

San Fernando Valley Task Force Briefing

By: Clark Desing

Date: December 4, 2019

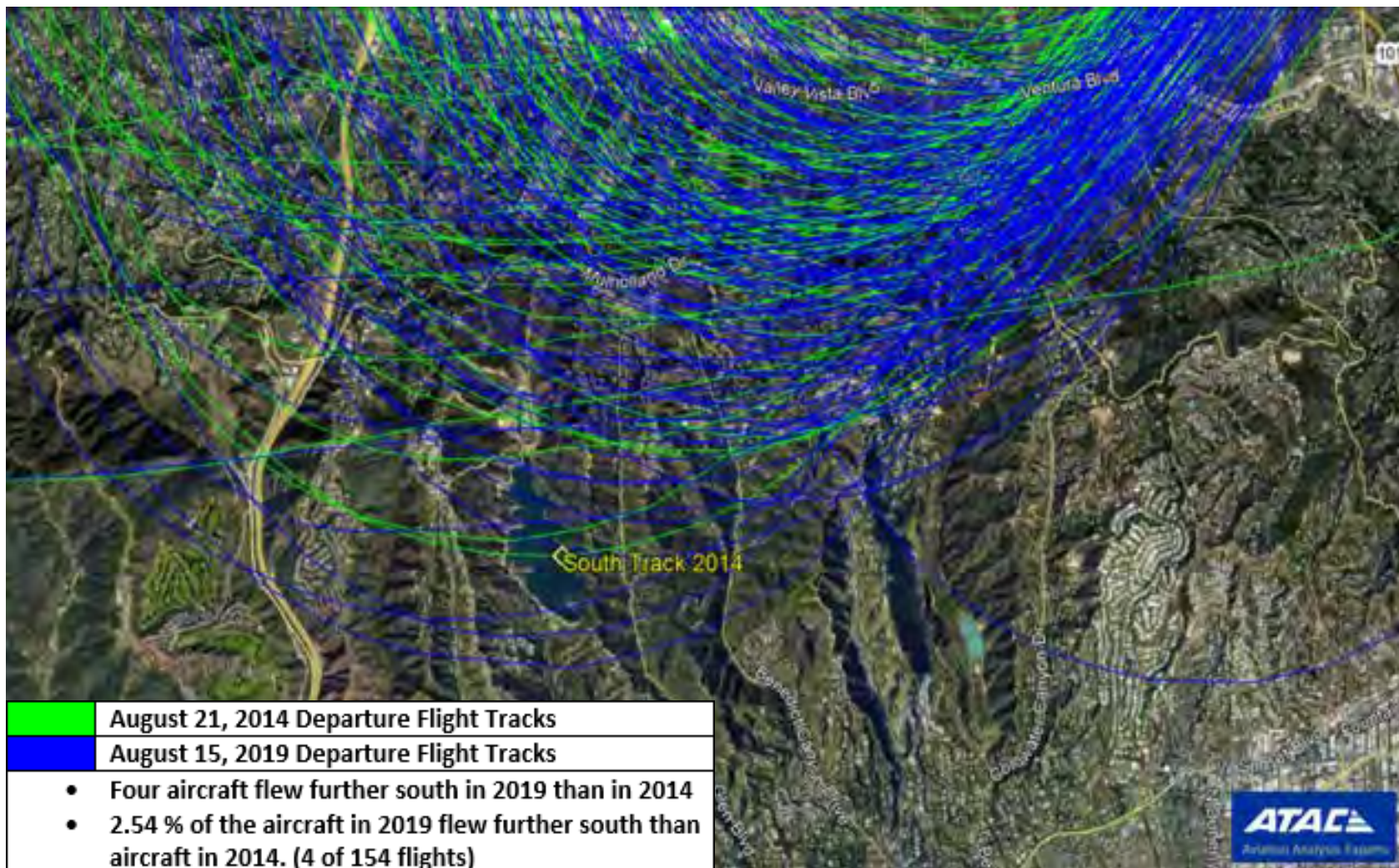


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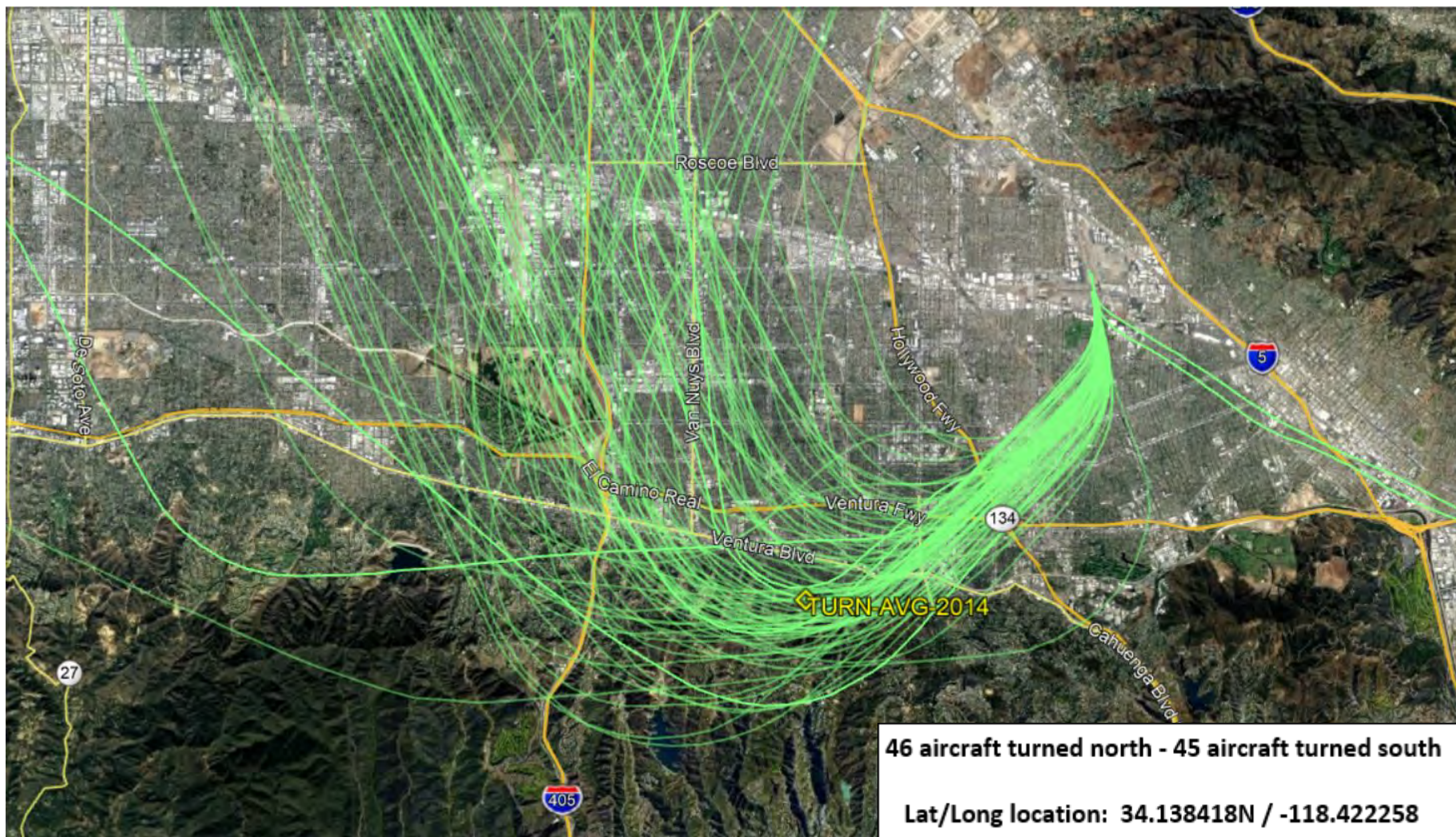


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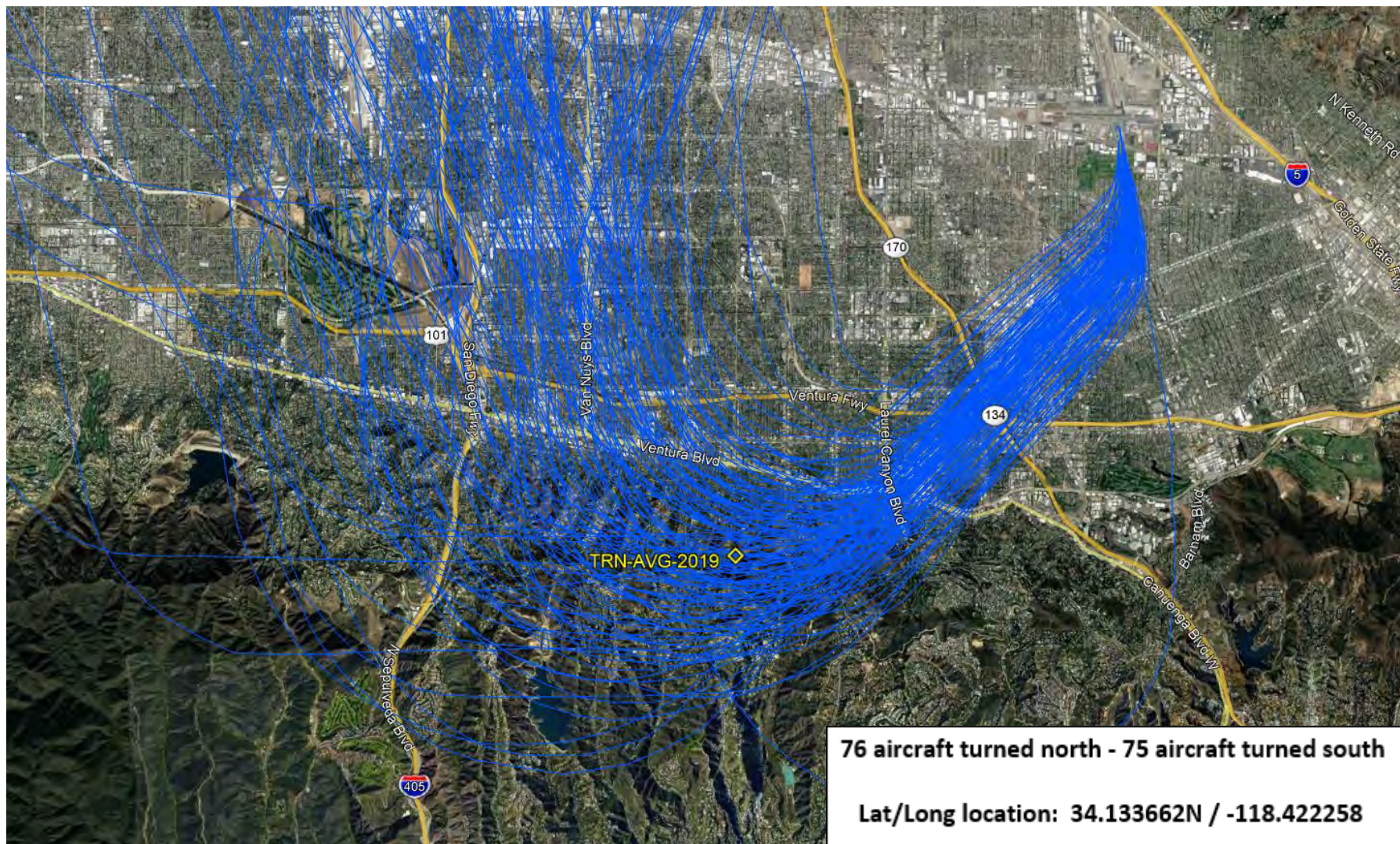
Burbank Departures



