

Noise Management Forums Pearson Public Meeting

December 7, 2023



Welcome + Introductions



Pearson Public Meetings

- The Pearson Public Meetings are part of the Noise Management Forums.
- The meetings provide residents with:
 - A chance to learn more about airport operations and how your area is impacted
 - Hear updates from GTAA and NAV CANADA about noise management
 - Ask questions or raise concerns related to airport operations
- Each meeting has a drop-in style session where residents can ask questions about operations in their area and a public meeting session which includes presentations and a public question period. Both the drop-in session and public meetings are virtual
- The Public Meetings are recorded and posted online at www.torontopearson.com/nmf

Agenda

- About Toronto Pearson + Noise Management Roles and Responsibilities
- Operations + Community Impacts
- NAV CANADA
 - Six Days of Runway Usage at Pearson
- GTAA Updates
- Question Period

Operations + Community Impacts



About Toronto Pearson



In the first three quarters of 2023, Toronto Pearson facilitated 33.8 million passengers and 281,069 aircraft movements, directly employing 50,000 people from 400 employers, and enabling 6% of Ontario's GDP



Toronto Pearson is open 24 hours a day. The day is divided into regular operating hours (6:30 a.m. to midnight), preferential runway system hours and restricted hours



Preferential hours (midnight to 6:29 a.m.): prioritize runways that overfly the fewest people



Restricted Hours (12:30 to 6:29 a.m.): governed by a Night Flight Restriction Program which limits number of movements. Runs from Nov 1 to Oct 31. Annual budget increases with passenger growth

Noise Management Roles and Responsibilities

The **Greater Toronto Airports Authority** (GTAA) is a not-for-profit private business that has managed and operated the airport since 1996. The GTAA develops and manages a Noise Management Program and explores new opportunities for noise mitigation.

NAV CANADA is the air navigation provider in Canada, responsible for safe and efficient movement of aircraft. NAV CANADA designs and publishes a network of air routes to design criteria set by Transport Canada and ICAO. It also assigns runways at Toronto Pearson considering winds, weather, capacity and preferential runway system.

Airlines are responsible for conducting operations in accordance with the Transport Canada regulations and the airport's Noise Abatement Procedures and Noise Operating Restrictions.

Transport Canada is the regulator for aviation in Canada. It ensures Canadian aircraft are compliant with the international noise standards through the aircraft certification process, establishes flight path design criteria and land-use guidelines based on noise exposure. It approves proposed changes to and enforces the Noise Abatement Procedures and Noise Operating Restrictions. Transport Canada also audits the airport's Night Flight Restriction Program annually.

Our Runways

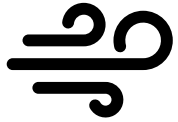
Toronto Pearson has five runways

- Two runways go in the north-south direction:
 - Runway 15L/33R
 - Runway 15R/33L
- Three runways go in the east-west direction:
 - Runway 05/23
 - Runway 06L/24R
 - Runway 06R/24L
- Runways can be used from both ends, so while there are five runways, there are 10 operational ends for arrivals and departures



Runway Selection

Air Traffic Controllers consider many factors when selecting a runway configuration:



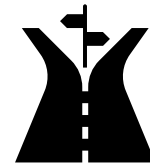
Wind - direction, windspeed, crosswinds



Runway and Taxiway Availability - can be affected by maintenance, snow clearing and other factors



Surface conditions - (wet, dry, ice, snow) combined with wind conditions



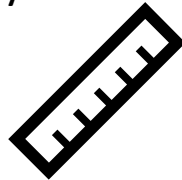
Distance to Runway – the primary departure runway is typically the shortest distance from the terminal – less fuel consumption, less GHG



Traffic Demand & Capacity – traffic levels vary seasonally and even throughout the day. Runway configurations are selected for optimal capacity



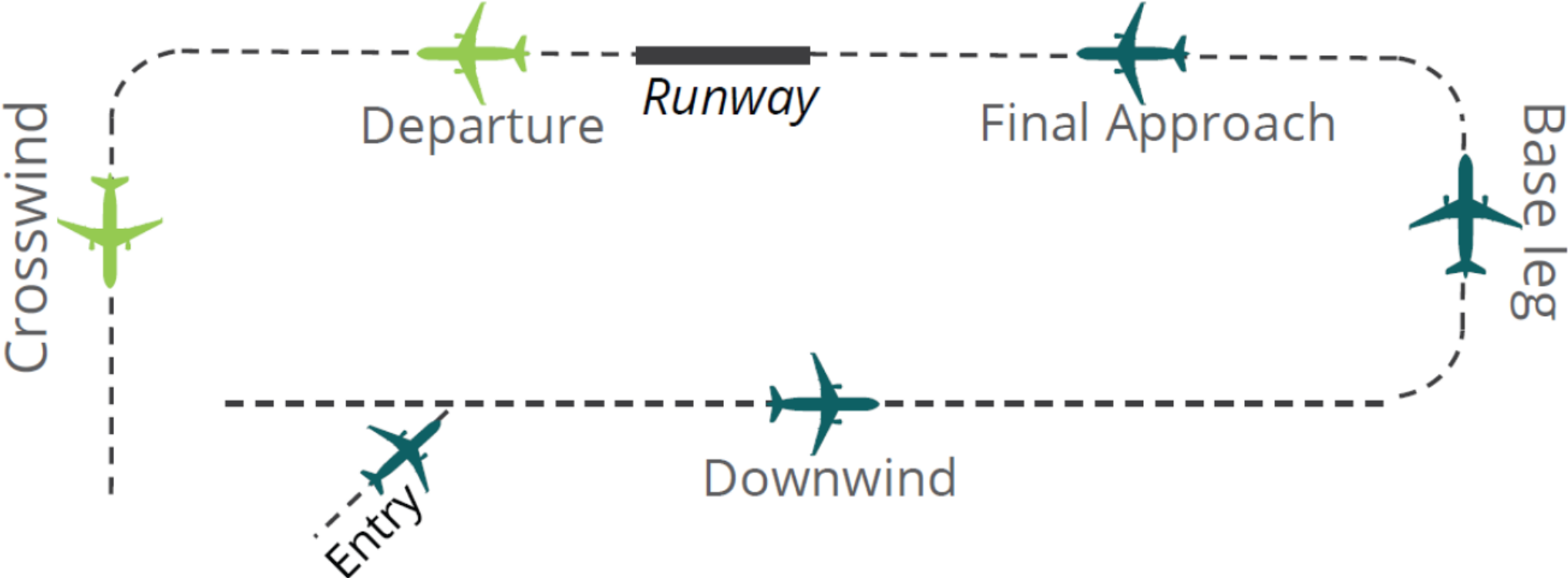
Time of Day – the Nighttime Preferential Runway System is used between midnight and 6:30 am. It is designed to affect the fewest people in the nighttime hours



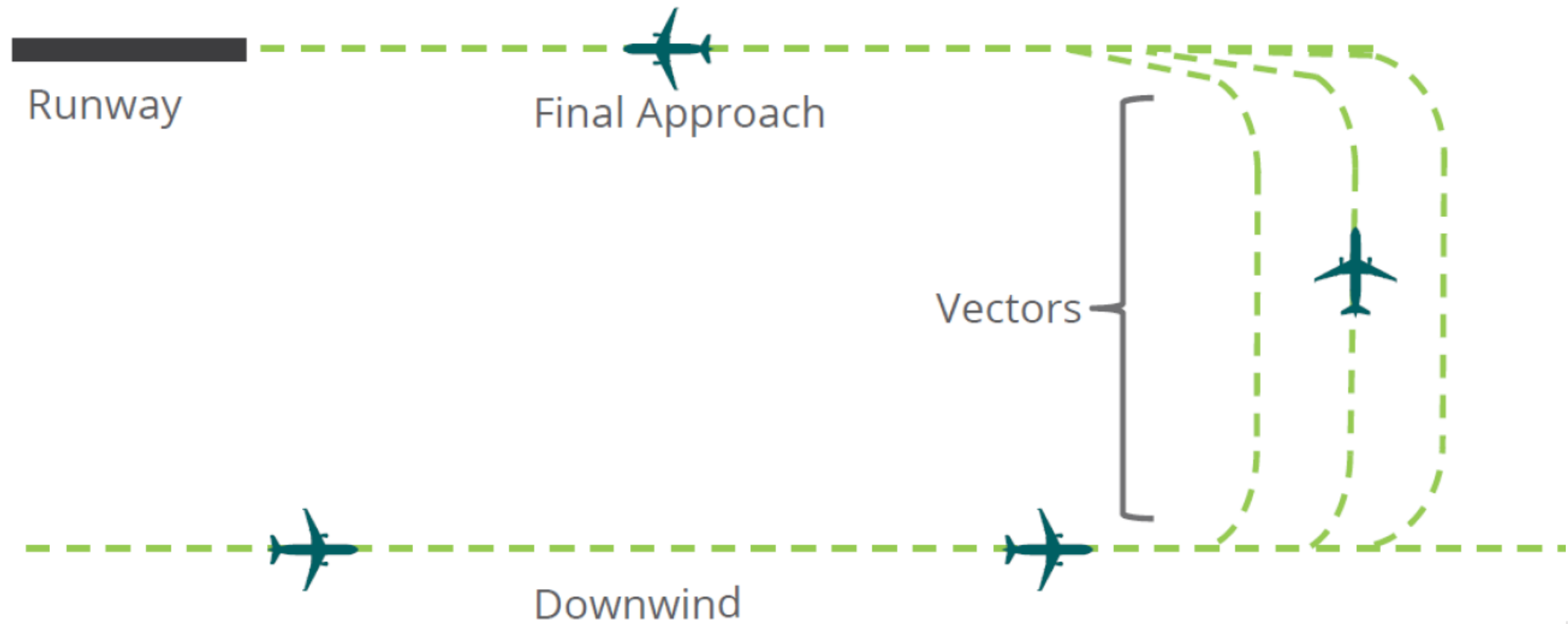
Runway Length –sometimes a longer runway is needed for long haul, large/heavy aircraft

The east/west runways are used for ~95% of traffic, due to predominant easterly/westerly winds, and capacity

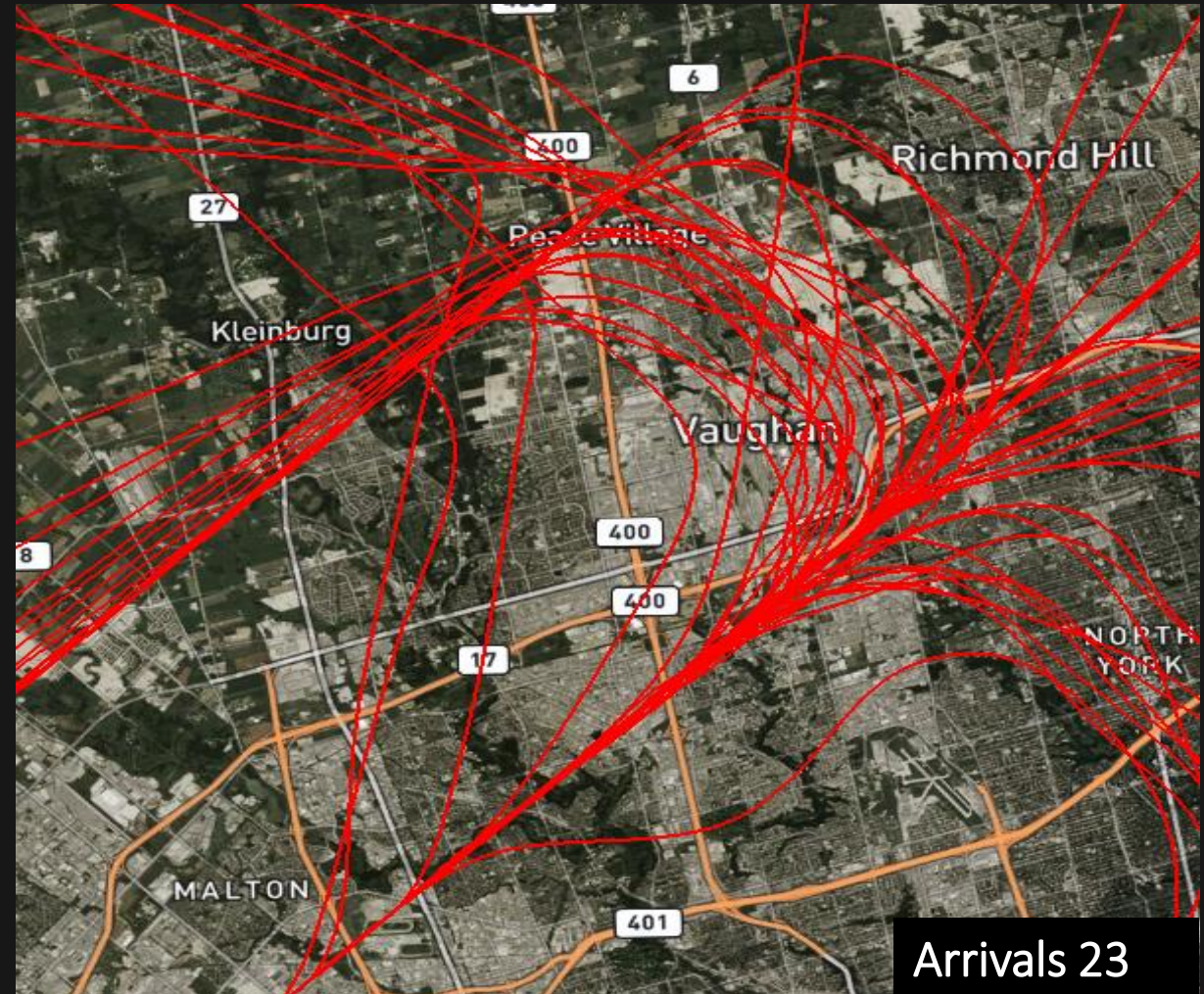
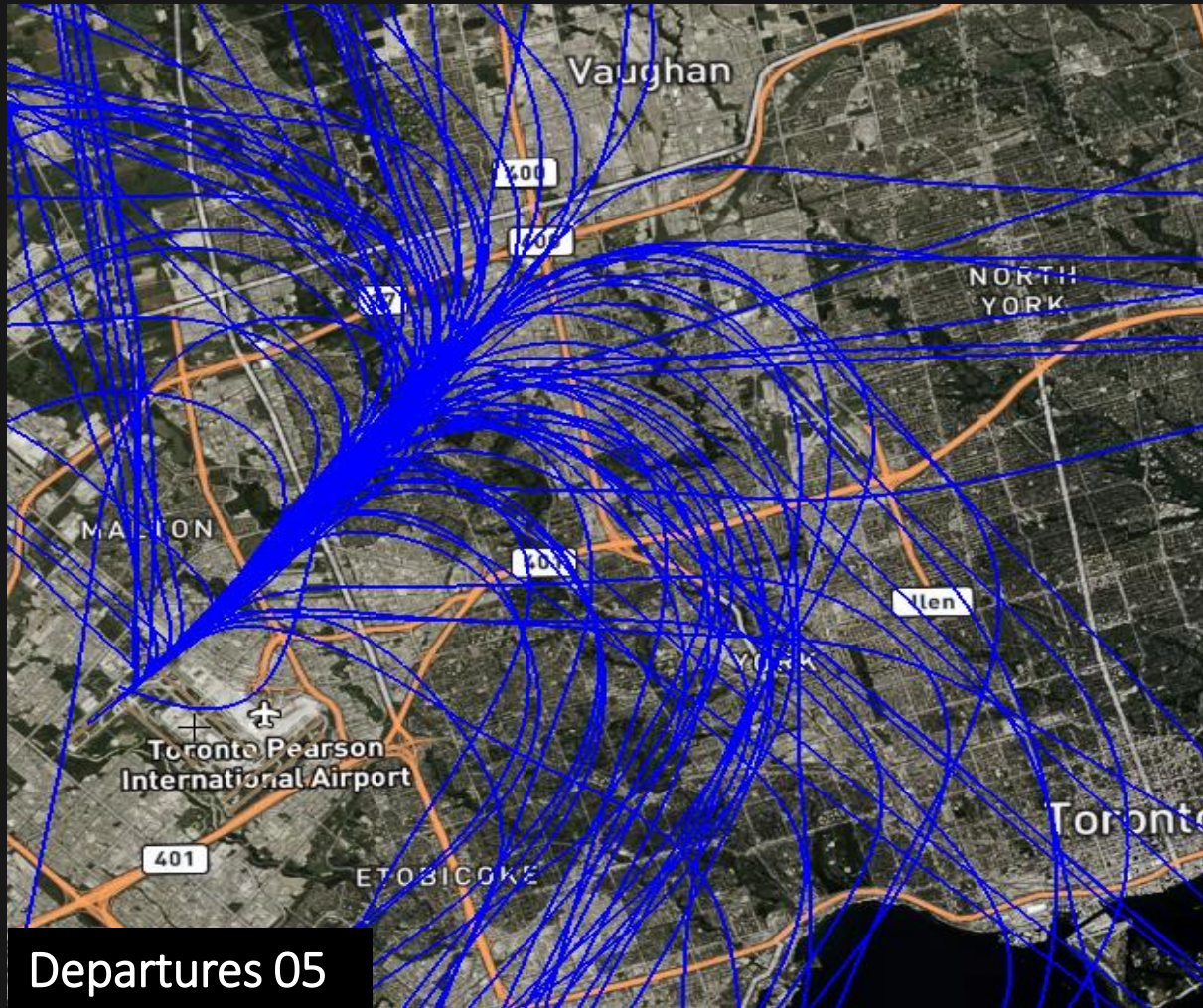
Runway Circuit Pattern



