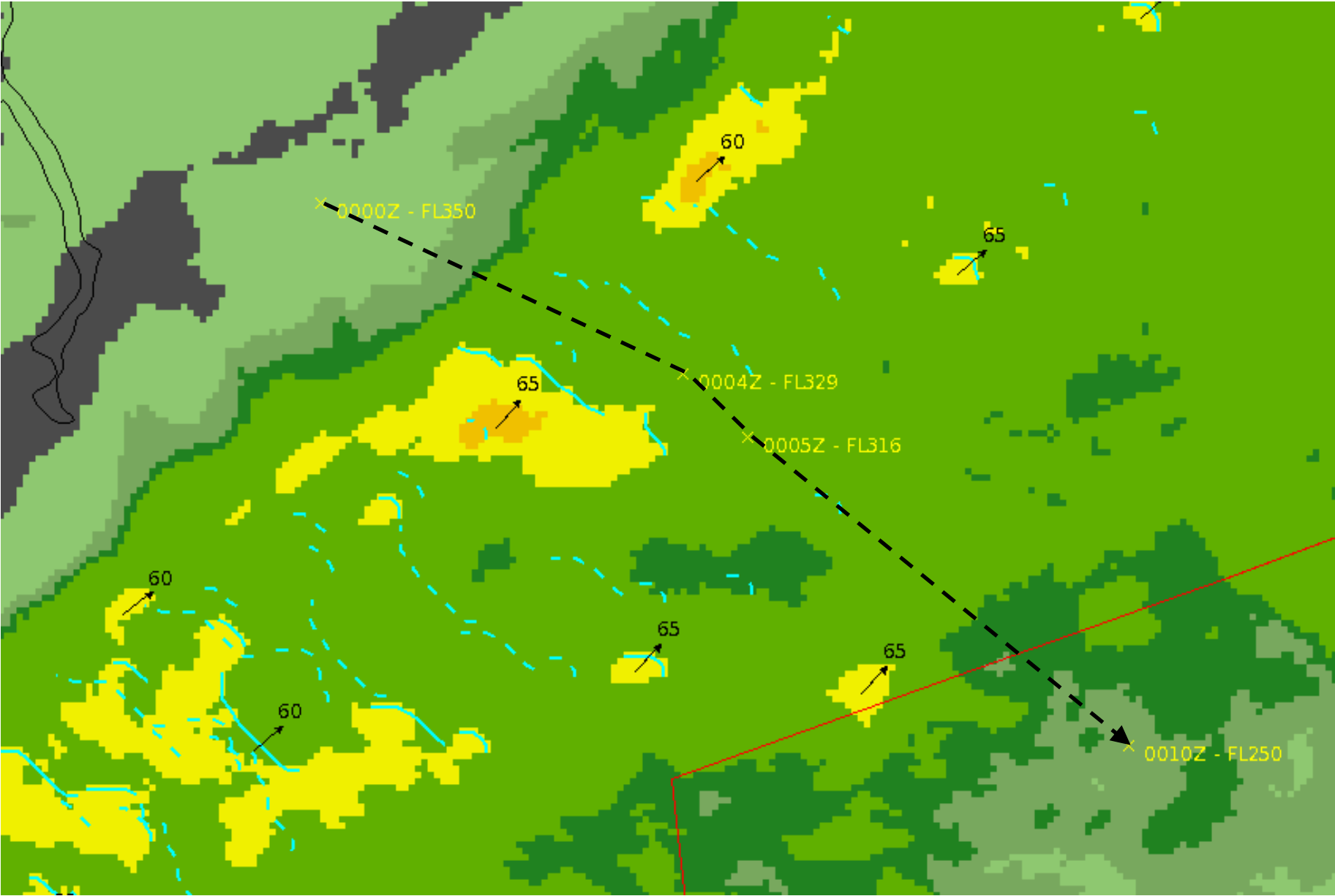
February 17, 2019

Met Remarks: This aircraft is equipped with Eddy Dissipation Rate (EDR) reporting. When in turbulence, the aircraft automatically reports EDR value, temperature, wind direction and wind speed every minute. EDR is measured on a scale of 0-1. More information on EDR scale can be found at:

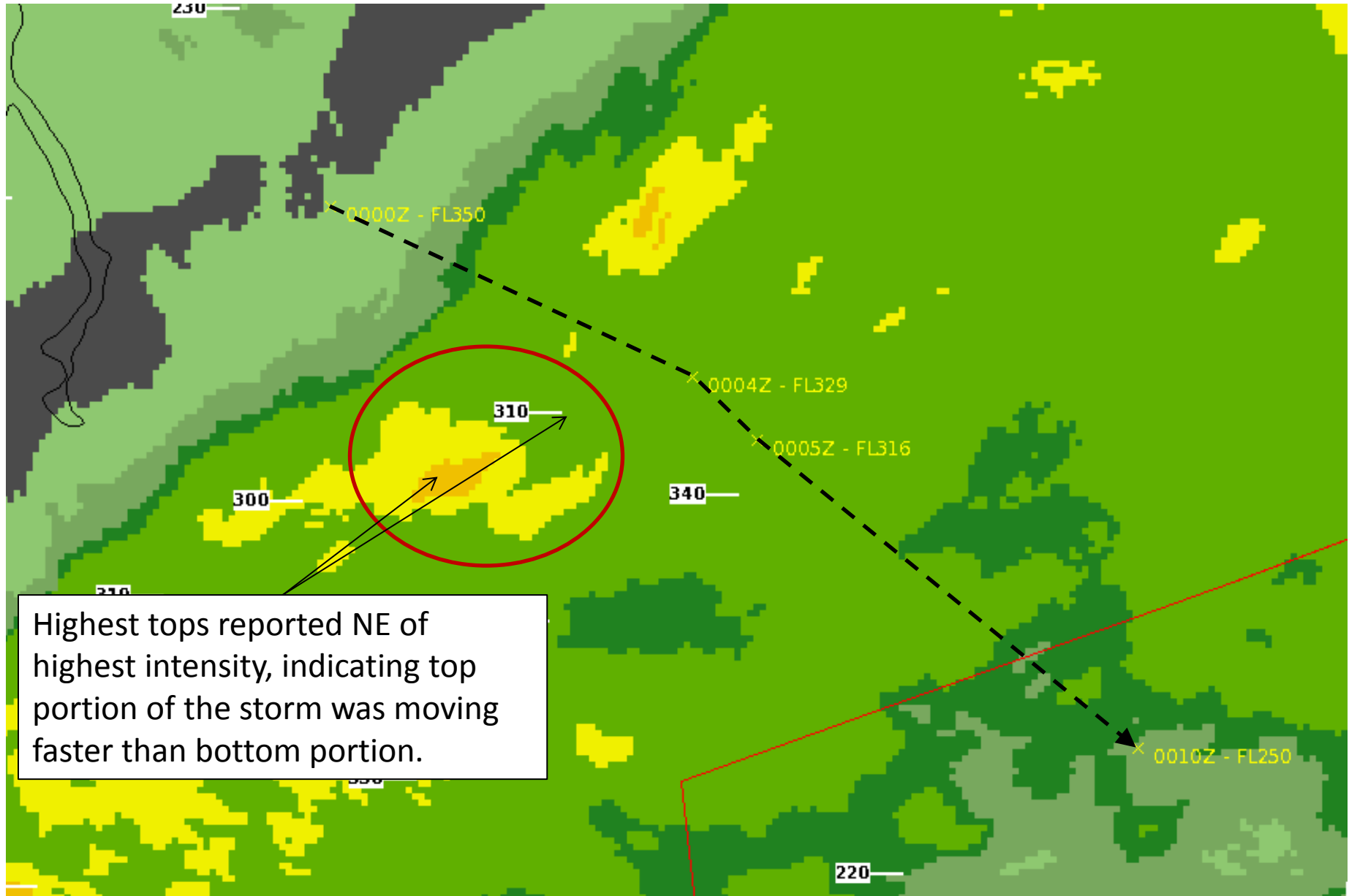
<https://www.aviationweather.gov/turbulence/help?page=plot>

Analysis: At 0004z, at FL329 on descent across central TN, the flight registered a peak EDR of 0.18. This occurred within Advisory TP SE10 which was issued at 2303z and auto-uplinked to flight at 2305z, or 1 hour prior to event. One other peak EDR of 0.14 registered at 0010z. The pilot manually reported moderate turbulence with a flight attendant injury at 0012z. Rain showers with tops to FL320 moving rapidly northeast at 60-65kts with light/moderate PIREPS in Advisory TP to FL350 and mention of fast moving showers. At the time of the event, reported wind speed was 125kts. Turbulence in the vicinity of the cells was likely caused by shear, with echo tops moving NE in wind speeds greater than 100kts and bottoms moving at 60-65kts.

