

## JFKAC Meeting – September 11, 2023

### Agenda

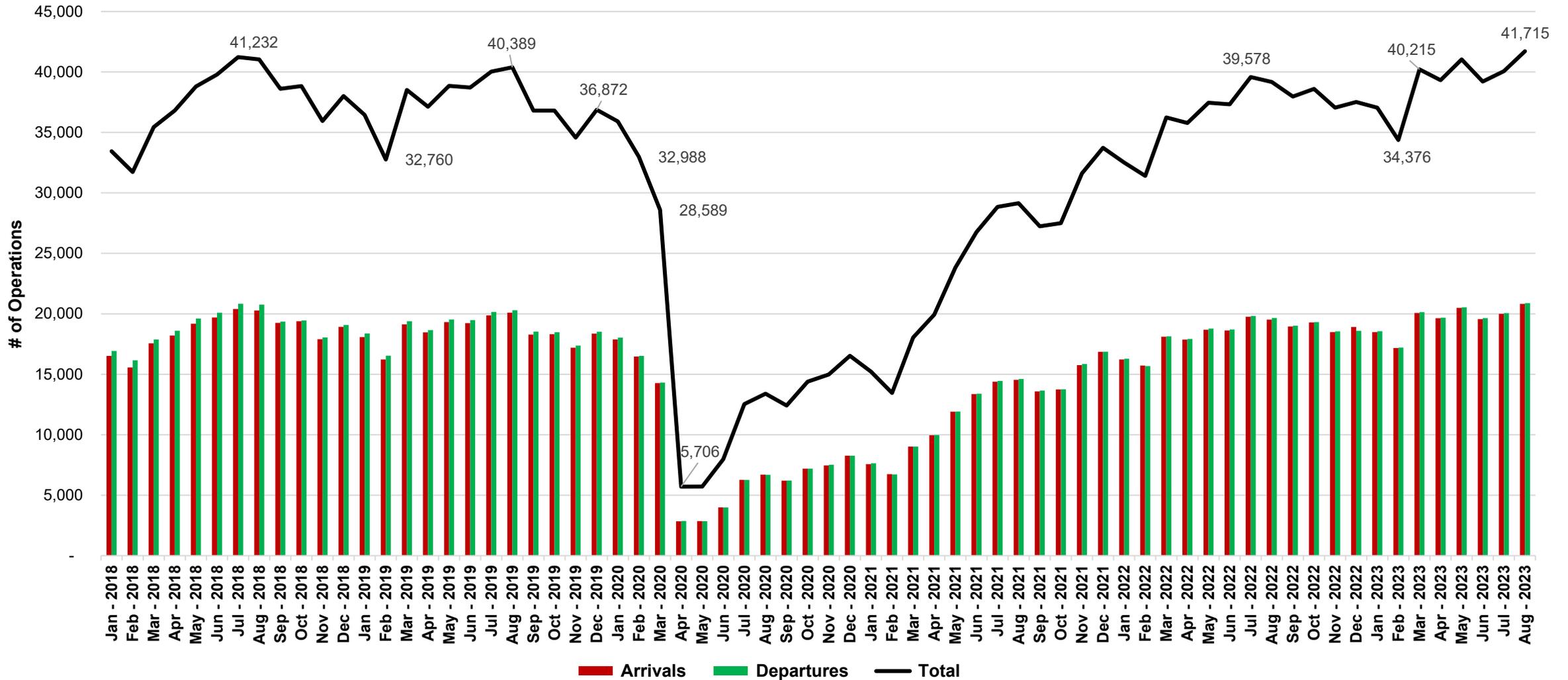
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|--------------------------------------------|------|
| 1. Welcome/Roll Call                       | 7:00 |
| 2. Minutes                                 | 7:15 |
| Patrick Evans                              |      |
| 3. Wind Direction and Aviation             | 7:20 |
| 4. Runway Usage Reports: Analysis and Use  | 7:30 |
| Adeel Yousuf, PANYNJ                       |      |
| Veda Simmons, FAA                          |      |
| 5. Flight Paths, Runway Use and Dispersal  | 8:00 |
| Ralph Tamburro, Program Manager, PANYNJ    |      |
| 6. Public Comment Period (Time Permitting) | 8:45 |
| 7. Adjournment                             | 9:00 |

# The Port Authority of New York and New Jersey John F. Kennedy International Airport (JFK) Operations



# JFK 2019 to 2023 Operations Overview

All Arrivals and Departures: Jan 2019 to August 2023



# *Factors in Runway Selection*

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Runway Selection is determined by FAA based on the following criteria (in order of decreasing priority):

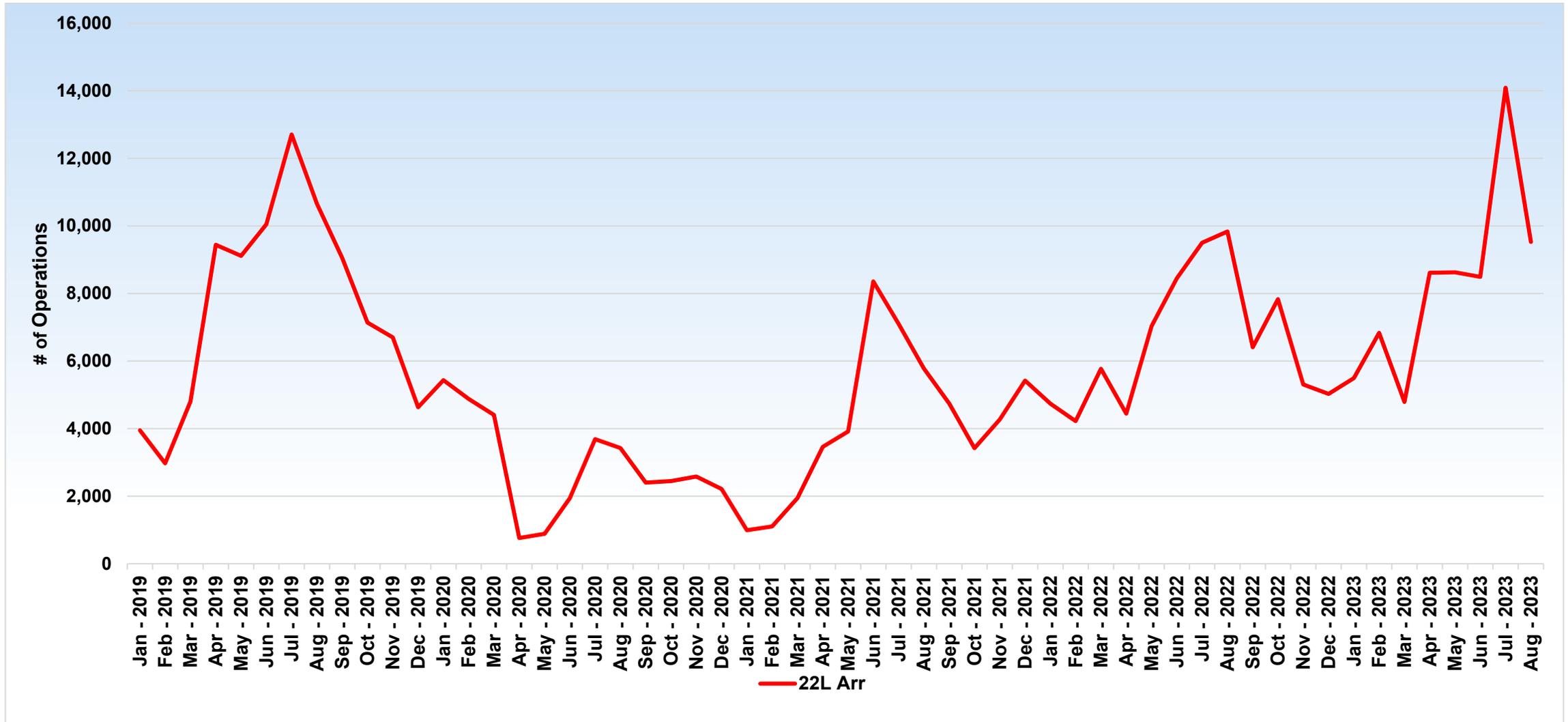
- Runway availability
- Prevailing wind and weather patterns
- Operational efficiency
- Community noise concerns

*Flying into the wind provides the greatest margin of safety when landing or departing at any airport*

# Operations By Runway for Past 13 Months

Month	Total Operations	4L Arr	4L Dep	4R Arr	4R Dep	13L Arr	13L Dep	13R Arr	13R Dep	22L Arr	22L Dep	22R Arr	22R Dep	31L Arr	31L Dep	31R Arr	31R Dep	Unk Arr	Unk Dep
Aug - 2022	39,176	332	2,788	2,780	0	4,180	16	16	5,540	9,835	2	649	8,399	460	2,868	1,245	12	29	25
Sep - 2022	37,967	445	2,978	3,031	2	2,334	10	5	2,992	6,408	0	568	5,469	1,442	7,523	4,711	33	6	10
Oct - 2022	38,600	943	5,288	5,126	1	1,742	11	12	2,207	7,830	0	819	7,048	601	4,736	2,203	12	10	11
Nov - 2022	37,044	394	2,765	2,767	0	2,104	10	7	2,618	5,307	1	593	4,888	1,523	8,230	5,796	39	0	2
Dec - 2022	37,515	893	5,625	5,797	0	893	9	5	1,155	5,027	0	463	4,506	1,282	7,265	4,544	32	14	5
Jan - 2023	37,045	704	5,013	5,010	0	683	3	3	936	5,494	0	492	5,115	1,295	7,448	4,805	32	3	9
Feb - 2023	34,376	375	3,299	3,107	1	1,485	11	2	1,861	6,833	0	712	6,101	1,061	5,915	3,594	11	2	6
Mar - 2023	40,215	835	6,401	6,328	1	2,134	5	4	2,683	4,789	0	418	4,022	1,186	6,987	4,379	34	0	9
Apr - 2023	39,316	476	4,184	4,046	0	2,682	5	5	3,381	8,613	0	813	7,687	643	4,387	2,359	27	2	6
May - 2023	41,040	663	4,341	4,268	0	4,238	12	9	5,558	8,627	0	802	6,932	485	3,682	1,401	12	5	5
Jun - 2023	39,208	580	4,960	4,654	0	1,356	3	5	1,680	8,492	0	743	7,859	869	5,122	2,869	9	0	7
Jul - 2023	40,063	172	1,718	1,730	0	523	0	3	679	14,088	1	1,105	13,529	644	4,113	1,733	8	6	11
Aug - 2023	41,715	596	4,688	4,921	0	1,579	5	12	1,990	9,526	0	975	8,713	710	5,467	2,505	10	4	14

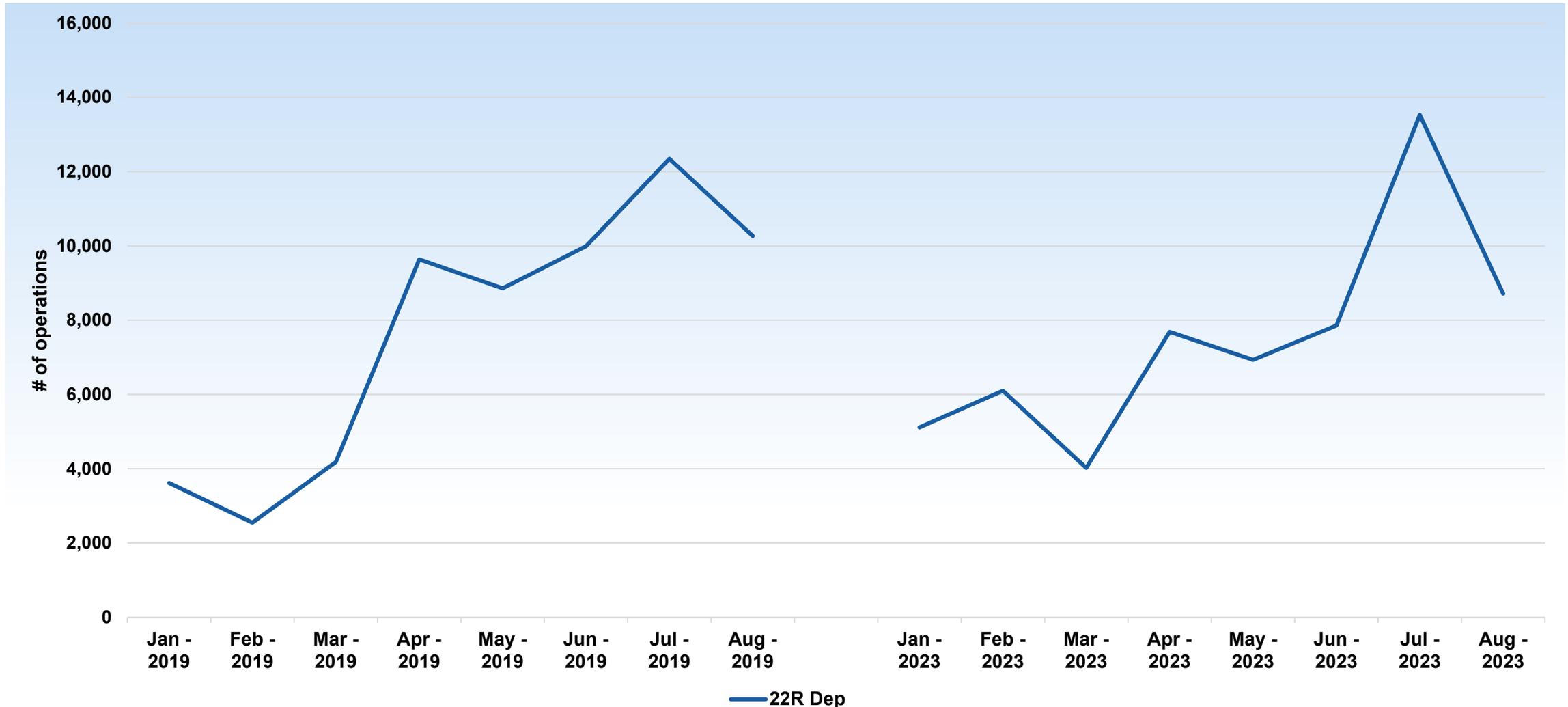
# Runway 22L Arrival Comparison – 2019 to 2023 (August)