August 21, 2014 Departure Flight Tracks

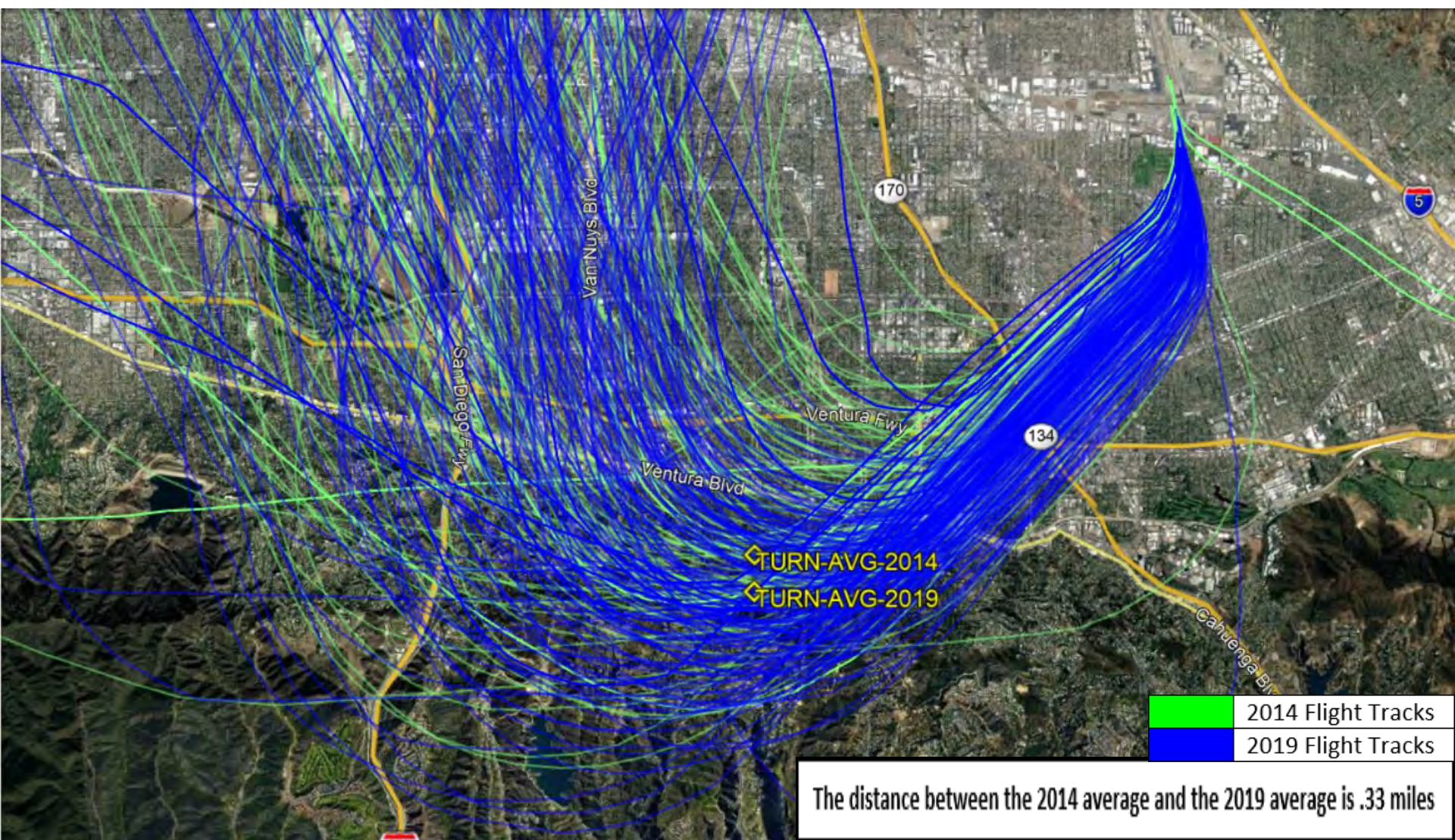


August 15, 2019 Departure Flight Tracks

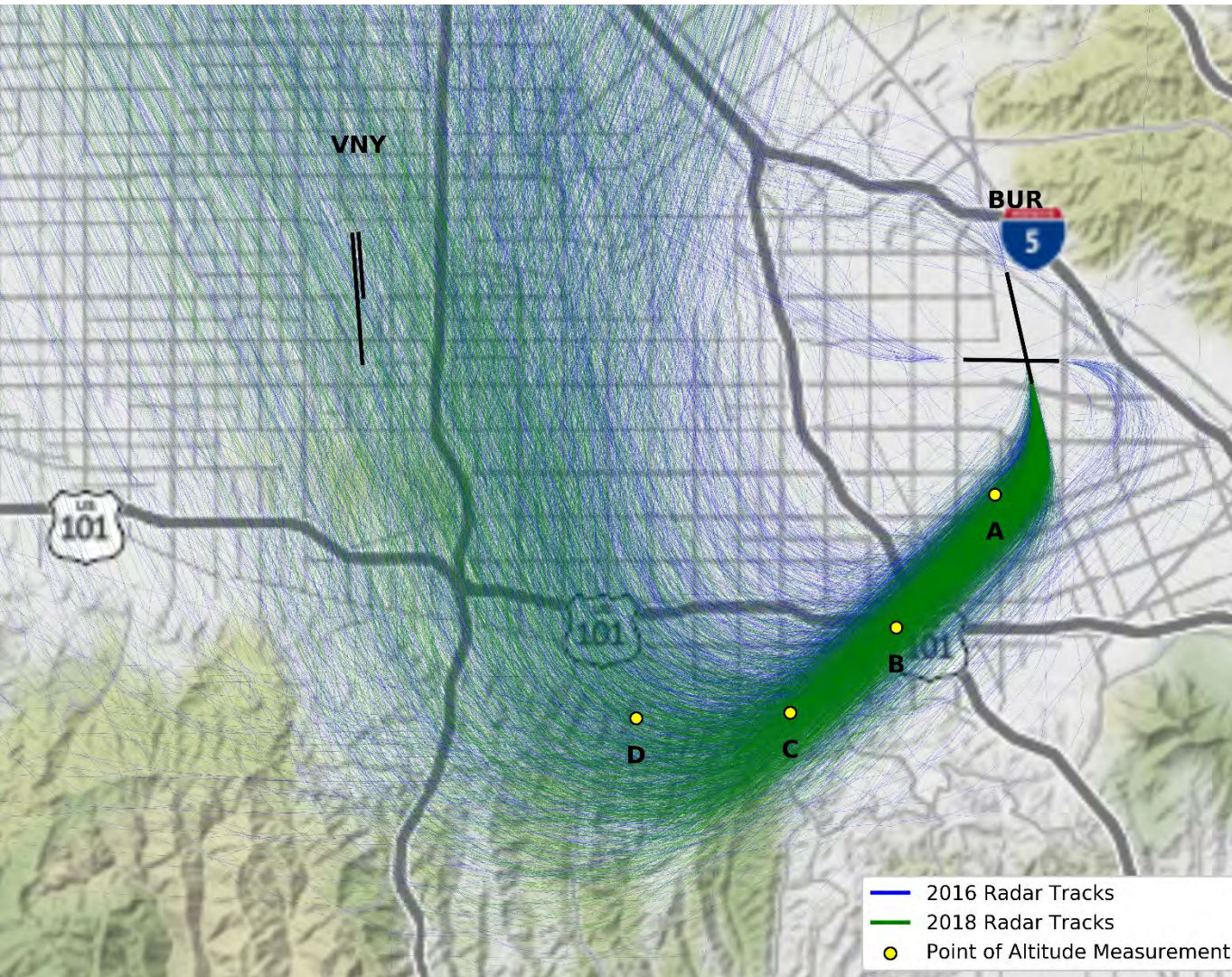


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BUR Departure Flight Tracks Average Comparison



Locations of the Four Points



- The FAA selected four locations under the BUR departure path to compare pre- and post-Metroplex altitudes.
- Post-Metroplex average altitudes are higher than pre-Metroplex average altitudes over each of the four points.
- Average Altitudes over each point (in Feet):
 - Point A:
 - 2016 1,953
 - 2018 2,058
 - Point B:
 - 2016 2,785
 - 2018 2,957
 - Point C:
 - 2016 3,613
 - 2018 3,865
 - Point D:
 - 2016 4,506
 - 2018 4,879



Burbank Departure track comparison 2014 to 2019



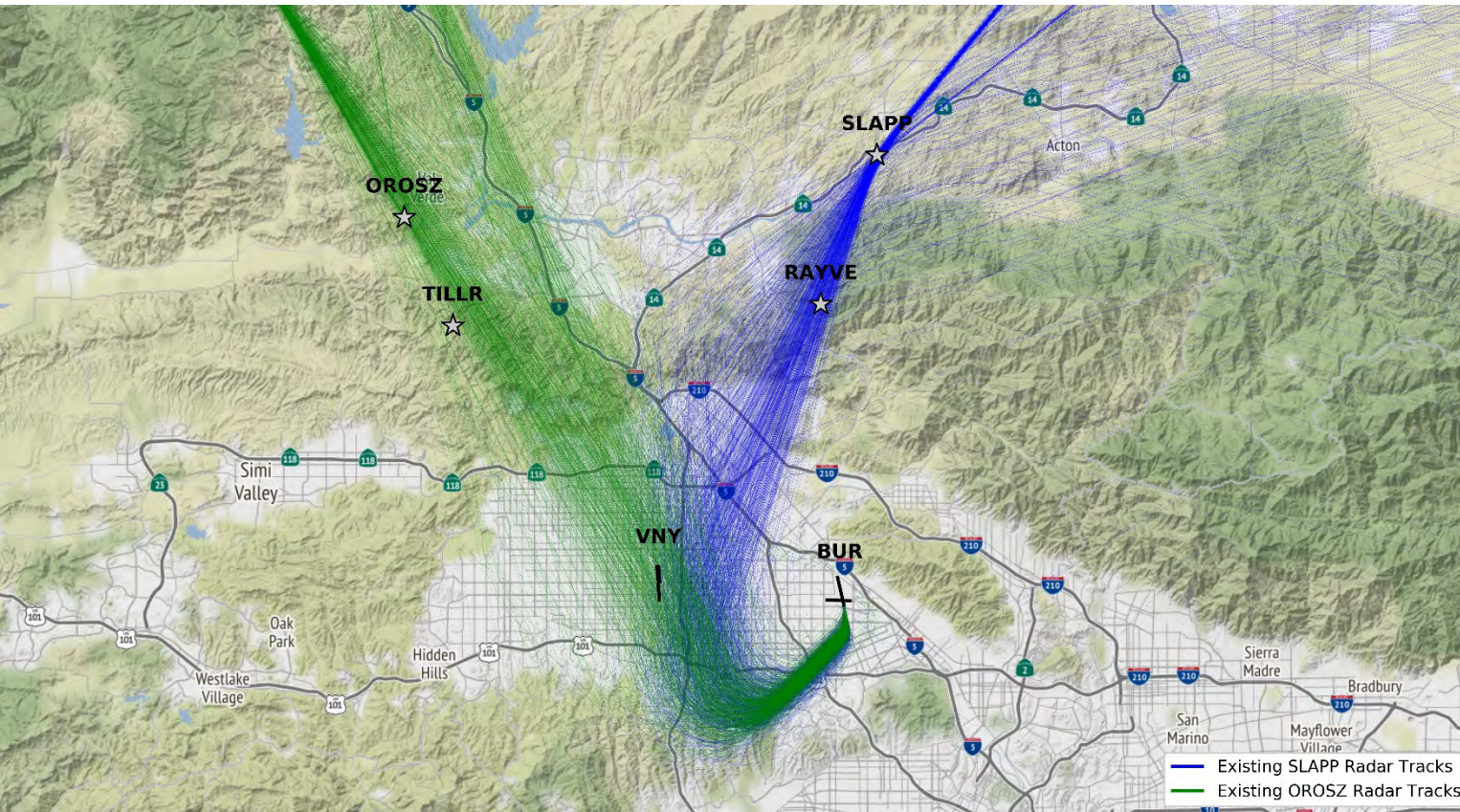
Both Flight Tracks are 737 aircraft.

2014 Flight Track is from August 21, 2014.

2019 Flight Track is from August 15, 2019.



Current Flight Tracks for SLAPP and OROSZ Departure Routes



- As part of the Southern California Metroplex Project, the FAA created two new satellite-based departure routes for BUR.
- These routes, which the FAA implemented in March 2017, are called the SLAPP and the OROSZ.
- The satellite-based portions of the routes begin significantly north and northwest of the airport, at the RAYVE and TILLR waypoints. They do not begin in the immediate airport environment.

- 2018 flight tracks for the OROSZ and SLAPP procedures
- 14 random days totaling 1,574 flight tracks .

Backup Slides History of Two Cities and LAWA Briefing



The History of Two Airports

By: Clark Desing

Date: December 4, 2019



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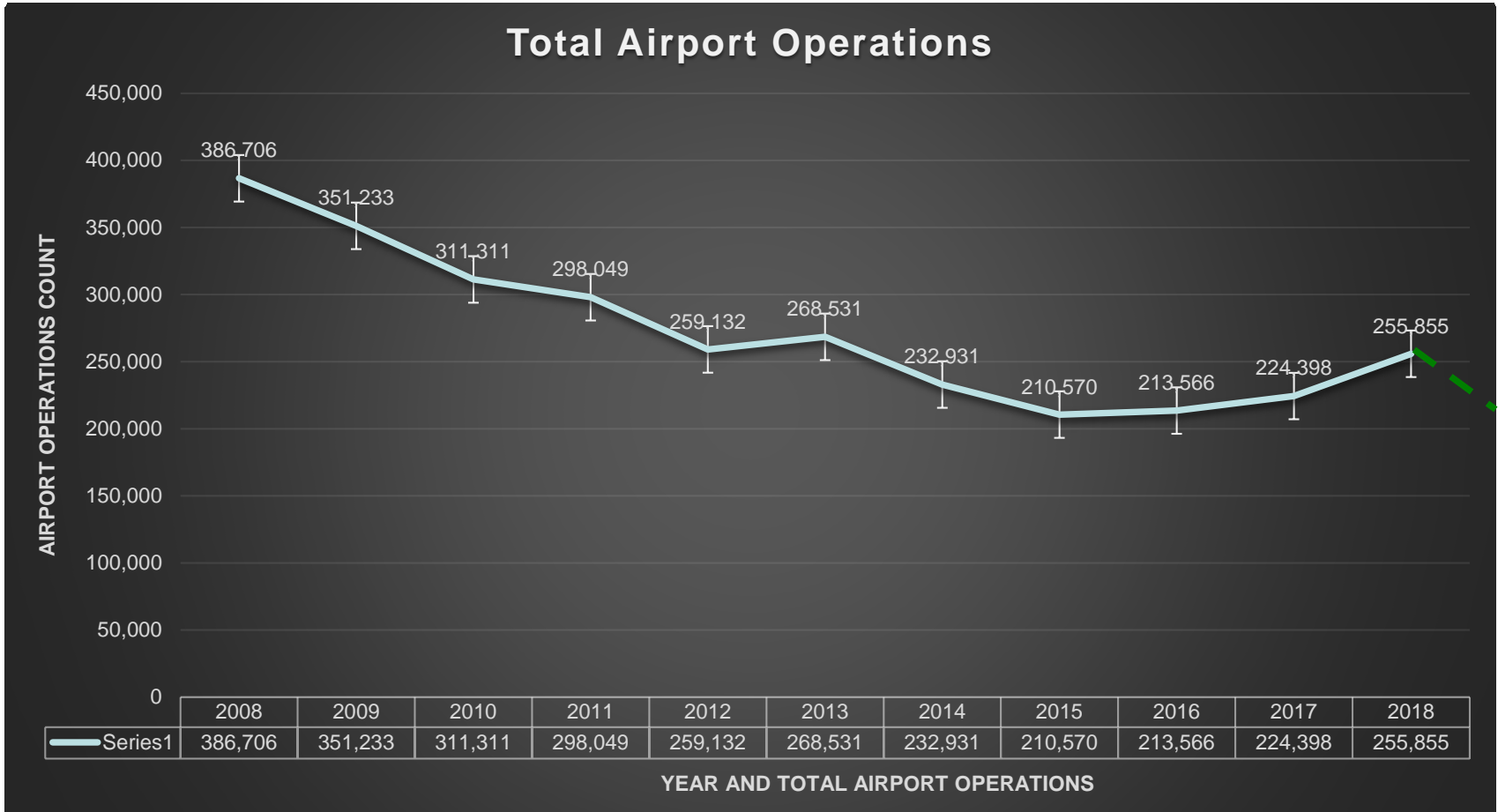
History of Van Nuys (VNY)



- Opened December 1928.
- U.S. Army took control of airport in 1941.
- Home to many military aircraft:
 - P-80's first test flight.
 - P-38 Lightning.
 - F-86 jets.
- City of Los Angeles bought airport in 1949.
- Voluntary Noise abatement and Curfew Ordinance was implemented in the 1980's.