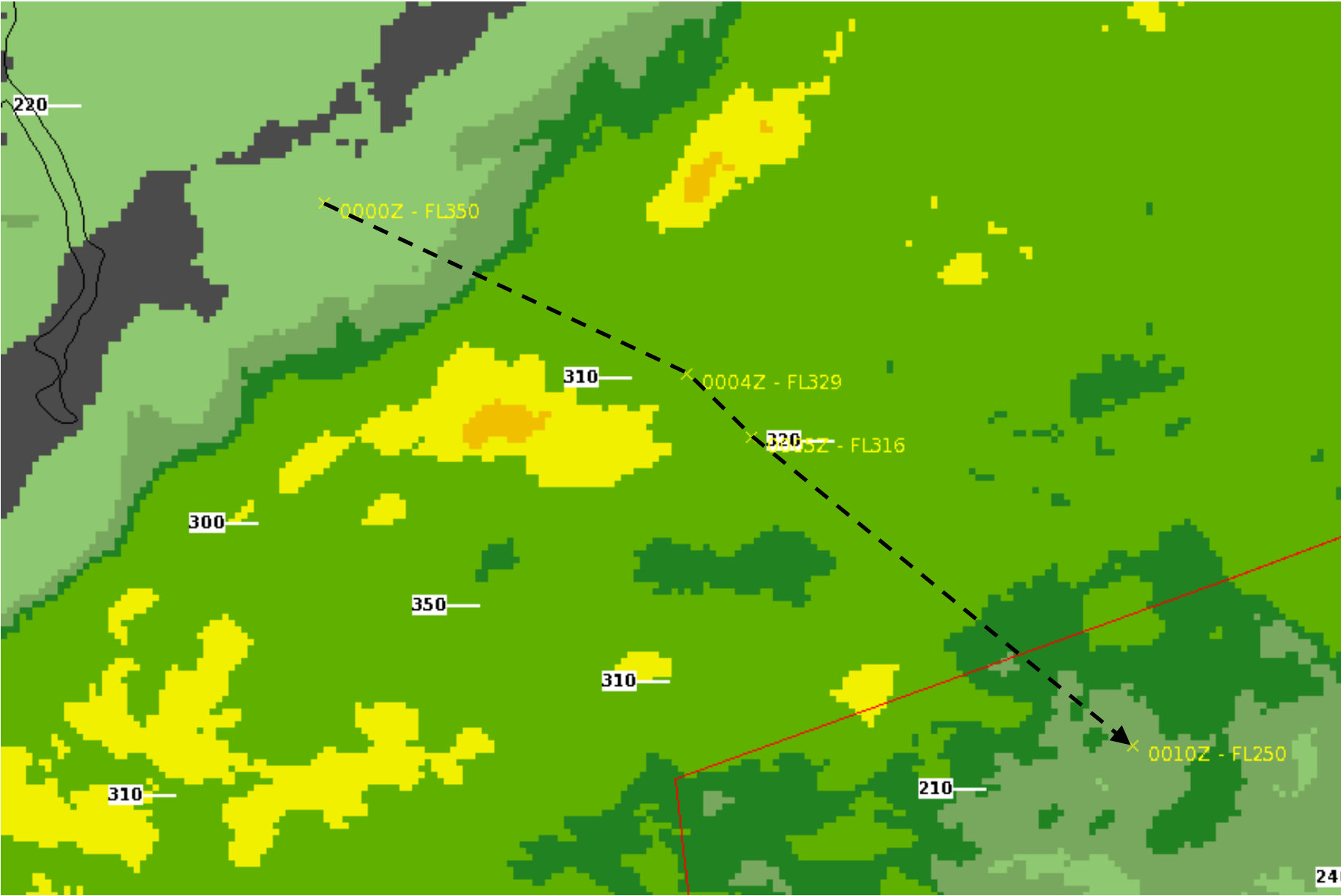
February 18, 2019 - 0050z Cell Movement and Speed



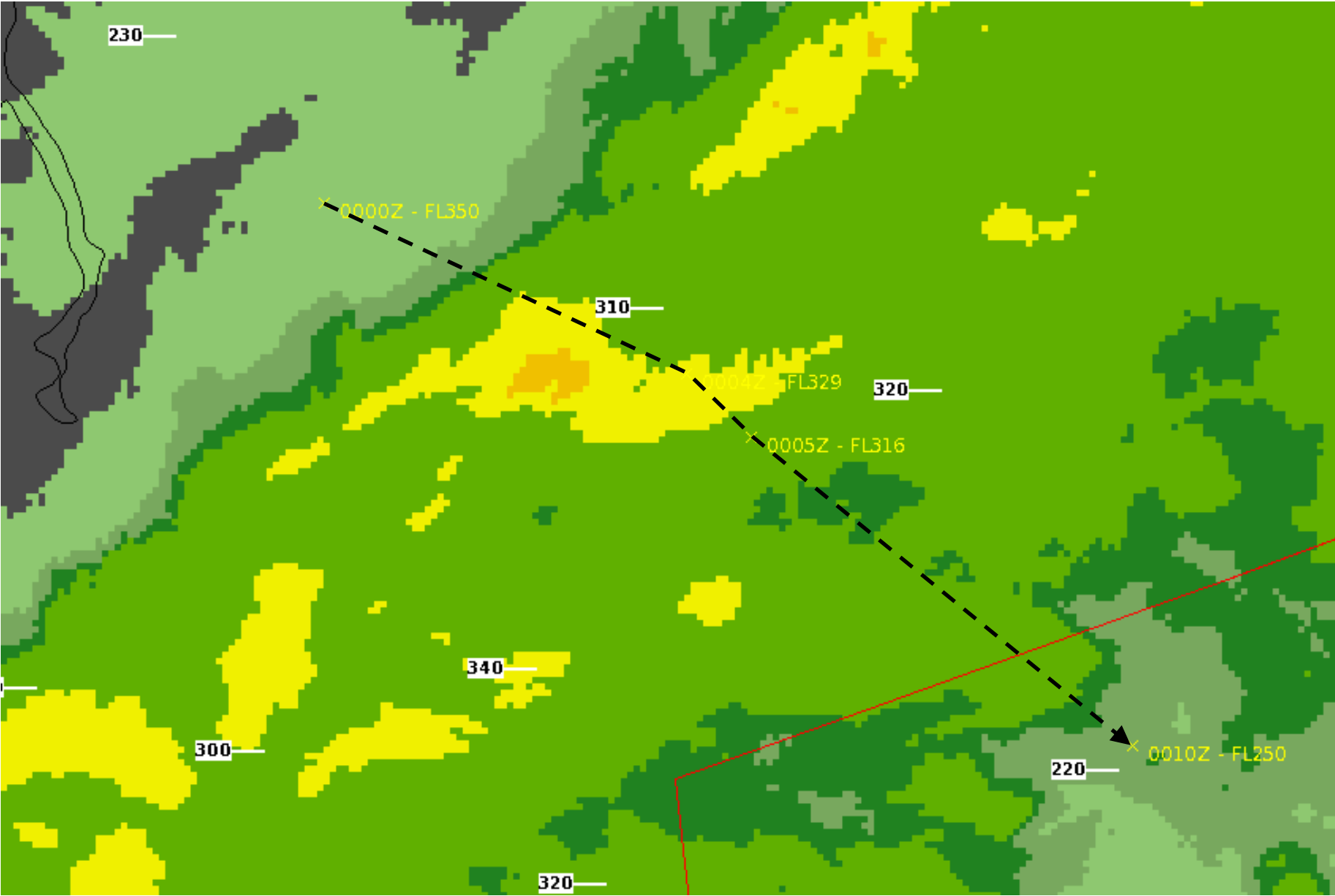
February 18, 2019 - 0000z Radar Reflectivity