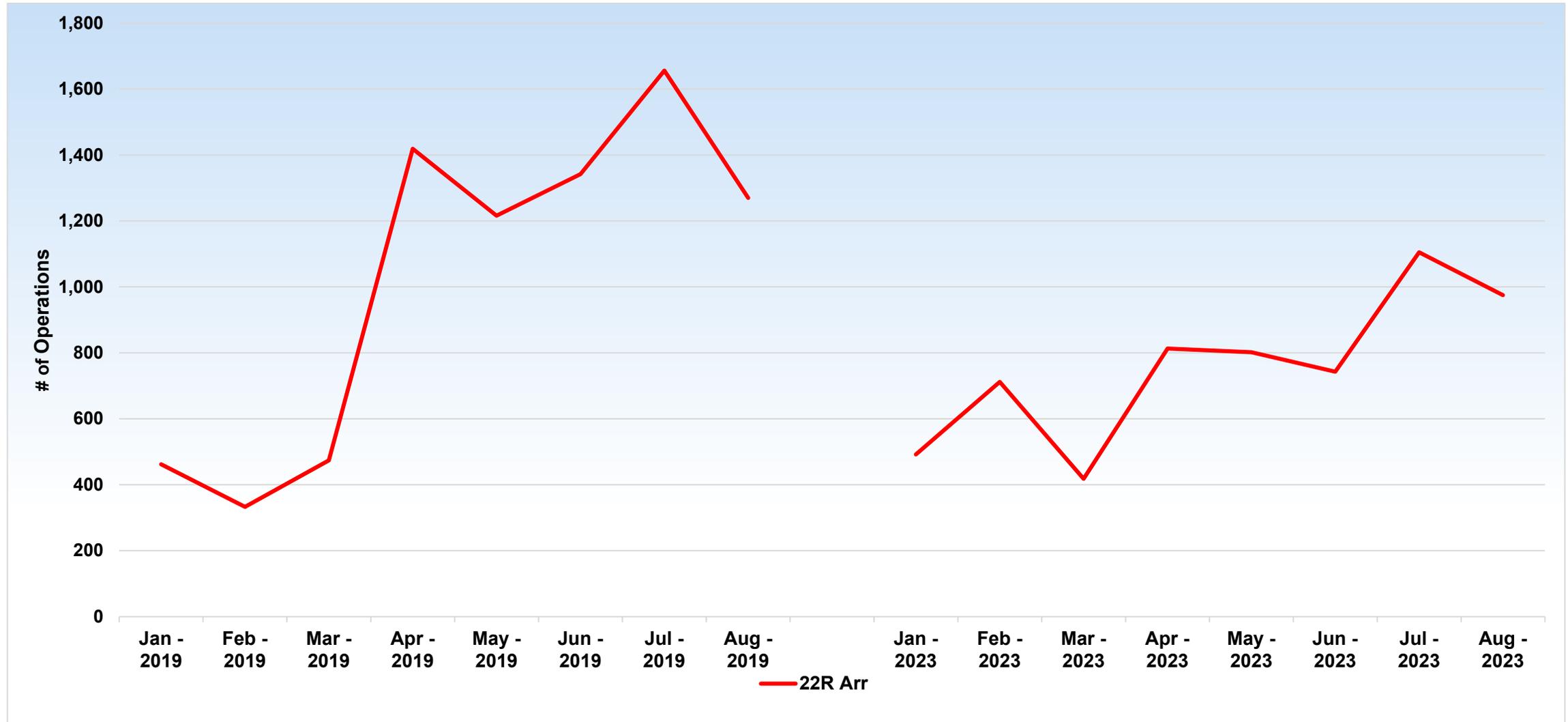
# Runway 22L Arrival Comparison – 2019 vs. 2023



# Runway 22R Departure Comparison – 2019 vs. 2023



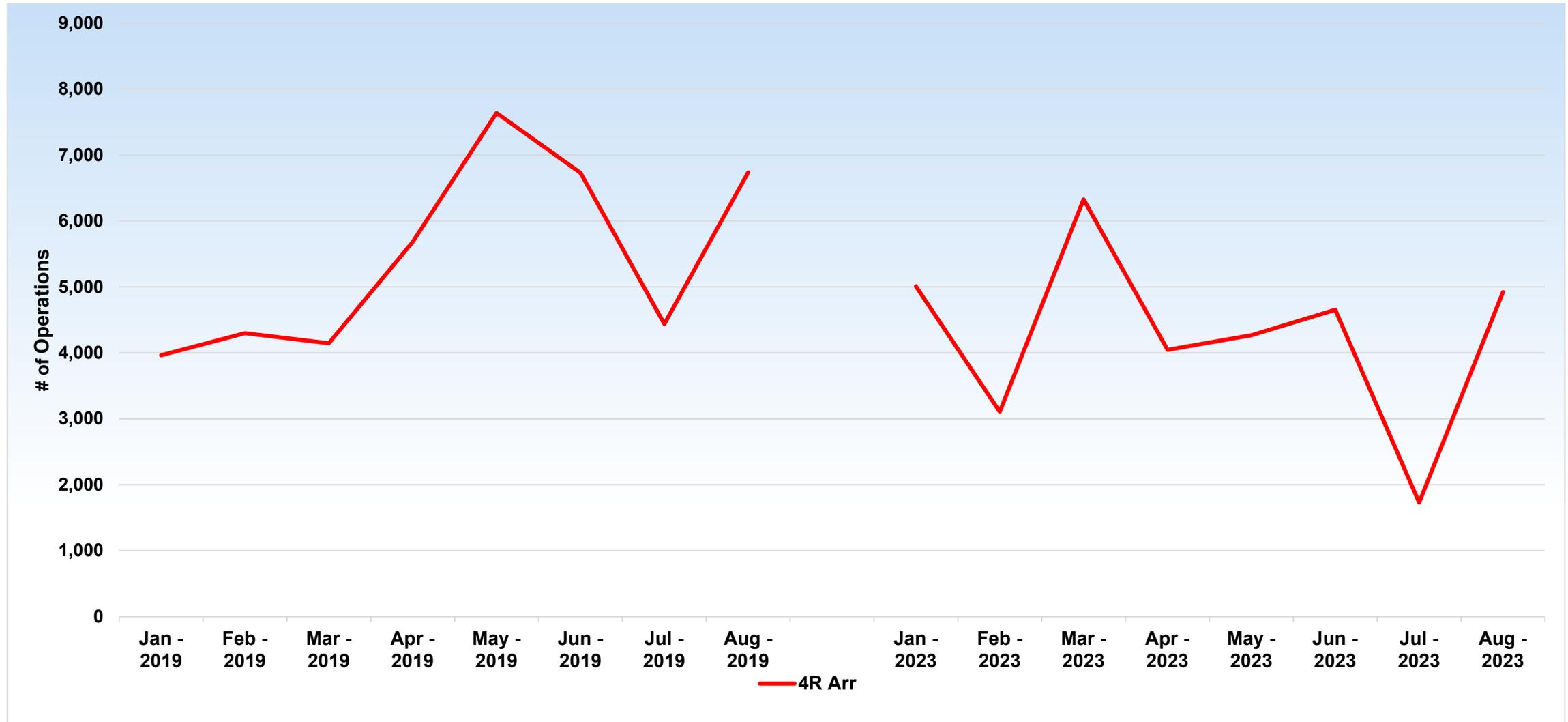
# Runway 22R Arrival Comparison – 2019 vs. 2023



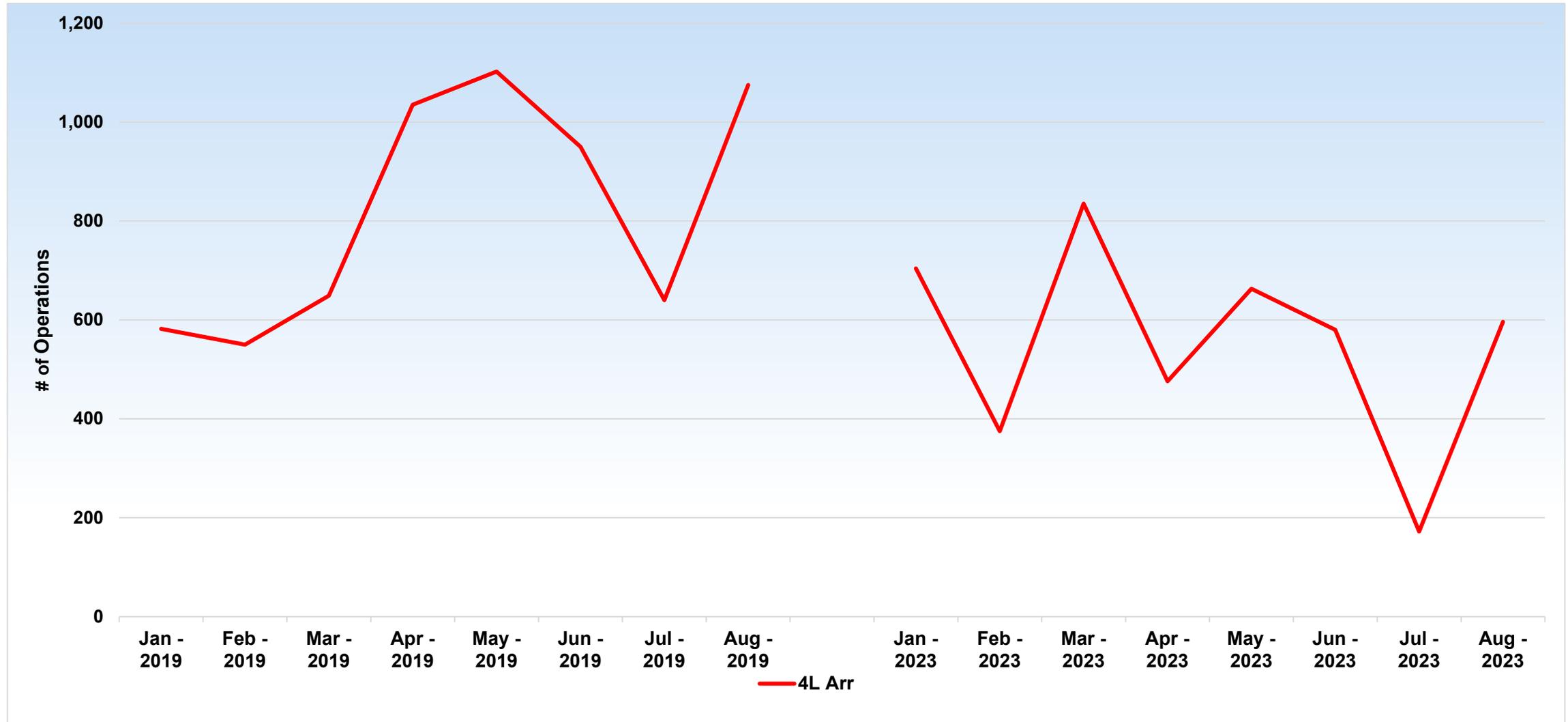
# Runway 4L Departure Comparison – 2019 vs. 2023