Runway Circuit Pattern

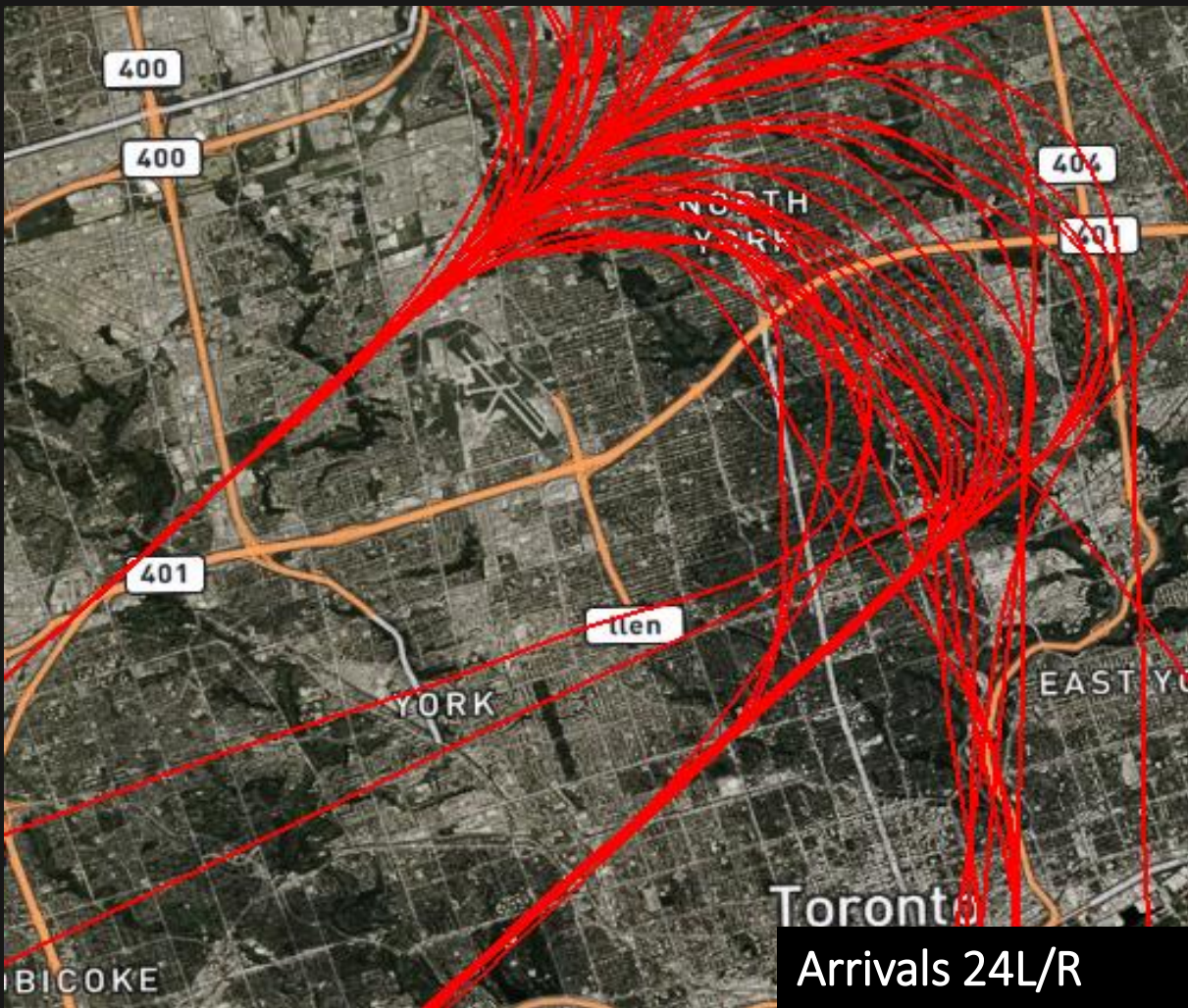
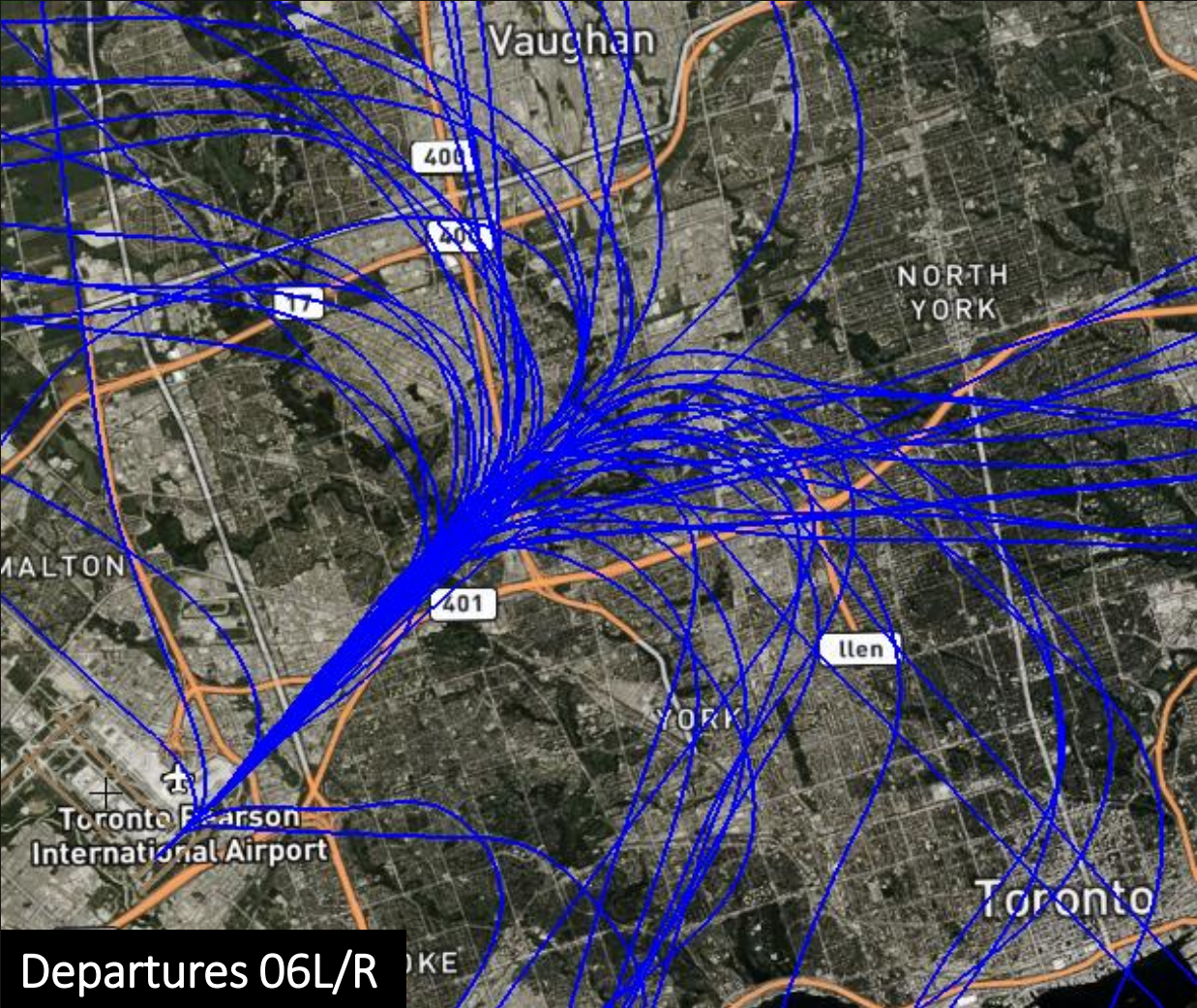