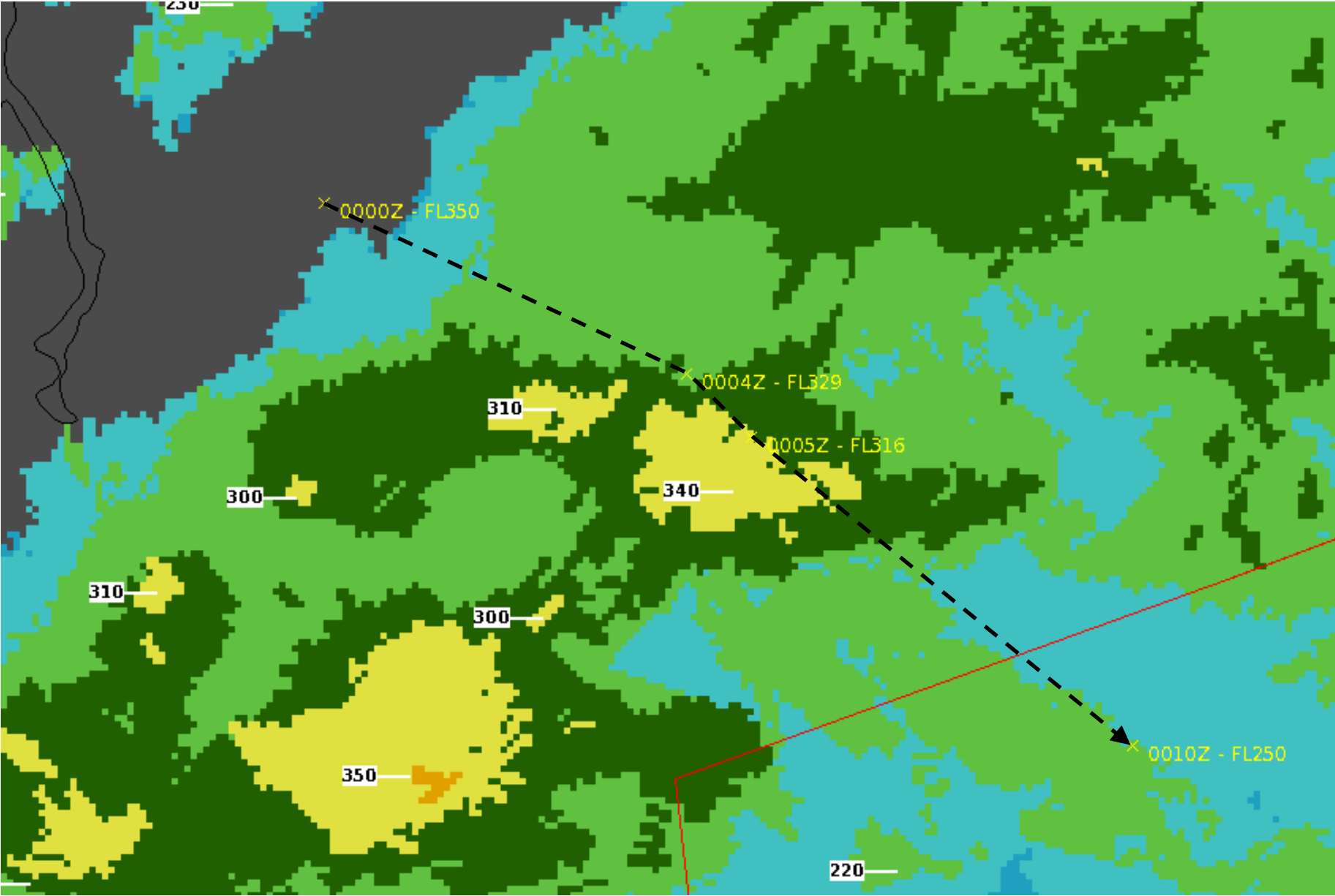
February 18, 2019 - 0005z Radar Reflectivity



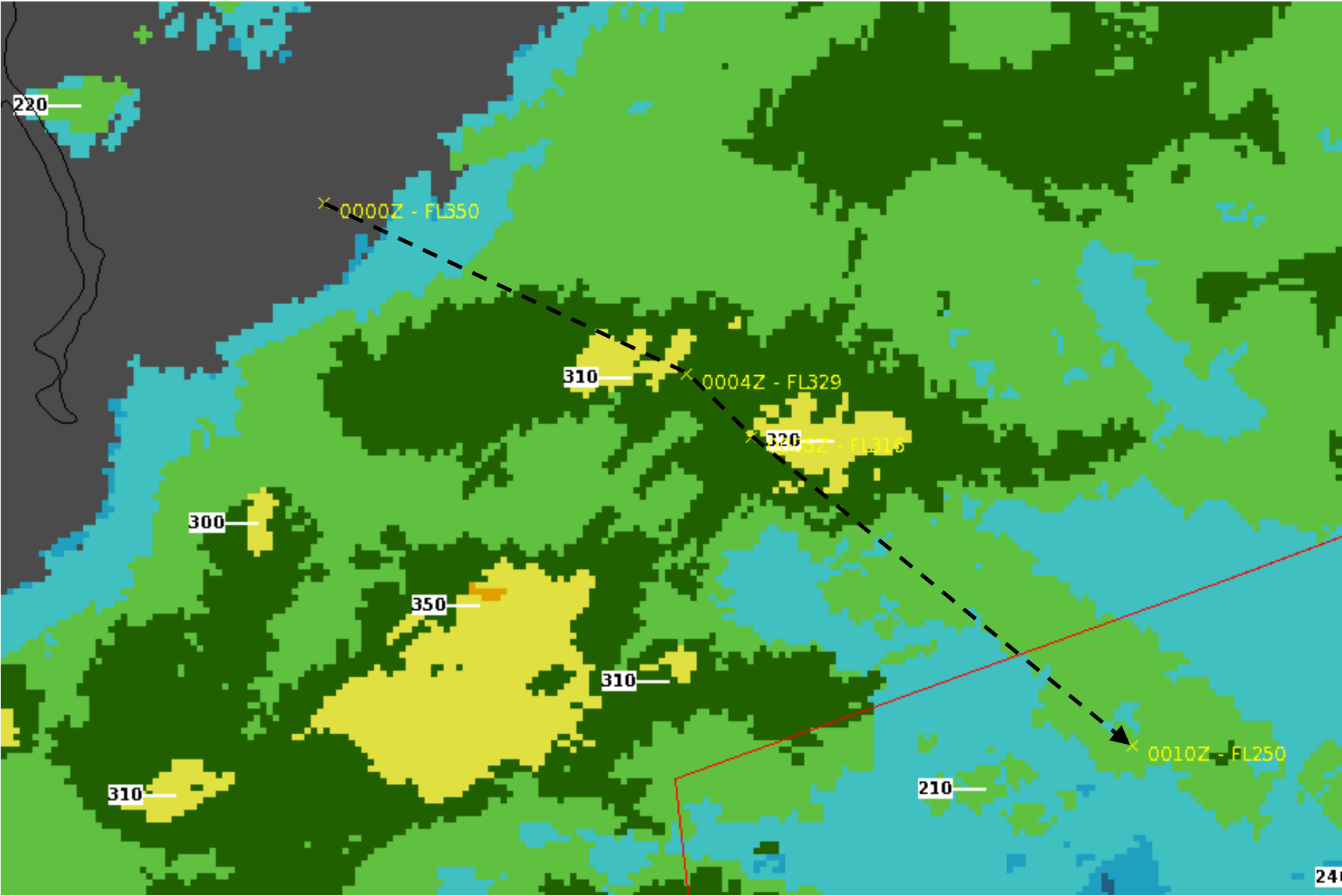
February 18, 2019 - 0010z Radar Reflectivity