# Runway 4R Arrival Comparison – 2019 vs. 2023



# Runway 4L Arrival Comparison – 2019 vs. 2023



# Helpful Links

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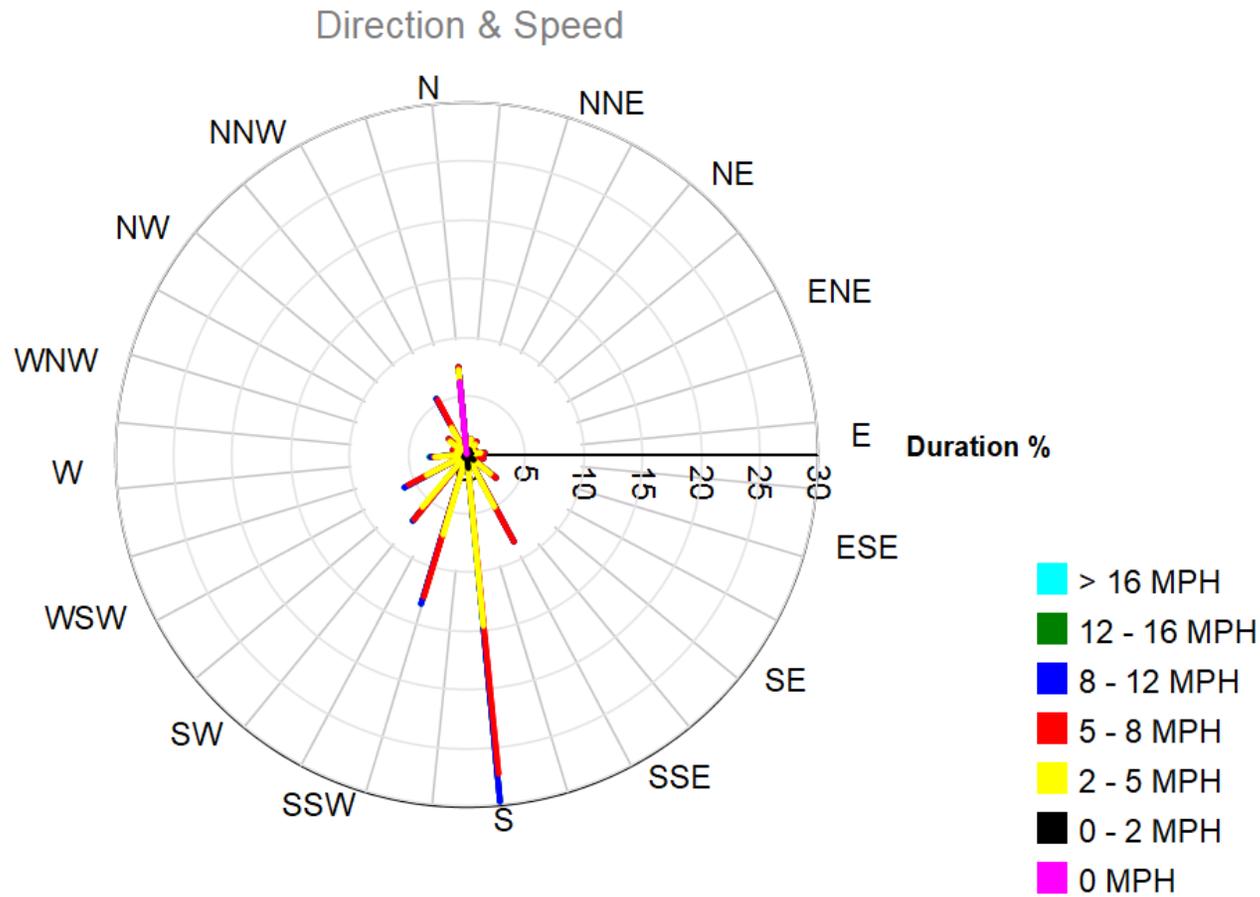
- PA Aircraft Noise webpage <https://aircraftnoise.panynj.gov/>
- Webtrak <https://webtrak.emsbk.com/panynj4>
- Submit a noise complaint <https://aircraftnoise.panynj.gov/submit-a-noise-complaint/>
- Monthly Reports <https://aircraftnoise.panynj.gov/reports/>
- Noise information and FAQs <https://aircraftnoise.panynj.gov/faqs/>

***Thank You***

A wind rose is a graphic tool that provides the summary of how wind speed and direction are distributed for a given time period, at a particular location.

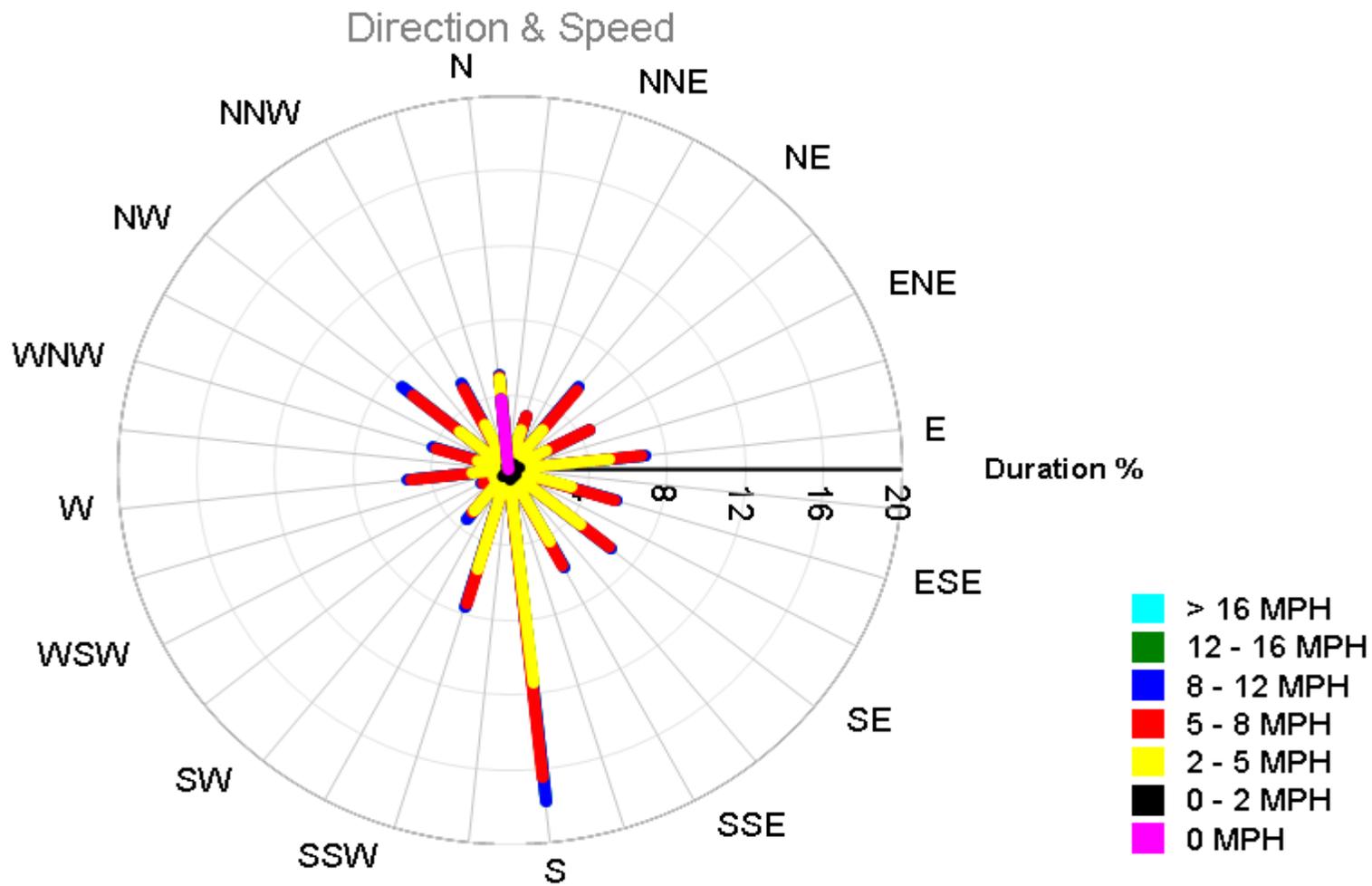
July 2023

### Wind Direction & Speed Relative Distribution



June 2023

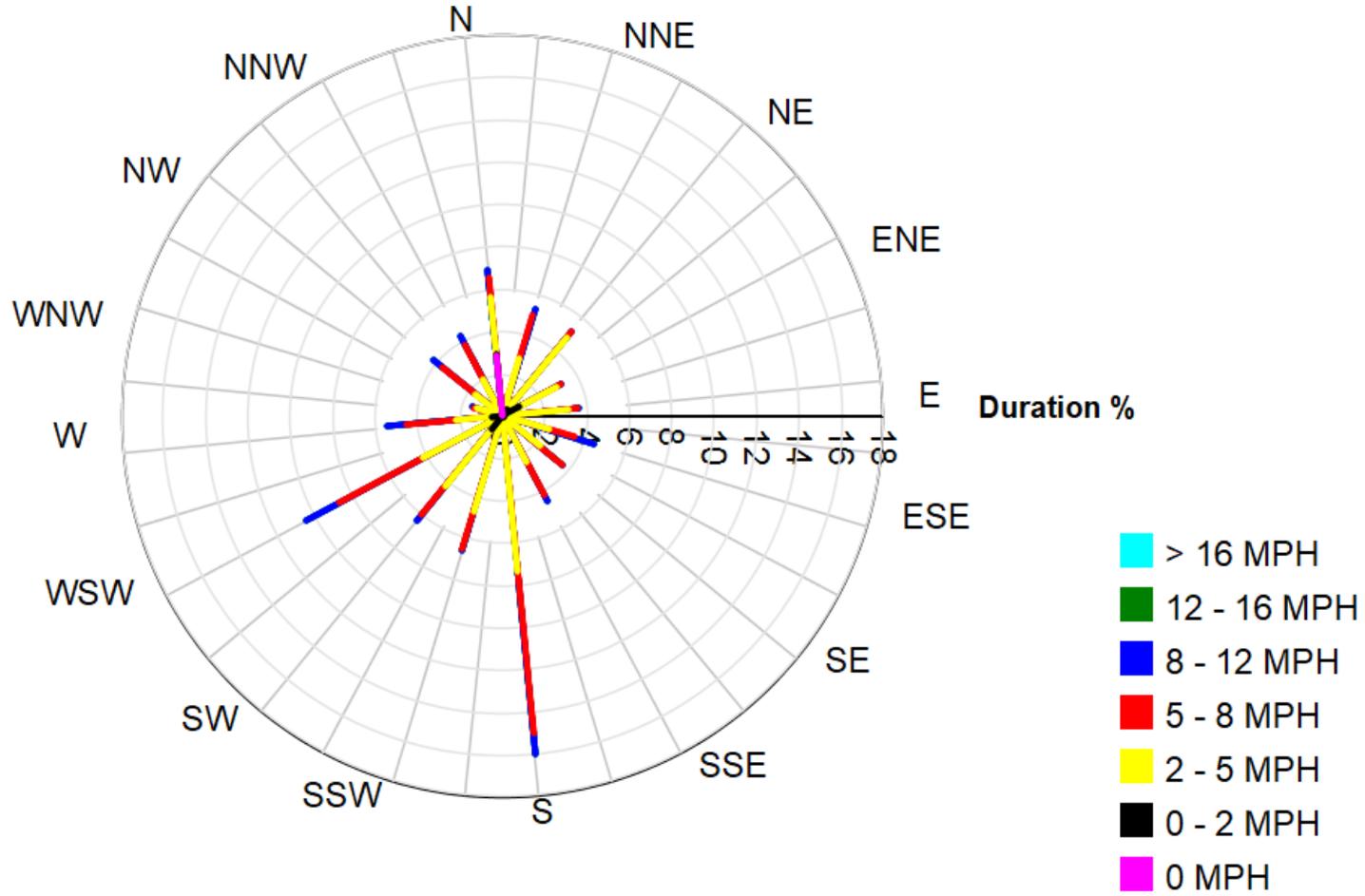
## Wind Direction & Speed Relative Distribution