Northeast



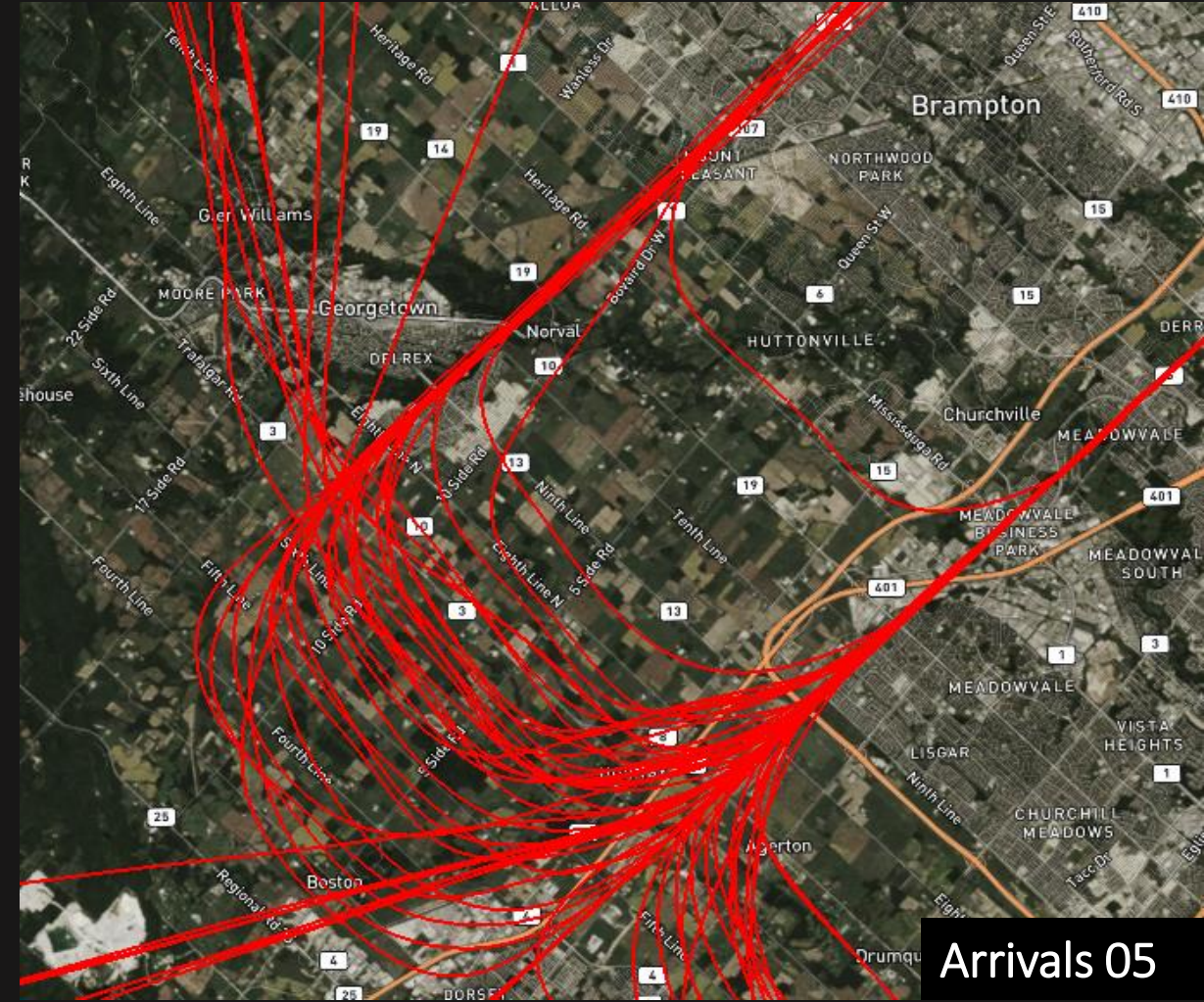
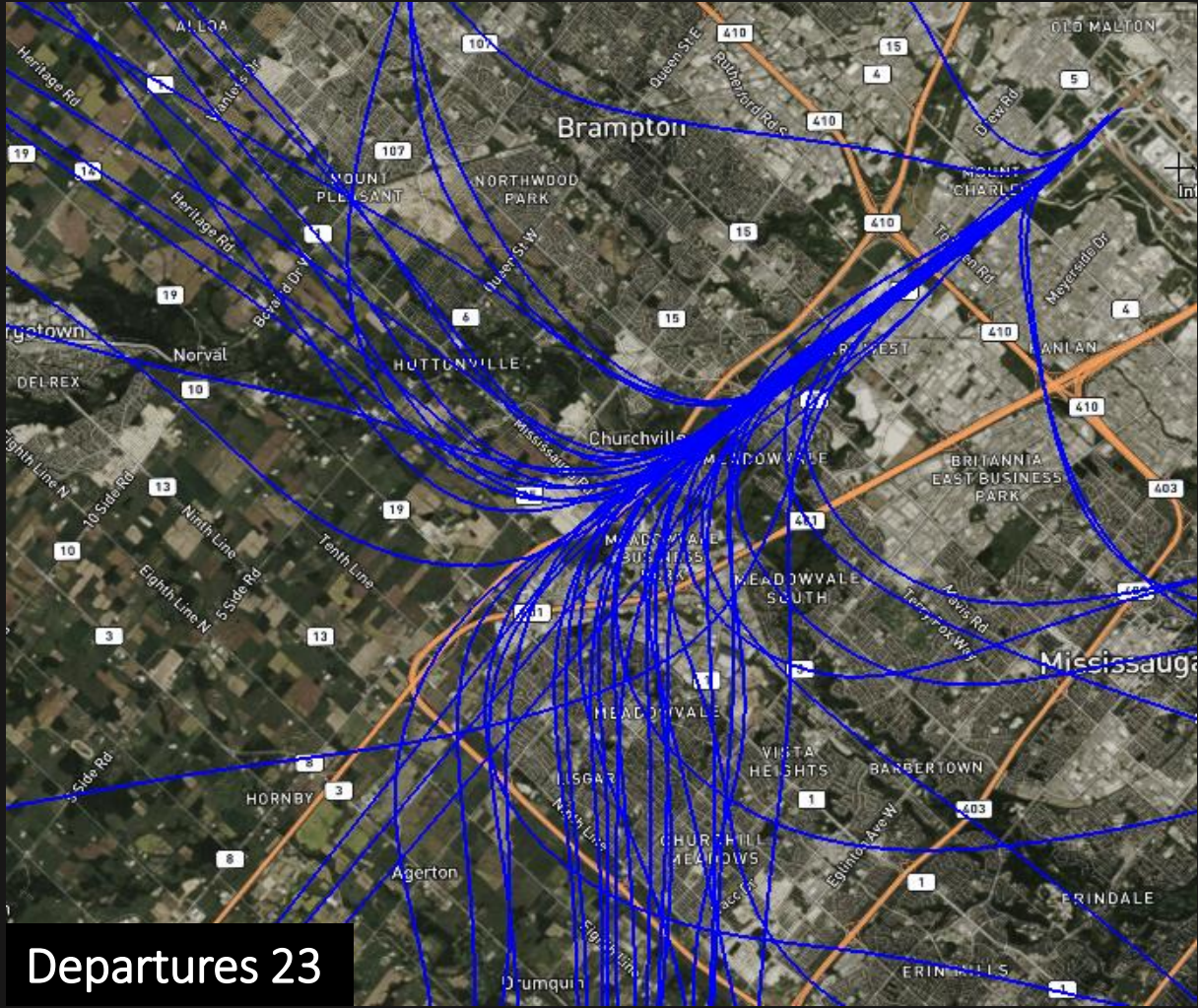
Rexdale, Humber River-Black Creek, Maple, Vaughan, Richmond Hill, Thornhill,

Southeast



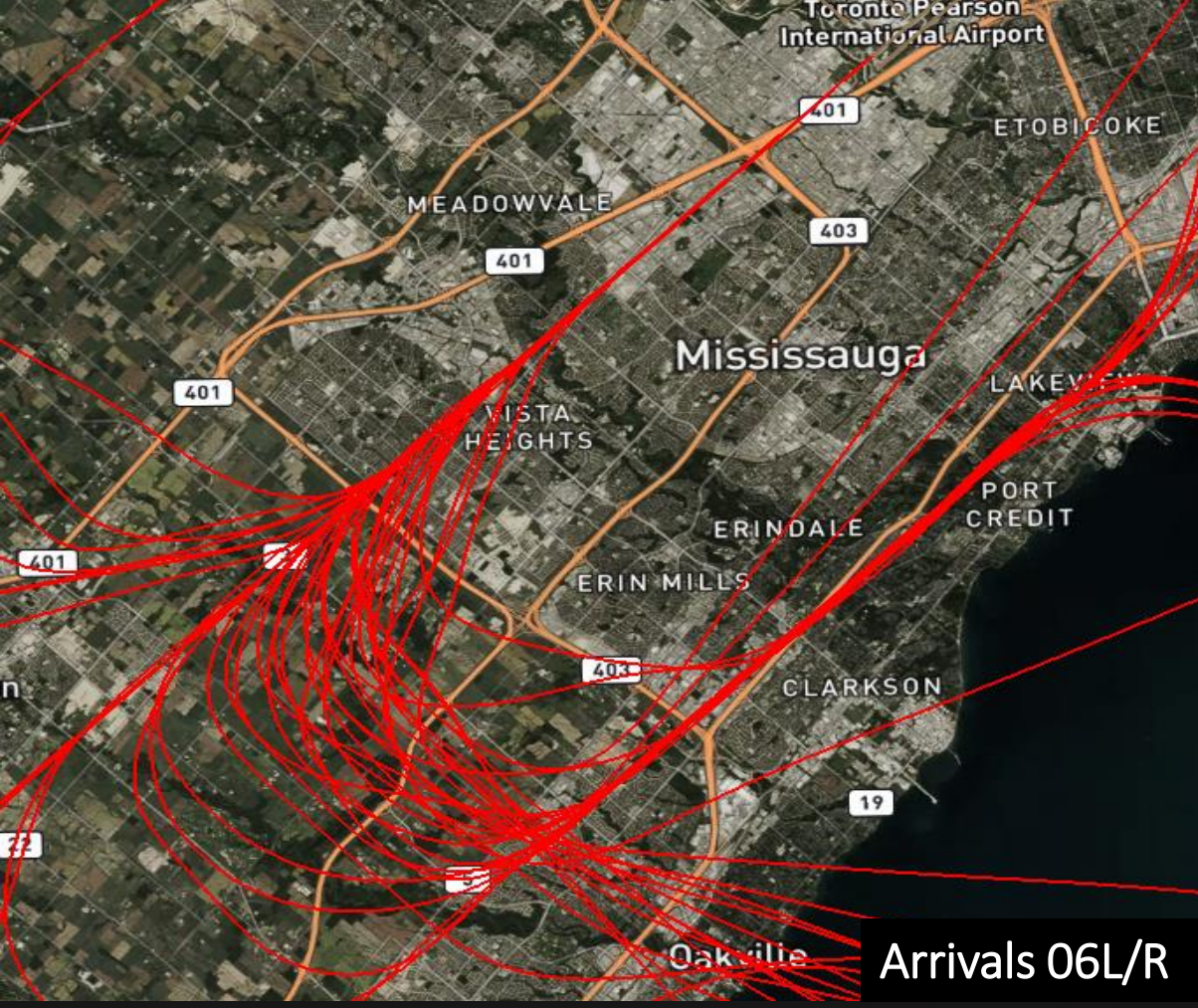
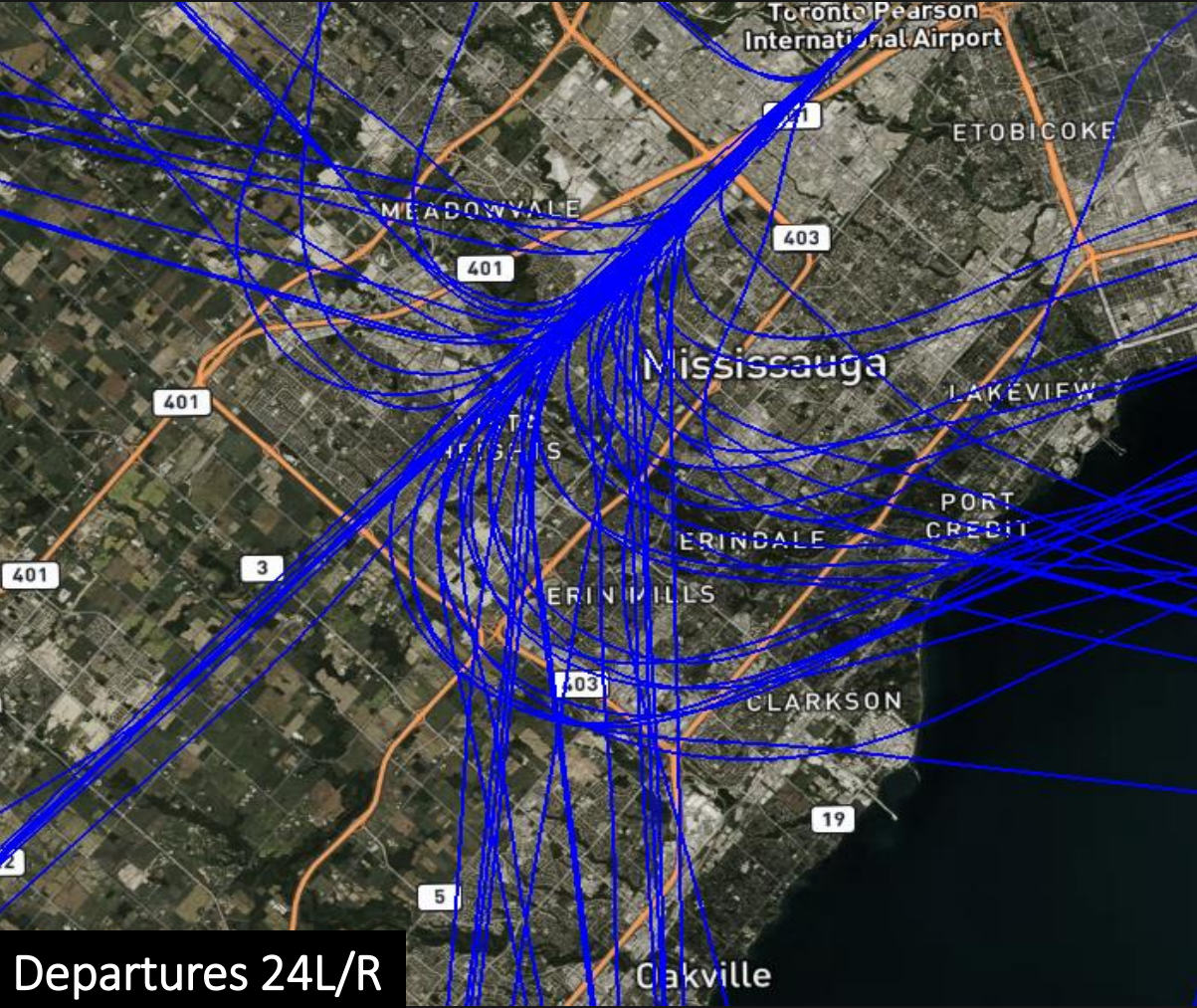
Midtown Toronto, North York, Weston, Markham