VNY Airport Operations Yearly Traffic Count (OPSNET)



**** Green dashed line is 2019 project of total airport operations**



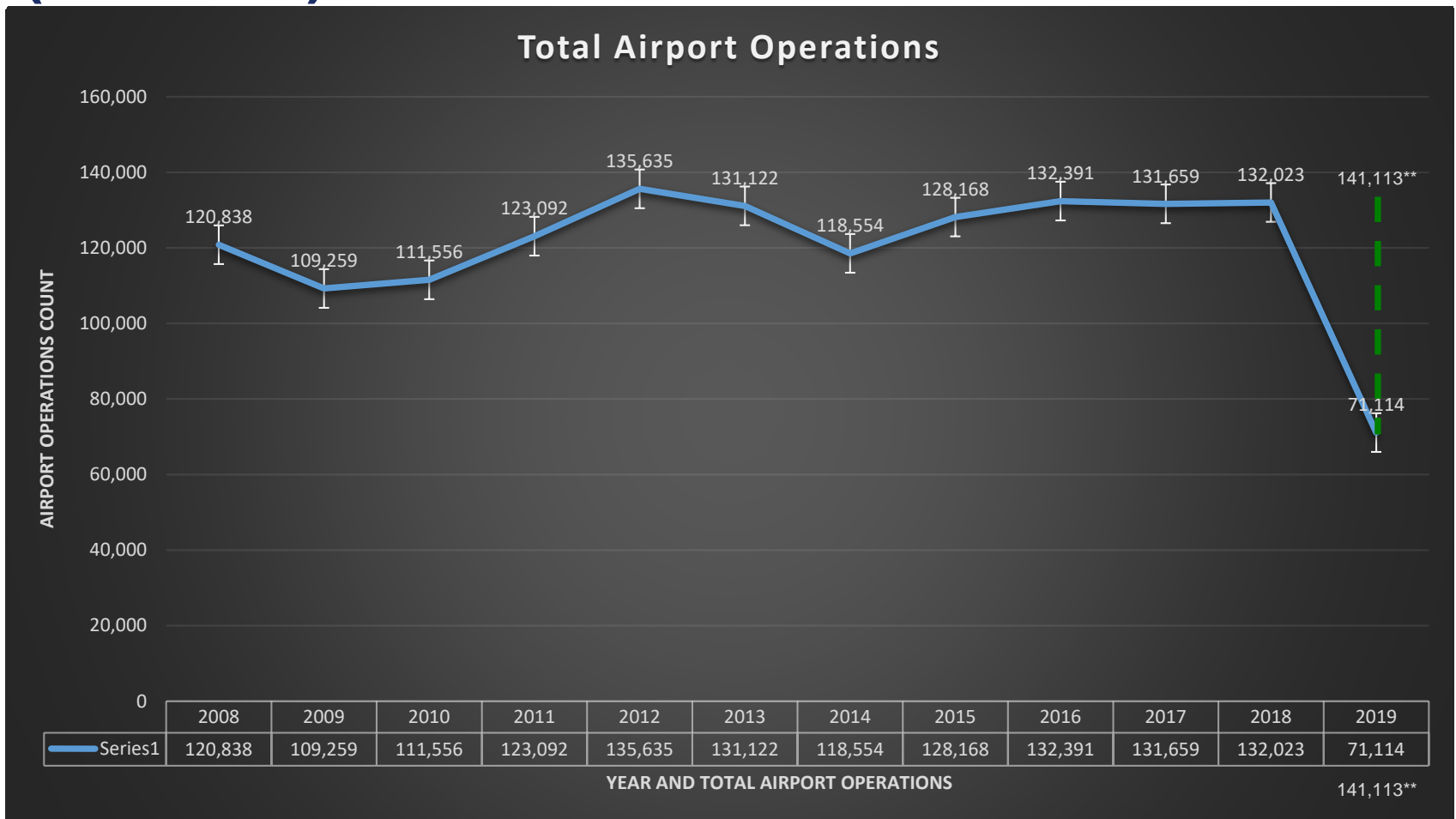
History of Burbank (BUR)



- Opened in 1930 as United Airport.
- Renamed United Air Terminal in 1934.
- Lockheed bought airport in 1940 and renamed it "Lockheed Air Terminal."
- Jet service arrived in 1960's
- Home to many aircraft:
 - Douglas DC-4
 - Lockheed L-188 turboprop
 - Boeing 727-100s/737/767
 - DC-9/DC-10
- 1973 Supreme court overturned Airport Curfew ordinance.
- 1978 Lockheed sold to Burbank Glendale Pasadena Airport Authority.
- Home of the "Skunk Works" program (1943 to 1989)



BUR Airport Operations Yearly Traffic Count (OPSNET)



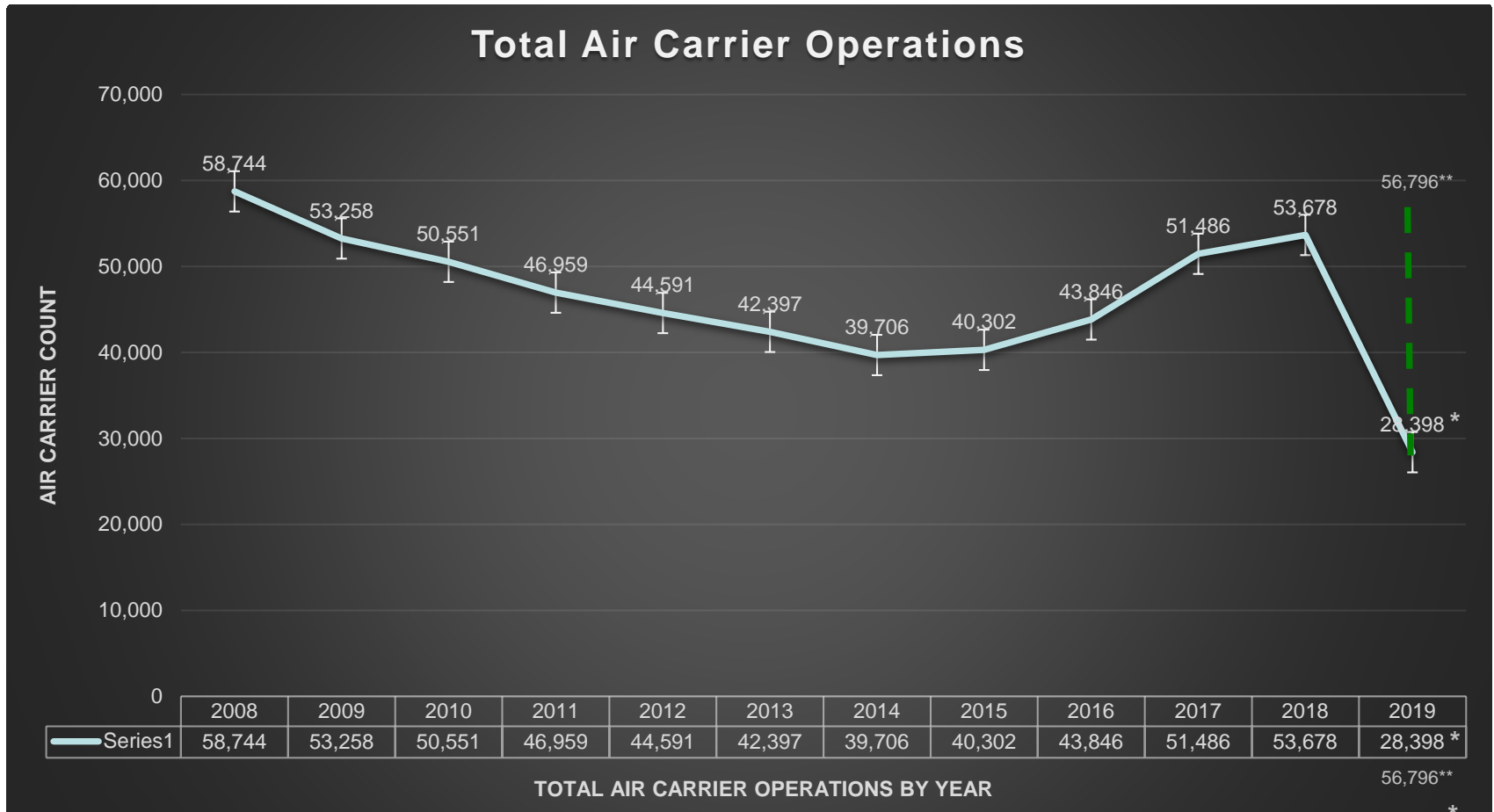
** 2019 data only includes count through June*

*** Green dashed line is 2019 project of total airport operations*



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BUR Air Carrier Yearly Traffic Count (OPSNET)



** 2019 data only includes count through June*

*** Green dashed line is 2019 project of total airport operations*



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Overview

- 14 random days of flight tracks from VNY and BUR were used, except in 2019 where only 7 random dates were used.
- Same dates used for each of the years starting in 2008 except in 2019 where only 7 days was used.
- All track data displayed is sourced from PDARS.
- All traffic count data was obtained from Operational Network (OPSNET).
- Dates generated by a “random calendar date generator” (Random.org).

