



Background for Discussion of Forecasts for Northeast Corridor 5-22-2018

- Airlines raised concerns about use of AFPs on this event
- Case was suggested as a candidate case for Lincoln R & D on TMI usage analysis using “serious gaming” techniques
- Key forecasting issues associated with this event:
 - Determining whether New York departures will be blocked at various times by semi organized storms south and southwest of New York
 - Planning for management of rapid growth storm impacts on Washington airports (DCA, IAD, BWI)
 - Management of airport impacts (DCA, IAD)
 - Recovery (especially for DCA)

NORTHEAST DEPARTURE PLAN

2
2

Impact Area	Timing	Triggers	Mitigation Strategies
N90 departure gates / airways	Prior to 18z	Impact from TSTMs, MIT in excess of 15 minutes	Reduce / limit 1st Tier internal departures to allow N90 to run unencumbered. Dedicate specific airway for N90 offloads. Implement ESCAPE routes Required & AZEZU if available. Activate NY or a NE Hotline to increase coordination.
N90 East Int'l Dept Gates	After 20z	TSTMs impacting Eastbound Depts	If needed, develop offload route strategy with ZBW to access NATOT routes.

SWAP is probable for the NE terminals.

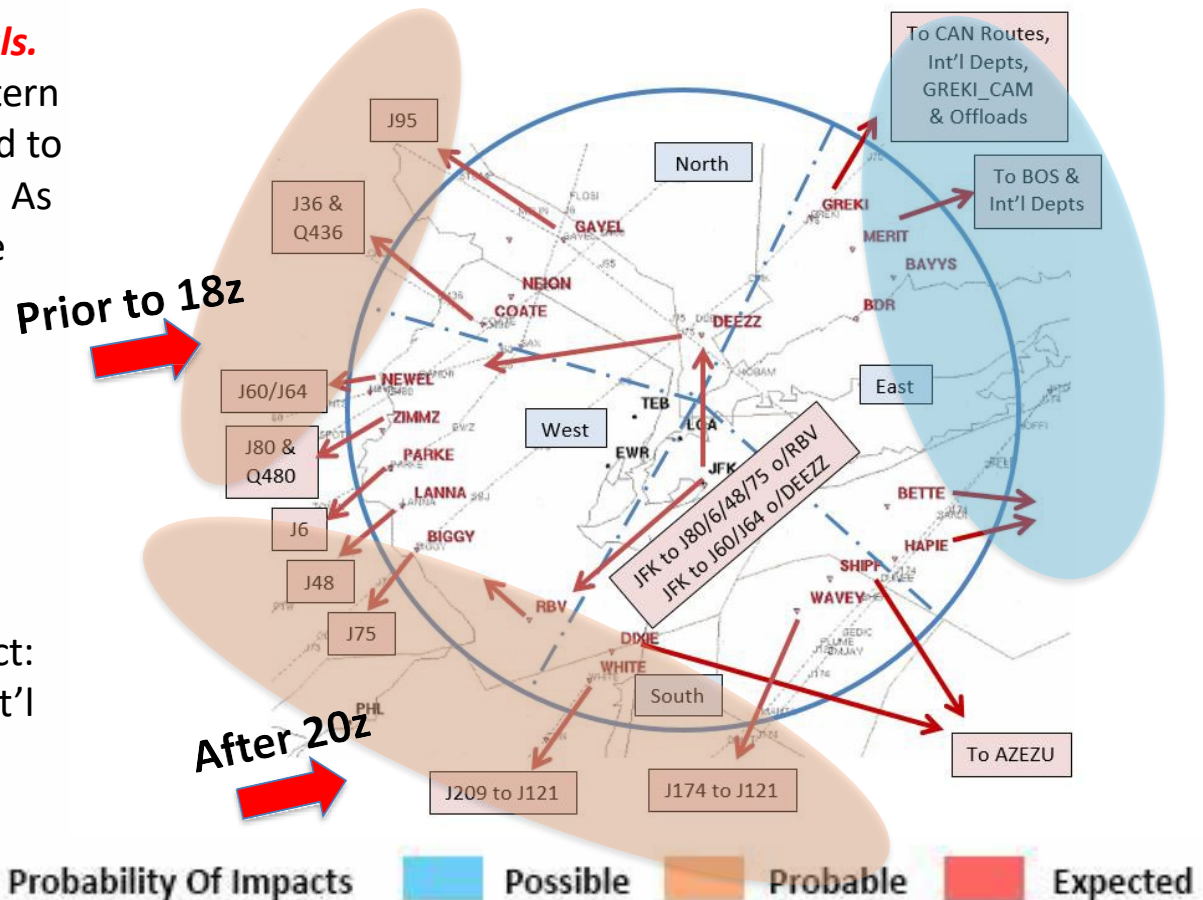
Morning TSTMs forecast for ZBW, Eastern ZOB, & Western ZNY that are expected to impact the NY West and North Gates. As storms pass through ZDC, impacts are likely for the NY South gates.

Prior to 1800z:

West & North Gate Impact:
J95, J36/Q436, J60/J64, J80/Q480.