Northwest



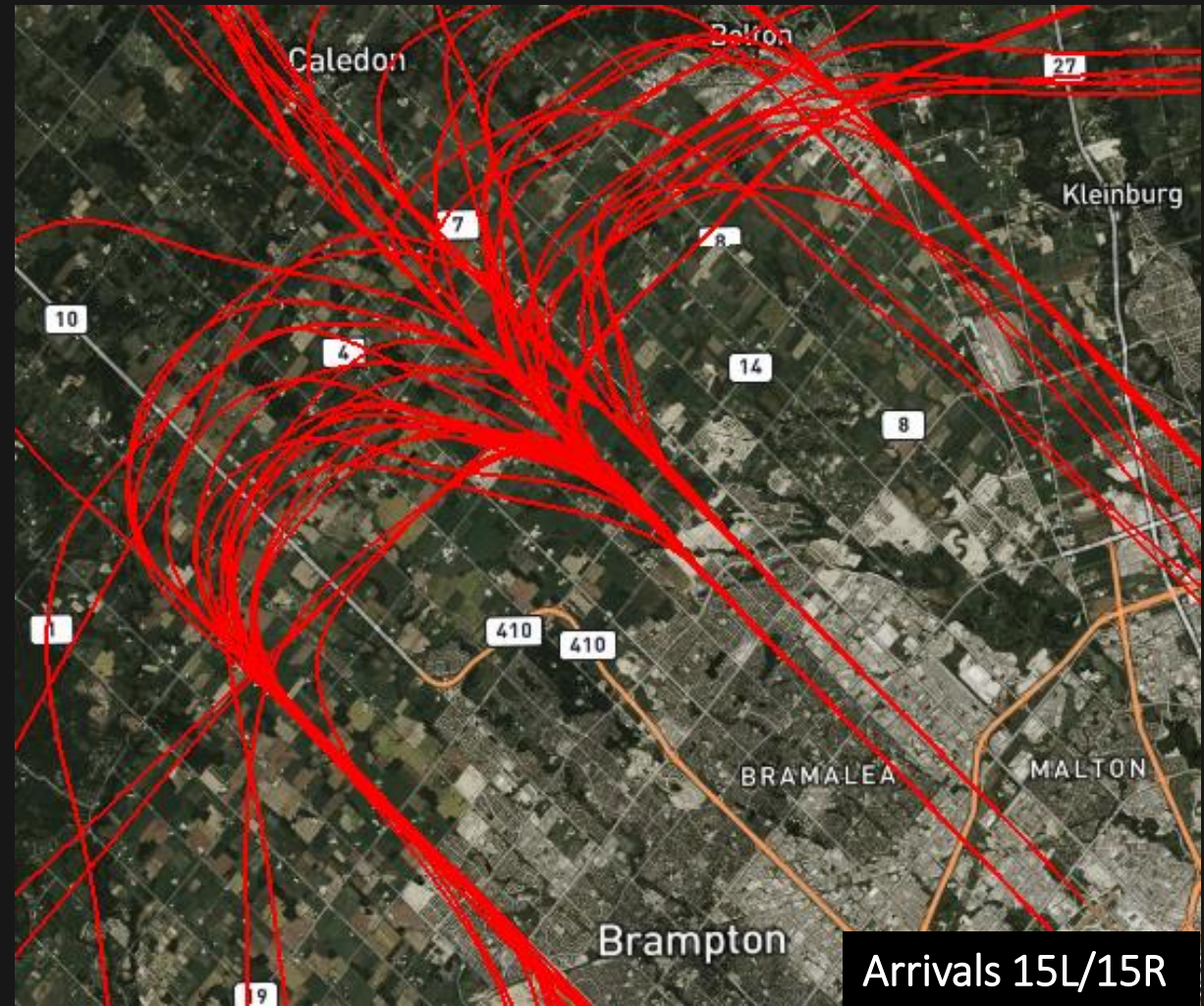
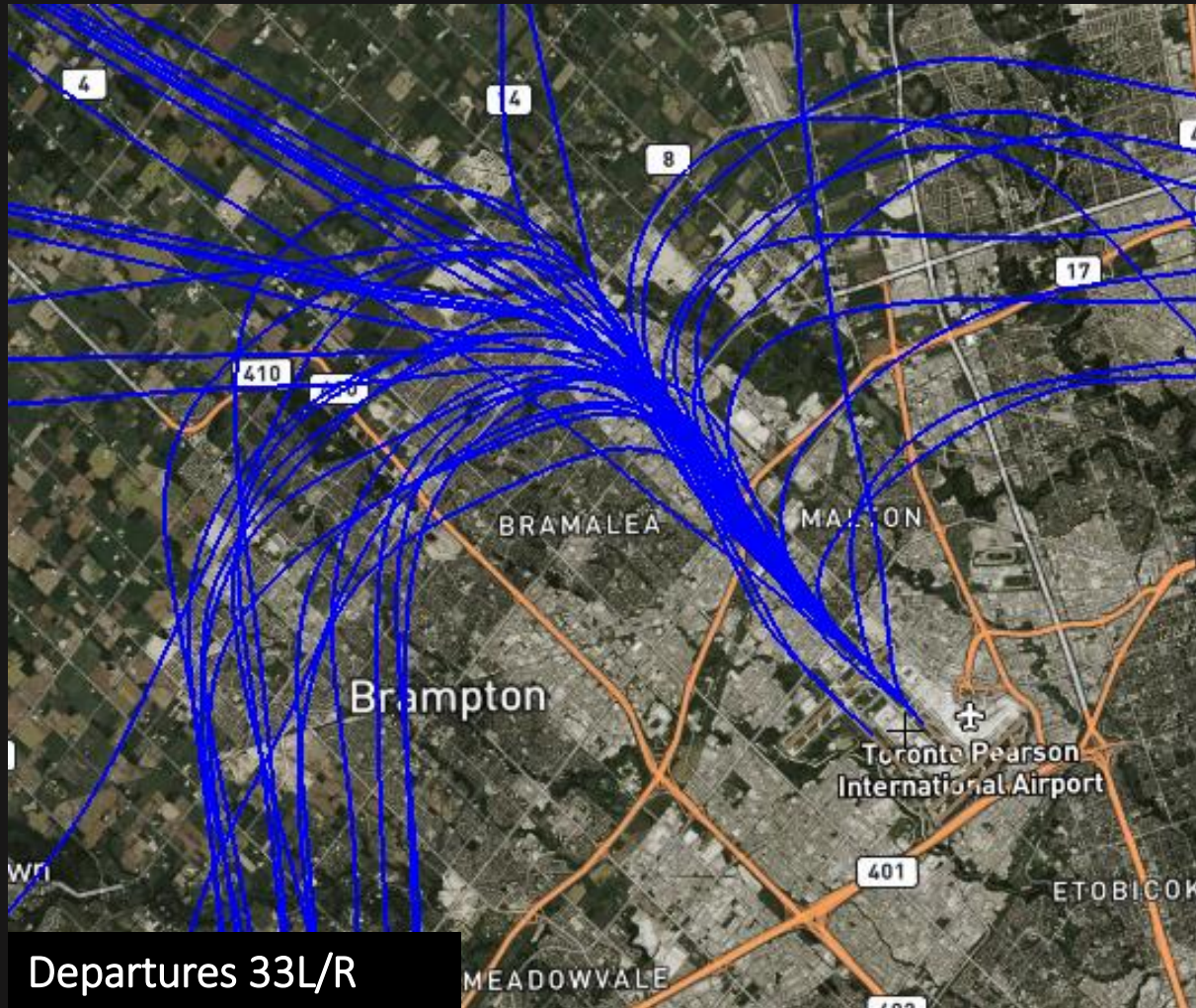
Brampton, Georgetown, Milton, Meadowvale, Streetsville

Southwest



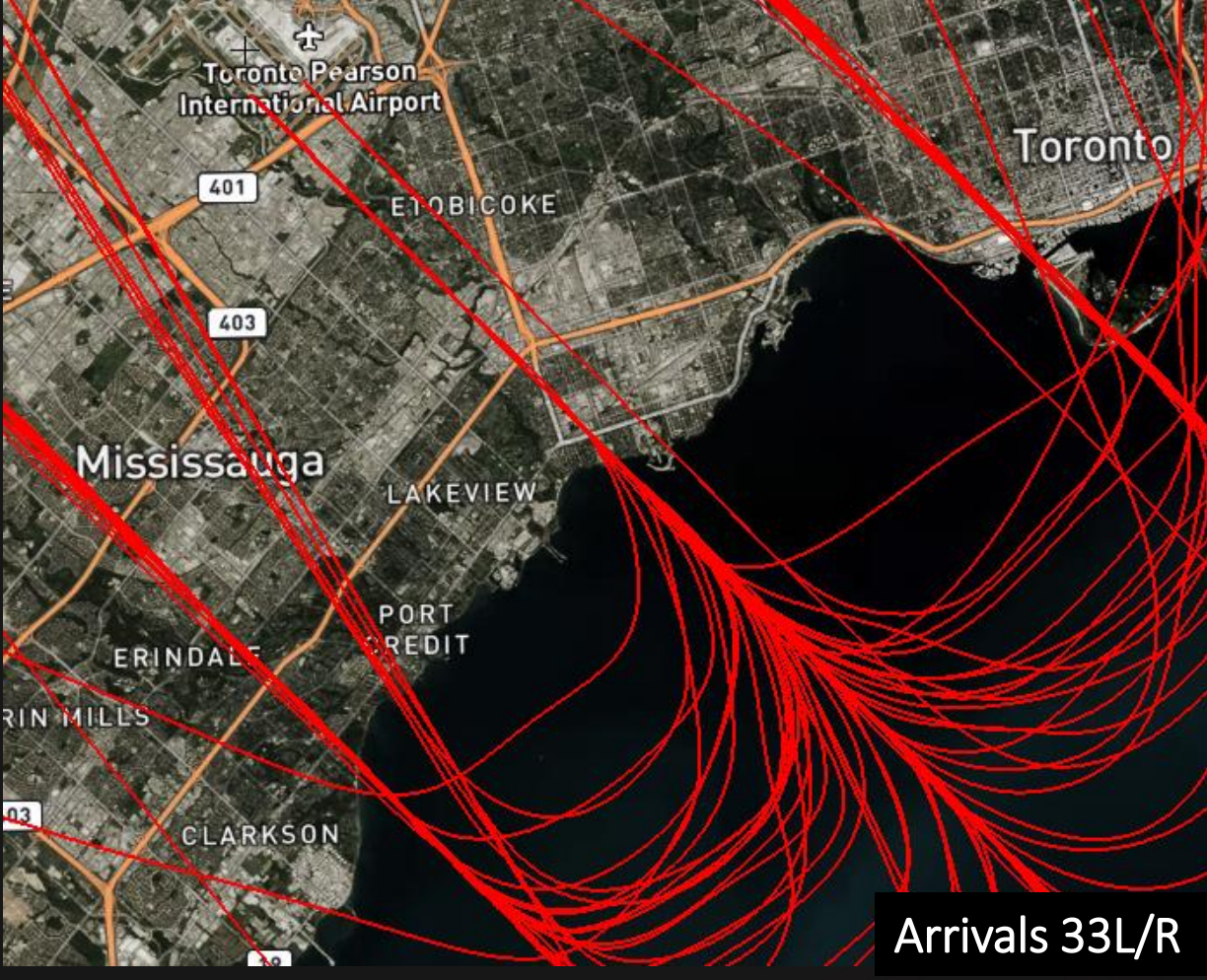
Meadowvale, Alderwood, Erin Mills, Streetsville, Clarkson, Port Credit, Oakville

North



Brampton, Malton

South



Etobicoke-Lakeshore, Alderwood, Long Branch, Markland Wood

NAV CANADA Updates





NAV CANADA UPDATE

Serving a world in motion
navcanada.ca



NAV CANADA ► PROPRIETARY

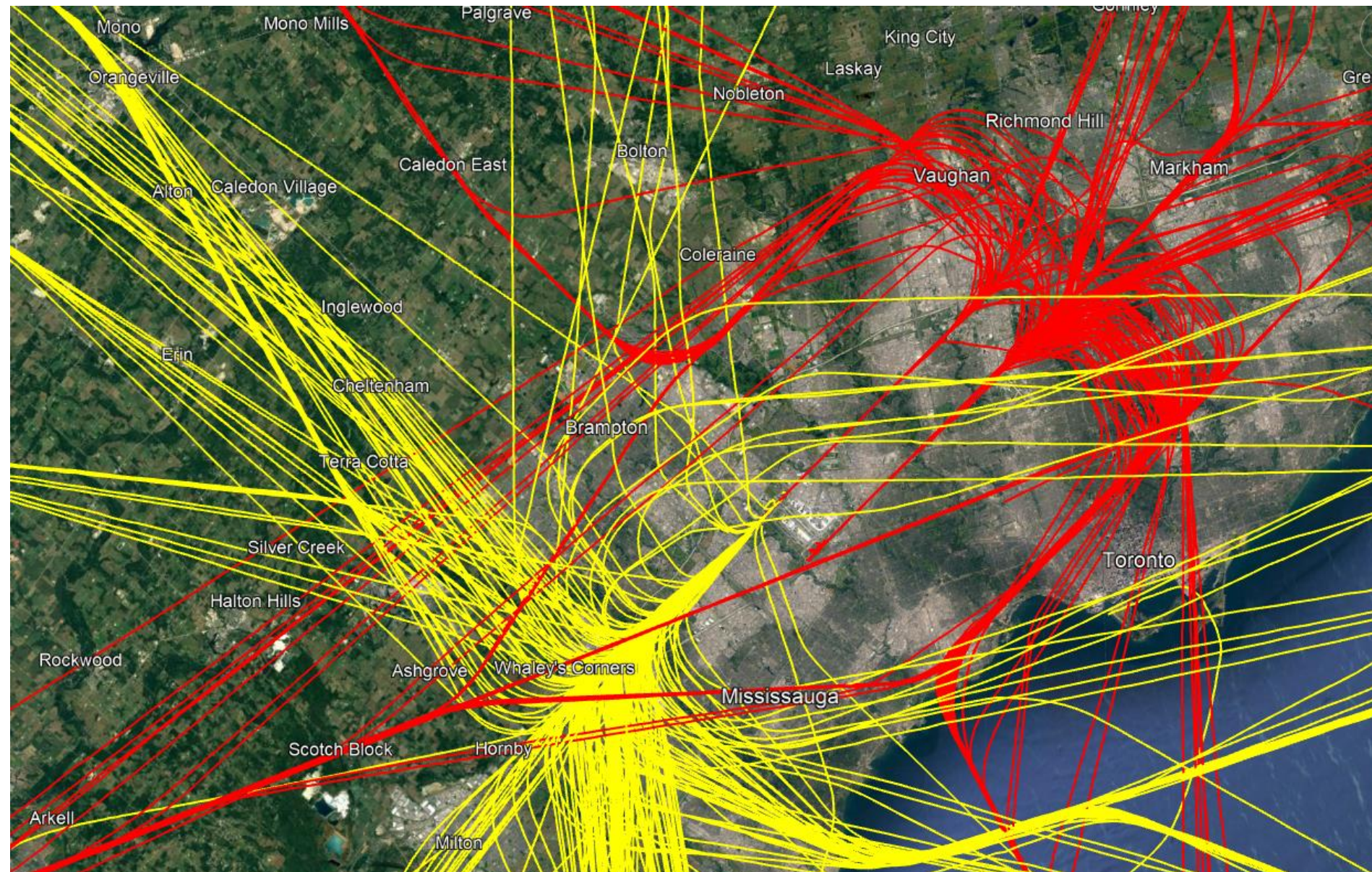
SIX DAYS OF RUNWAY USAGE AT PEARSON



Friday,
November
10th
0000-1200

Active Runways:
Landing on 24L
and 23 (red)

Departing on 23
(yellow)