May 2023

# Wind Direction & Speed Relative Distribution

Direction & Speed



# JFK Community roundtable

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September 11, 2023

**PORT  
AUTHORITY  
NY NJ**

**AIR LAND RAIL SEA**



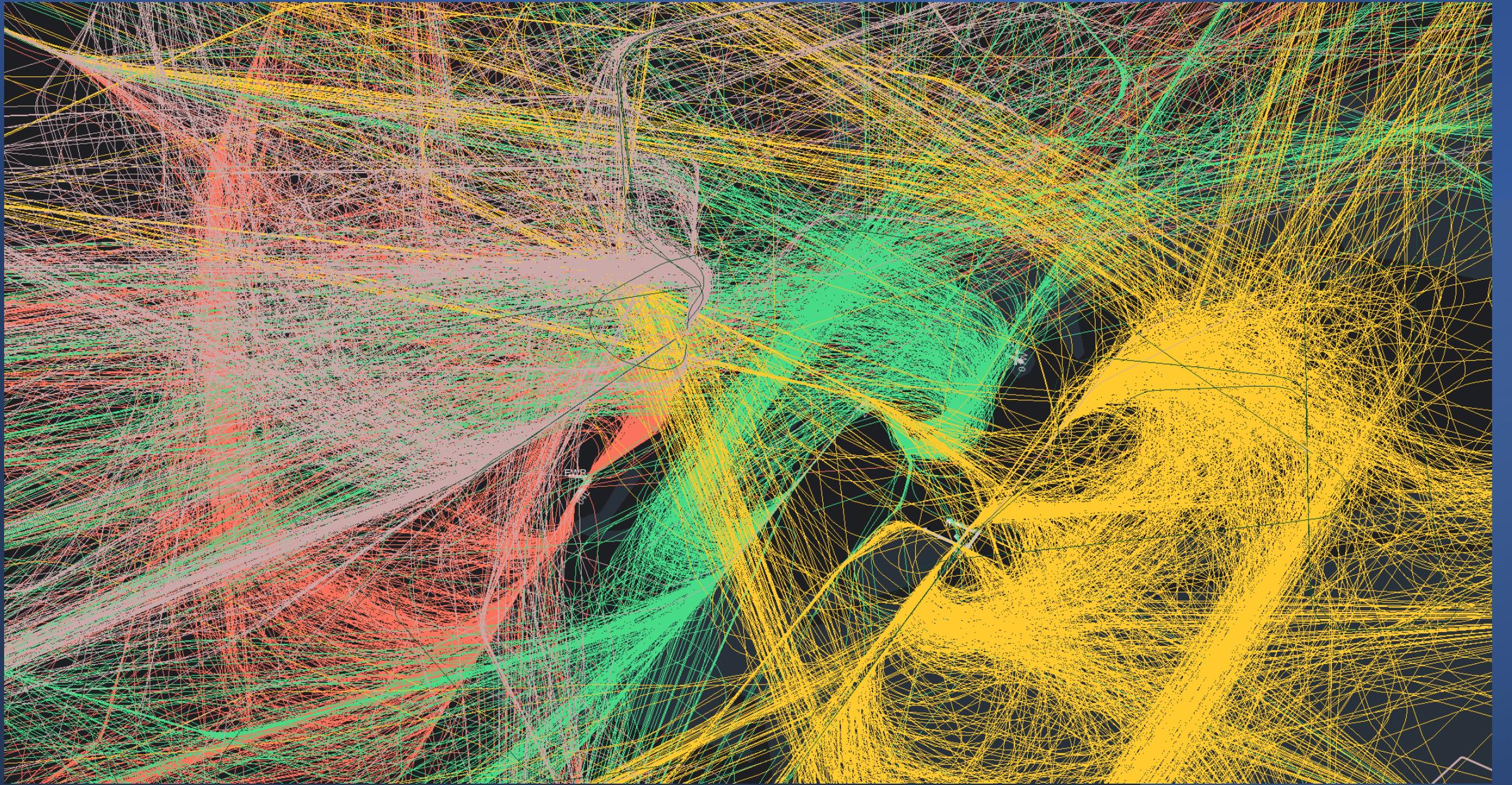
# Agenda

- NY TRACON traffic (Port Authority Airports)
- JFK traffic and configurations
- JFK Arrival runway 22L/22R
- Weather Impacts and why 22R is favored during severe weather
- Runway 4L departure track comparison 2005 vs 2023
- Questions



# Acronyms and phrases

- ILS – Instrument Landing System – radio signal aligns aircraft with the runway and provides vertical guidance to the runway.
- Glideslope – Part of the ILS system that provide vertical guidance
- Vector – Controller issued heading to guide aircraft
- Dispersal Headings – two or more paths assigned to a departure, off a runway
- Headings – paths based on a 360-degree compass
- VAP – Visual Approach – Pilot will maintain separation from other arrivals and line up with the runway
- RNAV GPS – type of approach that uses GPS technology



# JFK arrivals and departures

9/10/2023 4:30 pm

through

9/12/2022 4:30 pm

24-hour period

Arrivals in Green

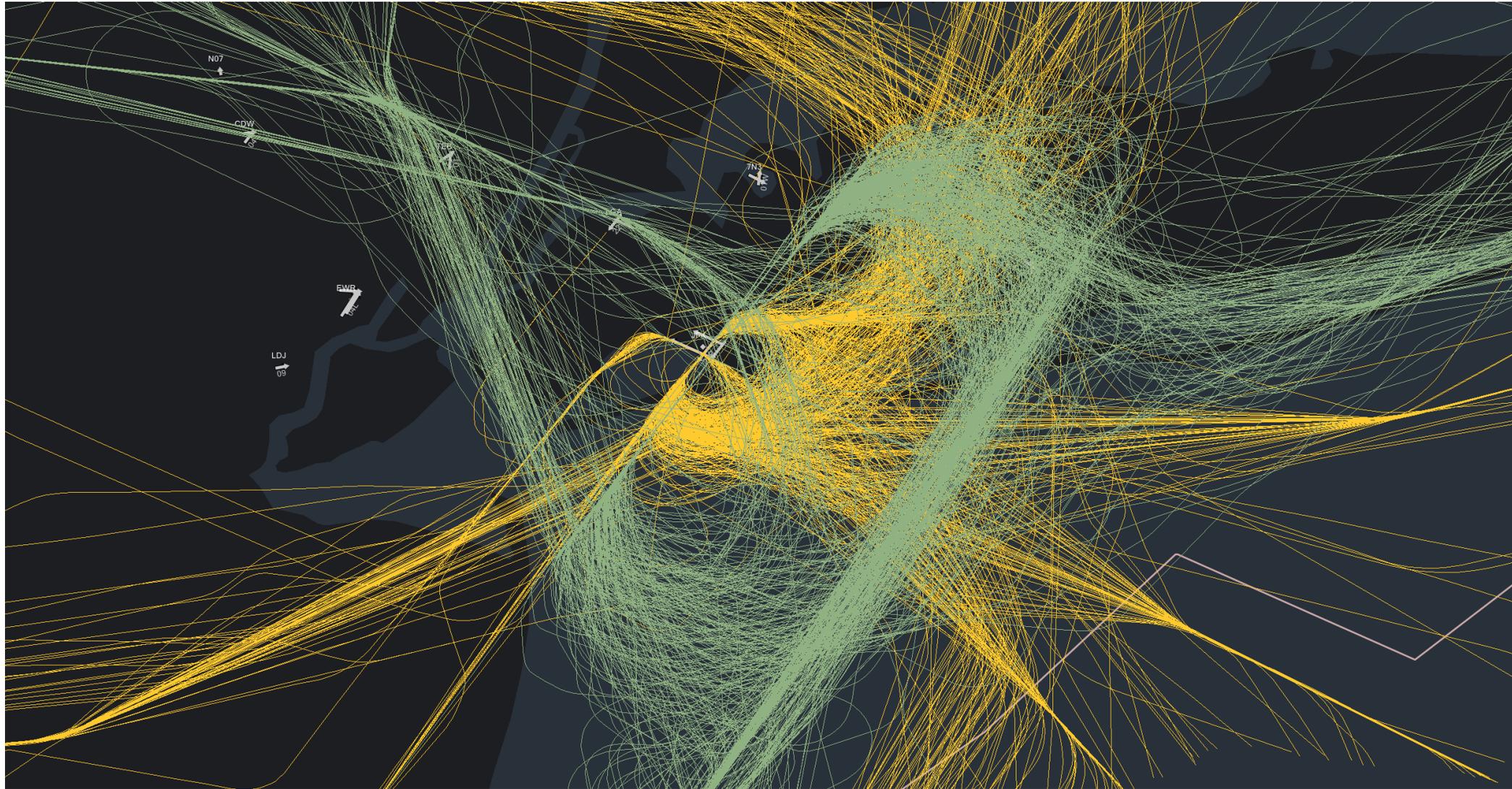
Departures in Yellow

Land 22L/22R

Depart 22R

Land 4R/4L

Depart 4L/31L



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# JFK Runways

- JFK has 4 runways
- 8 runway ends
- Runway numbers are based the magnetic heading to the nearest 10 degrees dropping the last digit
- Left or Right is used when there is a parallel pair of runways

# JFK Runways

- Prior to 2012 these same configurations were used; however, we were limited to the VOR/DME approach 22L (today the RNAV/GPS X 22L is used) whenever LGA was departing runway 13 and JFK was departing 22R AND 31L. The primary complaints received were related to this approach to runway 22L.
- The LGA runway 13 TNNIS climb allowed for the use of the ILS 22L and 22R.
- Balancing the use of the ILS's 22L/R vs the RNAV GPS X 22L approaches would provide some benefits to the communities but this is dependent on volume at the airport

# JFK runway configurations

## Primary runway configurations used

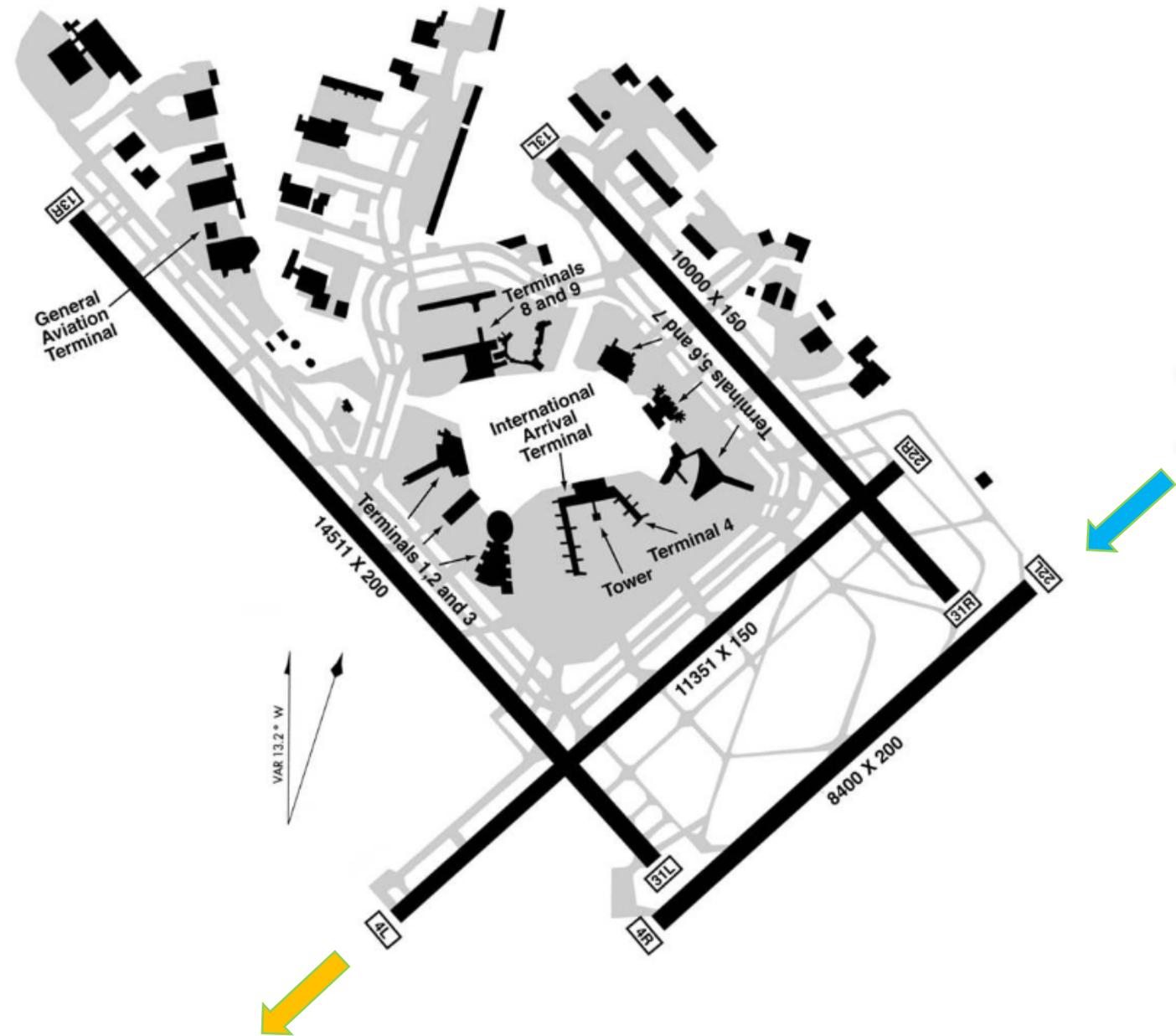
- Land 13L/22L Depart 13R
- Land 22L Depart 22R
- Land 22L/22R depart 22R/31L
- Land 31R/31L depart 31L
- Land 31R/31L depart 31L
- Land 4R/4L depart 4L
- Land 4R/4L depart 4L/31L
- Land 13L depart 13R