After 2000z:

Southwest, South, & East Gate Impact:
J6, J48, J75, J209, J174, & possible Int'l Departures.

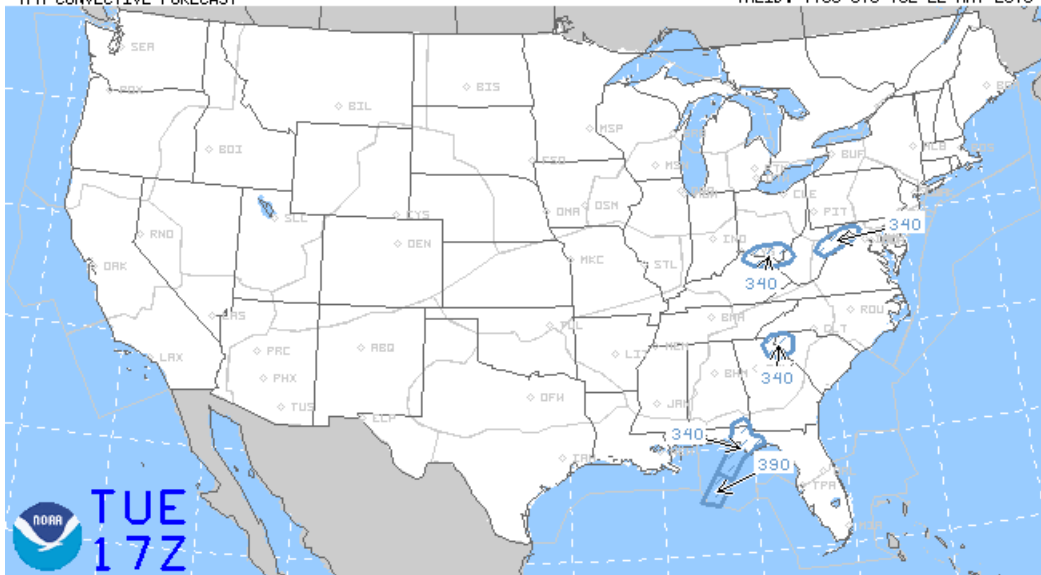


Probability Of Impacts Possible Probable Expected



TCF forecasts at 13Z

TFM CONVECTIVE FORECAST VALID: 1700 UTC TUE 22 MAY 2018