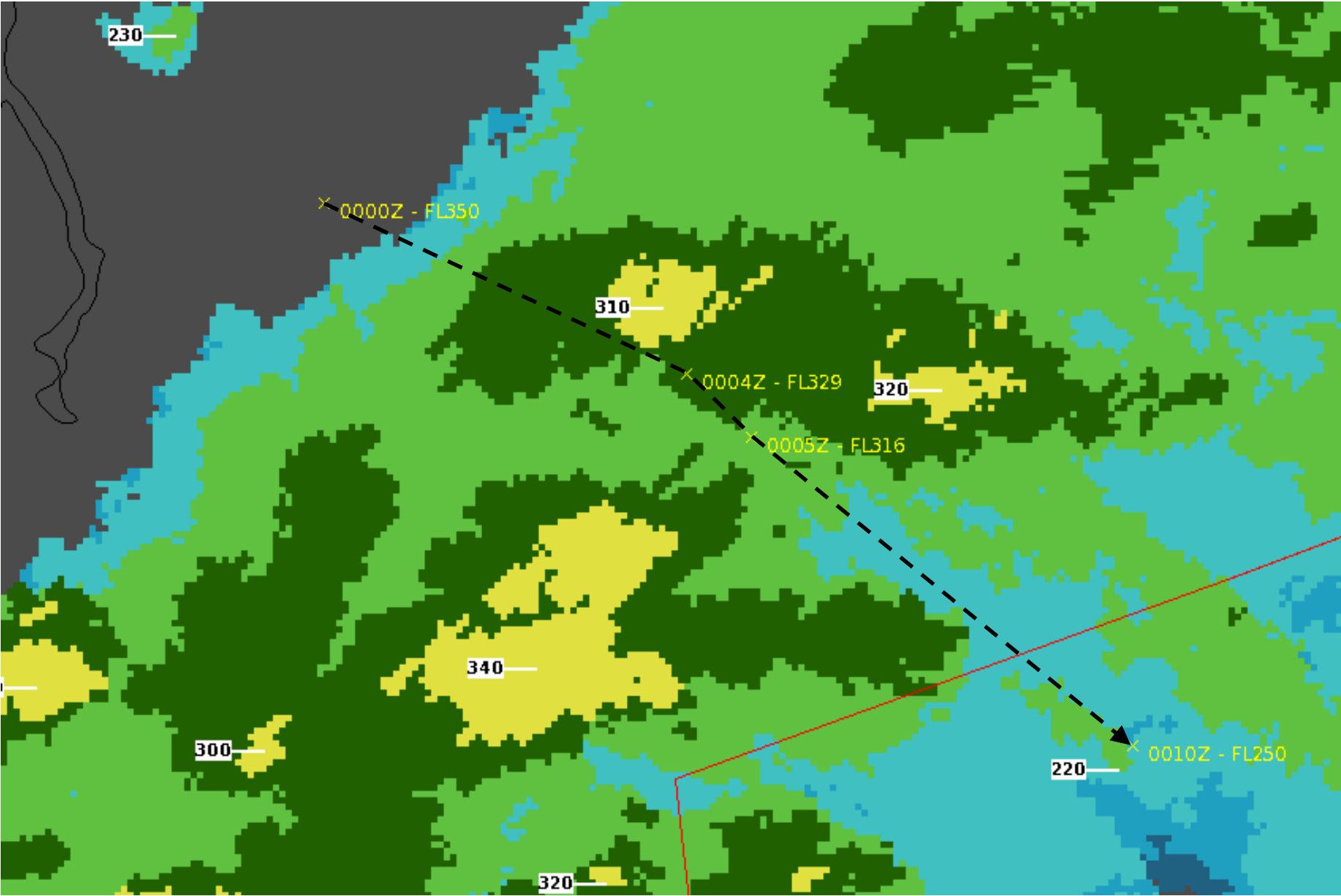
February 18, 2019 - 0000z Echo Tops



February 18, 2019 - 0005z Echo Tops

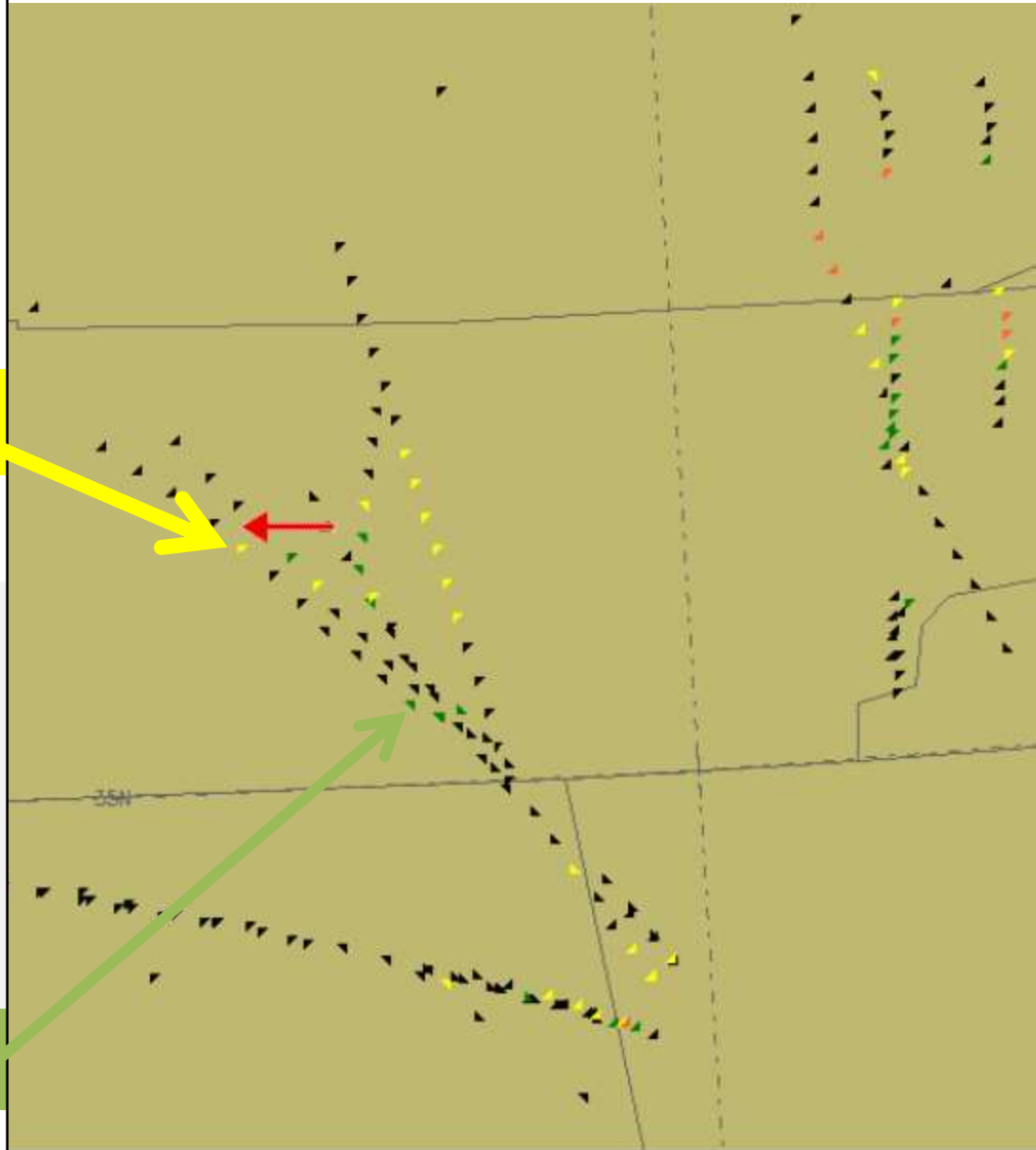


February 18, 2019 - 0010z Echo Tops

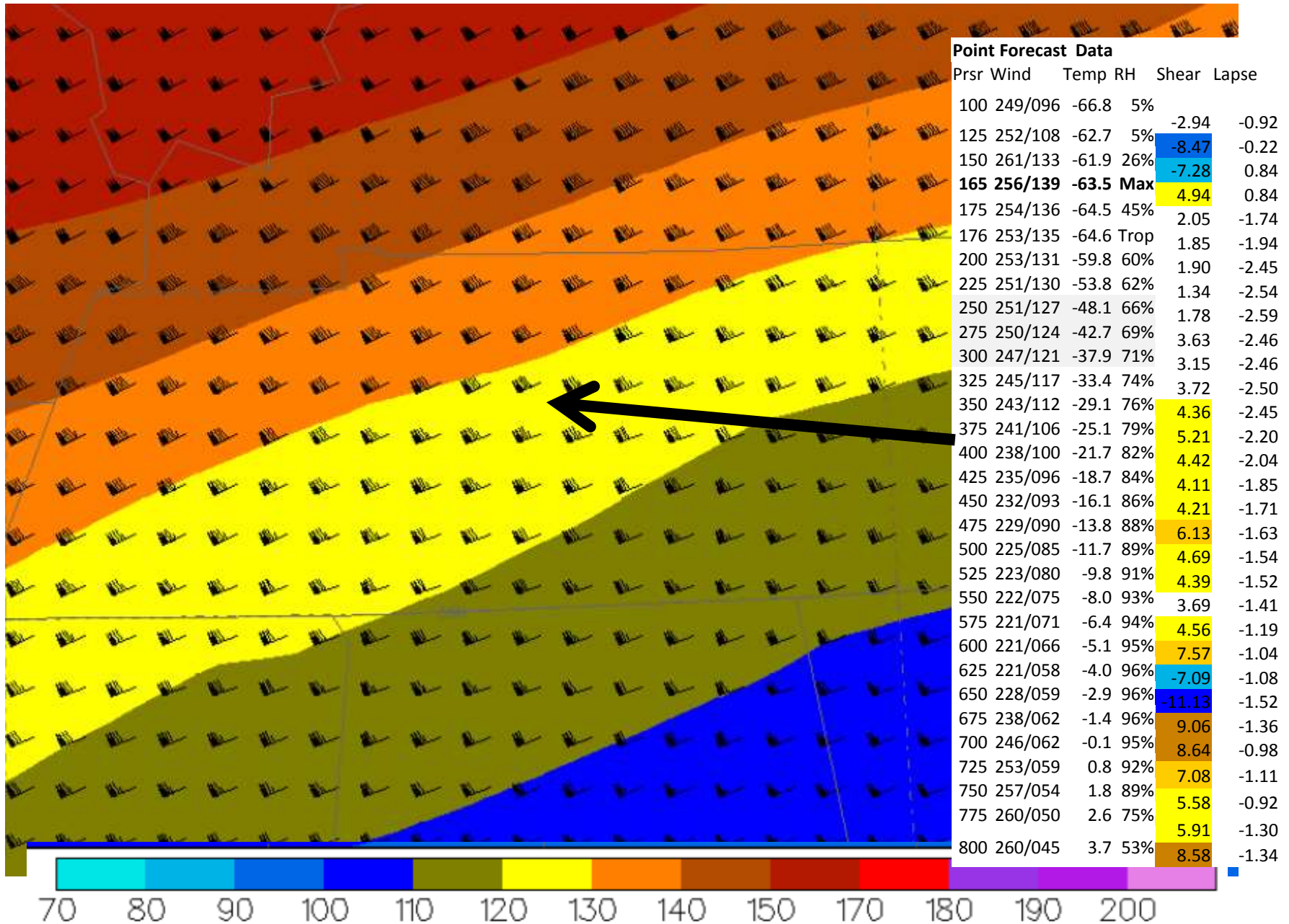


EDR reported by DL957

DL957	FL350	0000Z	36.22N/87.48W
DL957/OV 36.22N087.48W/FL350/TM 0000/TP B737/TA -50.0/WV 25135/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.02			
Rcvd: 2/18/2019 00:05Z			
DL957	FL350	0001Z	36.13N/87.33W
DL957/OV 36.13N087.33W/FL350/TM 0001/TP B737/TA -50.2/WV 25134/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.00			
Rcvd: 2/18/2019 00:05Z			
DL957	FL350	0002Z	36.05N/87.19W
DL957/OV 36.05N087.19W/FL350/TM 0002/TP B737/TA -50.5/WV 25130/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.02			
Rcvd: 2/18/2019 00:05Z			
DL957	FL342	0003Z	35.96N/87.04W
DL957/OV 35.96N087.04W/FL342/TM 0003/TP B737/TA -49.0/WV 25128/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.00			
Rcvd: 2/18/2019 00:05Z			
DL957	FL329	0004Z	35.87N/86.92W
DL957/OV 35.87N086.92W/FL329/TM 0004/TP B737/TA -46.0/WV 25125/TB LGT/MOD/CP KBZN-KATL/RM EDR=0.08/0.18			
Rcvd: 2/18/2019 00:05Z			
DL957	FL316	0005Z	35.77N/86.79W