# JFK runway configurations

LAND 22L

DEPART 22R

Used during severe weather events due to surface flexibility

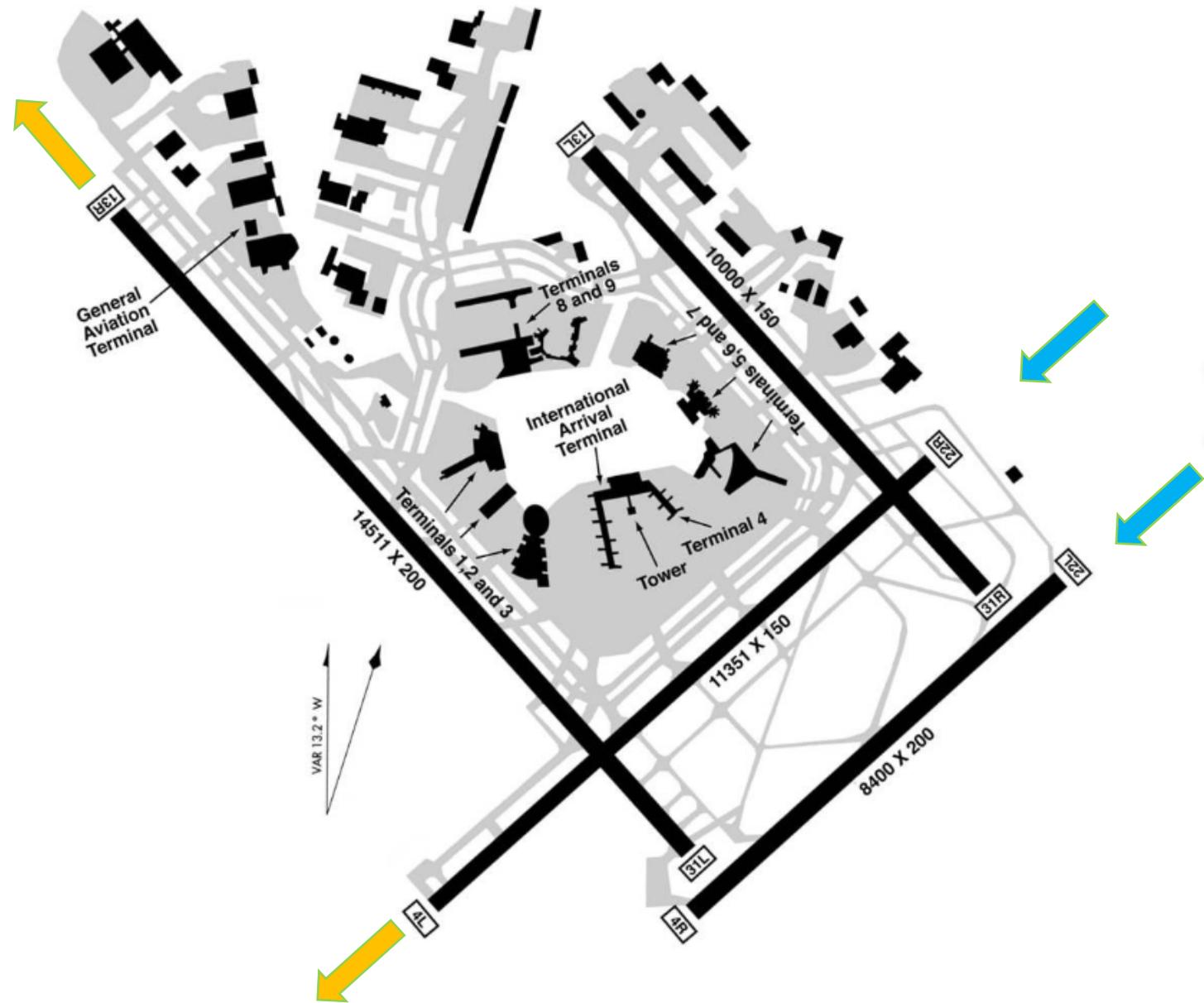


# JFK runway configurations

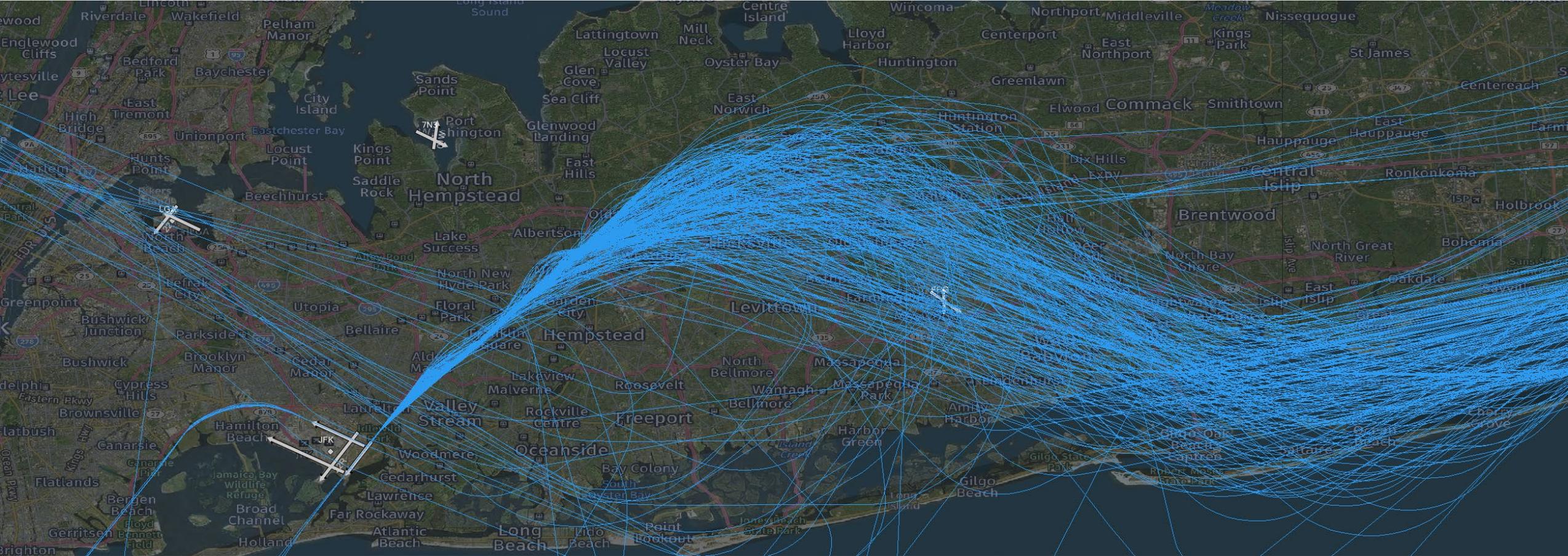
LAND 22L/22R

DEPART 22R/31L

Most efficient departure configuration

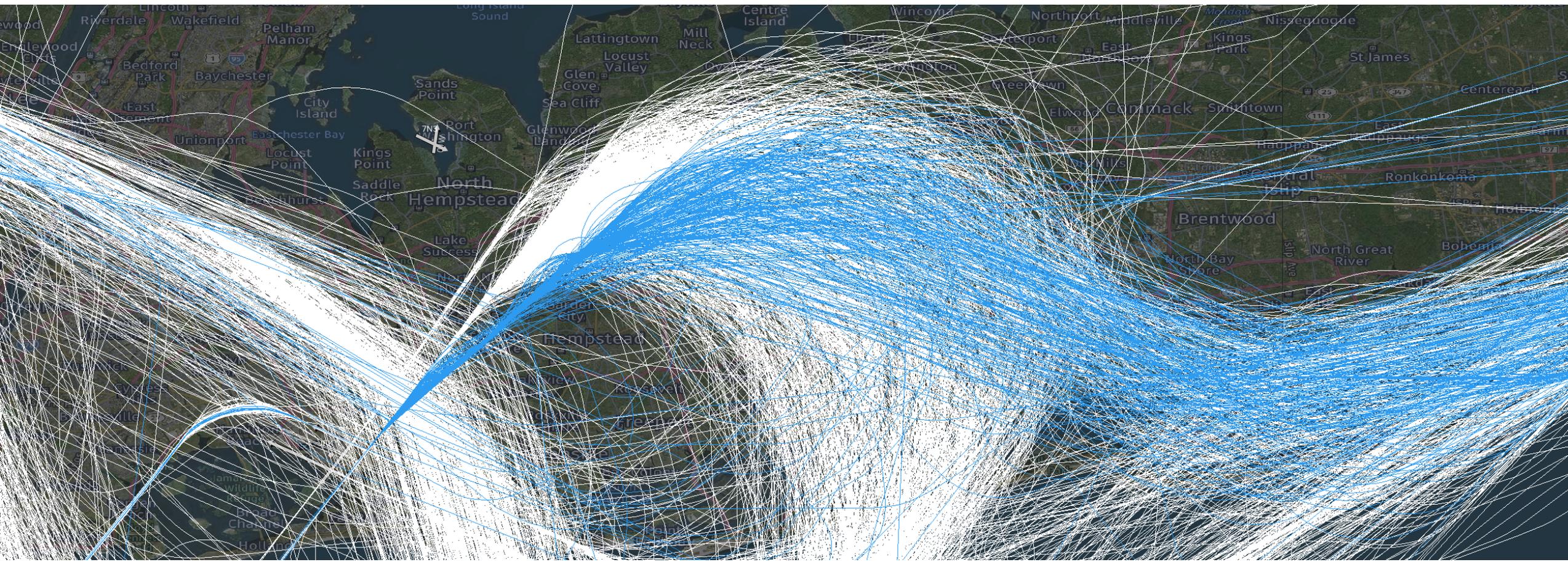


# JFK RNAV GPS X 22L

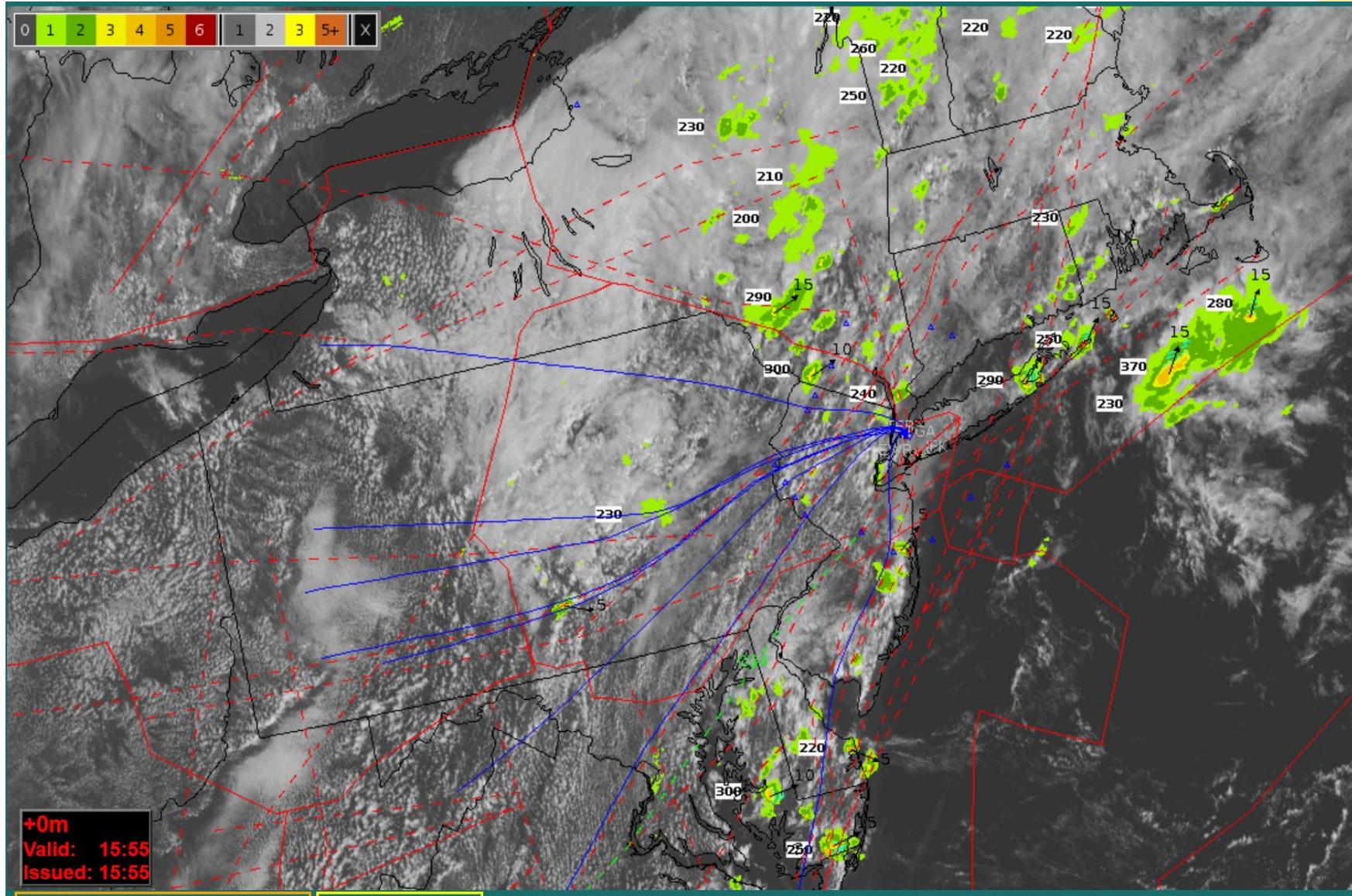


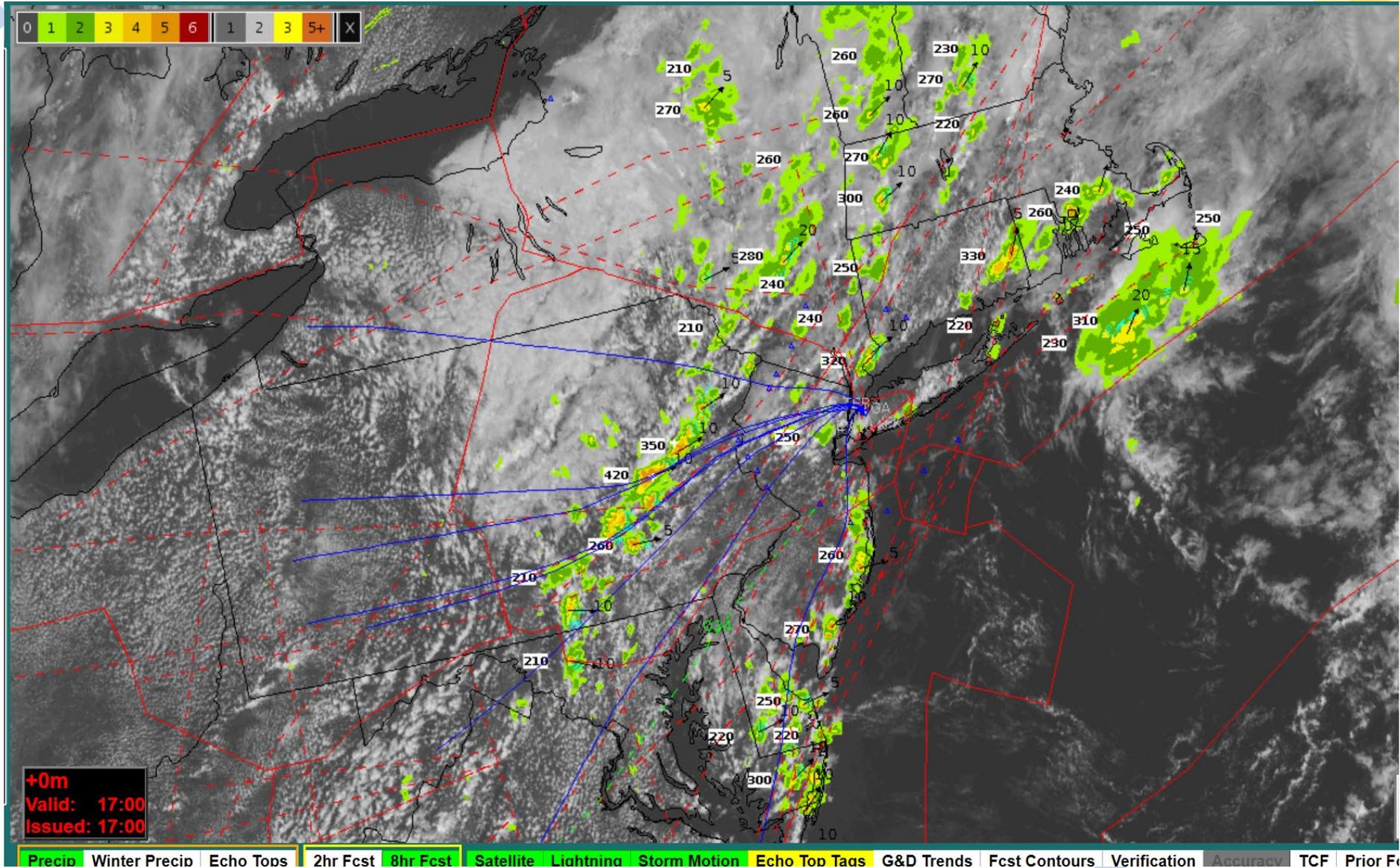
*"A World Class Operator of World Class Airports"*