VALID: 1900 UTC TUE 22 MAY 2018



ISSUED: 1300 UTC TUE 22 MAY 2018

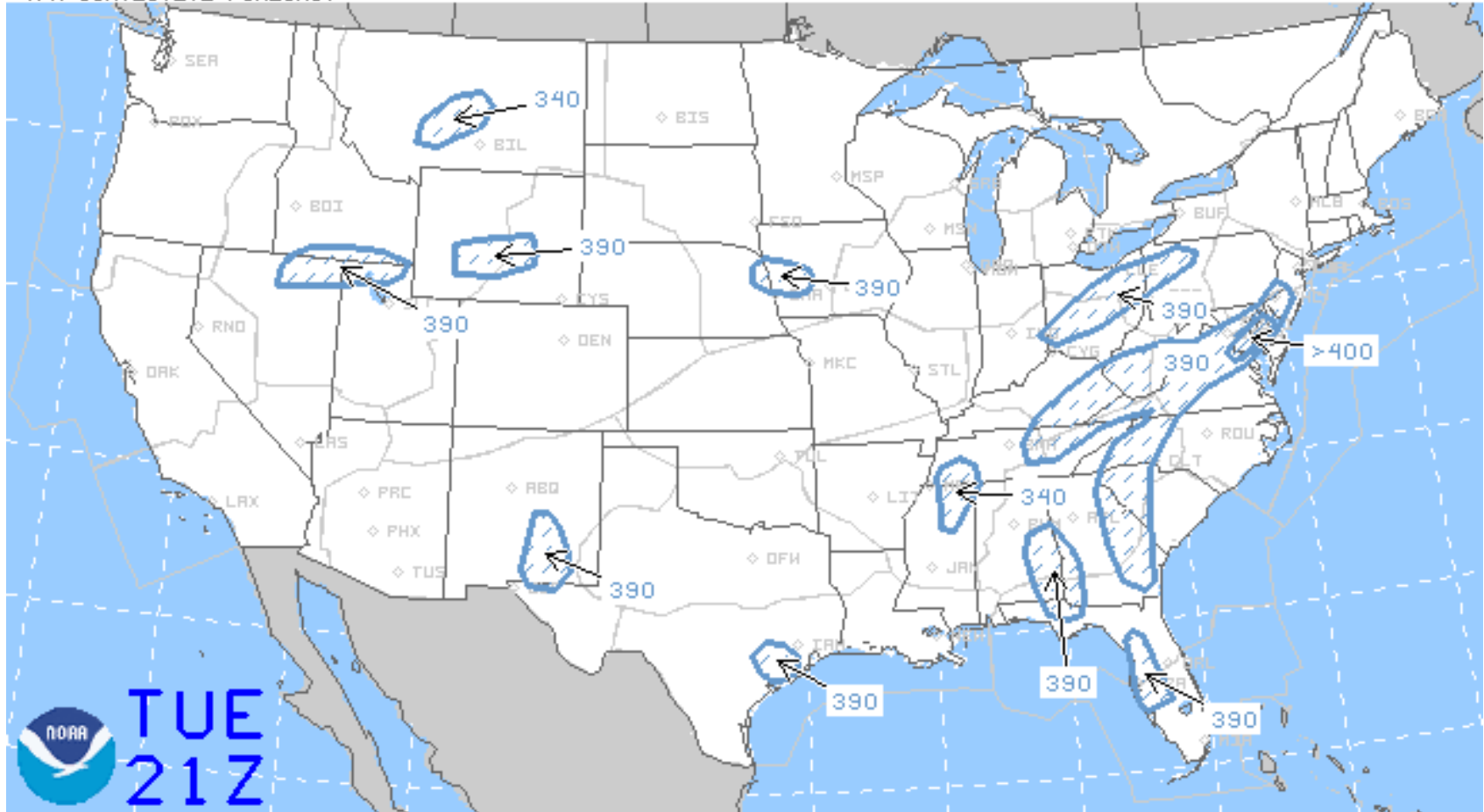
ISSUED: 1300 UTC TUE 22 MAY 2018



TCF forecast issued 15Z

TFM CONVECTIVE FORECAST

VALID: 2100 UTC TUE 22 MAY 2018

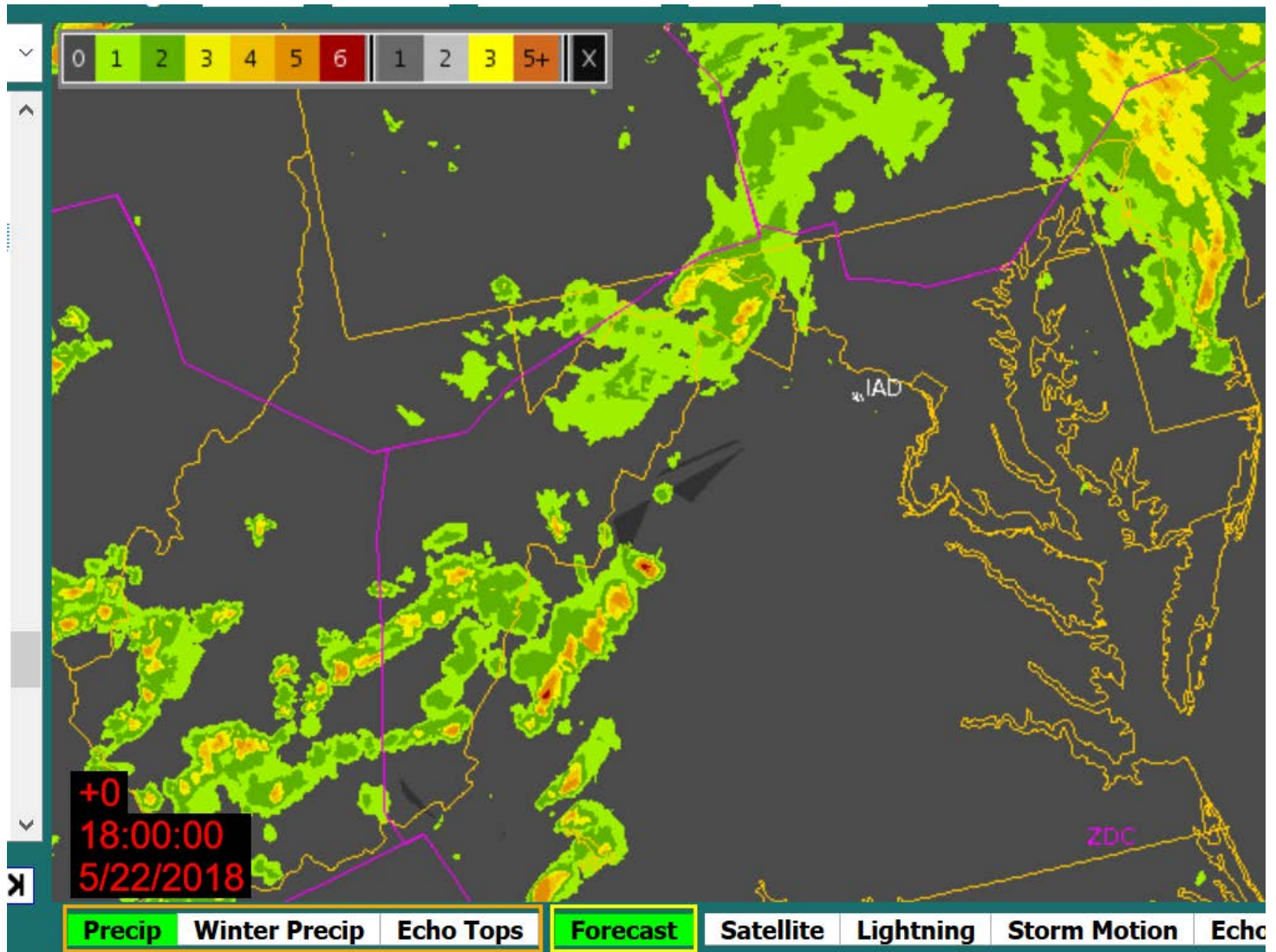


AVIATION WEATHER CENTER (NOAA/NWS/NCEP)