DL957/OV 35.77N086.79W/FL316/TM 0005/TP B737/TA -42.0/WV 25122/TB NEG/CP KBZN-KATL/RM EDR=0.02/0.04			
Rcvd: 2/18/2019 00:11Z			
DL957	FL307	0006Z	35.67N/86.67W
DL957/OV 35.67N086.67W/FL307/TM 0006/TP B737/TA -39.0/WV 25121/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.08			
Rcvd: 2/18/2019 00:11Z			
DL957	FL290	0007Z	35.57N/86.55W
DL957/OV 35.57N086.54W/FL290/TM 0007/TP B737/TA -35.2/WV 25109/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.08			
Rcvd: 2/18/2019 00:11Z			
DL957	FL269	0008Z	35.48N/86.42W
DL957/OV 35.48N086.42W/FL269/TM 0008/TP B737/TA -29.7/WV 25107/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.06			
Rcvd: 2/18/2019 00:11Z			
DL957	FL250	0009Z	35.39N/86.31W
DL957/OV 35.39N086.31W/FL250/TM 0009/TP B737/TA -24.5/WV 25100/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.10			
Rcvd: 2/18/2019 00:11Z			
DL957	FL250	0010Z	35.3N/86.2W
DL957/OV 35.30N086.20W/FL250/TM 0010/TP B737/TA -24.7/WV 24092/TB LGT/CP KBZN-KATL/RM EDR=0.08/0.14			
Rcvd: 2/18/2019 00:11Z			
DL957	FL240	0013Z	35.04N/85.88W
DL957/OV 35.04N085.88W/FL240/TM 0013/TP B737/TA -23.0/WV 24108/TB NEG/CP KBZN-KATL/RM EDR=0.02/0.04			
Rcvd: 2/18/2019 00:14Z			