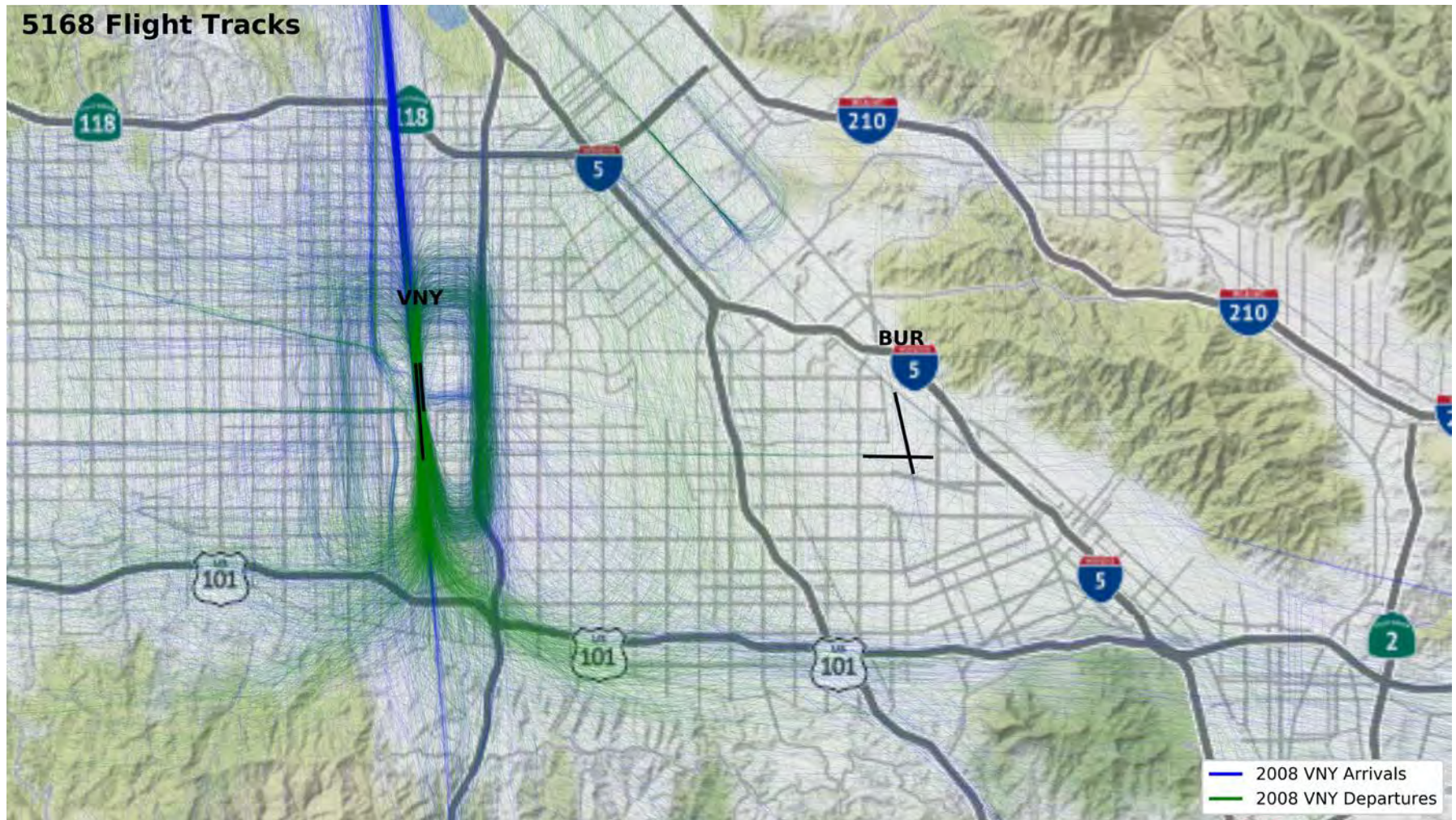


Overview

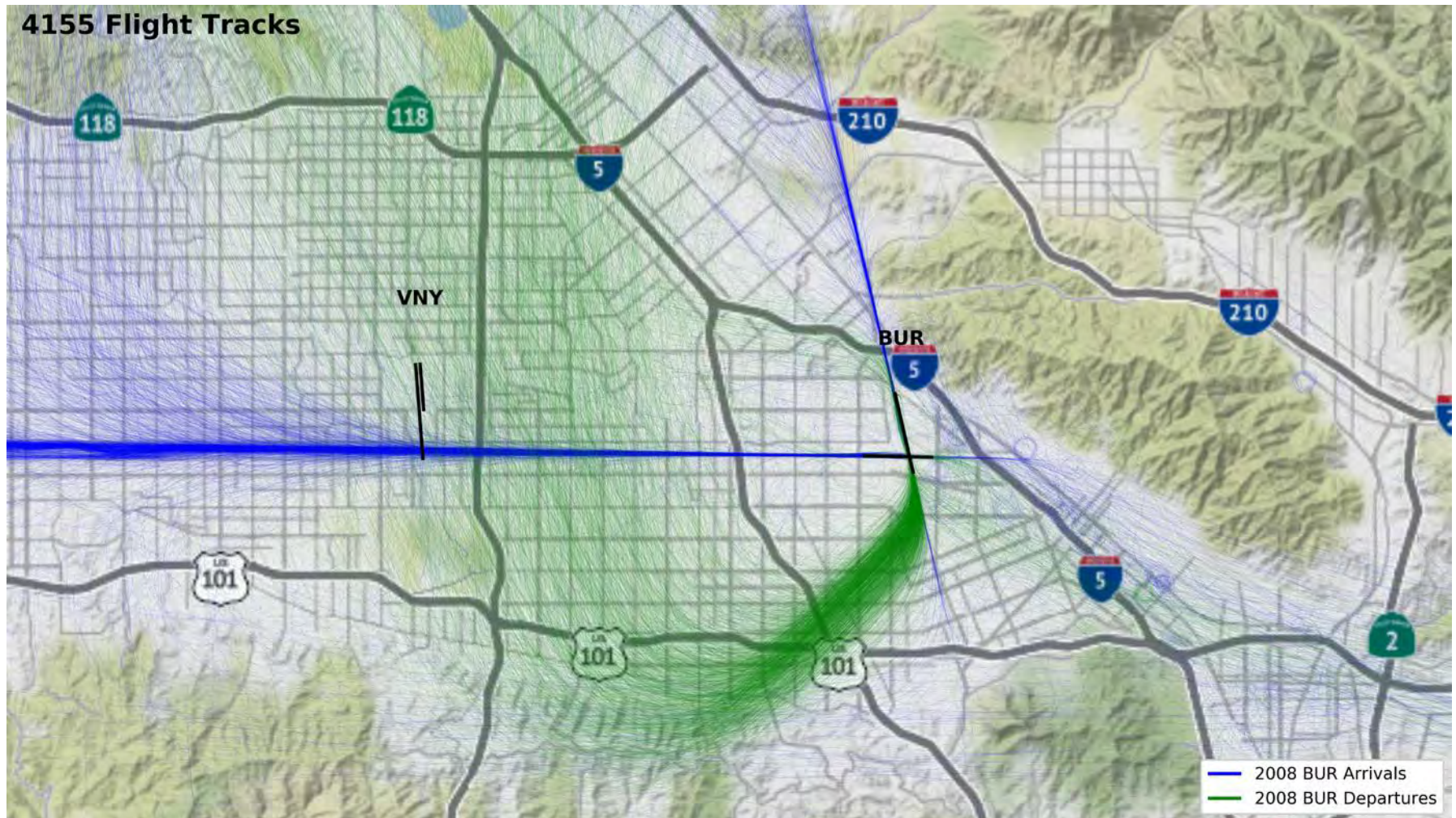
- The initial Metroplex changes occurred in March 2, 2017.
- First Area Navigation (RNAV) departures were implemented at VNY and BUR on March 2, 2017.
- Both VNY and BUR have seen an overall increase in traffic over the last 3 years.
- The following items were not analyzed:
 - Airline flight schedules
 - General Aviation flight schedules
 - Weather/Temperature