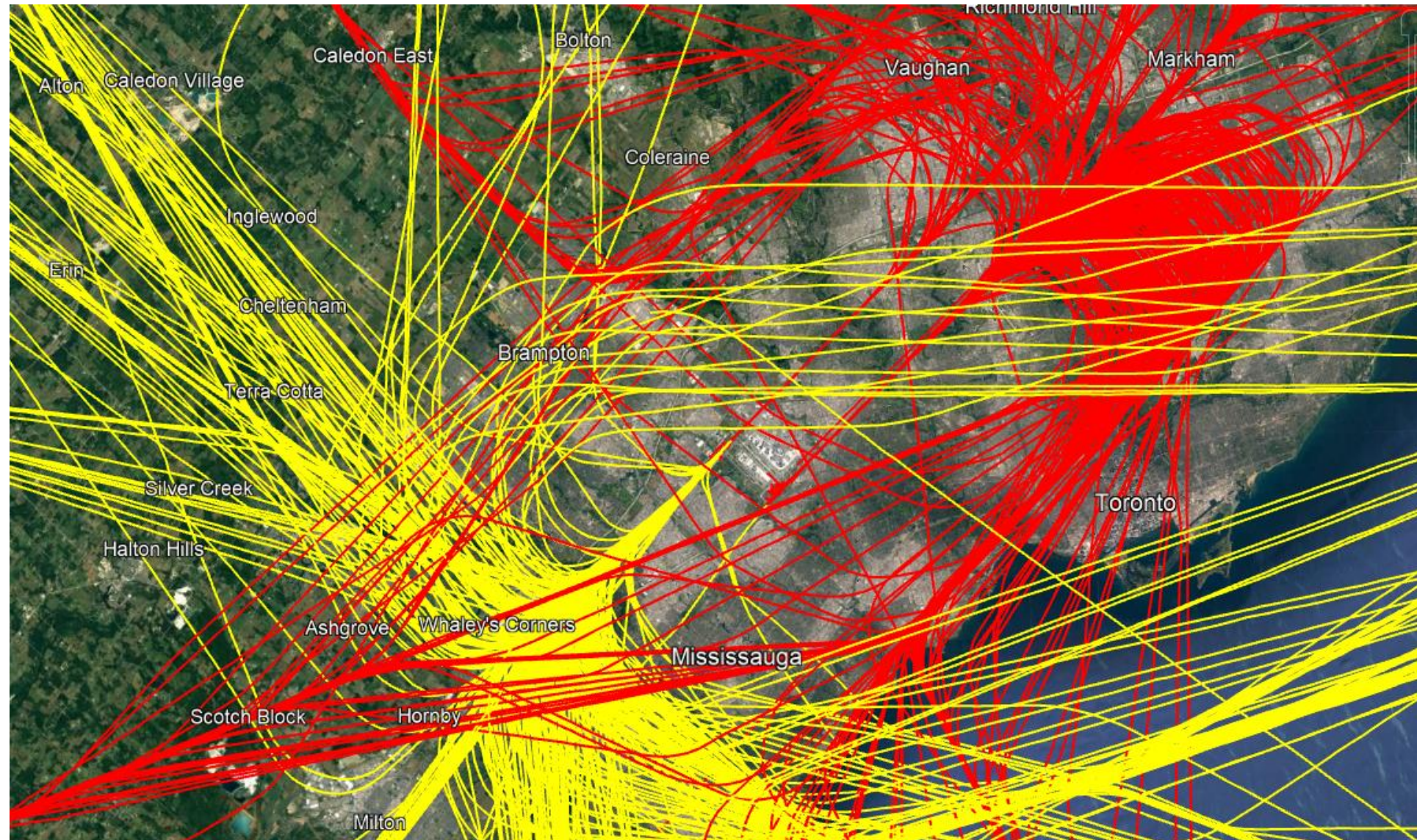


Friday,
November

10th
1200-0000

Active Runways:
Landing 23 (red)

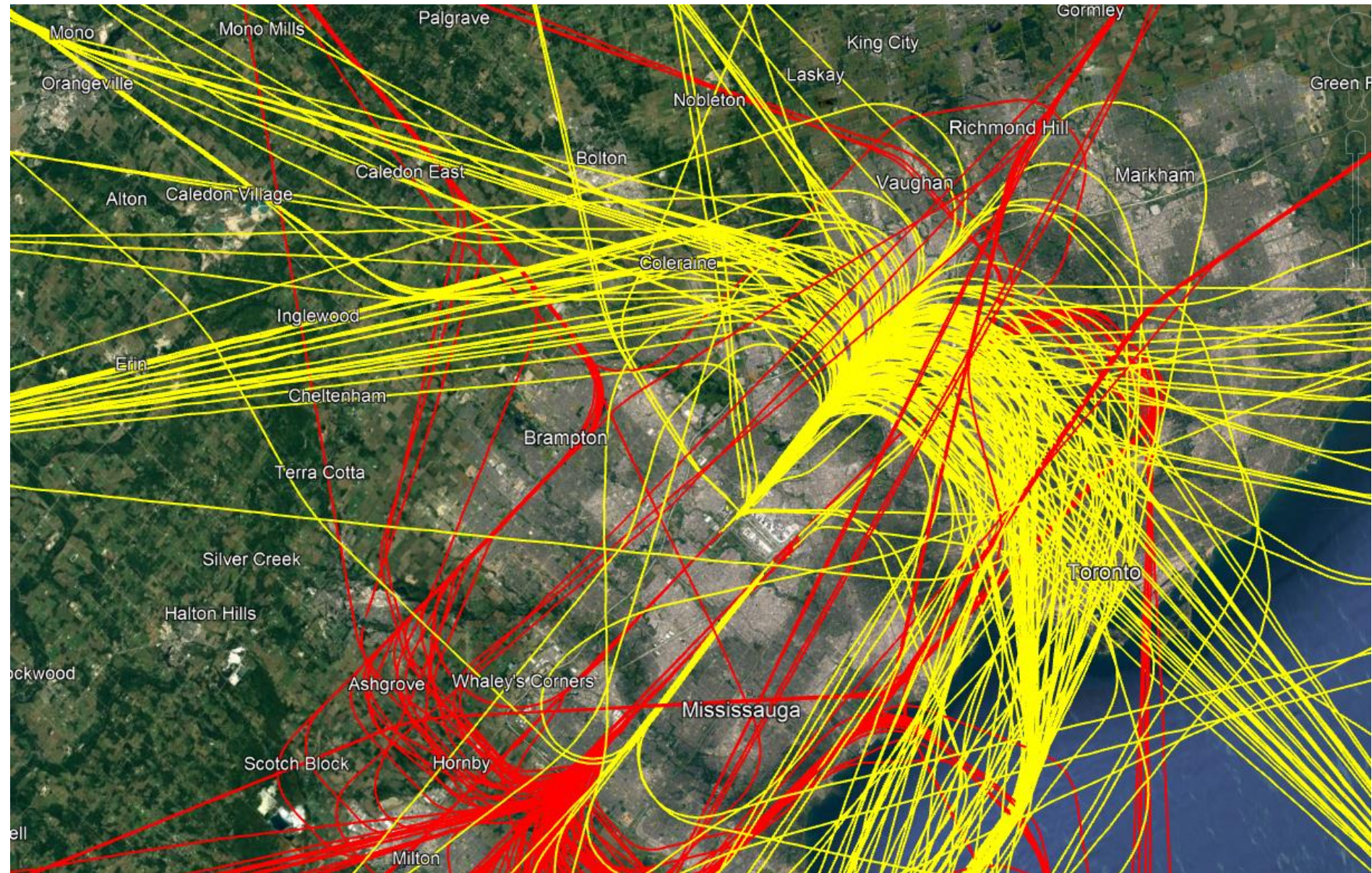
Departing on 23
(yellow)



Saturday,
November 11th
0000-1200

Active Runways:
Landing on 24R,
(red), 06L

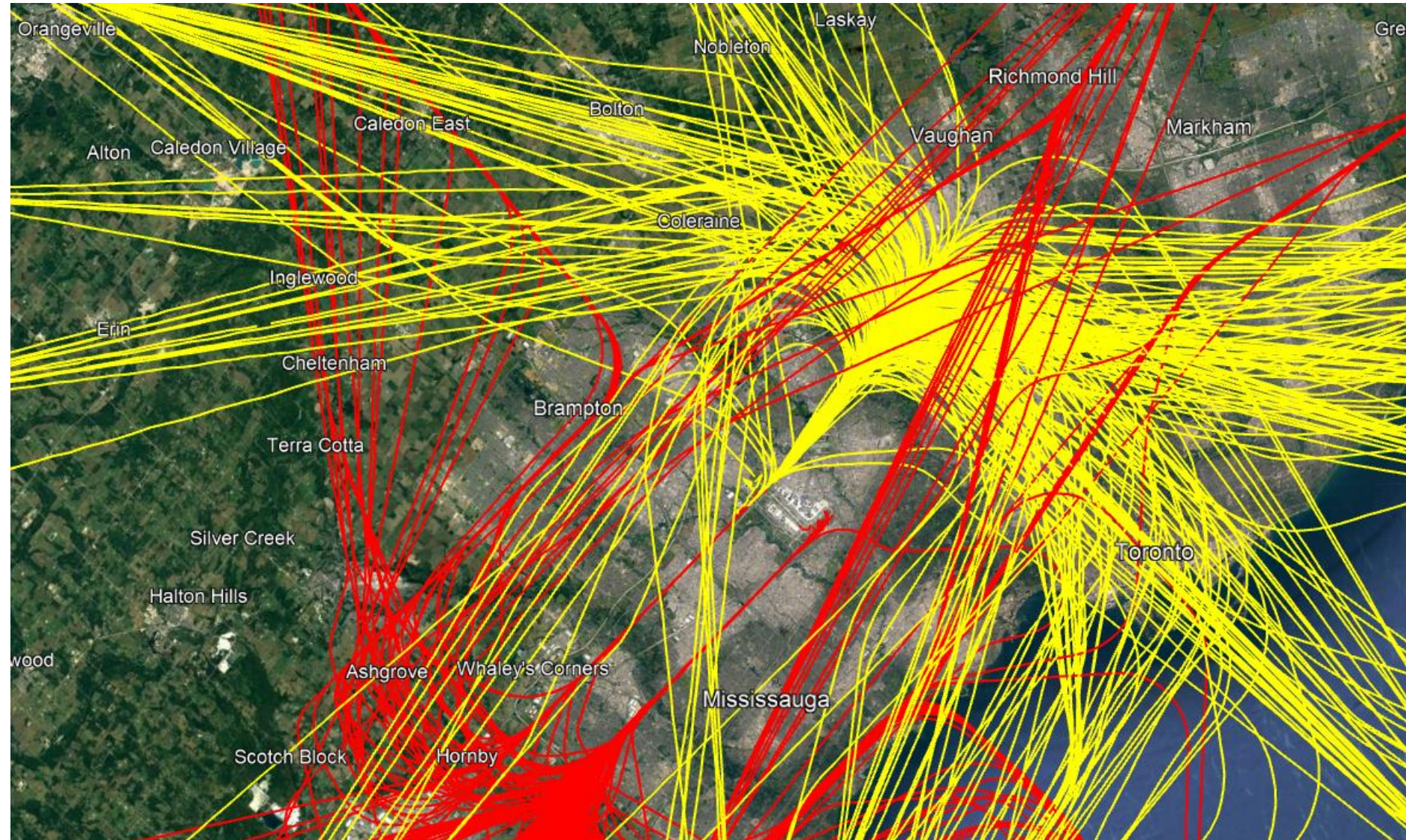
Departing on, 24R,
05 (yellow)



Saturday,
November 11th
1200-0000

Active Runways:
Landing on 06R
and 05 (red)

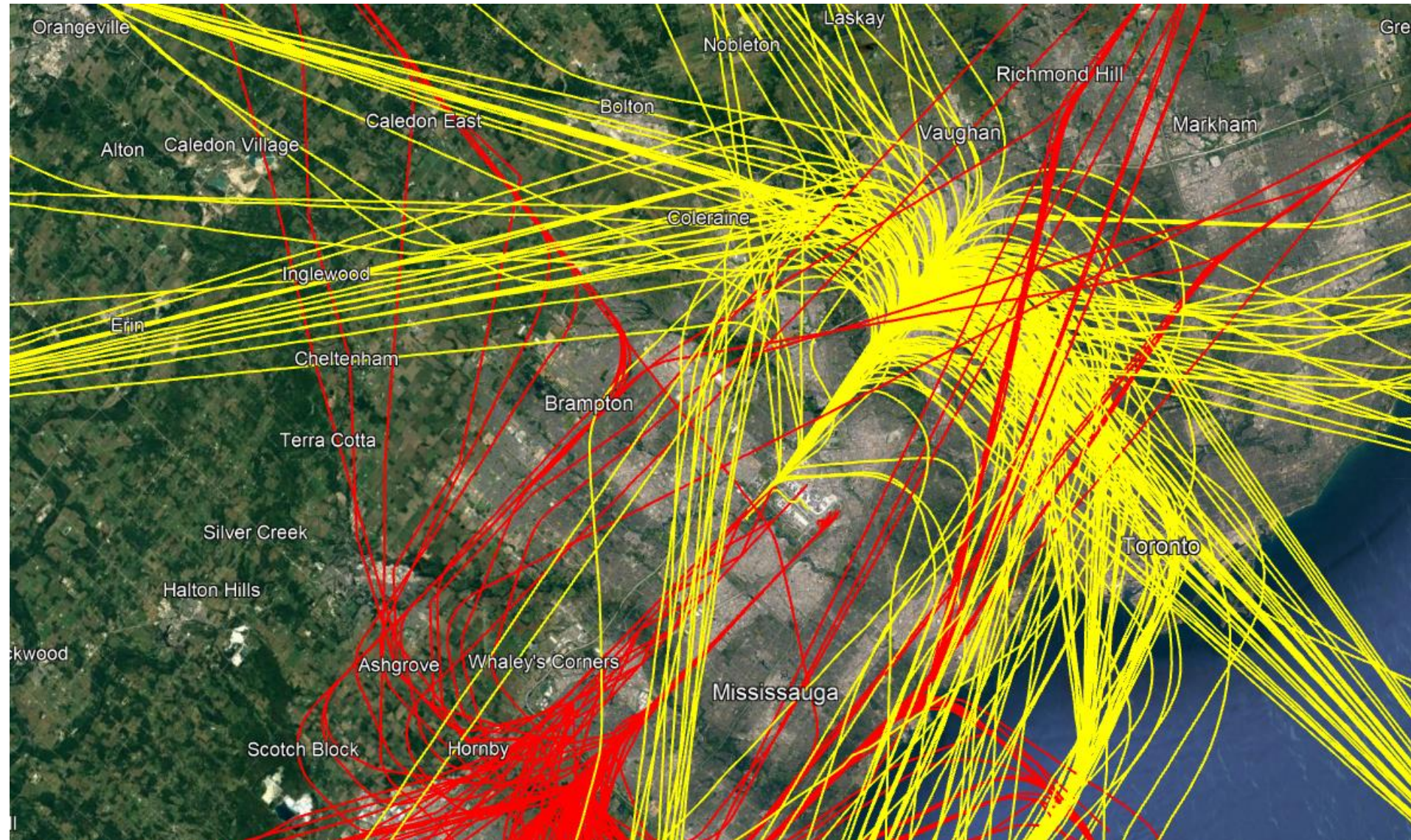
Departing on 05
(yellow)



Sunday,
November
12th
0000-1200

Active Runways:
Landing on 06R
and 05 (red)

Departing on 05
(yellow)