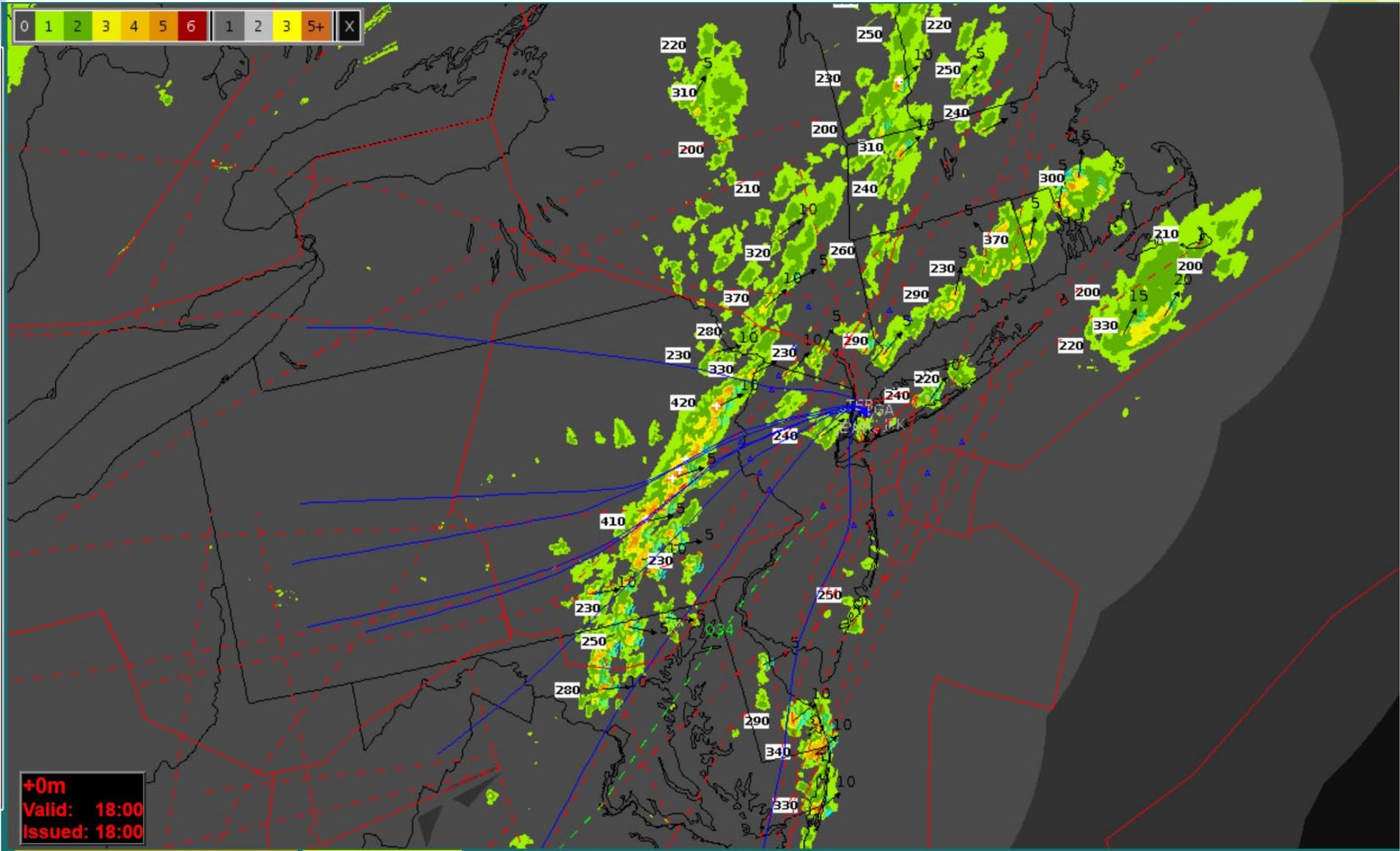
# JFK RNAV GPS X VS ILS 22L and 22R

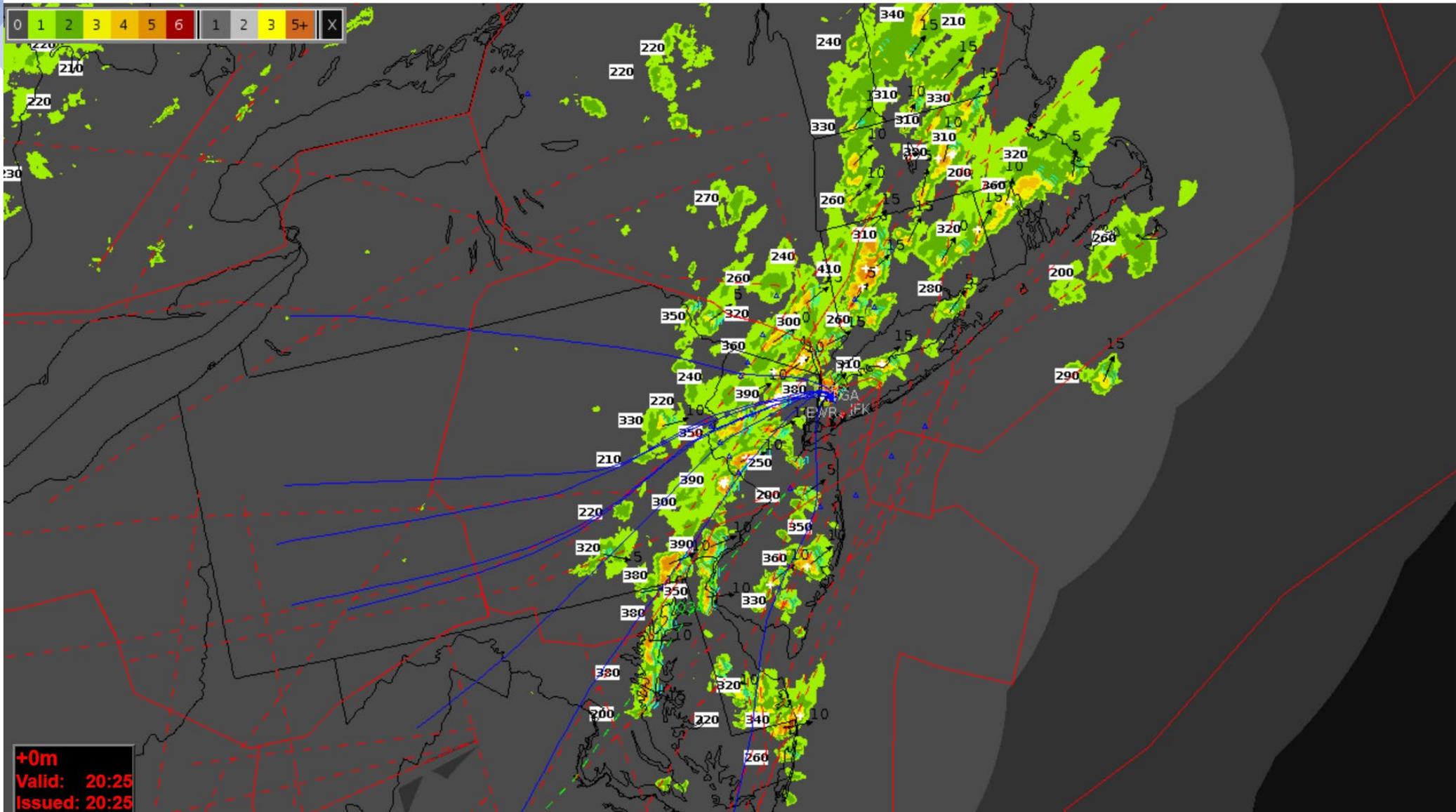


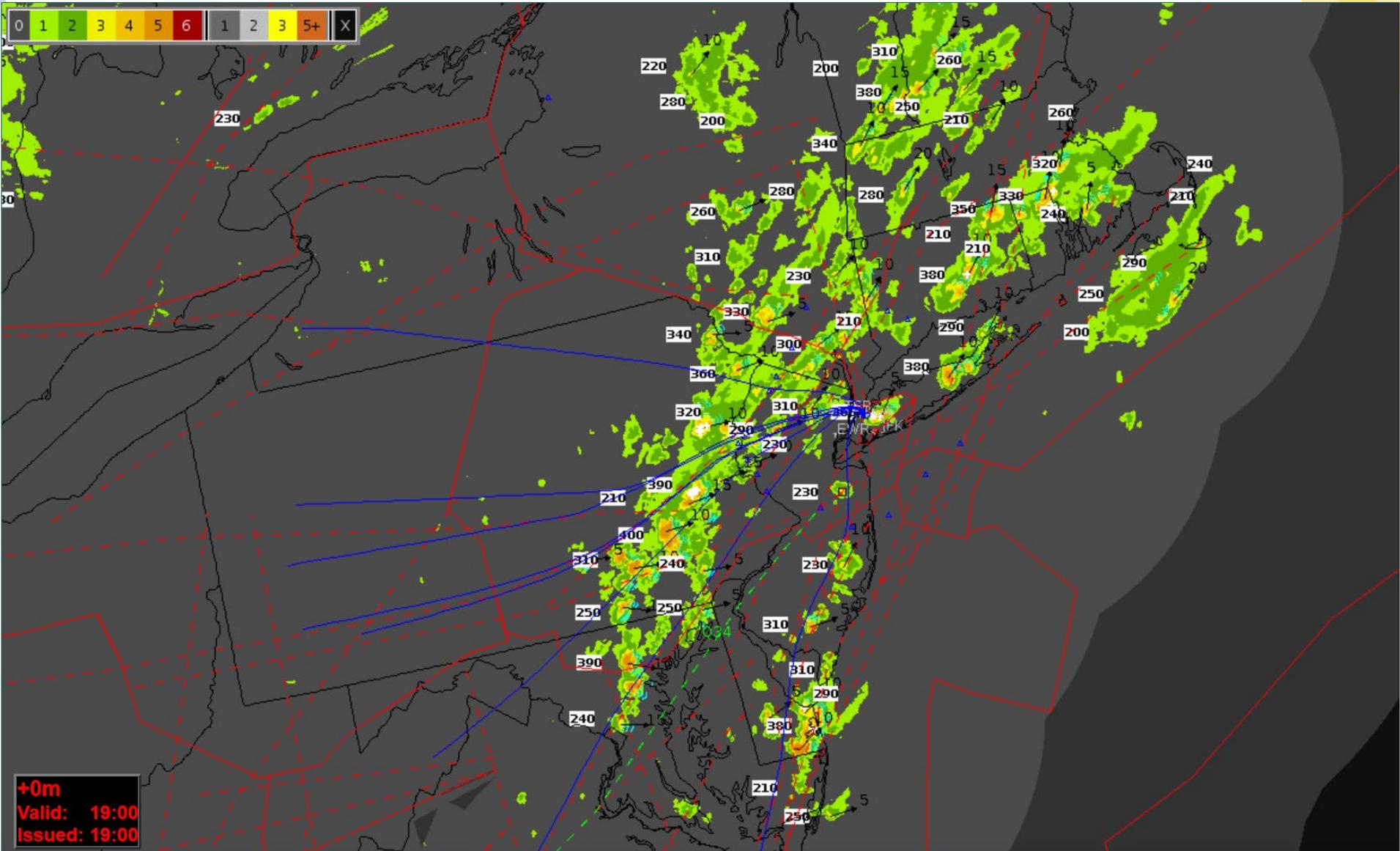
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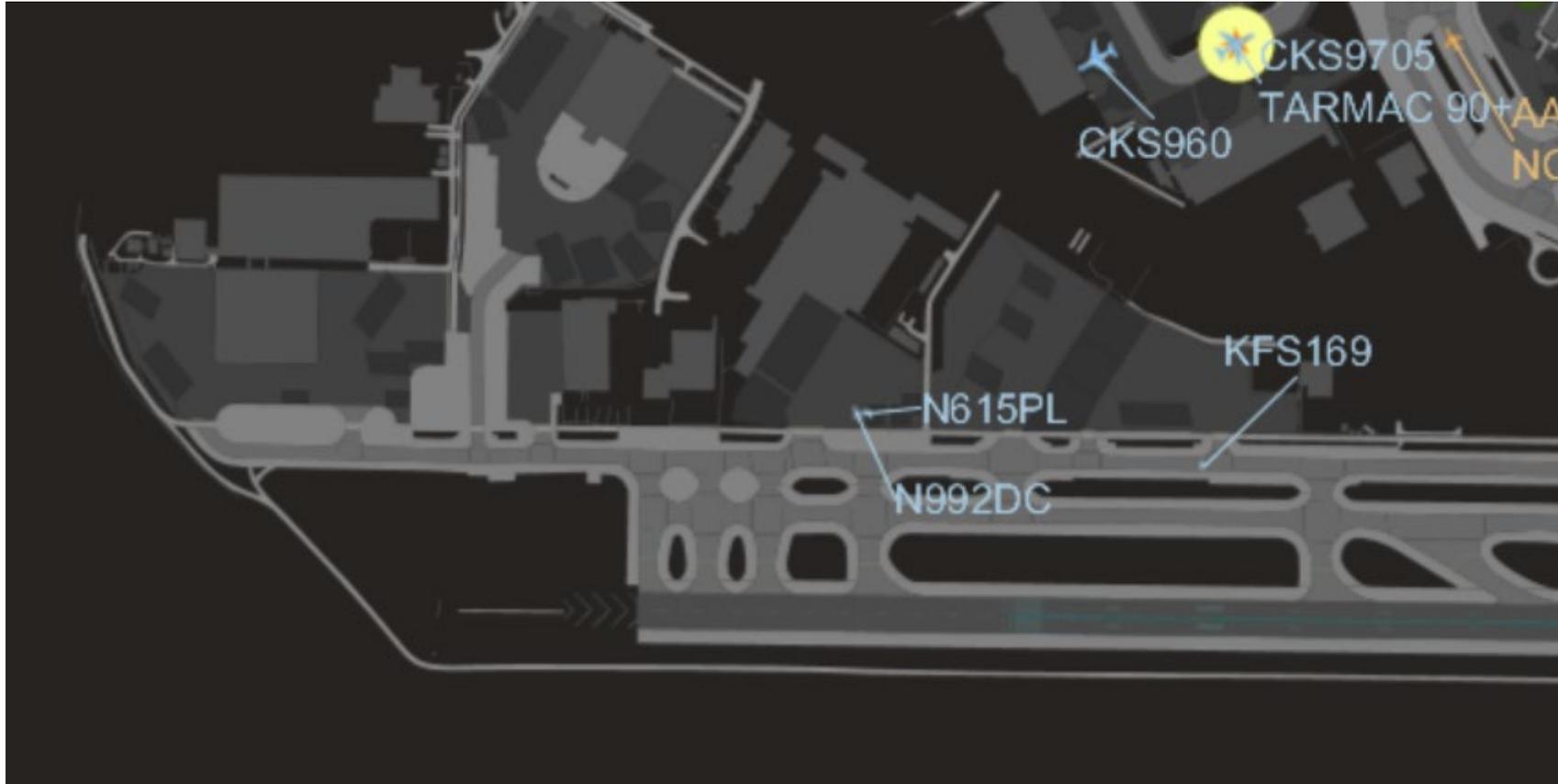








# Runway 13R



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# Runway 4L and 31L



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# JFK ILS 22L/22R depart 22R



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NY

US Department of Transportation  
Federal Aviation Administration

**GRAPHIC DEPARTURE PROCEDURE (DP)**

1. Bearings, headings, courses, tracks, and radials are magnetic.
2. Distances are in nautical miles.
3. Altitudes are minimum altitudes unless otherwise indicated.
4. Graphic depiction attached.

OBSTACLE     SID     RNAV

(1) DP Route Description: TAKEOFF RUNWAYS 4L/R; CLIMBING RIGHT TURN TO 5000 VIA HEADING 100.00, THENCE... TAKEOFF RUNWAYS 13L/R; CLIMB VIA ASSIGNED HEADING, MAINTAIN 5000 FEET, THENCE... TAKEOFF RUNWAYS 22L/R; CLIMB HEADING 224.77, MAINTAIN 5000 FEET, THENCE... GATEWAY CLIMB\*\*: INTERCEPT THE JFK VOR/DME R-232 SOUTH WEST BOUND UNTIL 5 DME, THEN TURN LEFT HEADING 220, MAINTAIN 5000 FEET, THENCE... TAKEOFF RUNWAYS 31L/R; BREEZY POINT CLIMB: CLIMBING LEFT TURN DIRECT CRI VOR/DME, MAKE TURN EAST OF CRI R-039 THEN VIA CRI R-223 TO RNRGR/CRI 27 DME. CROSS CRI 3 DME OR JFK R-253 AT OR ABOVE 2500 FEET, MAINTAIN 5000 FEET, THENCE... BRIDGE CLIMB\*\*\*: CLIMBING LEFT TURN DIRECT OGY NDB, THEN VIA HEADING 220.00, MAKE TURN EAST OF CRI R-039. CROSS JFK R-253 AT OR ABOVE 2500 FEET, MAINTAIN 5000 FEET, THENCE... CANARSIE CLIMB: CLIMBING LEFT TURN DIRECT CRI VOR/DME, MAKE TURN EAST OF CRI R-039, THEN VIA CRI R-176. CROSS CRI 2 DME OR JFK R-253 AT OR ABOVE 2500 FEET, MAINTAIN 5000 FEET, THENCE... IDLEWILD CLIMB\*\*\*: CLIMBING RIGHT TURN TO 2000 VIA HEADING 090.00, REMAIN WITHIN JFK 2.5 DME\*\*\*\*, THENCE... (CONT)