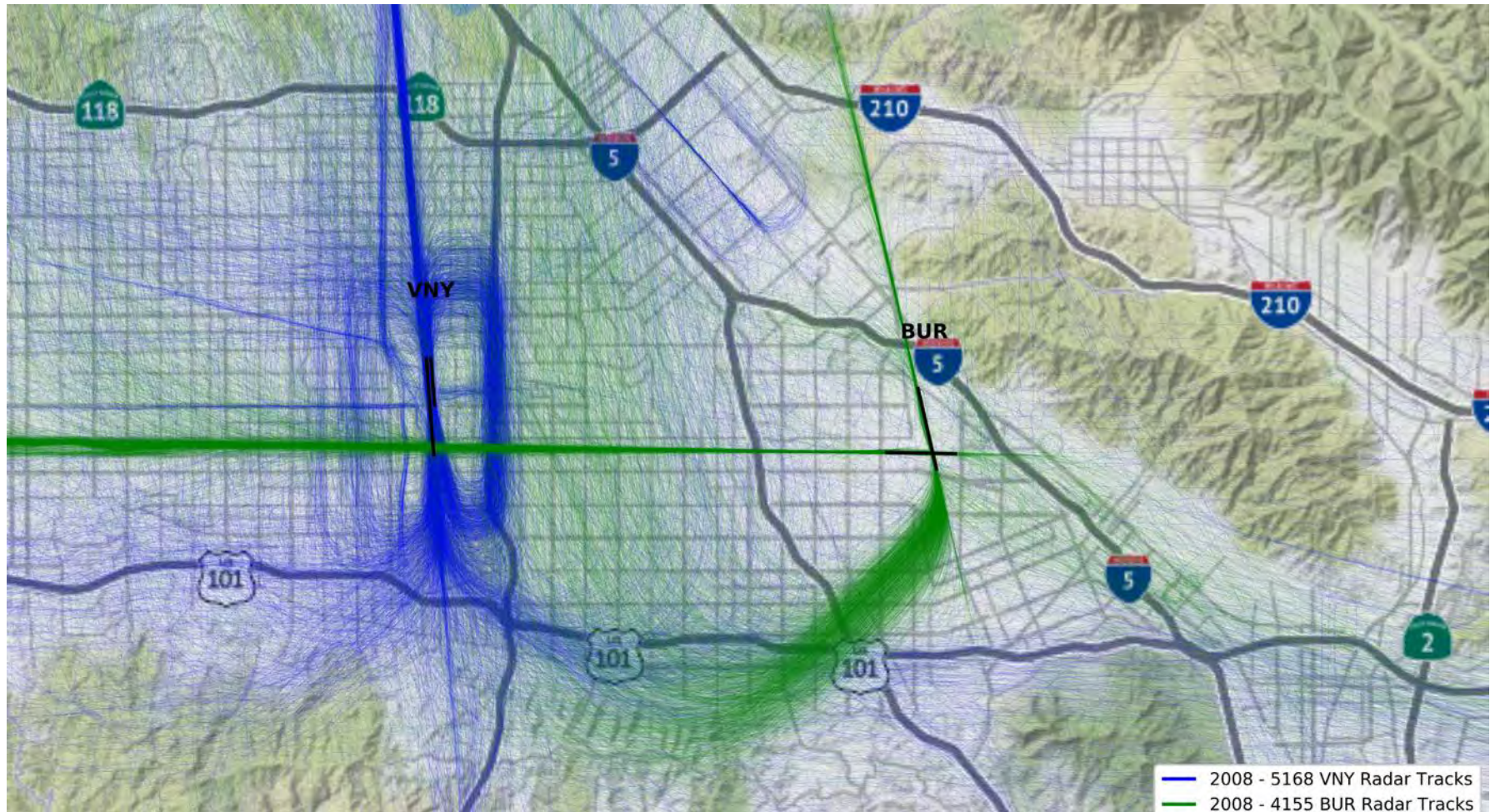
VNY Flight Tracks 2008



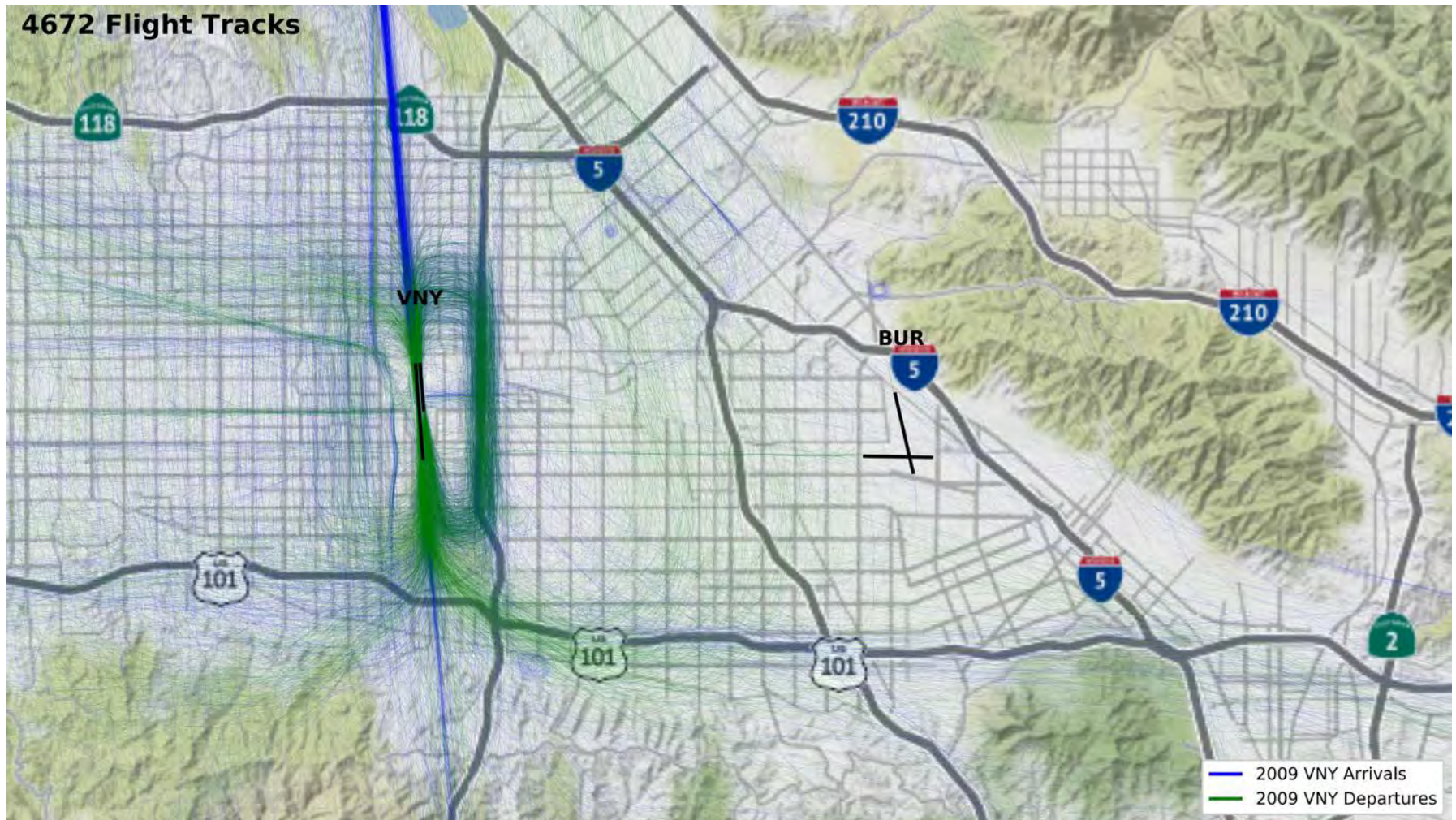
BUR Flight Tracks 2008



VNY and BUR Flight Tracks Combined 2008



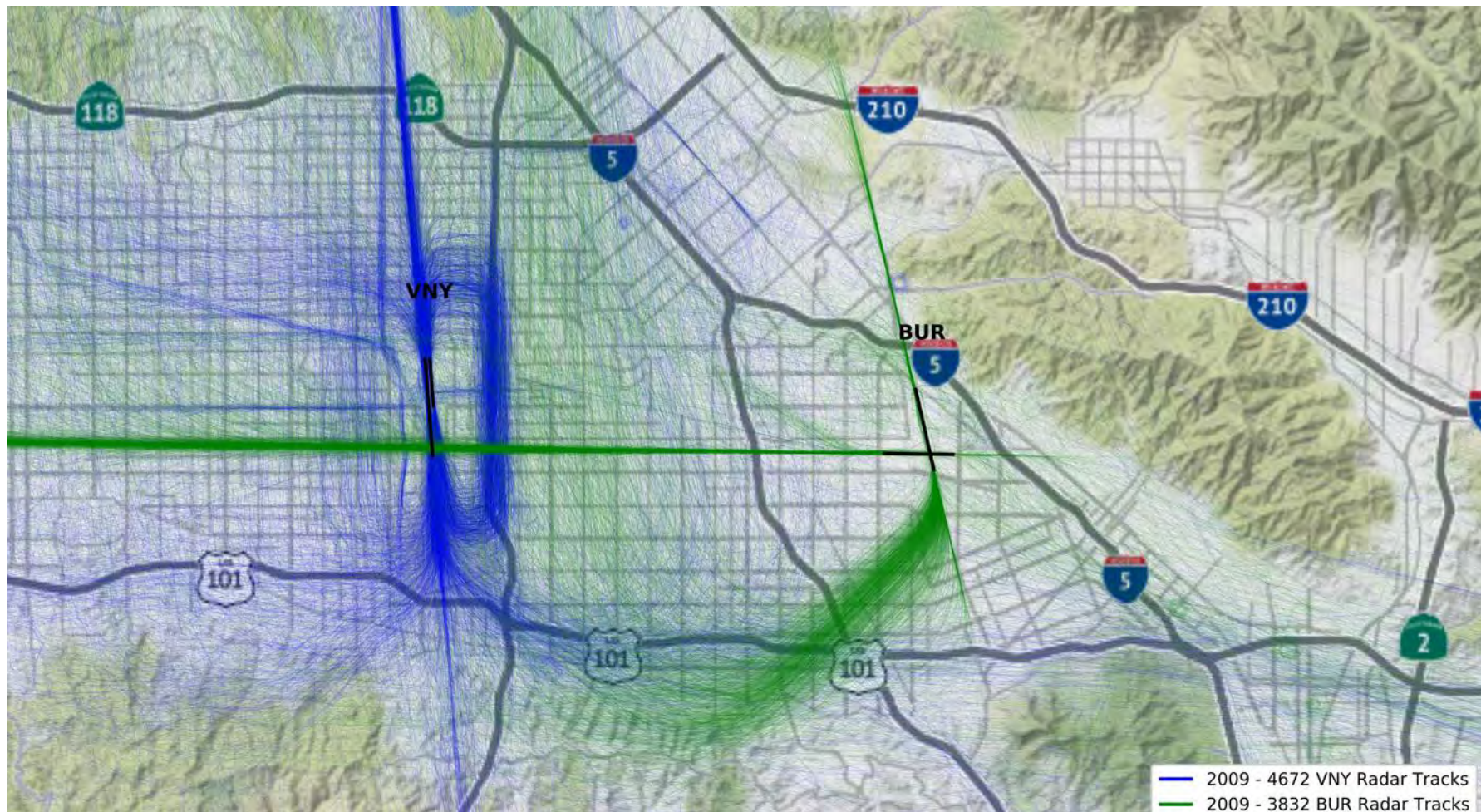
VNY Flight Tracks 2009



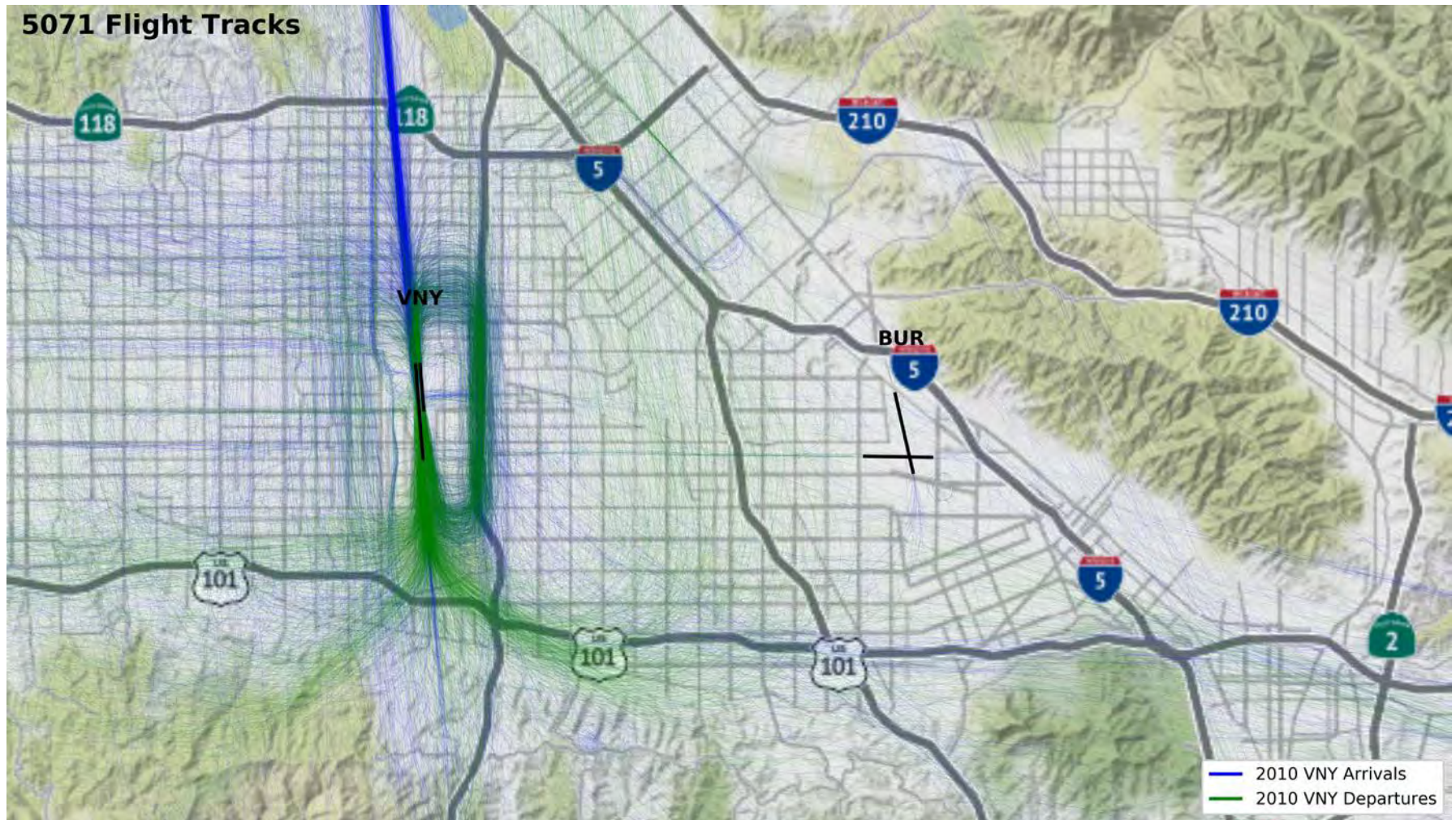
BUR Flight Tracks 2009



VNY and BUR Flight Tracks Combined 2009