ISSUED: 1500 UTC TUE 22 MAY 2018

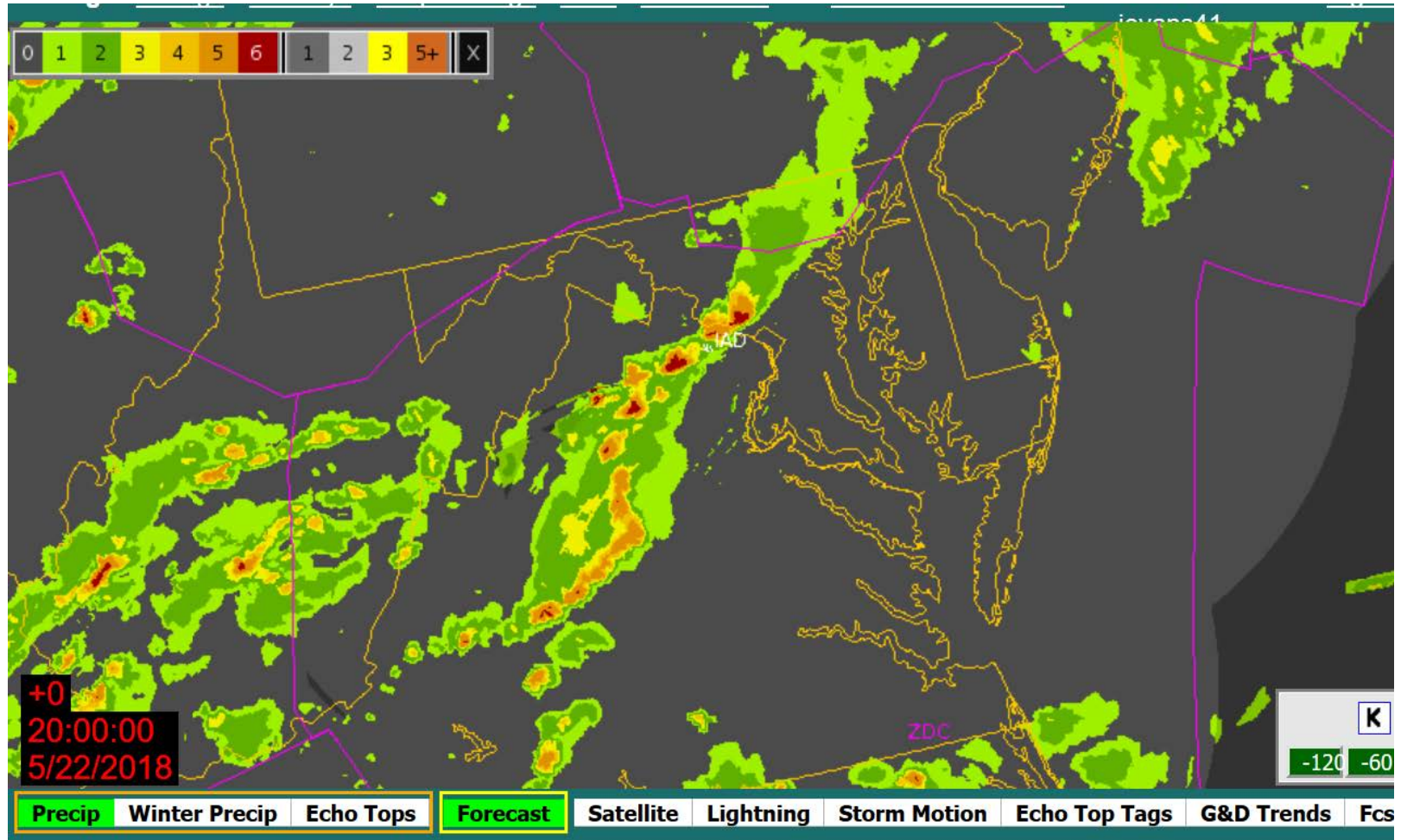


CIWS weather at 19Z





CIWS weather at 20Z





Discussion Questions

- **What forecasts would you use to:**
 - **1. Anticipate impact times on IAD, DCA , and BWI?**
 - **2. Plan for recovery following storm impacts?**