(2) Transition Routes (Graphic Depiction Only)

(a) Transition Name	(b) Transition Computer Codes	(c) From FIX/NAVAID	(d) To FIX/NAVAID	(e) Course / Distance	(f) MEA / MOCA	(g) Crossing Altitudes/Fixes
THIS IS A CORRECTED COPY OF THIS PROCEDURE PUBLISHED IN NFDD #151 DATED 8/7/06.						

(3) Procedural Data Notes / Takeoff Minimums: \*NOTE: TO BE ASSIGNED DURING THE PERIOD 2200-0700 LOCAL. \*\* NOTE: ADF REQUIRED. \*\*\* NOTE: TO BE ASSIGNED BY ATC TO NON-TURBOJET AIRCRAFT. \*\*\*\* NOTE: IF UNABLE TO REMAIN WITHIN JFK 2.5 DME, ADVISE ATC.  
NOTE: RADAR REQUIRED  
NOTE: HAPIE DEPARTURES EXPECT VECTORS TO JFK R-124  
NOTE: COATE DEPARTURES EXPECT VECTORS TO SAX VORTAC OR SAX R-311  
NOTE: BETTE DEPARTURES EXPECT VECTORS TO JFK R-109  
NOTE: BAYYS DEPARTURES EXPECT VECTORS TO BDR VOR/DME OR BDR R-054

(4) Takeoff Obstacle Notes:NOTE: RWY 4L, TAXIING AIRCRAFT 691' FROM DER, 390' LEFT OR RIGHT OF RWY CENTERLINE, 64' AGL/ 77' MSL. CROSS DER AT OR ABOVE 35' AGL/47' MSL. TREE 1824' FROM DER, 180' RIGHT OF CENTERLINE, 63' AGL/79' MSL. TREE 1847' FROM DER, 88' LEFT OF CENTERLINE, 54' AGL/67' MSL. MULTIPLE OBSTRUCTION LIGHTS ON FENCE BEGINNING 249' FROM DER, 316' LEFT OF CENTERLINE, 10' AGL/22' MSL. (CONT PAGE 2)

(5) Controlling Obstacles: RWY 13R: 227 MSL OBSTRUCTION LIGHT ON TANK 403648.04N/0734515.72W.  
RWY 31L: 1515 MSL BUILDING 404454.00N/035908.00W.

(6) Fixes and/or NAVAID'S : CHART: GAYEL; HAAYS; NEION; COATE; LANNA; WHITE; DIXIE; WAVEY; BAYYS; SHIPP; GREKI; HAPIE; BETTE; MERIT; RNRGR; SBJ VOR/DME; SAX VORTAC; DPK VOR/DME; LGA VOR/DME; RBV VORTAC; ARD VOR/DME; BDR VOR/DME; CHART LAT/LONGS FOR FIXES AND FACILITIES.

(7) DP Name KENNEDY	(8) Number ONE	(9) DP Computer Code	(10) Superseded Number NINE	(11) Dated 9/6/01	(12) Effective Date SEP 28 2006
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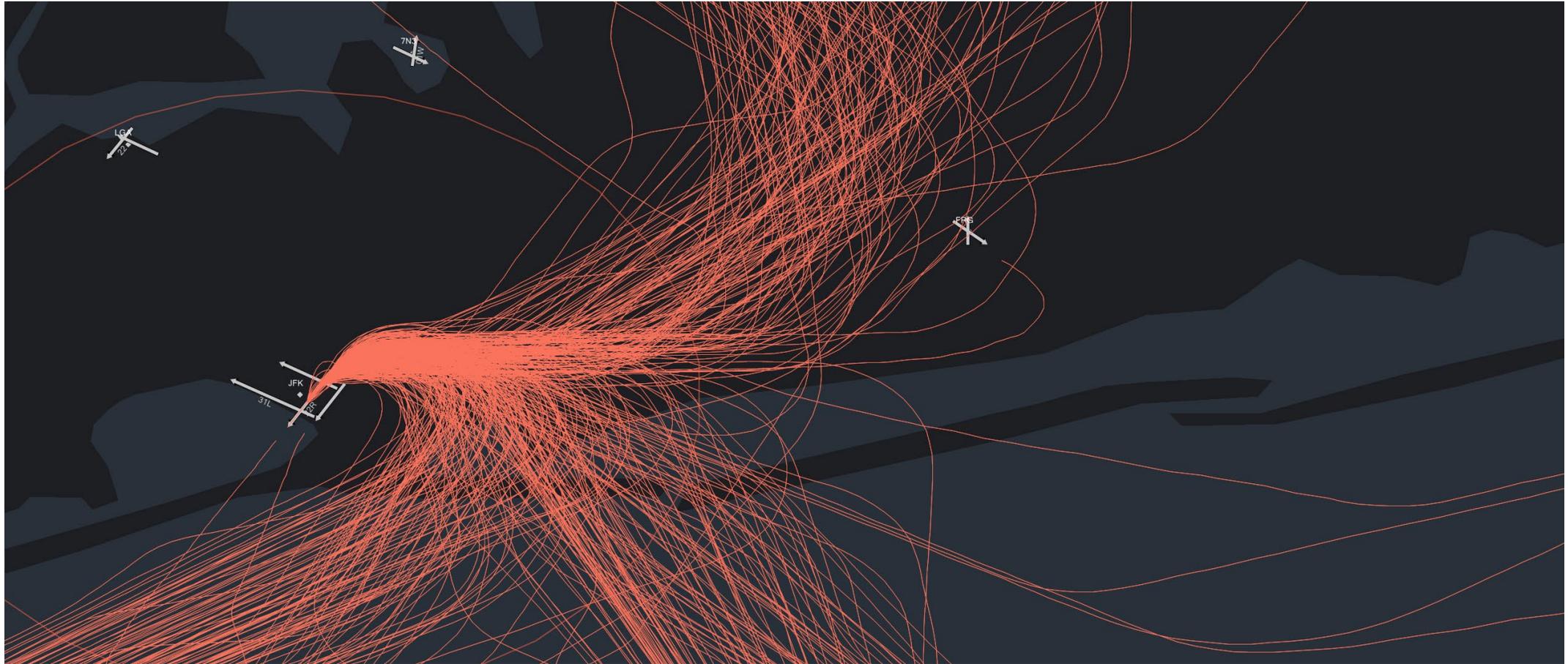
JFK SID Runway  
4L departures –  
CONVENTIONAL NAVIGATION  
NOT PBN