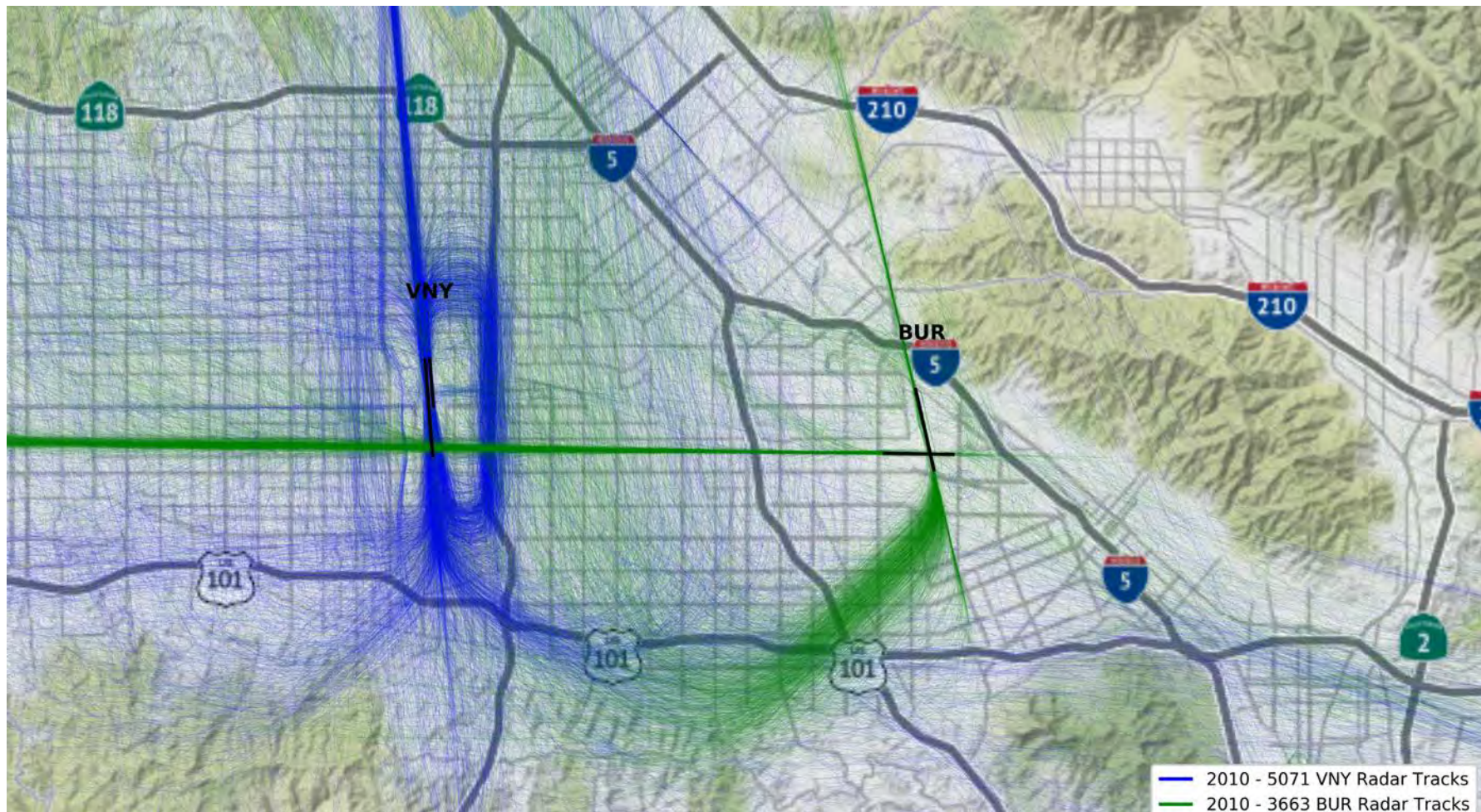
VNY Flight Tracks 2010



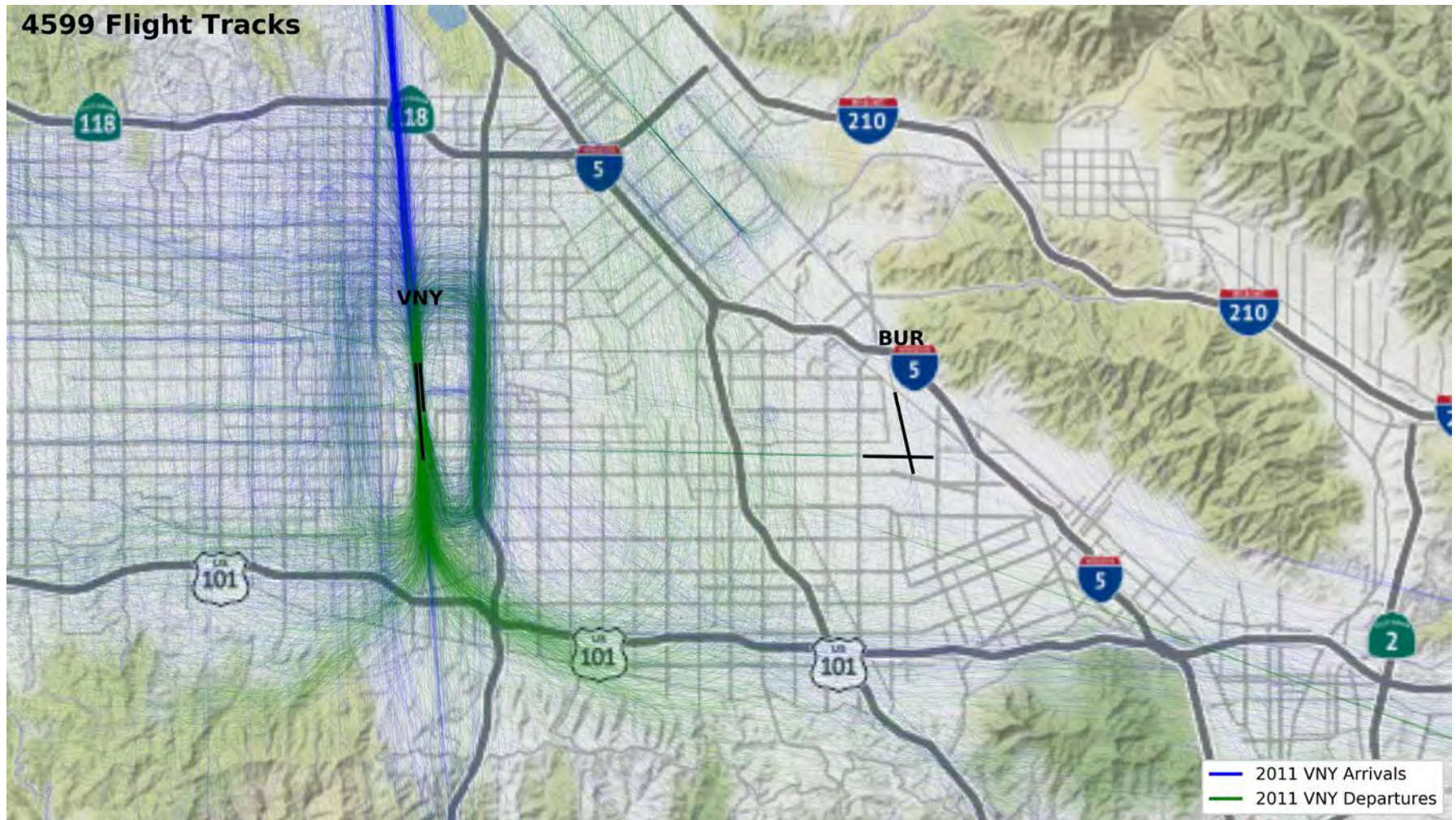
BUR Flight Tracks 2010



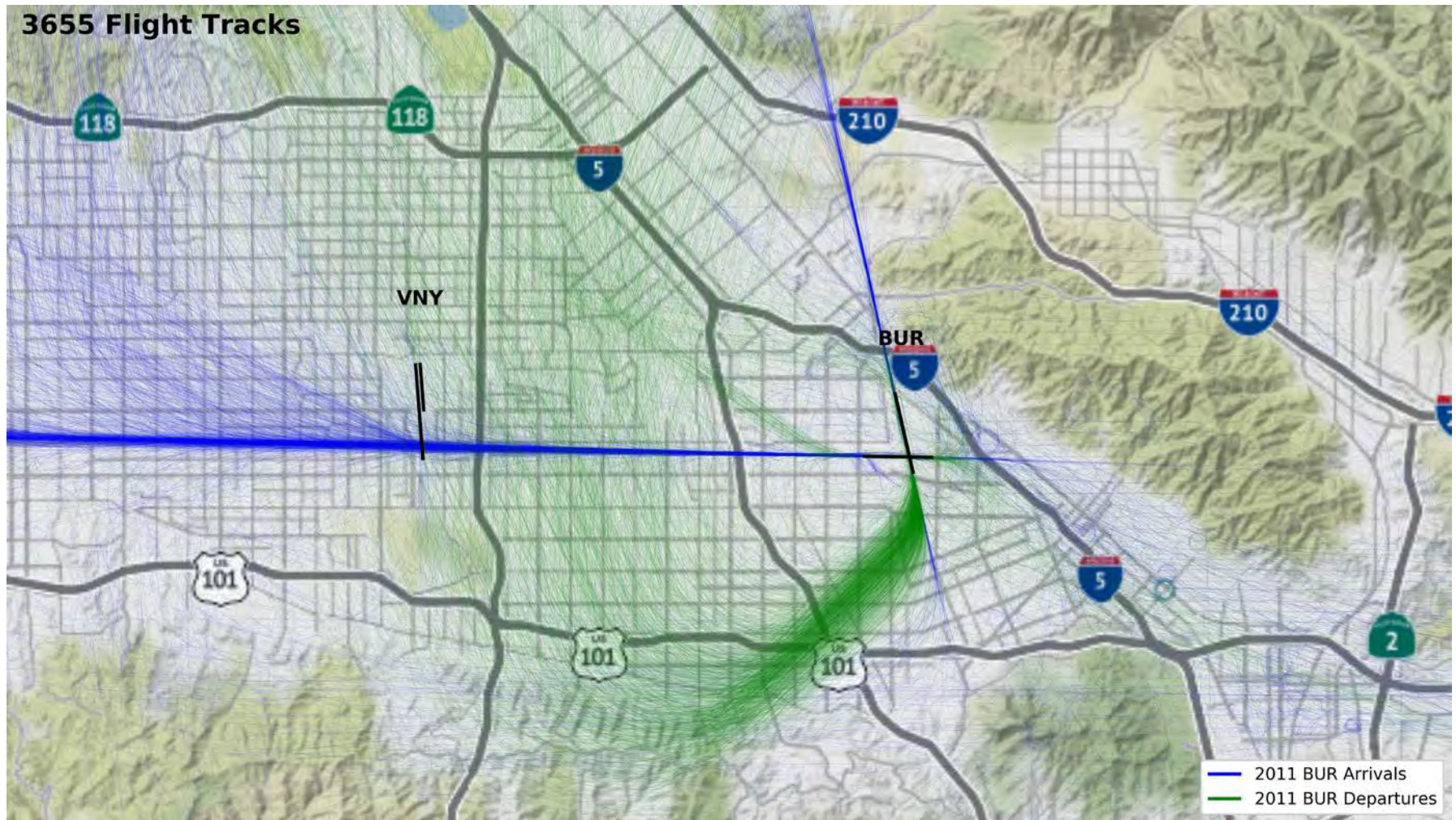
VNY and BUR Flight Tracks Combined 2010



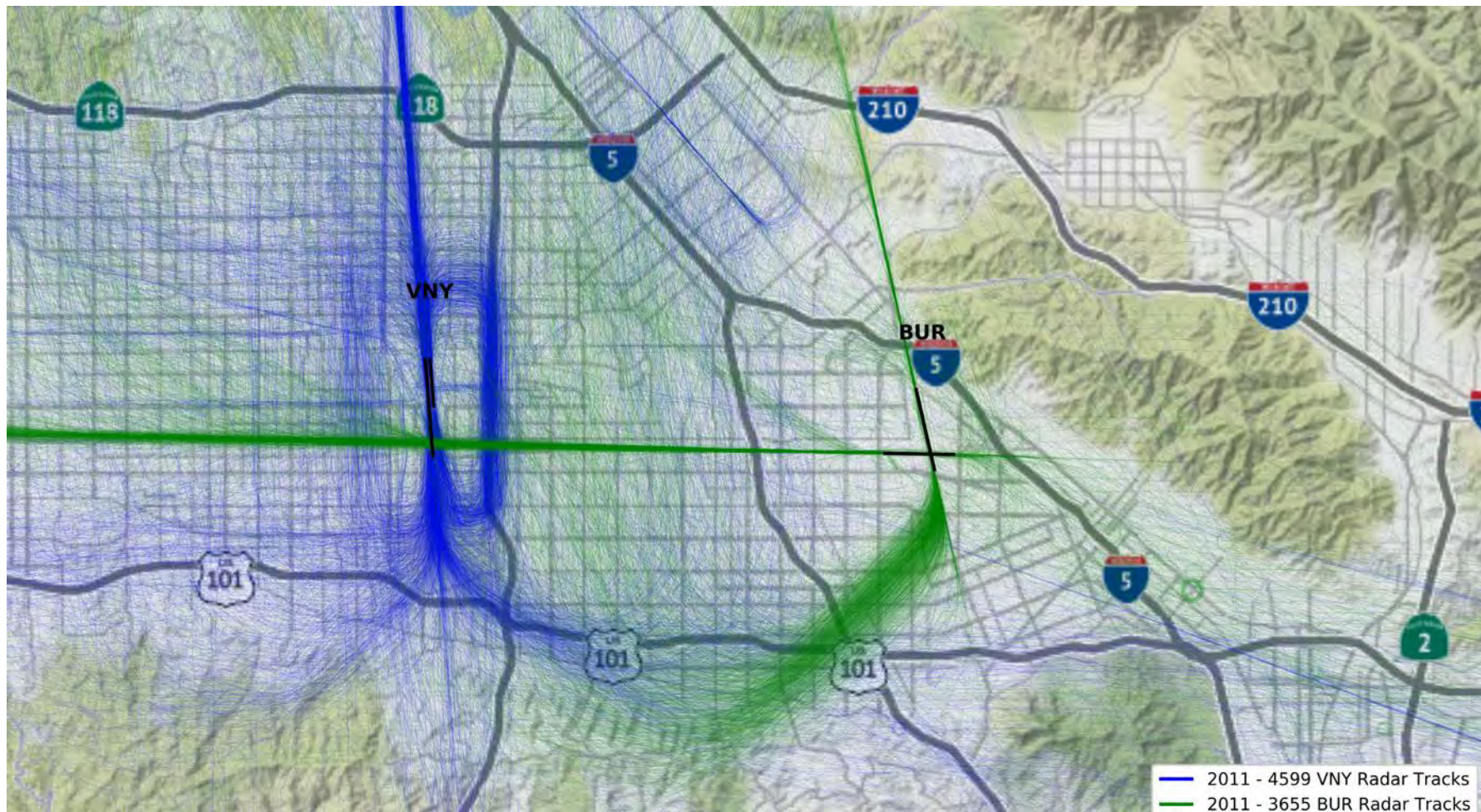
VNY Flight Tracks 2011



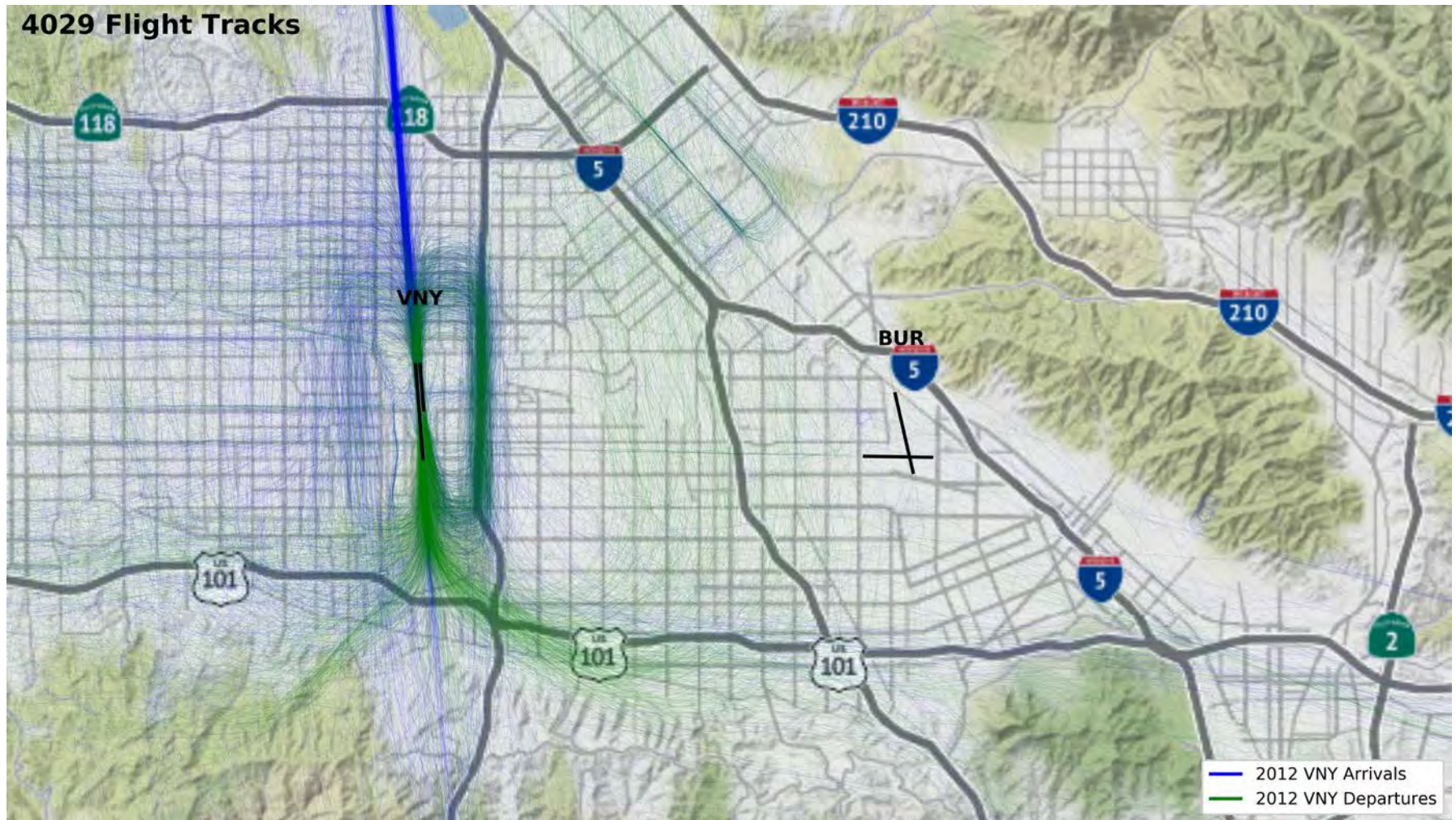
BUR Flight Tracks 2011