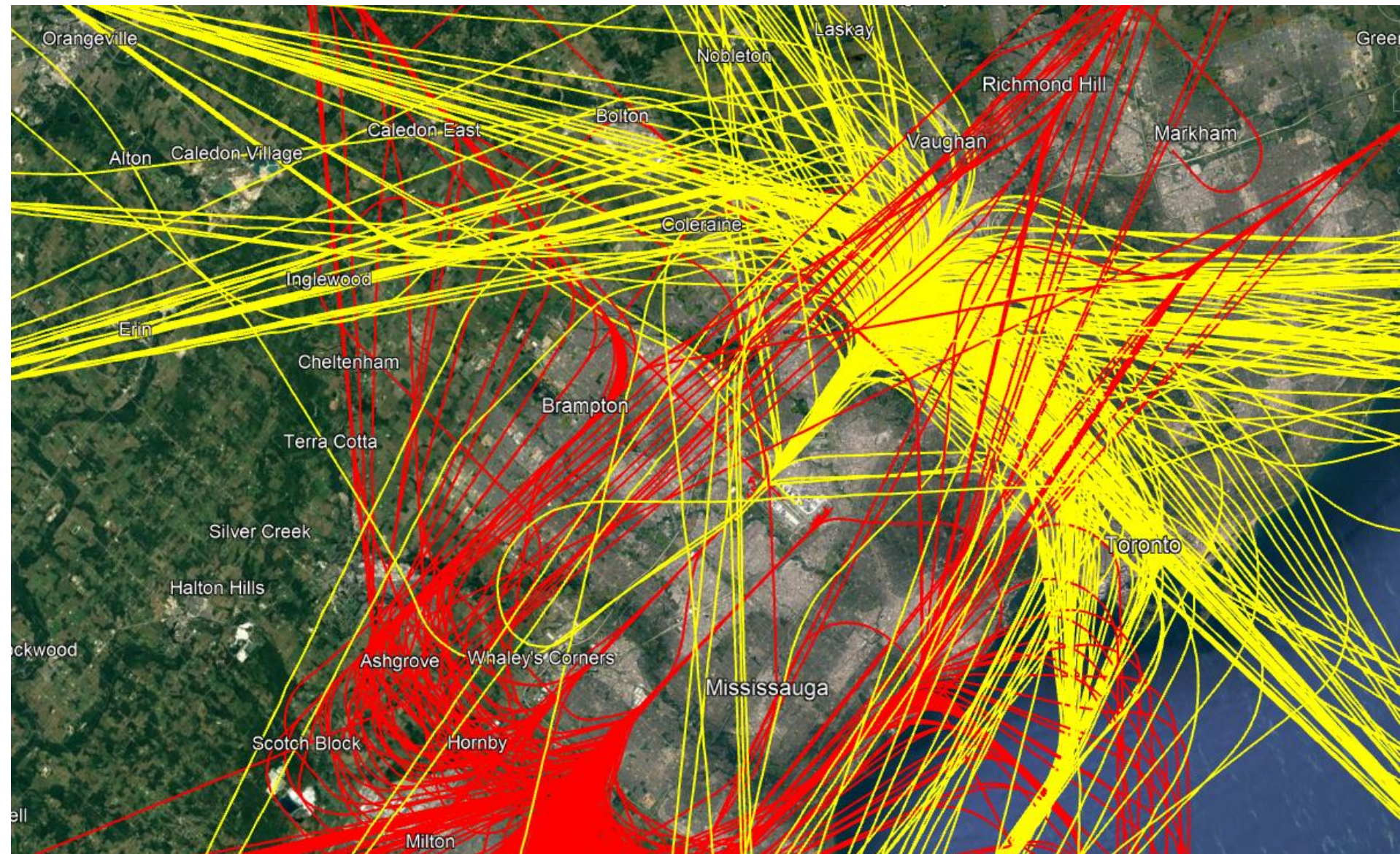


Sunday,
November

12th
1200-0000

Active Runways:
Landing on 06L
and 05 (red)

Departing on 05
(yellow)

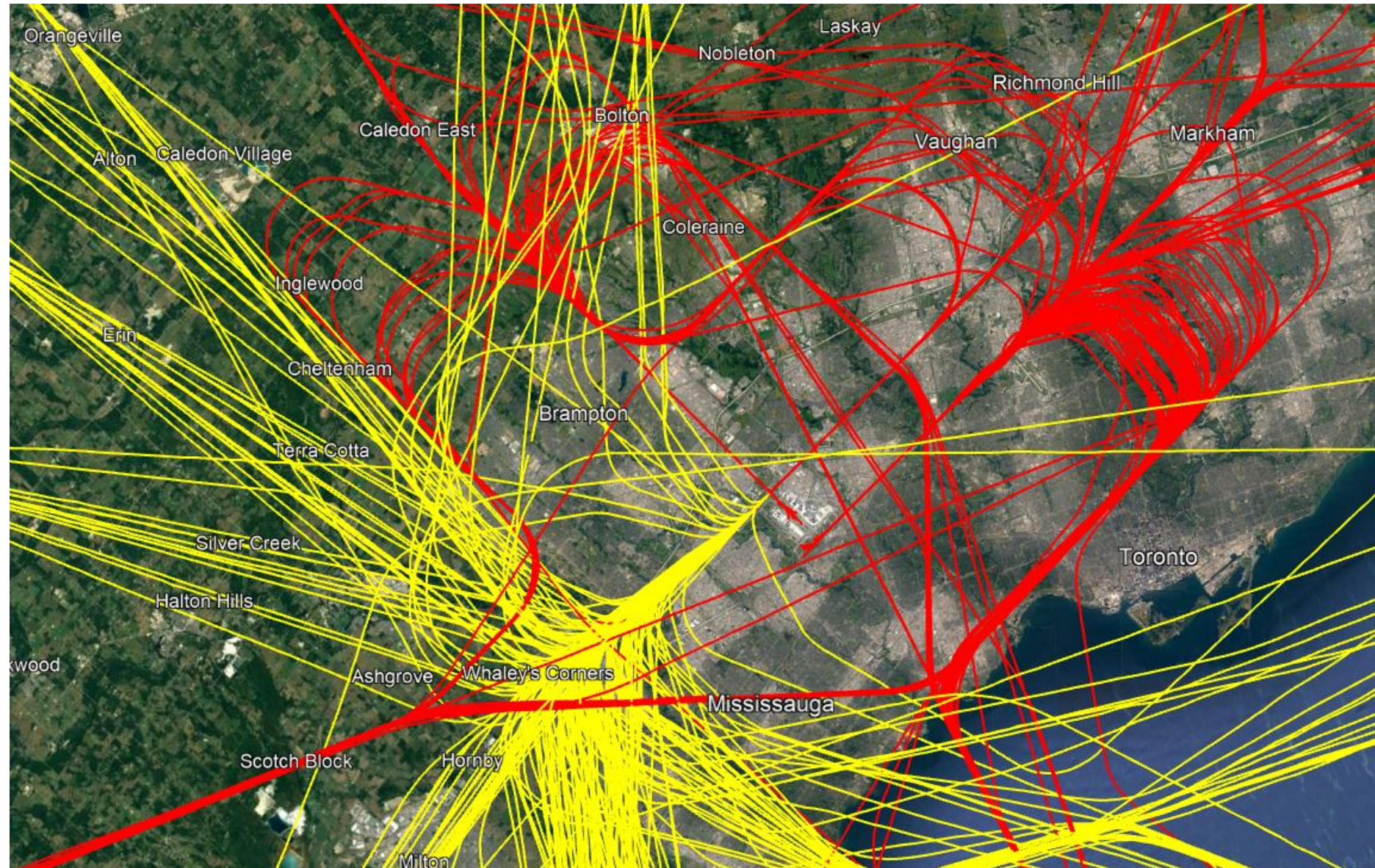


Monday,
November

13th
0000-1200

Active Runways:
Landing on 05, 06L
and 15L (red)

Departing on 05 &
23 (yellow)

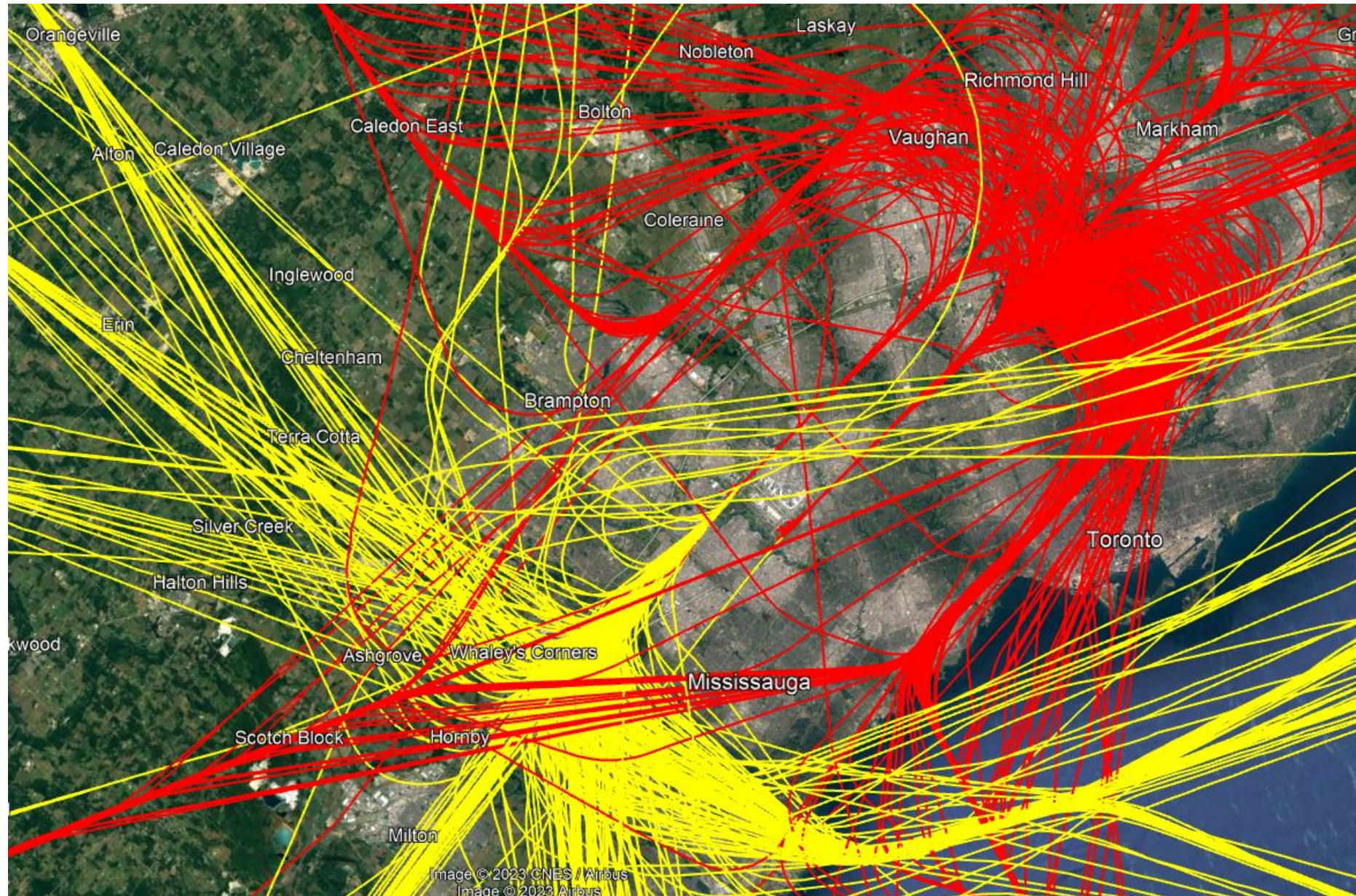


Monday,
November

13th
1200-0000

Active Runways:
Landing on 24L
and 23 (red)

Departing on 23
(yellow)

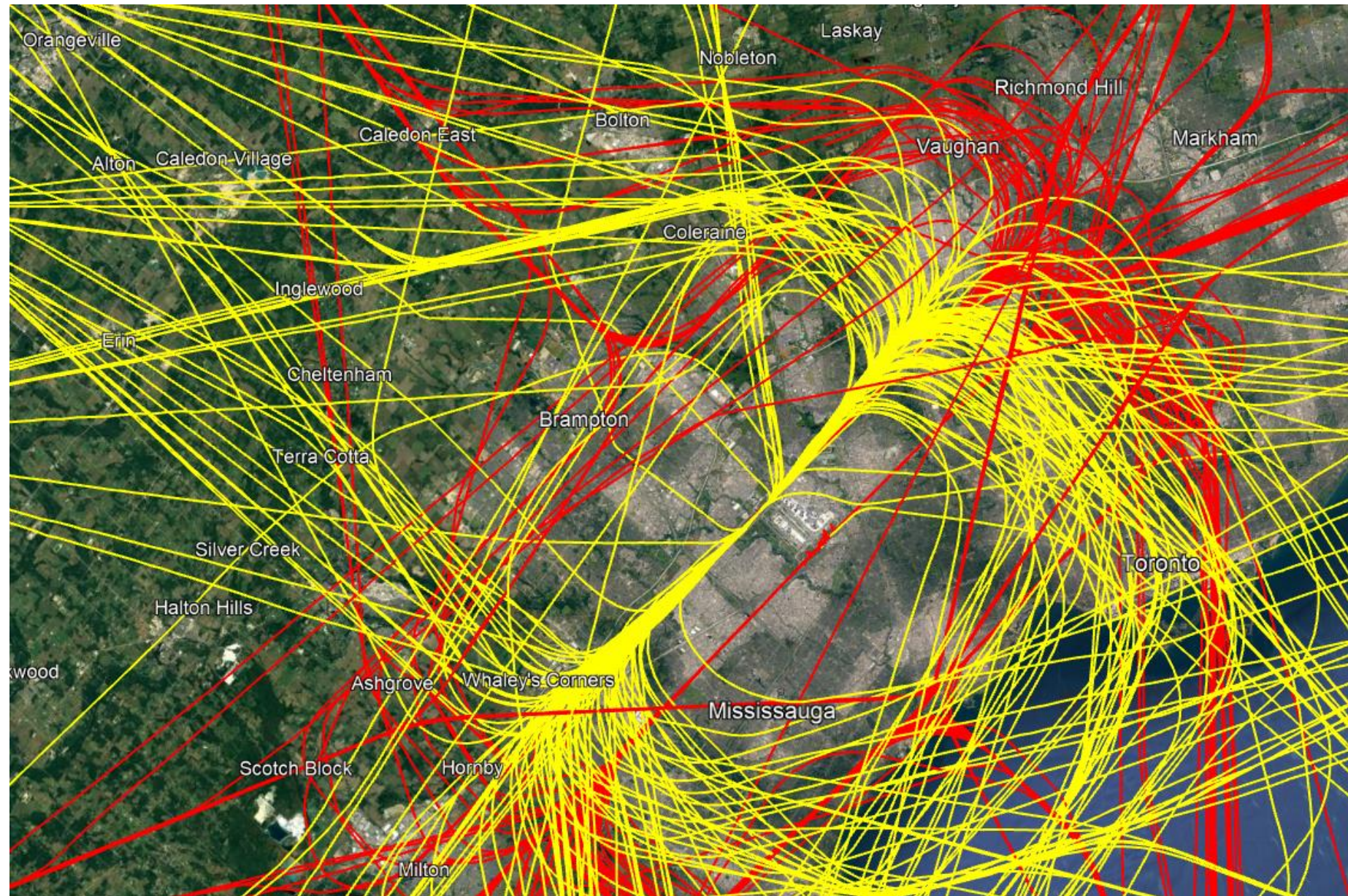


Tuesday,
November

14th
0000-1200

Active Runways:
Landing on 24L
and 23 (red)