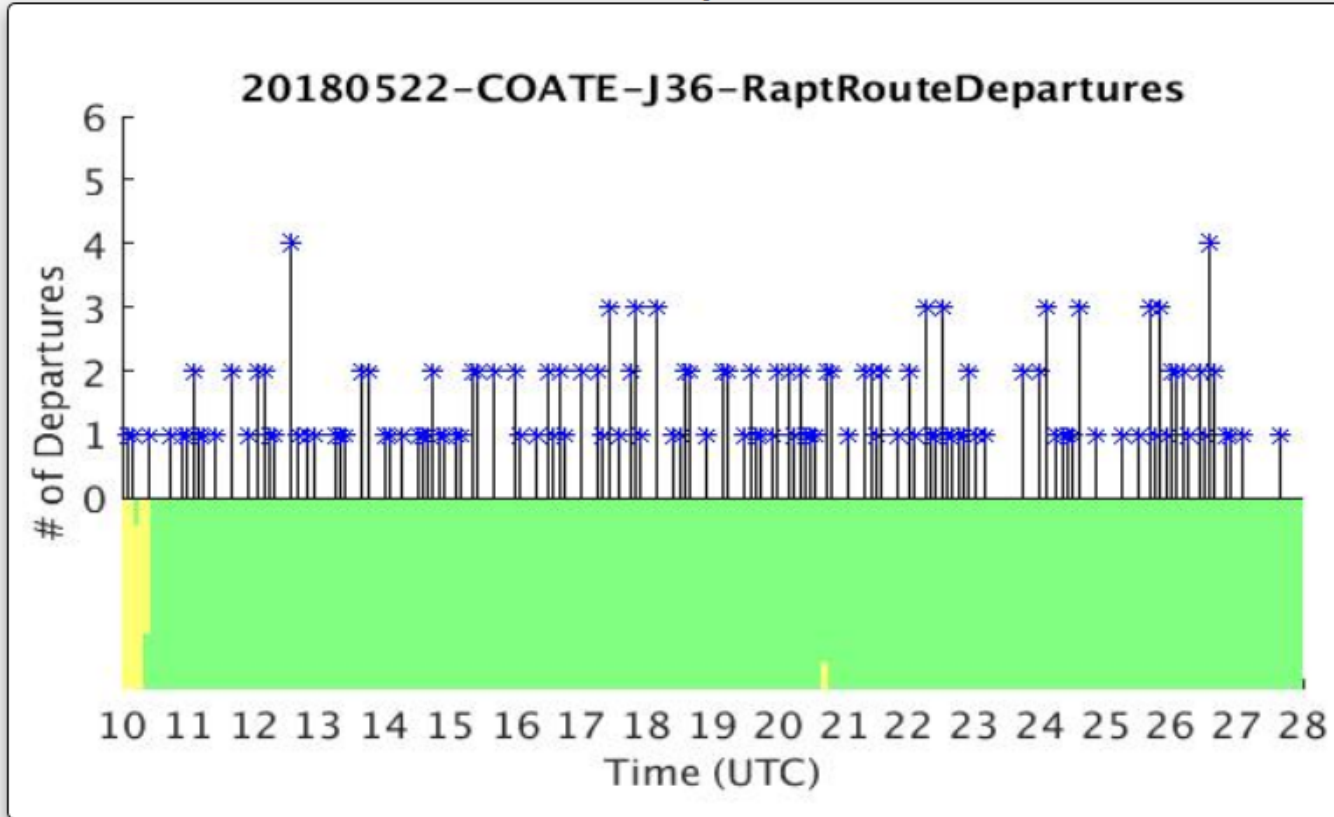


Epilogue to 5-22-2018 Northeast Corridor

- 1. Storm impacts on departures from New York were not as severe as would have been anticipated (see subsequent slides)**
- 2. Storms impacted IAD 20-21Z, but this was a time of low arrivals. No GDP issued. Departure bank normally at 21Z departed late several hours. Arrival recovery at 12Z**
- 3. Storms impacted DCA 20Z-22Z. Ground stops 1930Z. GDP 2338Z-0100Z. High arrival deficit (20Z to 23Z) – 59 aircraft. Very little recovery of DCA arrivals after 23Z.**
- 4. Diversions:**
 - IAD 15**
 - DCA 26**
 - BWI 0**