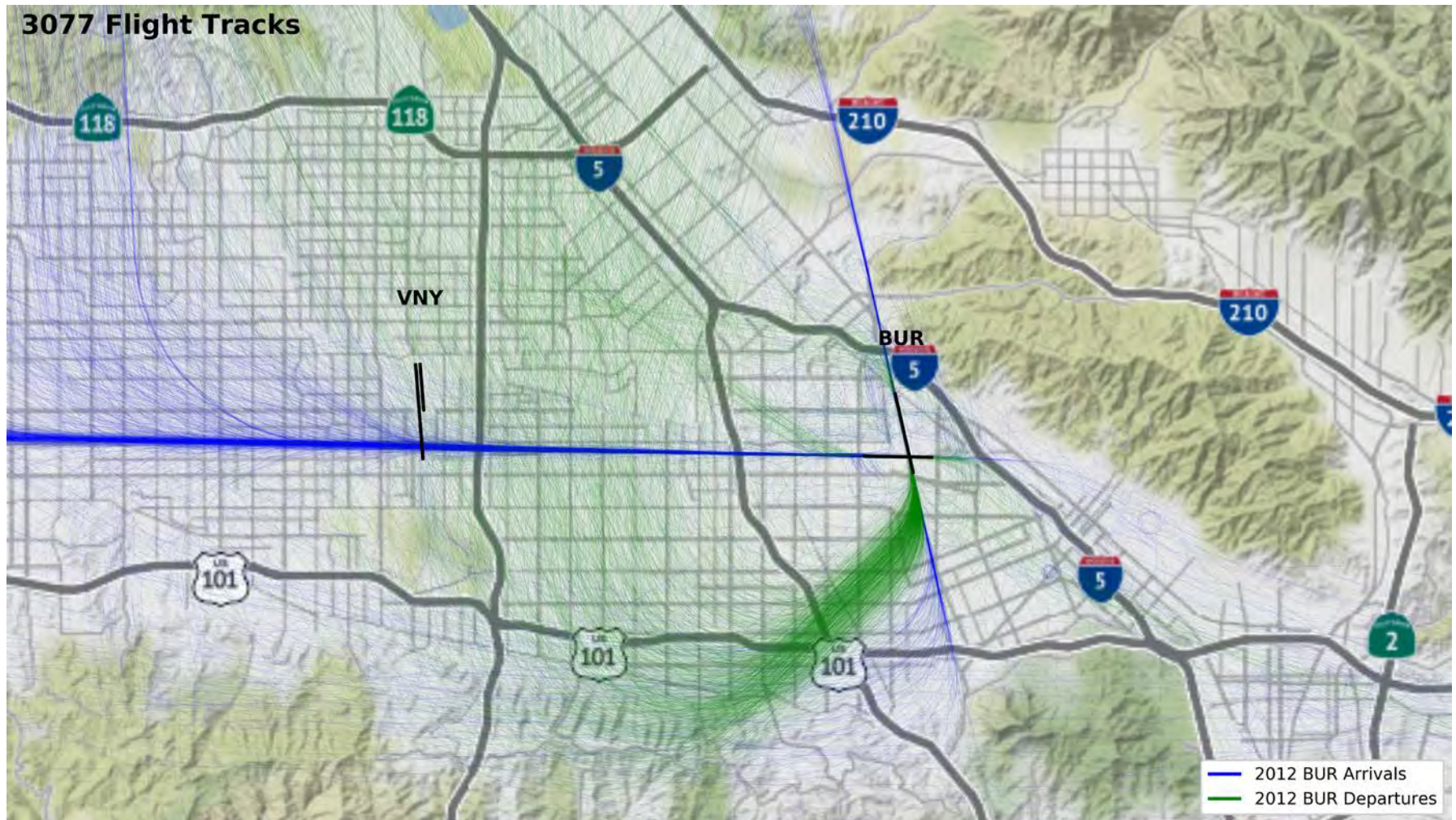
VNY and BUR Flight Tracks Combined 2011



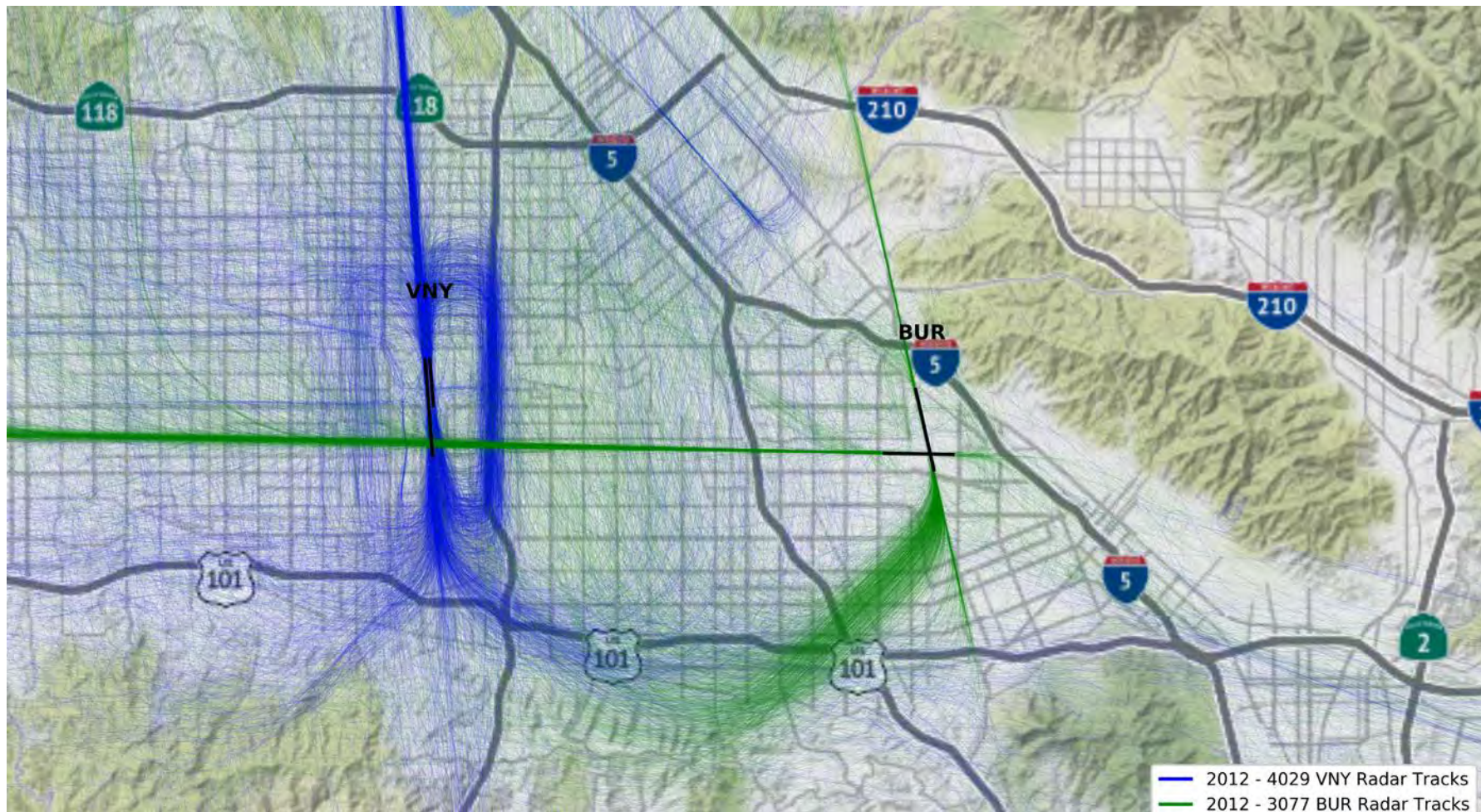
VNY Flight Tracks 2012



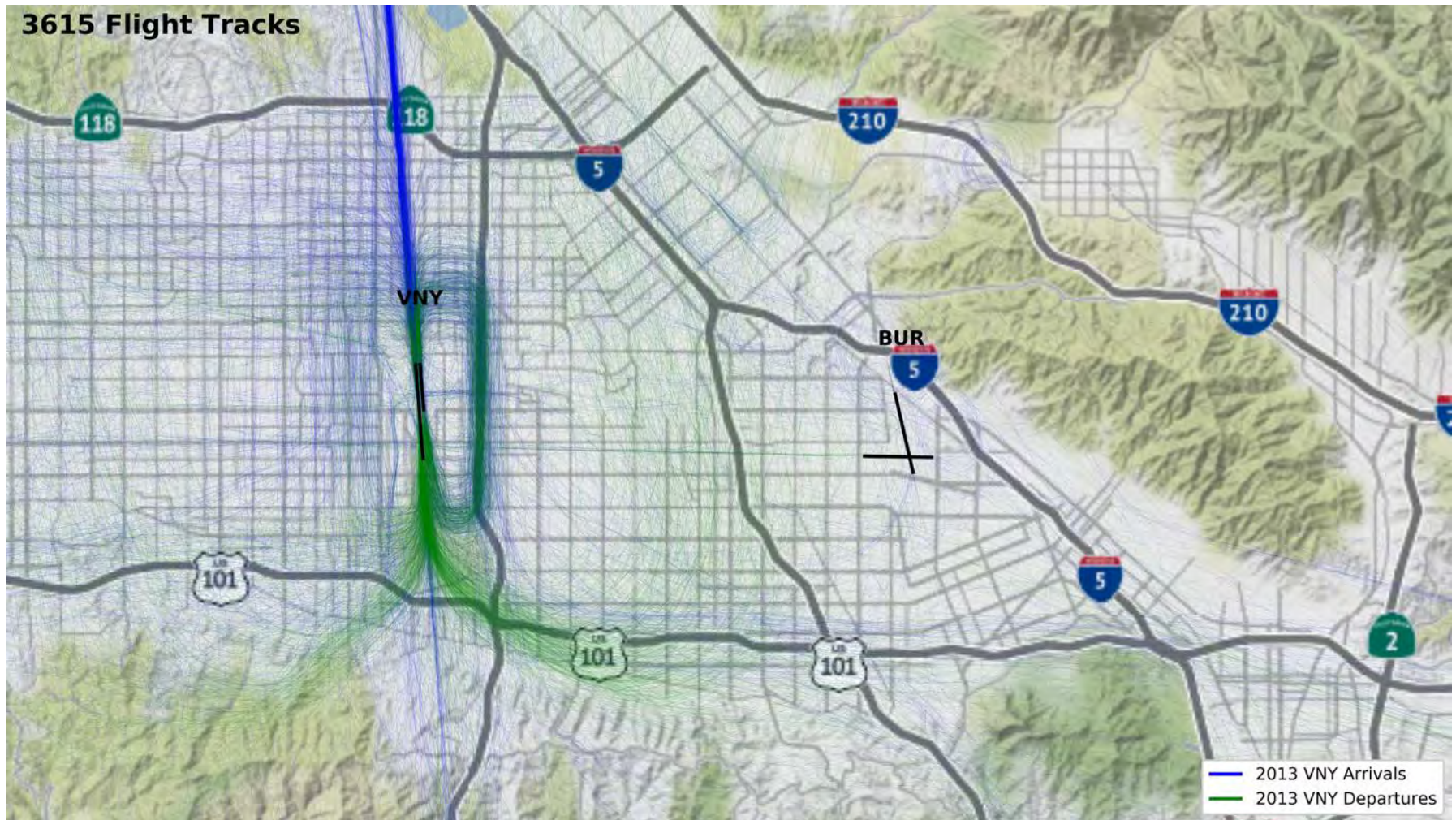
BUR Flight Tracks 2012



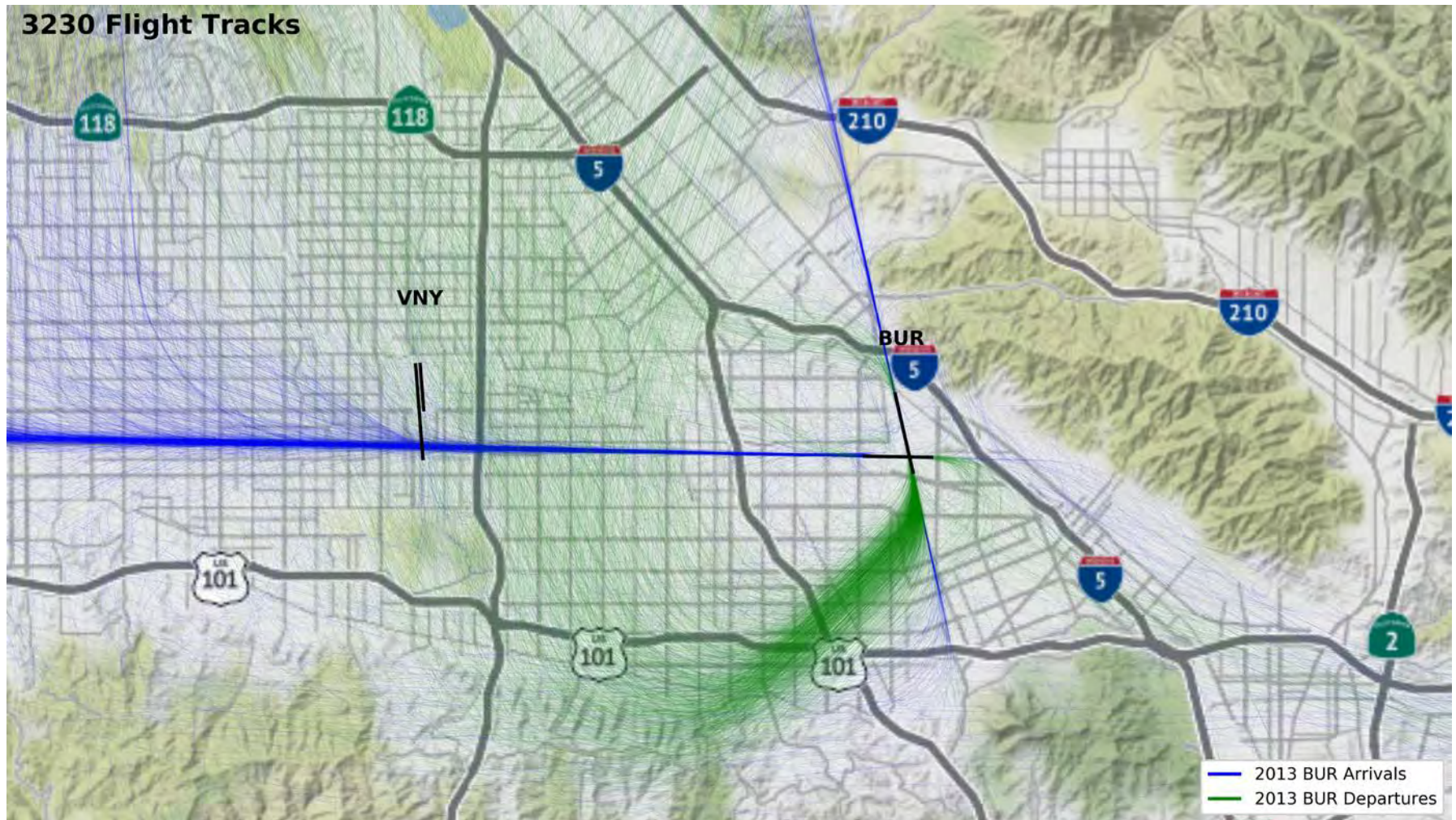
VNY and BUR Flight Tracks Combined 2012



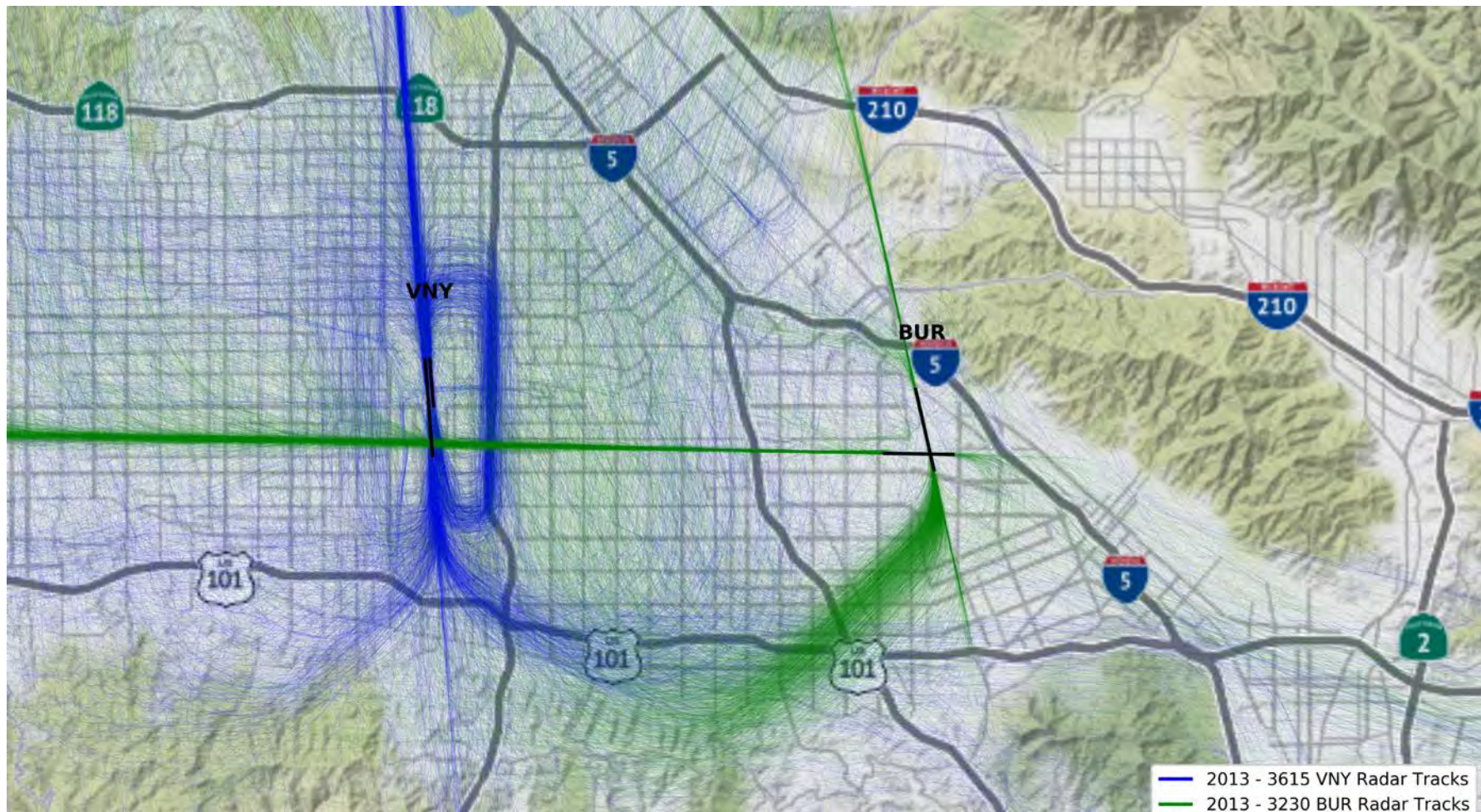