PAGE 38

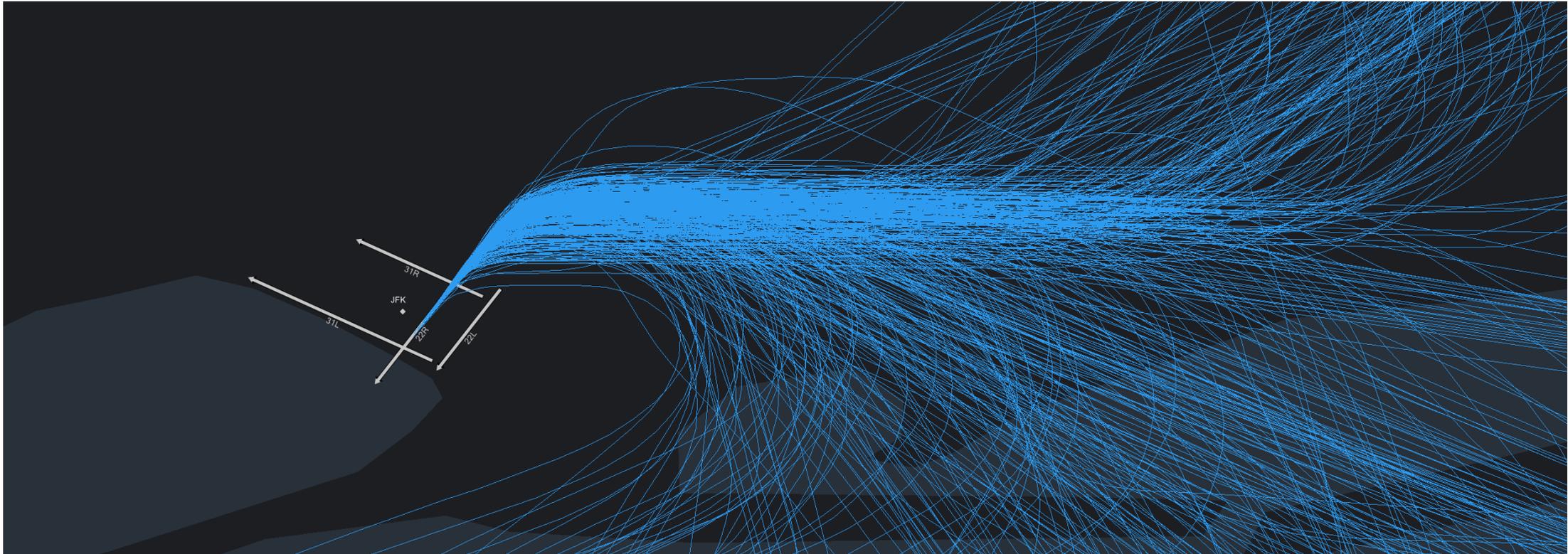
NFDD 161

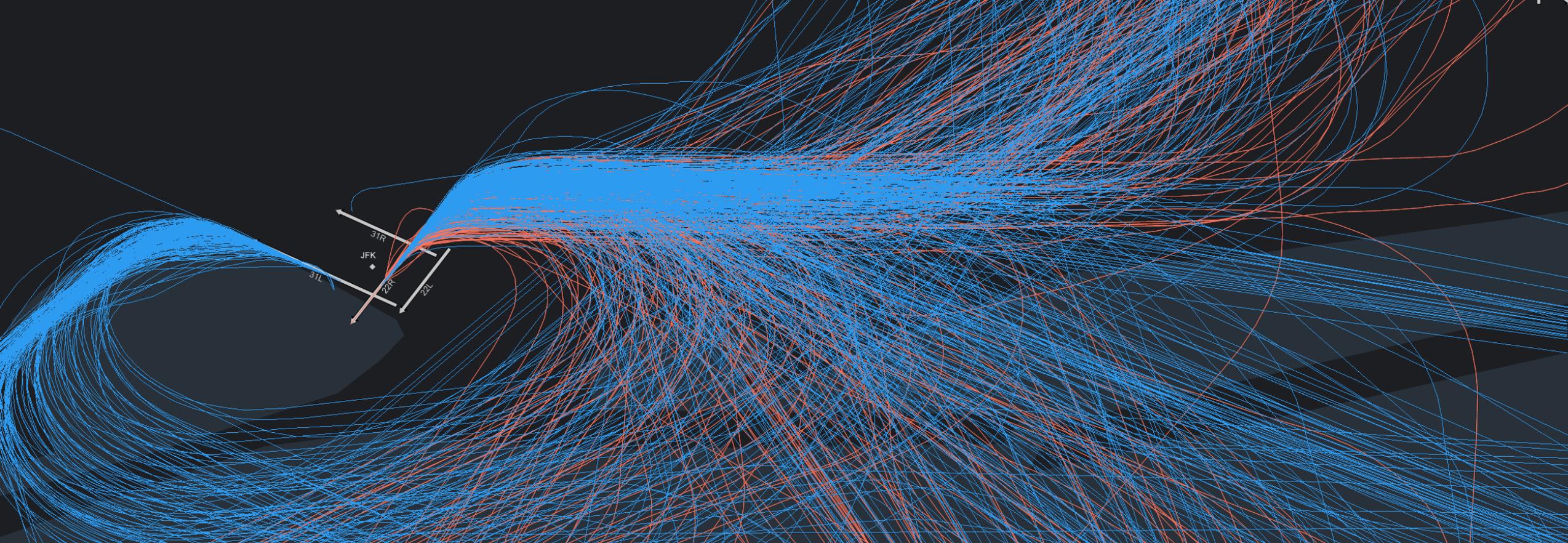
8/21/2006

JFK 4L departure track 6/1-2/2005.



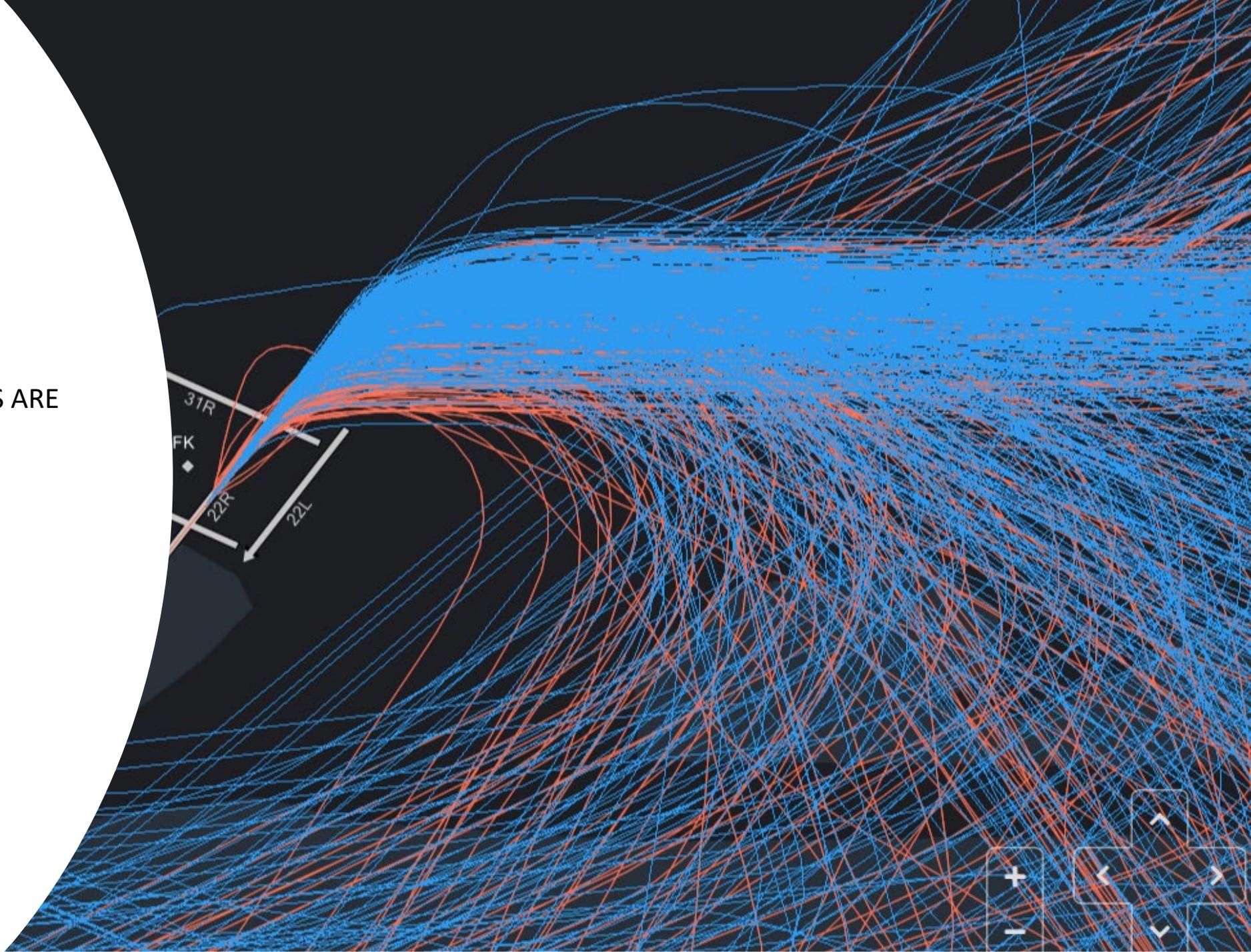
# JFK DEPARTURE TRACKS 6/4/2023





## 2005 VS 2023

- AS YOU CAN SEE THE TRACKS ARE NEARLY IDENTICAL
- 2005 IN ORANGE
- 2023 IN BLUE



# Community Suggestions

- *Our perception of what's going on is that currently ATC is **defaulting to ILS 22R/L** which allows for increased capacity, knowing that crosswinds are not an issue unless above 20KT or so, and that unless wind changes to tailwind or more than crosswind, or is above 20kt, the 22s are OK to use, and that **noise abatement procedures are not in the picture anymore.***
- *Additionally, we are really **concerned** that capacity is driving decisions by ATC and Port Authority to prefer using 4/22 flows, even at the cost of safety (more **crosswind and tailwind landings and takeoffs**)*
- *1- Please avoid crosswind landings regardless of wind speed and make the change of configuration as soon as wind favors a different runway other than 22L 22R.*
- *2- Currently, when winds are defined as calm (5KT or under) we noticed that you select a high capacity runway when it could be used to disperse noise by selecting runways that have lower monthly usage than 22L.*
- *3- Please consider bringing back VOR to 22L, at least until the implementation of GBAS is completed.*
- *4- We are aware that starting 2025 GBAS will be ready at JFK and we would like to urge you to use it for noise abatement and not just to increase capacity, as it has the capability to help in that regard.*
- *5- We are aware that when the 22s are assigned by the tower, it is possible for TRACON to use RNAV X 22L when volume is at or around 30 arrivals per hour. That switch is not happening or it rarely happens.*
- *We actually had a good experience in the past by calling TRACON and asking if it would be possible to switch to RNAV X 22L, since volume at the time was low, and not only were they very nice and receptive but the switch actually took place in many of the occasions.*
- *6- We would like to propose the establishment of a direct communication channel between ATC and a selected team of technically informed residents, just a few minutes a week to clarify certain decisions taken by the tower or TRACON. This could be via phone, email or even via Twitter. Our community already utilizes a Twitter account (@JFKNoiseWatch) to highlight times when noise abatement practices seem absent, providing hard data for other residents to understand the why of certain operations. Having a dedicated ATC presence on such platform, providing clarifications or even agreeing with our comments and hopefully making the necessary adjustments, would be invaluable in not only strengthening ties between ATC and the community, but possibly finding solutions through collaboration.*
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# Questions?



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