RAPT Route Departure Plots



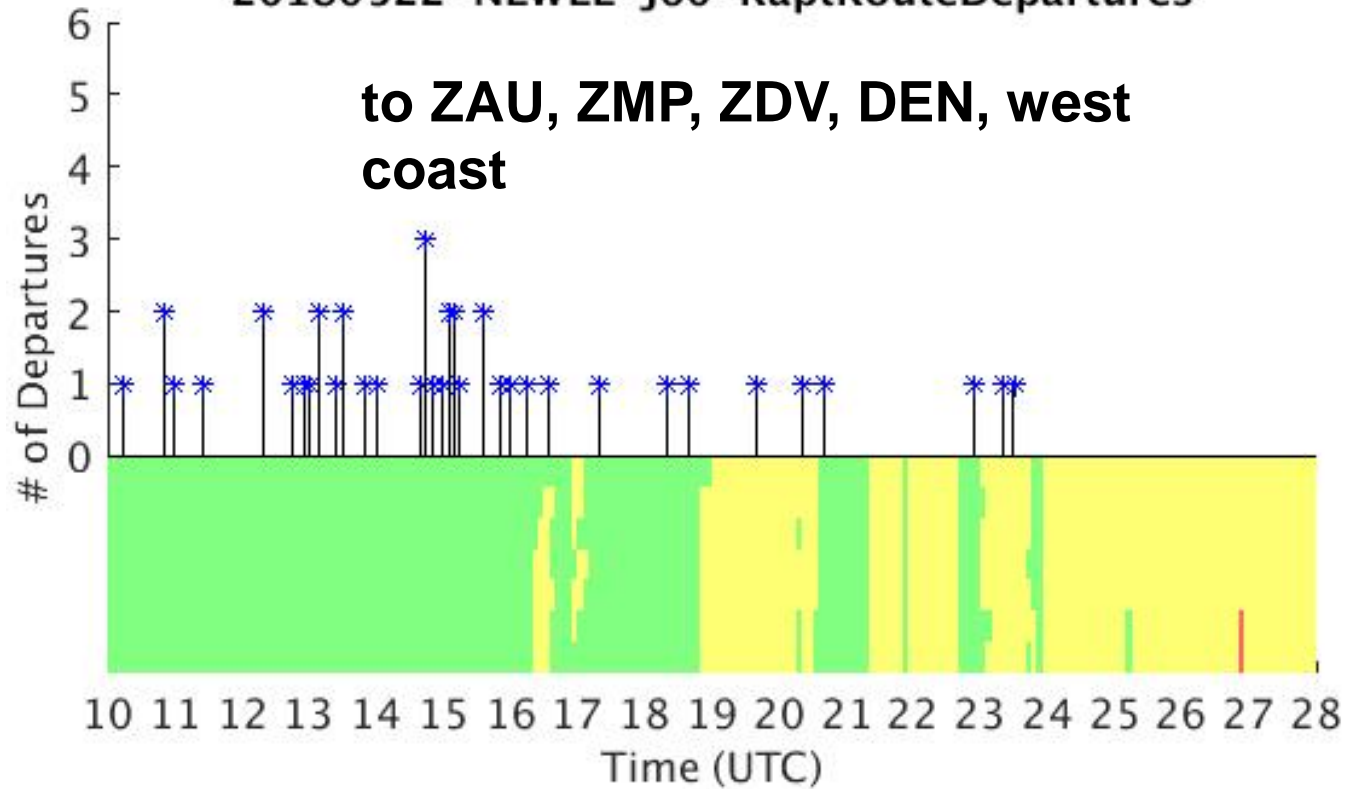
COATE-J36 ▾

Click graph to expand



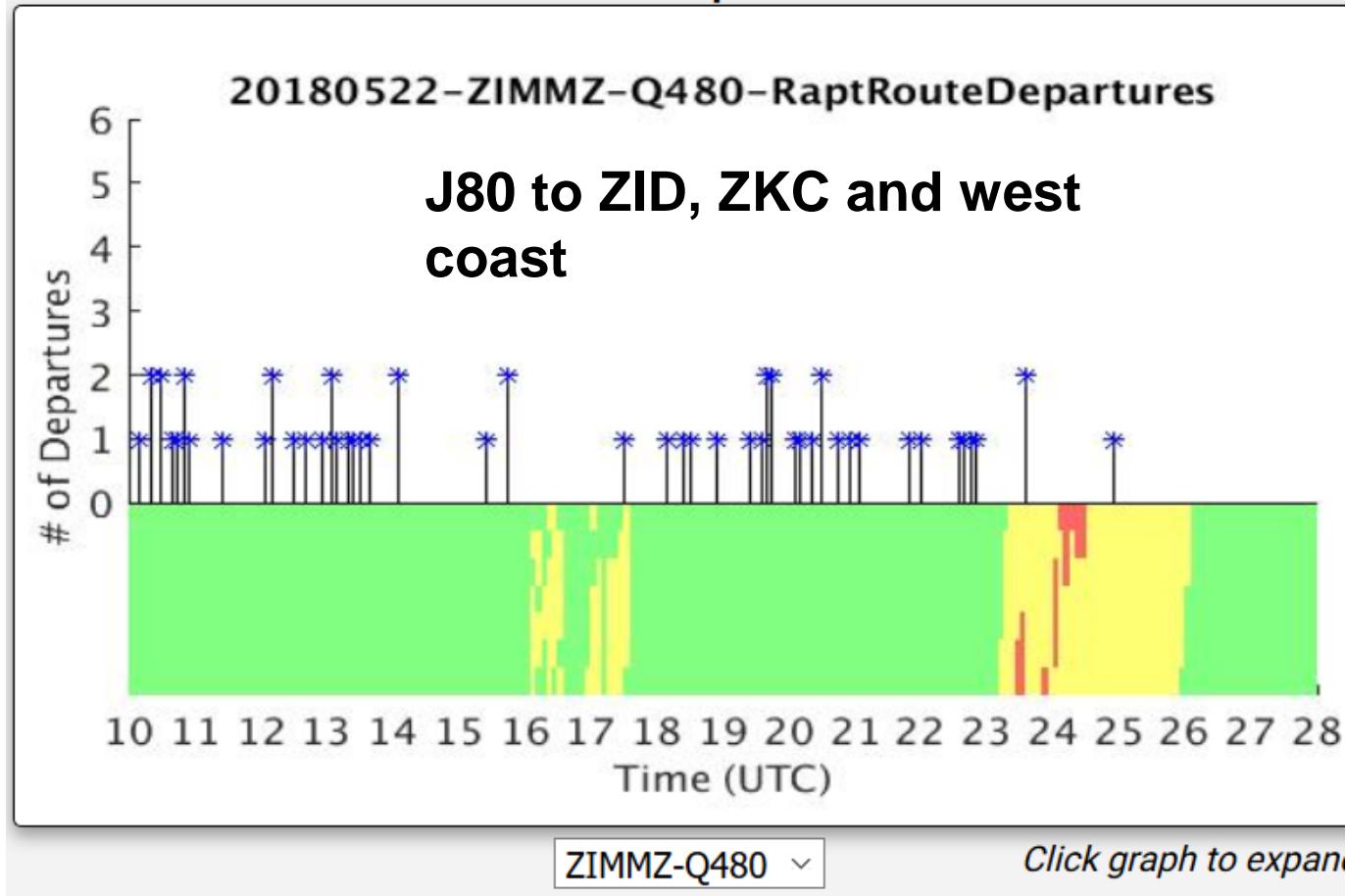
20180522-NEWEL-J60-RaptRouteDepartures