Departing on 23,
and 05 (yellow)

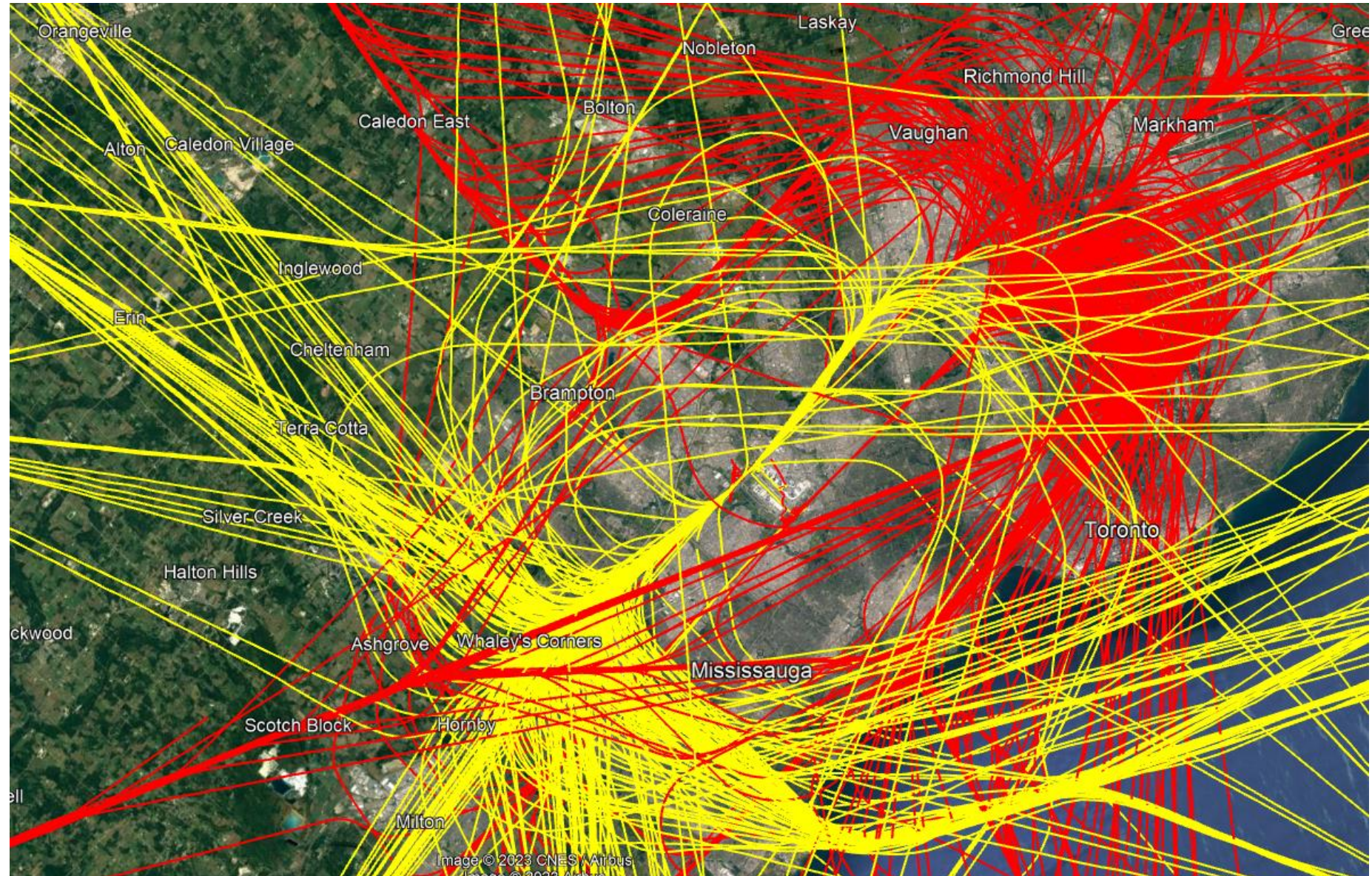


Tuesday,
November

14th
1200-0000

Active Runways:

Landing on 24L
and 23, a few
hours of 06R and
05 arrivals (red)
Departing on 23, a
few hours of 05
(yellow)

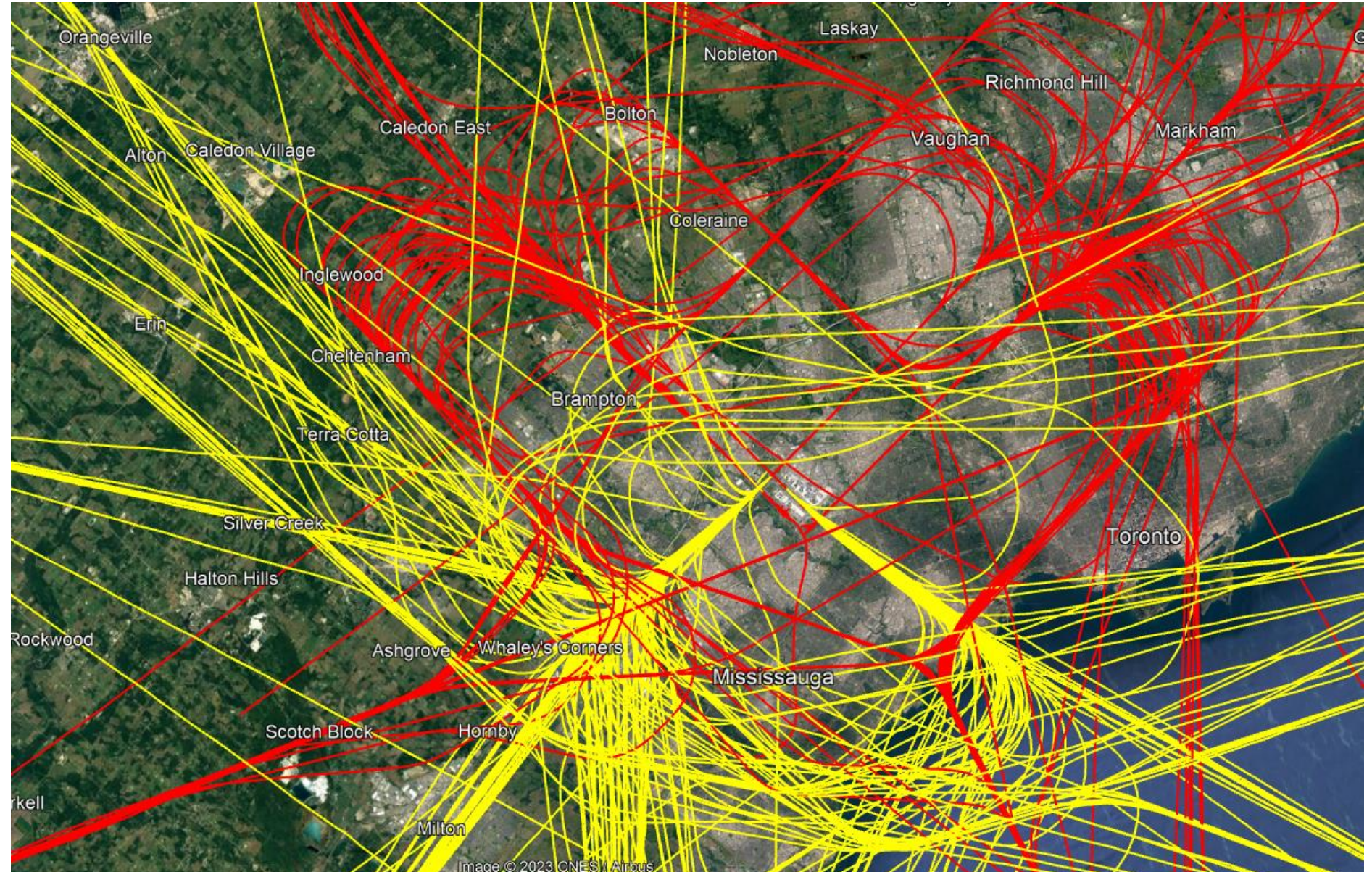


Wednesday,
November

15th
0000-1200

Active Runways:
Landing on 24L
and 23 (red)

Departing on 23
(yellow)

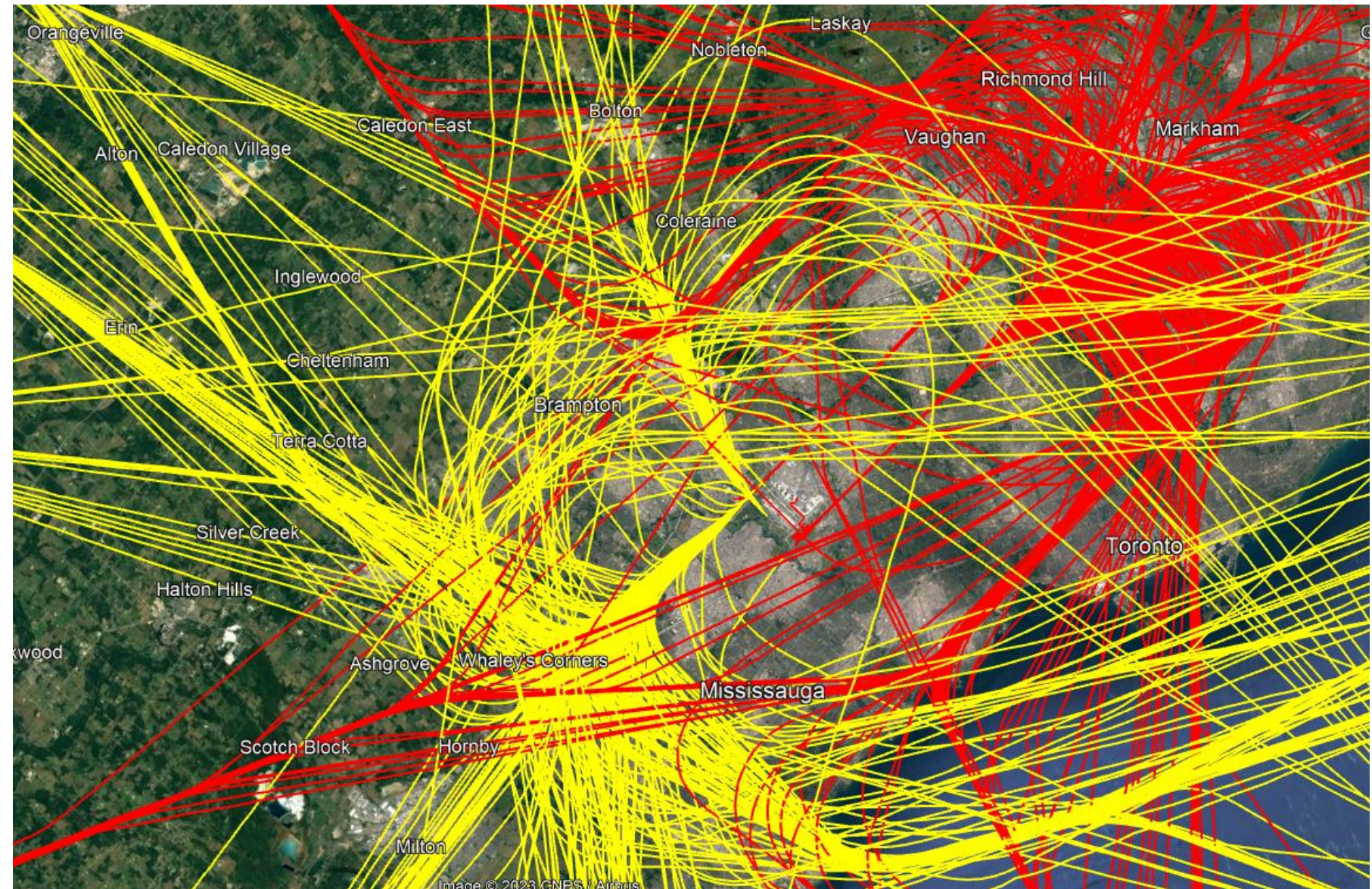


Wednesday,
November

15th
1200-0000

Active Runways:
Landing on 24L
and 23 – two hours
of 15R/L (red)

Departing on 23,
33L & 15L (yellow)