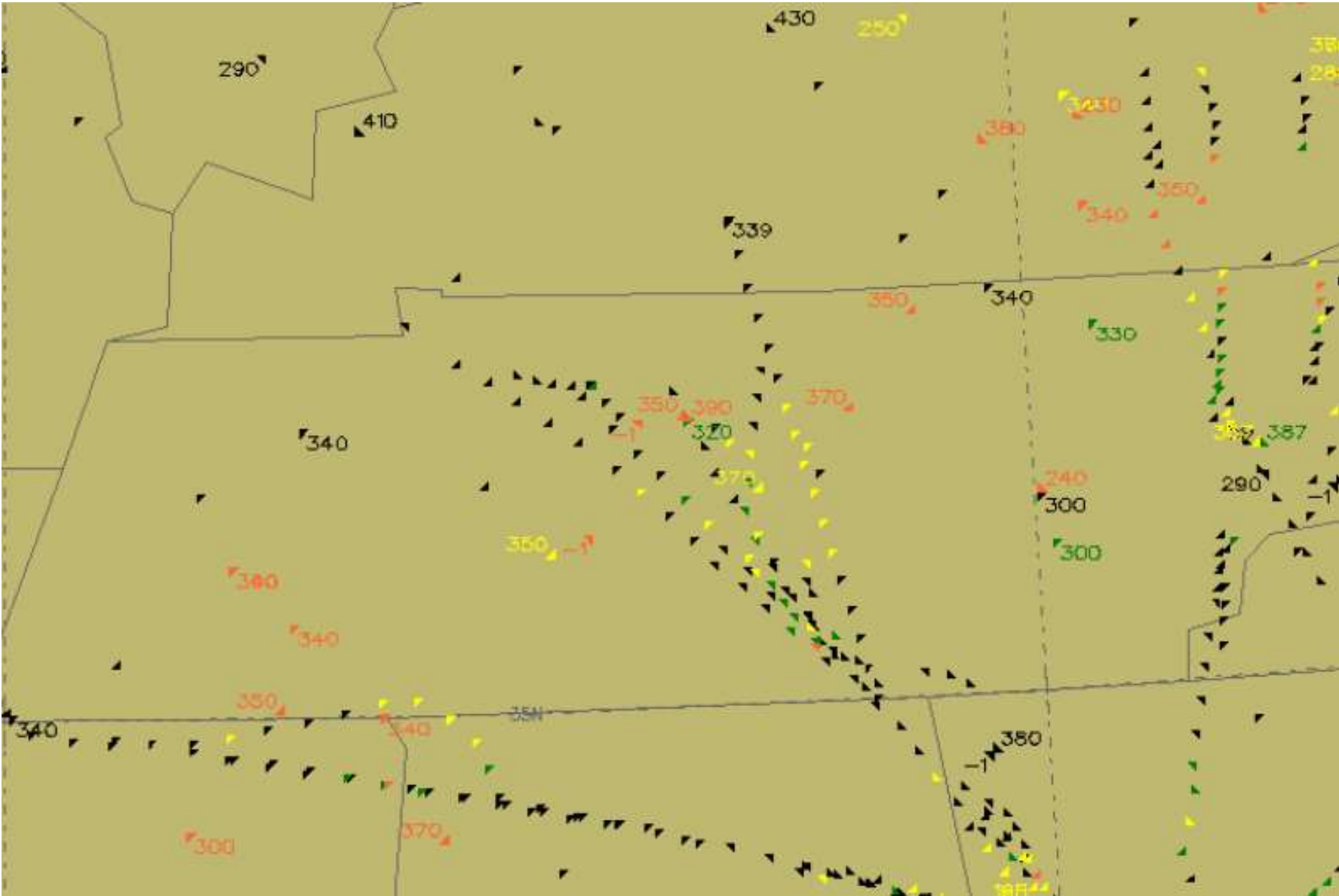


FL340 NAM Wind Forecast valid at 18/0000Z



Vicinity Pilot Reports from 2300z-0100z

Black = Smooth/Light Chop Green = Light Yellow = Light/Moderate Orange = Moderate



Vicinity Pilot Reports 2300z-0100z FL390-FL330

Black = Smooth/Light Chop Green = Light Yellow = Light/Moderate Orange = Moderate

ARP UAL251 3608N 08641W 0100 F390 MS61 264/135KT TB MOD SK IN CLOUDS RM B737 OV BNA=

DL9933/OV 36.13N086.68W/FL390/TM 2359/TP B737/TA -61.0/WV 25131/TB NEG/CP KMSP-KATL/RM EDR=0.00/0.00

FL390

DL9933/OV 36.24N086.74W/FL389/TM 2358/TP B737/TA -61.2/WV 25133/TB NEG/CP KMSP-KATL/RM EDR=0.00/0.00

FL380

DL9933/OV 35.91N086.52W/FL374/TM 0001/TP B737/TA -57.5/WV 25128/TB NEG/CP KMSP-KATL/RM EDR=0.00/0.02

BNA UA /OV BNA090040/TM 0034/FL370/TP A319/TB MOD/RM ZME=

BNA UA /OV BNA135025/TM 0010/FL370/TP NMRS/TB MOD CHOP/RM RPTD BY NMRS ACFT. ZME=

FL370

DL9933/OV 35.80N086.44W/FL365/TM 0002/TP B737/TA -56.0/WV 25122/TB OCNL LGT/CP KMSP-KATL/RM EDR=0.02/0.08

FL360

DL1729/OV BNA/FL350/TM 0021/TP B757/TB MOD TURB/CP KMSP-KMCO/RM PINJ 2400Z

BNA UA /OV BNA225045/TM 0020/FL350/TP E75/TB MOD CHOP/RM ZME=

DL957/OV 36.05N087.19W/FL350/TM 0002/TP B737/TA -50.5/WV 25130/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.02

DL957/OV 36.13N087.33W/FL350/TM 0001/TP B737/TA -50.2/WV 25134/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.00

DL957/OV 36.22N087.48W/FL350/TM 0000/TP B737/TA -50.0/WV 25135/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.02

DL957/OV 36.30N087.62W/FL350/TM 2359/TP B737/TA -50.0/WV 24136/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.00