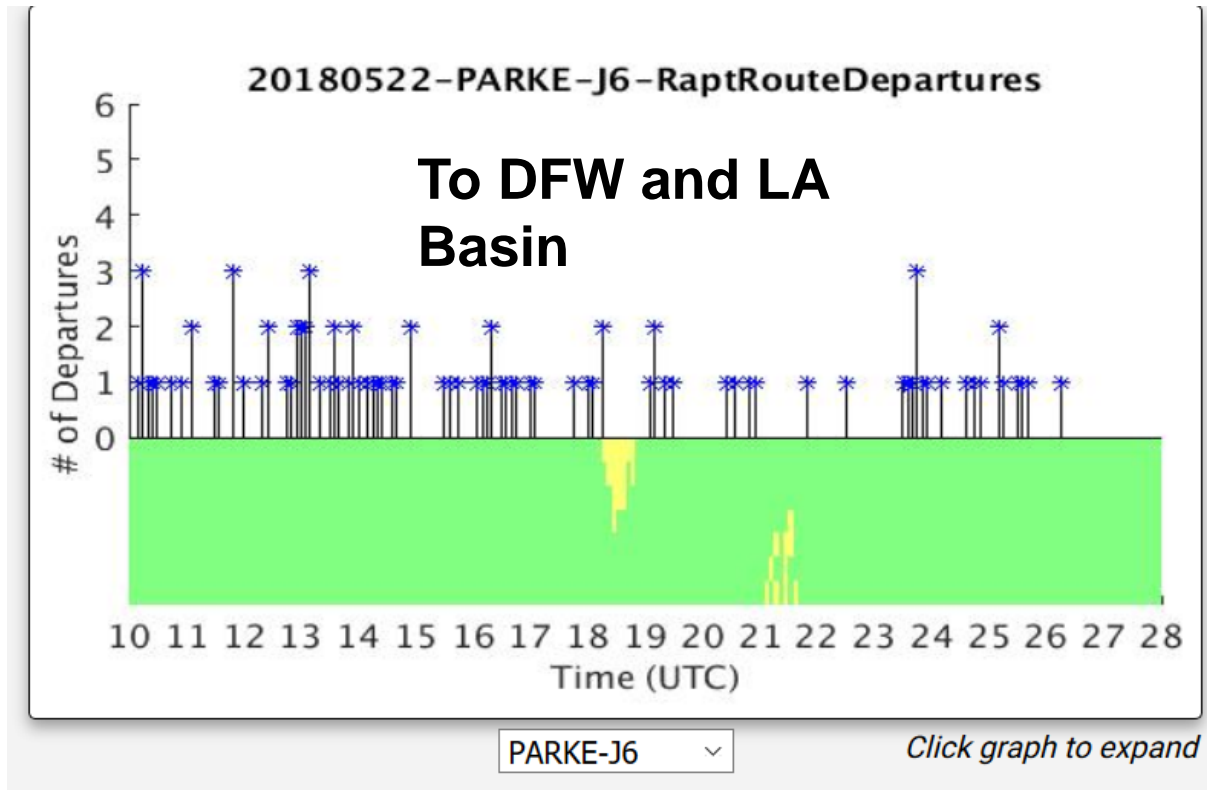
to ZAU, ZMP, ZDV, DEN, west coast

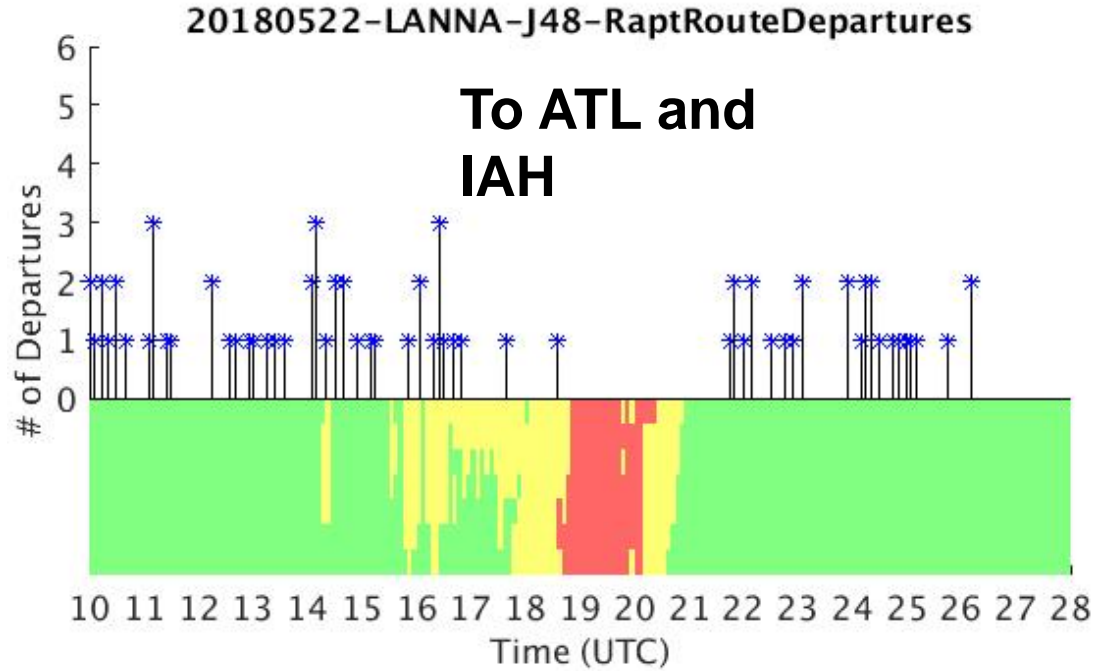




RAPT Route Departure Plots