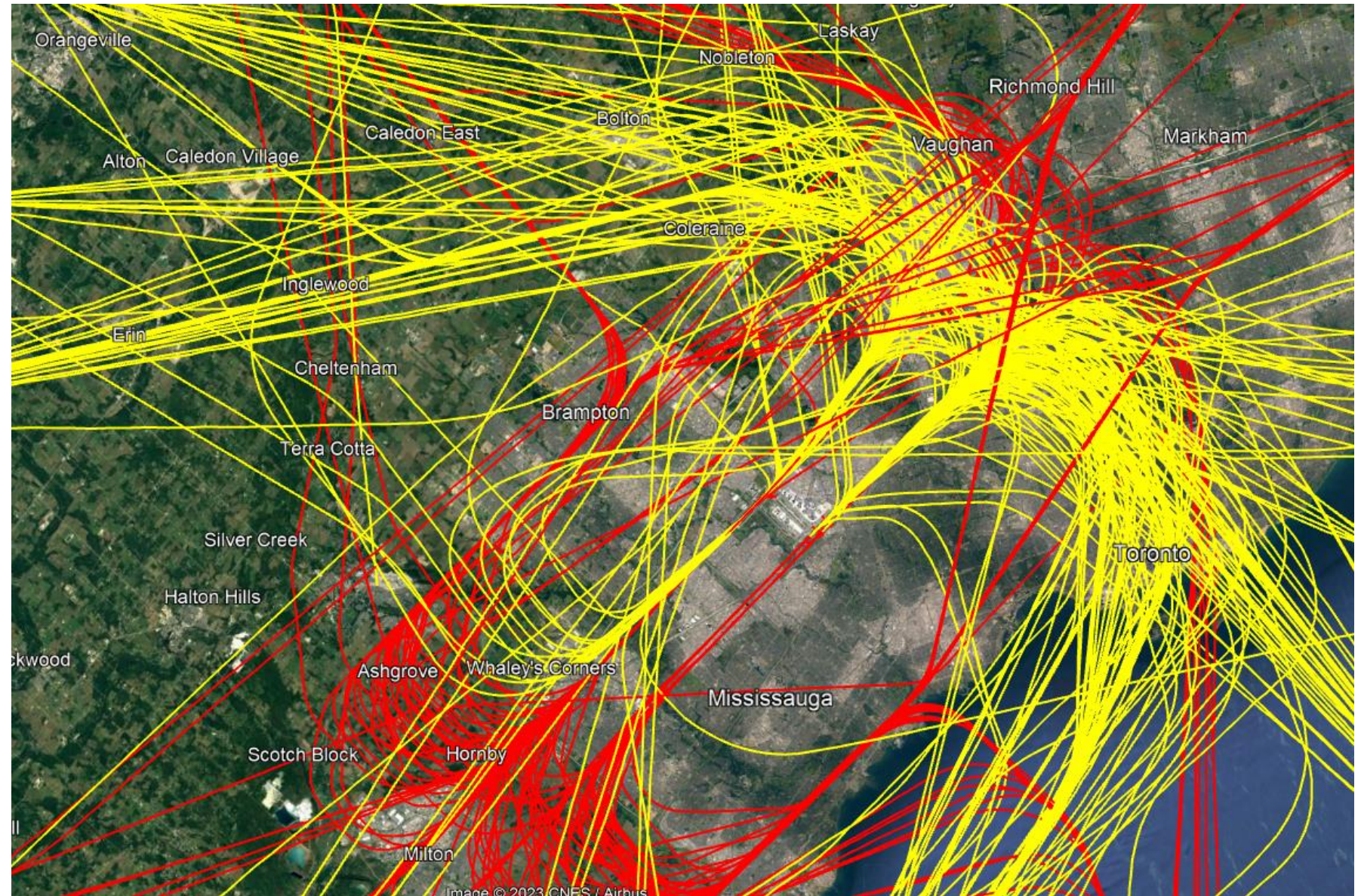


Thursday,
November

16th
0000-1200

Active Runways:
Landing on 24L
and 23 (red), 05
and 06R

Departing on 23&
05 (yellow)

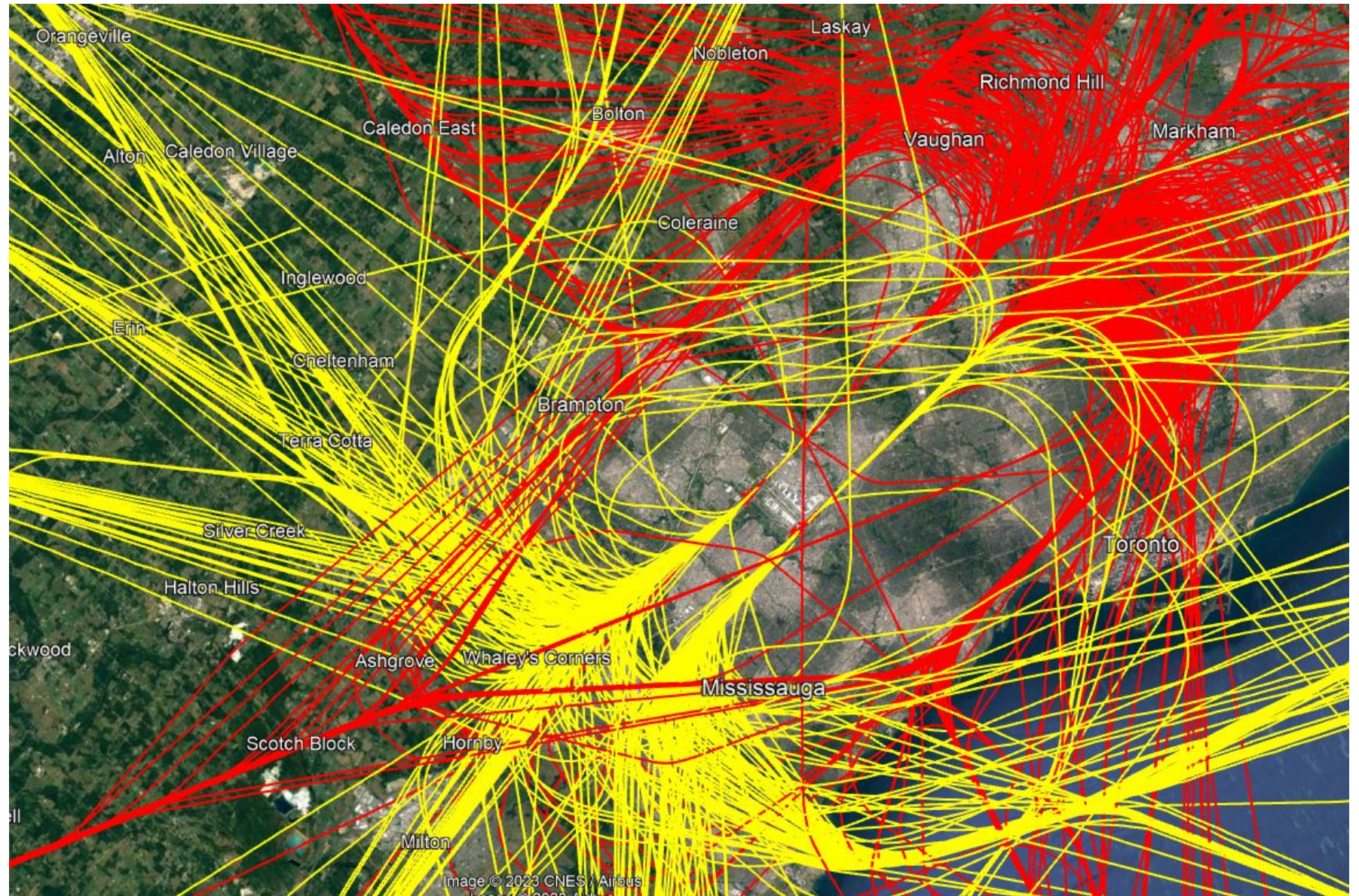


Thursday,
November

16th
1200-0000

Active Runways:
Landing on 06L &
05, 24R and 23

Departing on 05 &
06L, 23, and 24R
(yellow)





INDUSTRY NOISE MANAGEMENT BOARD

INMB MEETING #18

- › RNP-AR Discussion
 - Have not seen increase in usage, difficulties on both ATC and pilot sides. Working to ensure greater consistency and understanding
 - Discussions taking place in several different groups. INMB will act to consolidate those discussions and report back.

- › Improving usage of nighttime RNAV (GNSS) X approaches.
 - Good discussion on methods to improve usage. Prompted scheduling of local discussion for ATC staff to try to implement some concrete ways to encourage usage.
 - Landed on an incremental approach to increasing usage

INMB CONTINUED

- › Runway Utilization
 - Have seen a return to dual operations lately.
 - Expect that trend to continue
 - Winter (De-icing Operations) will likely see variation in this

THANK YOU



GTAA Updates



Reports and Noise Advisory Calendar

- [InsightFull](#) provides interactive information about Toronto Pearson's operations, providing location-specific information to help answer commonly asked questions.
- Noise Advisory Calendar added Spring 2023

Today	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	27 Low Flying Aircraft / Vols à basse altitude 12am Runway 15R/33L 7am Runway 06L/24R	28 12am Runway 06R/24L 7am Runway 06L/24R	29 12am Runway 15L/33R 7am Runway 06L/24R	30 12am Runway 15L/33R 5am Runway 05/23 7am Runway 06L/24R	31 Canadian International Air Show	Sep 1	2 Canadian International Air Show
	3 Canadian International Air Show	4 Canadian International Air Show	5 12am Runway 15L/33R 7am Runway 06L/24R	6 12am Runway 15L/33R	7 12am Runway 15L/33R	8 12am Runway 15L/33R	9 12am Runway 15L/33R
	10 12am Runway 15L/33R	11 12am Runway 05/23 12am Runway 15R/33L	12 12am Runway 05/23 12am Runway 15R/33L	13 12am Runway 05/23 12am Runway 15R/33L	14 12am Runway 05/23 12am Runway 15R/33L	15 12am Runway 05/23 12am Runway 15R/33L	16 12am Runway 15L/33R
	17 12am Runway 15L/33R	18 12am Runway 06L/24R	19 12am Runway 06L/24R	20 12am Runway 06R/24L	21 12am Runway 06R/24L	22	23
	24 12am Runway 06L/24R 12am Runway 15L/33R 7am Runway 06R/24L	25 12am Runway 06L/24R 12am Runway 15L/33R 7am Runway 06R/24L	26 12am Runway 06L/24R 12am Runway 15L/33R 7am Runway 06R/24L	27 12am Runway 06L/24R 12am Runway 15R/33L 7am Runway 06R/24L	28 12am Runway 15R/33L 7am Runway 06R/24L	29 7am Runway 06R/24L	30 7am Runway 06R/24L

Events shown in time zone: Eastern Time - Toronto

- How does Toronto Pearson operate?
- What operations are over my area?
- Has something changed?
- How is noise managed?
- Does the airport close at night?
- Interactive Reports and Statistics

Noise Advisory Calendar

Overview of scheduled runway closures and other activities that may impact surrounding communities.

[Read more](#)

Complaints report

View an interactive report on noise complaints received by the airport, organized by federal riding or city.

[Read more](#)

Operations report

View an interactive report on Toronto Pearson's operations.

[Read more](#)

Noise reports

View interactive noise reports on aircraft, community and ambient noise levels from our 25 noise monitoring terminals.

[Read more](#)

Quarterly & annual complaints report

View interactive quarterly and annual complaints reports

[Read more](#)

Quarterly & annual operations reports

View interactive quarterly and annual operations reports

[Read more](#)

Email us at community.engagement@gtaa.com to arrange a session on using InsightFull.

Weather data for Toronto Pearson

- Historical weather data for CYYZ can be found on the Government of Canada's weather site https://climate.weather.gc.ca/historical_data/search_historic_data_e.html
- Current weather data is available through NAV Canada's AeroView <https://spaces.navcanada.ca/workspace/aeroview/CYYZ/>

The screenshot displays the NAV Canada AeroView interface for Toronto Pearson International Airport (CYYZ). The interface is divided into several sections:

- Header:** NAV CANADA logo, "SPACES - NC-AeroView - CYYZ", and a "SIGN IN" button.
- Location:** "SOUTH FIELD" and "NORTH FIELD" tabs, with "CYYZ - TORONTO" and "LESTER B. PEARSON INTL" displayed.
- Weather Summary:** "010° 12kts" and "Altimeter: 30.15". Below this, it states "Wind Data Last Updated at 2023-12-06 14:58Z" and "Altimeter and Runway Data Last Updated at 2023-12-06 14:53Z".
- Runway Status Table:** A table with columns for Runway, +/- Wind, Cross Wind, RVR A, RVR B, RVR C, Light Setting, and NAVAMD Status. The table lists runways 05, 06L, 06R, 15L, 15R, 23, 24L, 24R, 33L, and 33R.
- Wind Rose Diagram:** A circular wind rose diagram showing wind direction and speed. The current wind is indicated as "12 kts" from the 010-degree direction. The diagram also shows "360 DEG MAG" and "030".
- Footnote:** "**" indicates head wind. "*" indicates tail wind. "Please note, for runway 06L/R, 24L/R and 33L/R, the preferred wind is the South field wind. (please see tab above)" and "NAV CANADA MATS requires that the maximum crosswind or tailwind component include gusts."

Stay in Touch



[Noise Advisory Calendar](#) – includes airport maintenance and activities.



Sign up for our monthly community e-newsletter, Checking In at torontopearson.com/checkingin



Learn more about airport operations and community impacts at airportnoise.torontopearson.com



Email us at community.engagement@gtaa.com



To log a complaint, call us at 416-247-7682 or [submit online](#)



[Pearson Public Meetings](#) – 2024 dates TBD

Question Period



Thank You

Next Meeting – TBD

HOW RUNWAYS ARE ASSIGNED

- › Winds
 - Predominant wind direction, wind speed, crosswinds. Predominant winds are westerly and easterly.
- › Runway surface conditions
 - Wet, dry, contaminated (accumulation of precipitation)
- › Runway Length
 - Pilots can request a specific runway based on operational requirements. For example Runway 15L/33R, the longest and can be requested at times by long haul (heavy) aircraft
- › Runway availability
 - Maintenance or other factors that make one of the five runways temporarily unavailable
- › Traffic Demand & Capacity
 - Traffic levels vary throughout the day. Weekend and overnight can mean lower traffic so more configuration options. Most capacity on the east/west runways (3 parallel runways in this direction)
- › Time of Day
 - Between 12:00 a.m. & 6:30 a.m., Toronto Pearson uses a preferential runway system to direct planes over the fewest residents

95% of operations are on the east/west runways because winds are predominantly from the west or the east and the three parallel east/west runways provide the most capacity.

RUNWAY UTILIZATION

Post Pandemic

- › Land one – depart one operation
- › Runway 05/23 is often used as the main departure runway due to length
- › Runway 06L/24R is often used as the main arrival runway when in an easterly or westerly configuration
- › Dualling unnecessary due to traffic levels and simplicity/standardization of operation.

Recent Trends

- › An east-west operation is the most streamlined operation. Depart 05/23, arrive on 06L/24R.
- › It is important to note that construction (planned and unplanned) and other factors present challenges that make it difficult to have the same operation every day.
- › When traffic permits, aim to use south complex (06 and 24) for departures to avoid longer taxi time.
- › Pilots will almost always prefer to depart from the longer runway – even when we plan to depart 06, we anticipate a lot of requests for the north runway. This interrupts the arrival flow to accommodate a departure from the arrival runway.