DL1638/OV 36.23N087.16W/FL350/TM 0012/TP B737/TA -50.0/WV 25131/TB NEG/CP KMCI-KATL/RM EDR=0.00/0.00

FL350

DL2832/OV 36.30N087.15W/FL349/TM 2311/TP A321/TA -50.2/WV 25139/TB NEG/CP KMSP-KATL/RM EDR=0.02/0.02

DL1638/OV 36.12N087.05W/FL348/TM 0013/TP B737/TA -50.0/WV 25125/TB NEG/CP KMCI-KATL/RM EDR=0.00/0.00

DL9933/OV 35.68N086.36W/FL344/TM 0003/TP B737/TA -49.7/WV 25116/TB LGT/MOD/CP KMSP-KATL/RM EDR=0.16/0.20

DL2832/OV 36.24N087.08W/FL344/TM 2312/TP A321/TA -49.5/WV 25137/TB NEG/CP KMSP-KATL/RM EDR=0.02/0.02

DL9933/OV 35.68N086.36W/FL343/TM 0003/TP B737/TA -50.0/WV 25117/TB LGT/MOD/CP KMSP-KATL/RM EDR=0.16/0.20

DL957/OV 35.96N087.04W/FL342/TM 0003/TP B737/TA -49.0/WV 25128/TB NEG/CP KBZN-KATL/RM EDR=0.00/0.00

FL340

DL814/OV 36.18N086.20W/FL339/TM 0049/TP B737/TA -48.2/WV 25127/TB LGT/MOD/CP MKJS-KMSP/RM EDR=0.12/0.18

DL814/OV 36.07N086.16W/FL339/TM 0048/TP B737/TA -48.5/WV 25118/TB LGT/MOD/CP MKJS-KMSP/RM EDR=0.18/0.22

DL814/OV 35.95N086.12W/FL339/TM 0047/TP B737/TA -49.0/WV 25115/TB LGT/MOD/CP MKJS-KMSP/RM EDR=0.16/0.20

DL814/OV 35.84N086.08W/FL339/TM 0046/TP B737/TA -48.5/WV 25106/TB LGT/MOD/CP MKJS-KMSP/RM EDR=0.12/0.18

DL814/OV 35.72N086.04W/FL339/TM 0045/TP B737/TA -48.2/WV 25108/TB LGT/MOD/CP MKJS-KMSP/RM EDR=0.12/0.18

DL814/OV 35.60N086.01W/FL339/TM 0044/TP B737/TA -48.7/WV 26114/TB LGT/MOD/CP MKJS-KMSP/RM EDR=0.10/0.20

DL814/OV 35.49N085.97W/FL339/TM 0043/TP B737/TA -48.5/WV 26124/TB OCNL LGT/CP MKJS-KMSP/RM EDR=0.04/0.08

DL814/OV 35.37N085.93W/FL339/TM 0042/TP B737/TA -47.7/WV 26129/TB OCNL LGT/CP MKJS-KMSP/RM EDR=0.02/0.06

DL814/OV 36.54N086.32W/FL339/TM 0052/TP B737/TA -47.7/WV 25133/TB NEG/CP MKJS-KMSP/RM EDR=0.00/0.00

DL814/OV 36.30N086.24W/FL339/TM 0050/TP B737/TA -48.2/WV 25130/TB NEG/CP MKJS-KMSP/RM EDR=0.00/0.02

DL1638/OV 36.02N086.93W/FL337/TM 0014/TP B737/TA -47.0/WV 25128/TB NEG/CP KMCI-KATL/RM EDR=0.00/0.02

DL2832/OV 36.17N087.01W/FL334/TM 2313/TP A321/TA -46.7/WV 25136/TB NEG/CP KMSP-KATL/RM EDR=0.00/0.02

Vicinity Pilot Reports 2300z-0100z FL330-FL280

Black = Smooth/Light Chop Green = Light Yellow = Light/Moderate Orange = Moderate

FL330

DL957/OV 35.87N086.92W/FL329/TM 0004/TP B737/TA -46.0/WV 25125/TB LGT/MOD/CP KBZN-KATL/RM EDR=0.08/0.18

DL1638/OV 35.93N086.82W/FL327/TM 0015/TP B737/TA -45.2/WV 24122/TB NEG/CP KMCI-KATL/RM EDR=0.00/0.02

DL2832/OV 36.11N086.54W/FL325/TM 2314/TP A321/TA -45.2/WV 25132/TB NEG/CP KMSP-KATL/RM EDR=0.02/0.02

DL2784/OV BNA/FL320/TM 2313/TP B737/TA -43.0/WV 25127/TB LT TURB/CP KATL-KSEA

DL2784/OV 35.91N086.05W/FL320/TM 2308/TP B737/TA -43.0/WV 25120/TB NEG/CP KATL-KSEA/RM EDR=0.02/0.02

FL320

DL2747/OV 36.02N086.10W/FL318/TM 2300/TP A321/TA -43.2/WV 24102/TB LGT/MOD/CP KDTW-KATL/RM EDR=0.14/0.24

DL1638/OV 35.83N086.71W/FL317/TM 0016/TP B737/TA -42.0/WV 24120/TB LGT/CP KMCI-KATL/RM EDR=0.06/0.12

DL9933/OV 35.57N086.29W/FL317/TM 0004/TP B737/TA -42.5/WV 25112/TB OCNL LGT/CP KMSP-KATL/RM EDR=0.06/0.10

DL2832/OV 36.05N086.48W/FL316/TM 2315/TP A321/TA -42.5/WV 24123/TB LGT/MOD/CP KMSP-KATL/RM EDR=0.06/0.16

DL957/OV 35.77N086.79W/FL316/TM 0005/TP B737/TA -42.0/WV 25122/TB NEG/CP KBZN-KATL/RM EDR=0.02/0.04

FL310

DL1638/OV 35.73N086.60W/FL308/TM 0017/TP B737/TA -39.5/WV 24107/TB LGT/MOD/CP KMCI-KATL/RM EDR=0.12/0.18

DL957/OV 35.67N086.67W/FL307/TM 0006/TP B737/TA -39.0/WV 25121/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.08

DL2832/OV 35.60N086.41W/FL304/TM 2316/TP A321/TA -39.5/WV 24108/TB LGT/MOD/CP KMSP-KATL/RM EDR=0.14/0.18

FL300

DL1638/OV 35.63N086.50W/FL298/TM 0018/TP B737/TA -37.2/WV 24090/TB OCNL LGT/CP KMCI-KATL/RM EDR=0.04/0.06

DL2747/OV 35.56N086.10W/FL291/TM 2301/TP A321/TA -35.7/WV 25111/TB LGT/MOD/CP KDTW-KATL/RM EDR=0.12/0.18

DL957/OV 35.57N086.54W/FL290/TM 0007/TP B737/TA -35.2/WV 25109/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.08

FL290

DL1638/OV 35.54N086.39W/FL287/TM 0019/TP B737/TA -34.2/WV 25105/TB OCNL LGT/CP KMCI-KATL/RM EDR=0.04/0.08

DL2832/OV 35.54N086.35W/FL284/TM 2317/TP A321/TA -34.2/WV 24106/TB LGT/MOD/CP KMSP-KATL/RM EDR=0.10/0.16

DL9933/OV 35.46N086.21W/FL281/TM 0005/TP B737/TA -32.7/WV 25112/TB OCNL LGT/CP KMSP-KATL/RM EDR=0.04/0.06

FL280

DL1638/OV 35.44N086.28W/FL278/TM 0020/TP B737/TA -32.0/WV 25096/TB NEG/CP KMCI-KATL/RM EDR=0.02/0.02

DL94 /OV 35.89N086.37W/FL270/TM 0043/TP B737/TA -30.0/WV 24103/TB LGT/CP KDTW-KATL/RM EDR=0.08/0.14

DL94/OV 35.66N086.35W/FL270/TM 0045/TP B737/TA -29.2/WV 25110/TB LGT/CP KDTW-KATL/RM EDR=0.06/0.12

DL94/OV 35.89N086.37W/FL270/TM 0043/TP B737/TA -30.0/WV 24102/TB LGT/CP KDTW-KATL/RM EDR=0.08/0.14

DL94/OV 35.32N086.09W/FL270/TM 0048/TP B737/TA -29.7/WV 25103/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.06/0.10

DL94/OV 35.55N086.27W/FL270/TM 0046/TP B737/TA -29.7/WV 25100/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.02/0.06

DL94/OV 36.22N086.31W/FL270/TM 0040/TP B737/TA -30.0/WV 24114/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.02/0.06

DL94/OV 36.32N086.28W/FL270/TM 0039/TP B737/TA -30.0/WV 24116/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.04/0.08

DL94/OV 36.11N086.33W/FL270/TM 0041/TP B737/TA -29.5/WV 24110/TB NEG/CP KDTW-KATL/RM EDR=0.02/0.04

Vicinity Pilot Reports 2300z-0100z FL280-Surface

Black = Smooth/Light Chop Green = Light Yellow = Light/Moderate Orange = Moderate

FL270

DL94/OV 36.00N086.35W/FL269/TM 0042/TP B737/TA -29.5/WV 24103/TB LGT/MOD/CP KDTW-KATL/RM EDR=0.06/0.16

DL94/OV 35.78N086.39W/FL269/TM 0044/TP B737/TA -29.7/WV 24101/TB LGT/CP KDTW-KATL/RM EDR=0.08/0.14

DL957/OV 35.48N086.42W/FL269/TM 0008/TP B737/TA -29.7/WV 25107/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.06