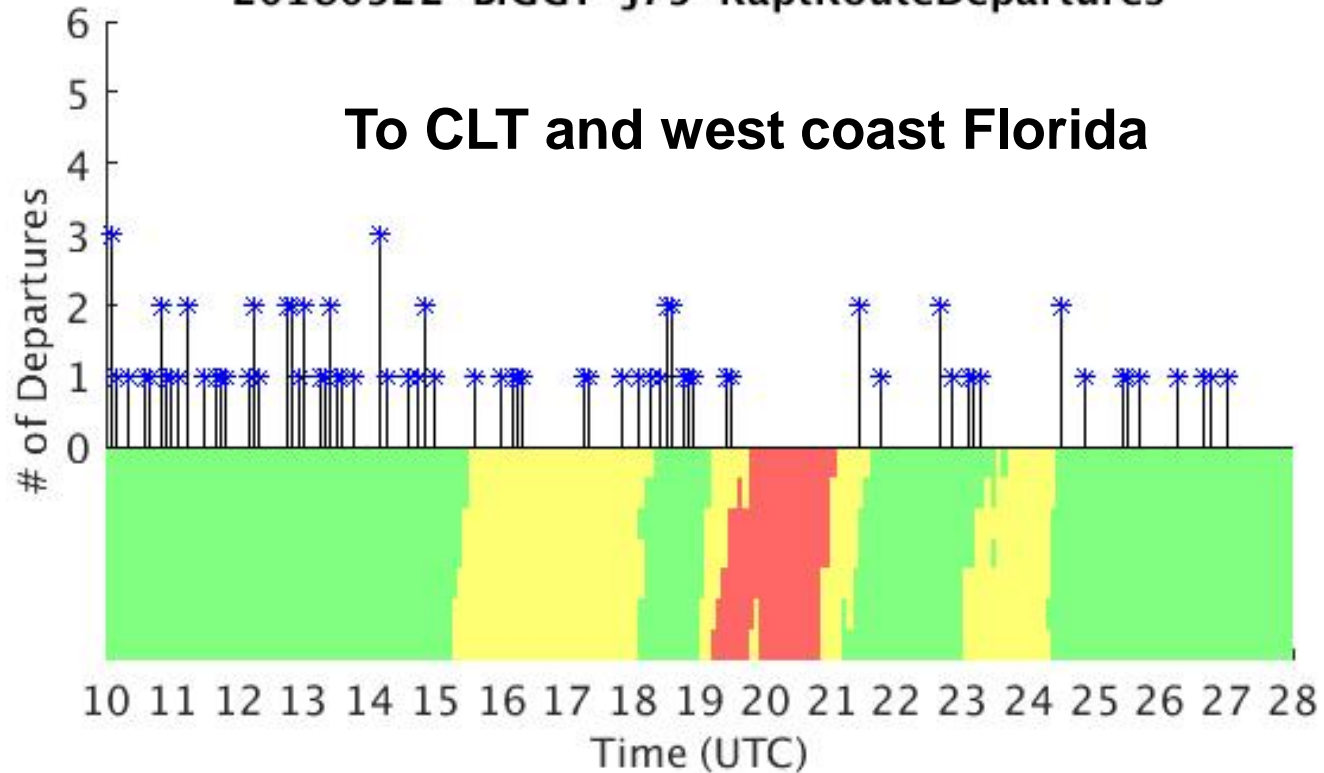






20180522-BIGGY-J75-RaptRouteDepartures

To CLT and west coast Florida





20180522-WHITE-RaptRouteDepartures

J121 to east coast Florida