DL94/OV 35.43N086.18W/FL269/TM 0047/TP B737/TA -30.0/WV 25095/TB NEG/CP KDTW-KATL/RM EDR=0.02/0.04

DL1638/OV 35.35N086.18W/FL268/TM 0021/TP B737/TA -29.0/WV 24103/TB OCNL LGT/CP KMCI-KATL/RM EDR=0.04/0.08

DL2832/OV 35.48N086.28W/FL267/TM 2318/TP A321/TA -29.0/WV 24104/TB LGT/CP KMSP-KATL/RM EDR=0.06/0.12

FL260

DL2832/OV 35.41N086.22W/FL258/TM 2319/TP A321/TA -26.7/WV 24109/TB LGT/CP KMSP-KATL/RM EDR=0.06/0.12

DL1638/OV 35.25N086.08W/FL258/TM 0022/TP B737/TA -26.5/WV 24102/TB LGT/CP KMCI-KATL/RM EDR=0.08/0.14

DL2747/OV 35.49N086.11W/FL256/TM 2302/TP A321/TA -26.5/WV 25113/TB NEG/CP KDTW-KATL/RM EDR=0.02/0.04

DL957/OV 35.30N086.20W/FL250/TM 0010/TP B737/TA -24.7/WV 24092/TB LGT/CP KBZN-KATL/RM EDR=0.08/0.14

DL2832/OV 35.35N086.18W/FL250/TM 2320/TP A321/TA -24.7/WV 24114/TB LGT/CP KMSP-KATL/RM EDR=0.08/0.14

DL9933/OV 35.36N086.11W/FL250/TM 0006/TP B737/TA -25.2/WV 25098/TB OCNL LGT/CP KMSP-KATL/RM EDR=0.04/0.10

DL957/OV 35.39N086.31W/FL250/TM 0009/TP B737/TA -24.5/WV 25100/TB OCNL LGT/CP KBZN-KATL/RM EDR=0.04/0.10

DL2747/OV 35.36N086.11W/FL250/TM 2304/TP A321/TA -25.5/WV 25108/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.06/0.08

FL250

DL2832/OV 35.29N086.13W/FL249/TM 2321/TP A321/TA -25.2/WV 25118/TB LGT/MOD/CP KMSP-KATL/RM EDR=0.12/0.18

DL2747/OV 35.29N086.11W/FL249/TM 2305/TP A321/TA -25.0/WV 24099/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.06/0.10

DL2747/OV 35.42N086.11W/FL249/TM 2303/TP A321/TA -25.0/WV 25110/TB OCNL LGT/CP KDTW-KATL/RM EDR=0.06/0.08

FL240

DL1114/OV 36.32N087.51W/FL232/TM 2309/TP B737/TA -21.2/WV 23118/TB OCNL LGT/CP KBNA-KSLC/RM EDR=0.04/0.06

FL230

DL1114/OV 36.30N087.41W/FL216/TM 2308/TP B737/TA -16.7/WV 23120/TB OCNL LGT/CP KBNA-KSLC/RM EDR=0.04/0.08

FL210

DL1114/OV 36.28N087.31W/FL192/TM 2307/TP B737/TA -12.7/WV 23096/TB NEG/CP KBNA-KSLC/RM EDR=0.00/0.02

FL190

DL1114/OV 36.27N087.21W/FL170/TM 2306/TP B737/TA -9.7/WV 23087/TB OCNL LGT/CP KBNA-KSLC/RM EDR=0.06/0.10

FL170

DL1114/OV 36.27N087.11W/FL152/TM 2305/TP B737/TA -7.2/WV 23090/TB LGT/CP KBNA-KSLC/RM EDR=0.08/0.14

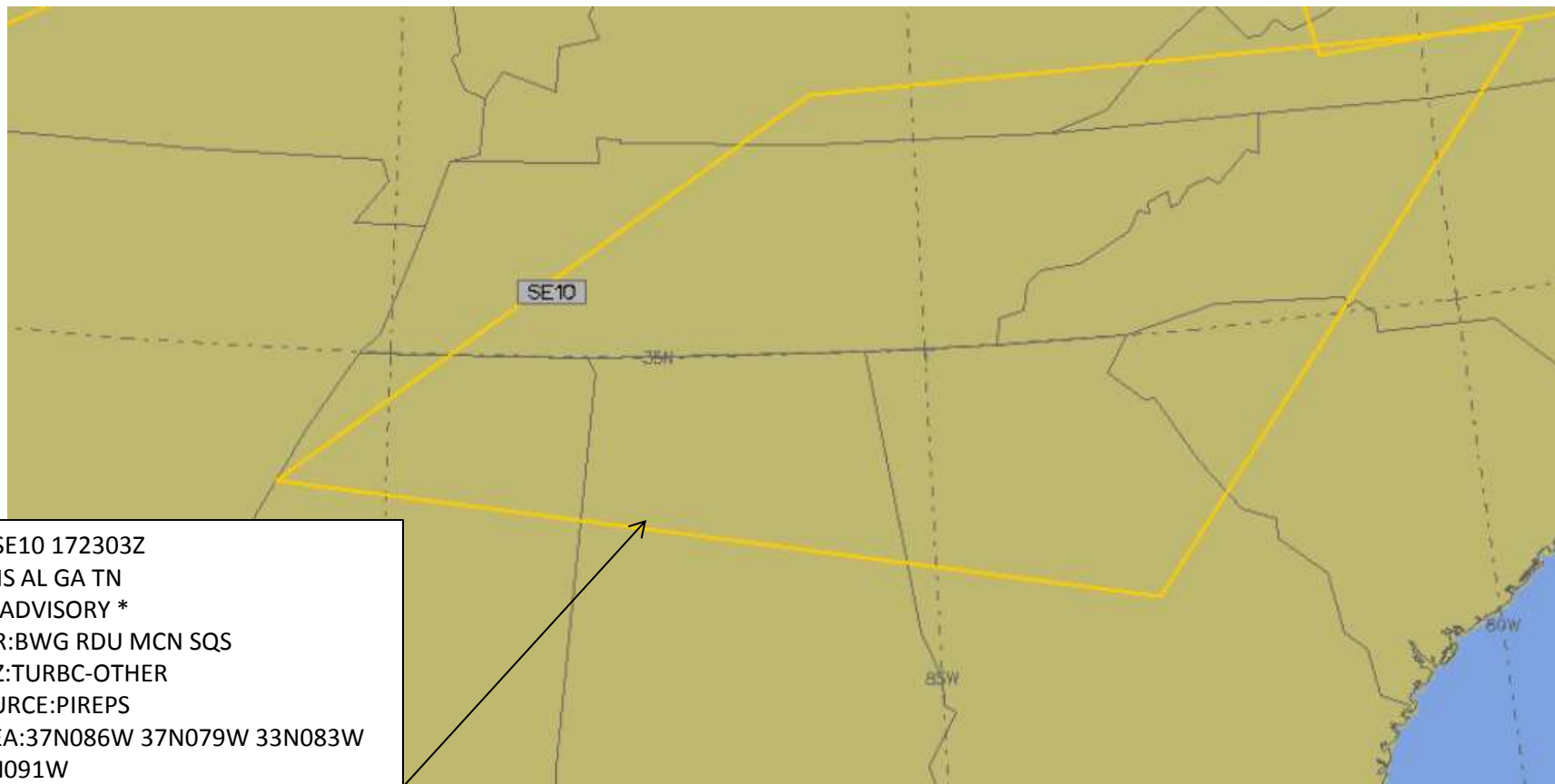
DL995/OV 35.89N087.65W/FL152/TM 2343/TP B737/TA -5.7/WV 22075/TB OCNL LGT/CP KSLC-KBNA/RM EDR=0.02/0.06

FL150

BNA UA /OV BNA270010/TM 2304/FLDURC/TP B738/TB MOD 060 - 095=

BNA UA /OV BNA220035/TM 0045/FLDURD/TP B737/TB MOD=

Delta Meteorology Turbulence Plot



TP SE10 172303Z
1.MS AL GA TN
2.* ADVISORY *
VOR:BWG RDU MCN SQS
HAZ:TURBC-OTHER
SOURCE:PIREPS
AREA:37N086W 37N079W 33N083W
34N091W
TIME:POSN AT 17/2302Z
ALTS:150-FL350 LGT/MOD
MVG FROM:27025
INFO:FAST MOVG RAINSHWRS. MOST
TOPS AOB FL250..ISLD TO FL320. CELLS
MVG NE 60KTS 3.VALID
172303Z/180300Z
4.CANCEL SE09 Cancelled at: 18/0057Z