VNY Flight Tracks 2013



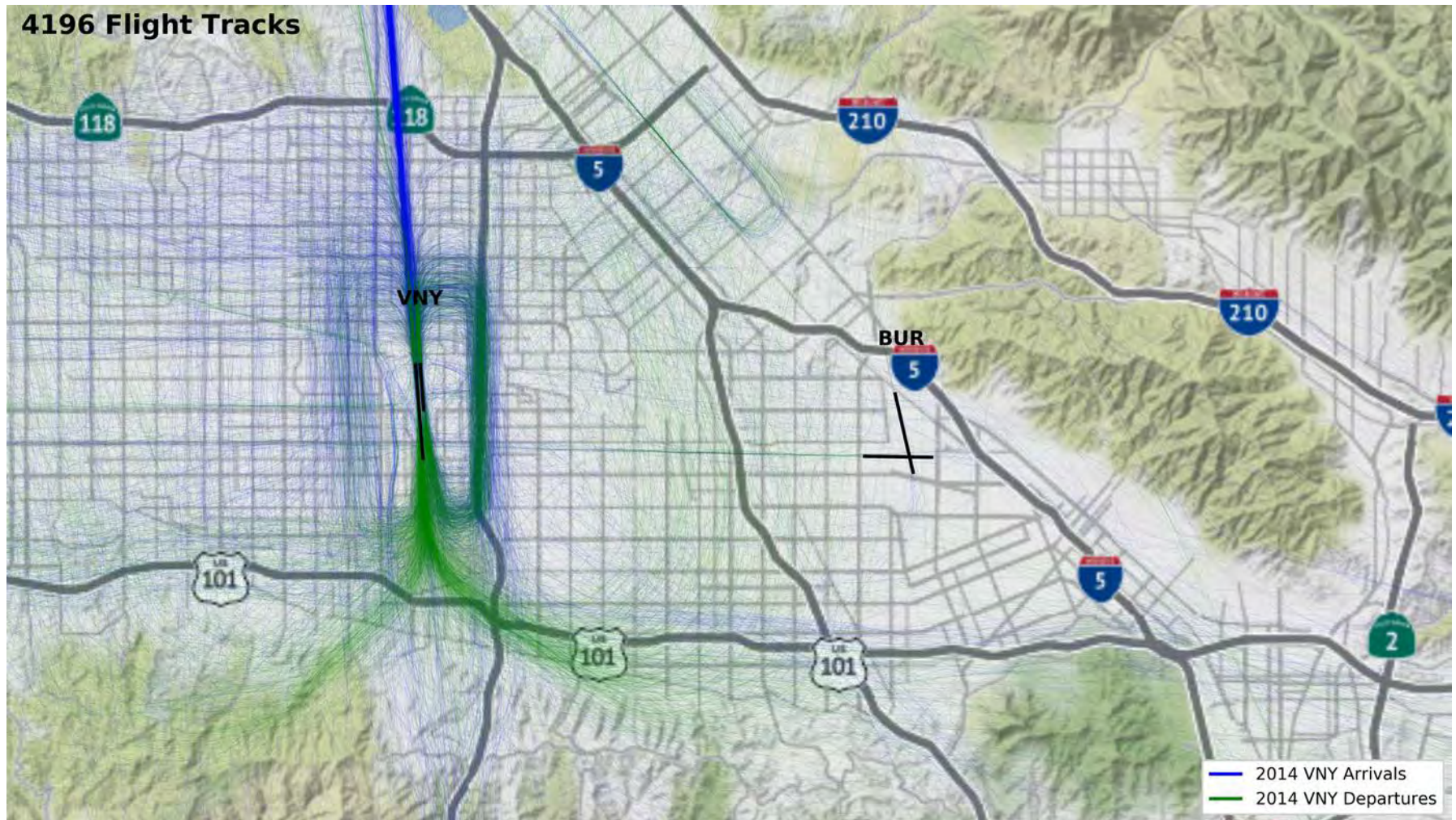
BUR Flight Tracks 2013



VNY and BUR Flight Tracks Combined 2013



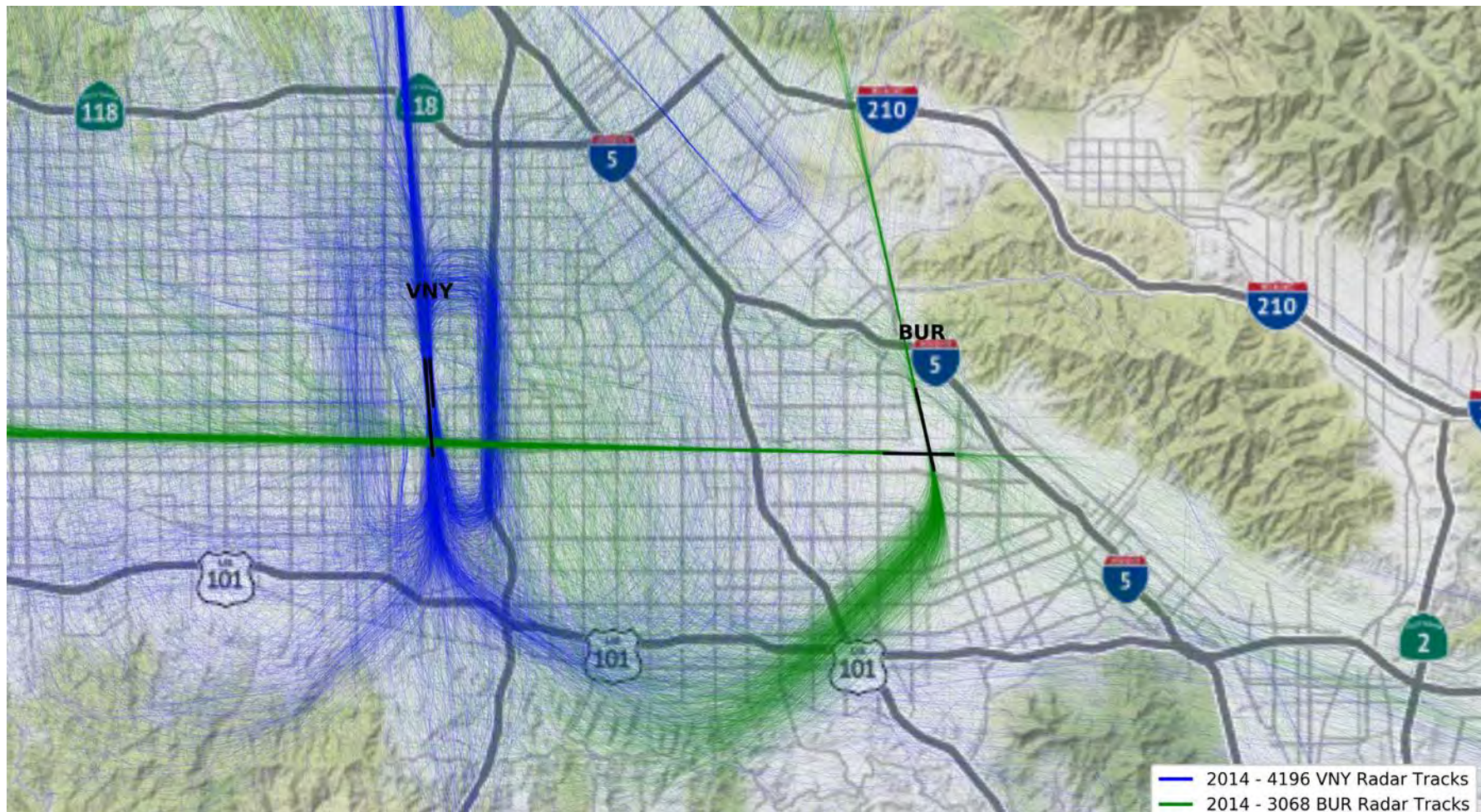
VNY Flight Tracks 2014



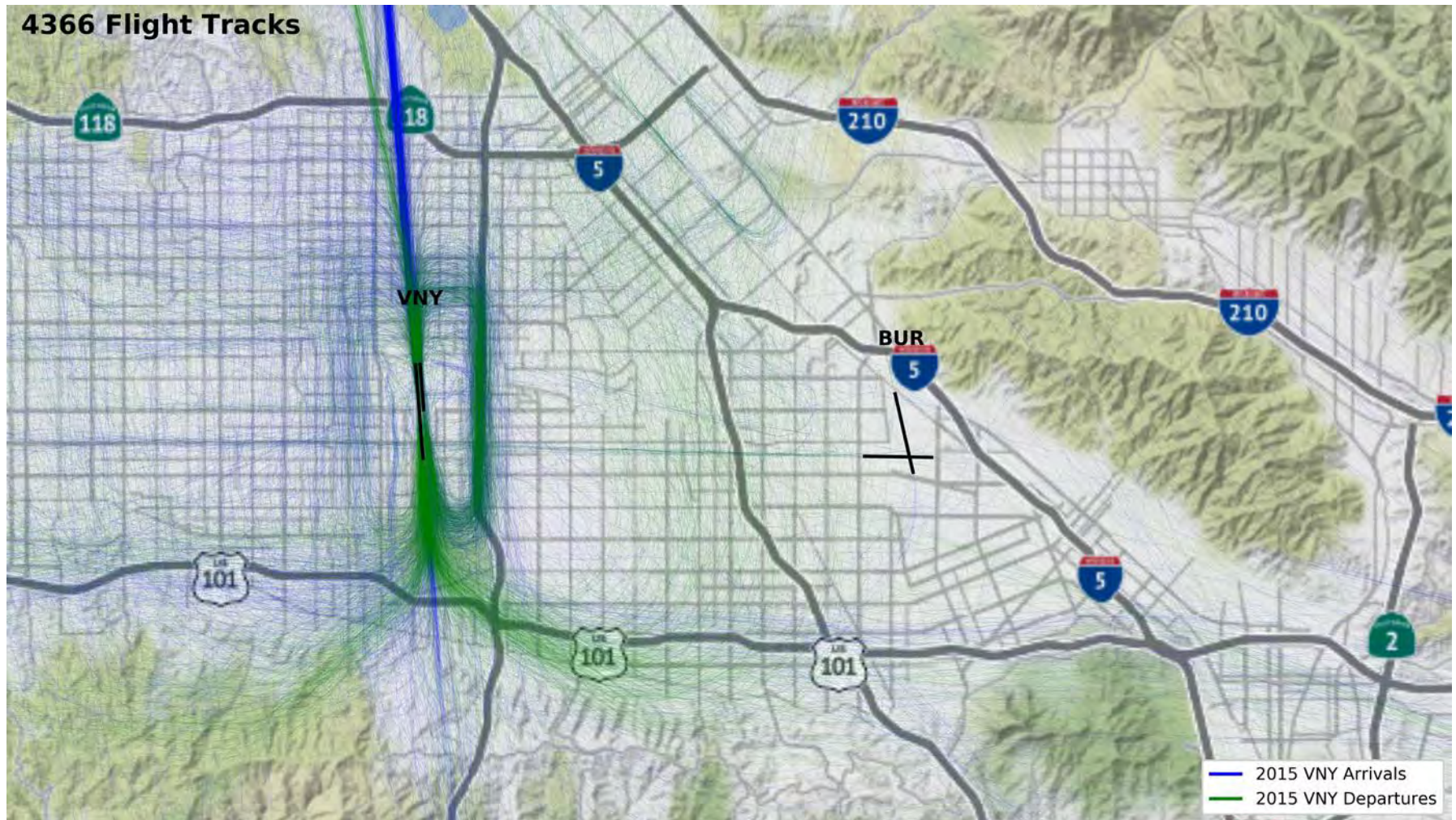
BUR Flight Tracks 2014



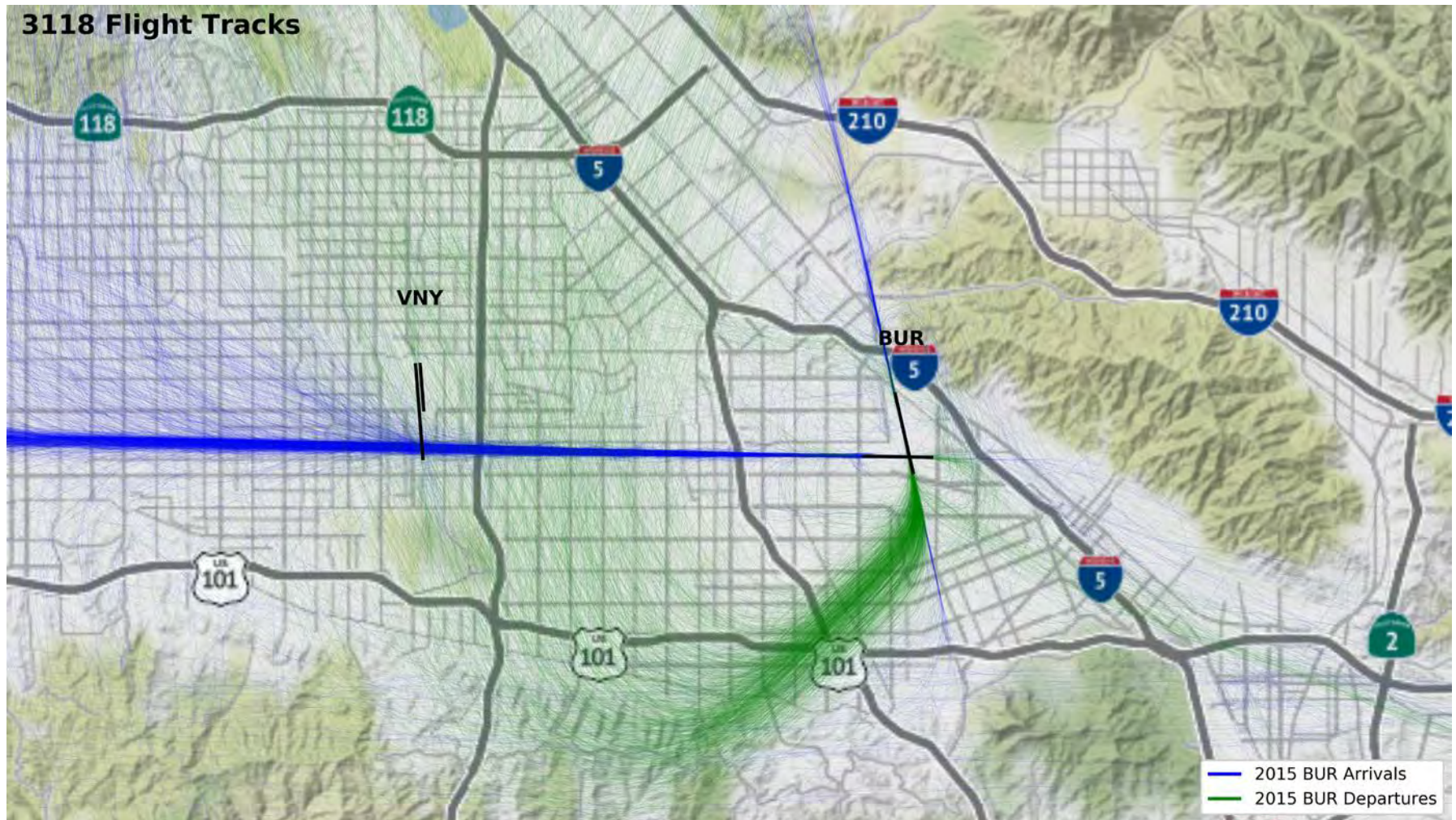
VNY and BUR Flight Tracks Combined 2014



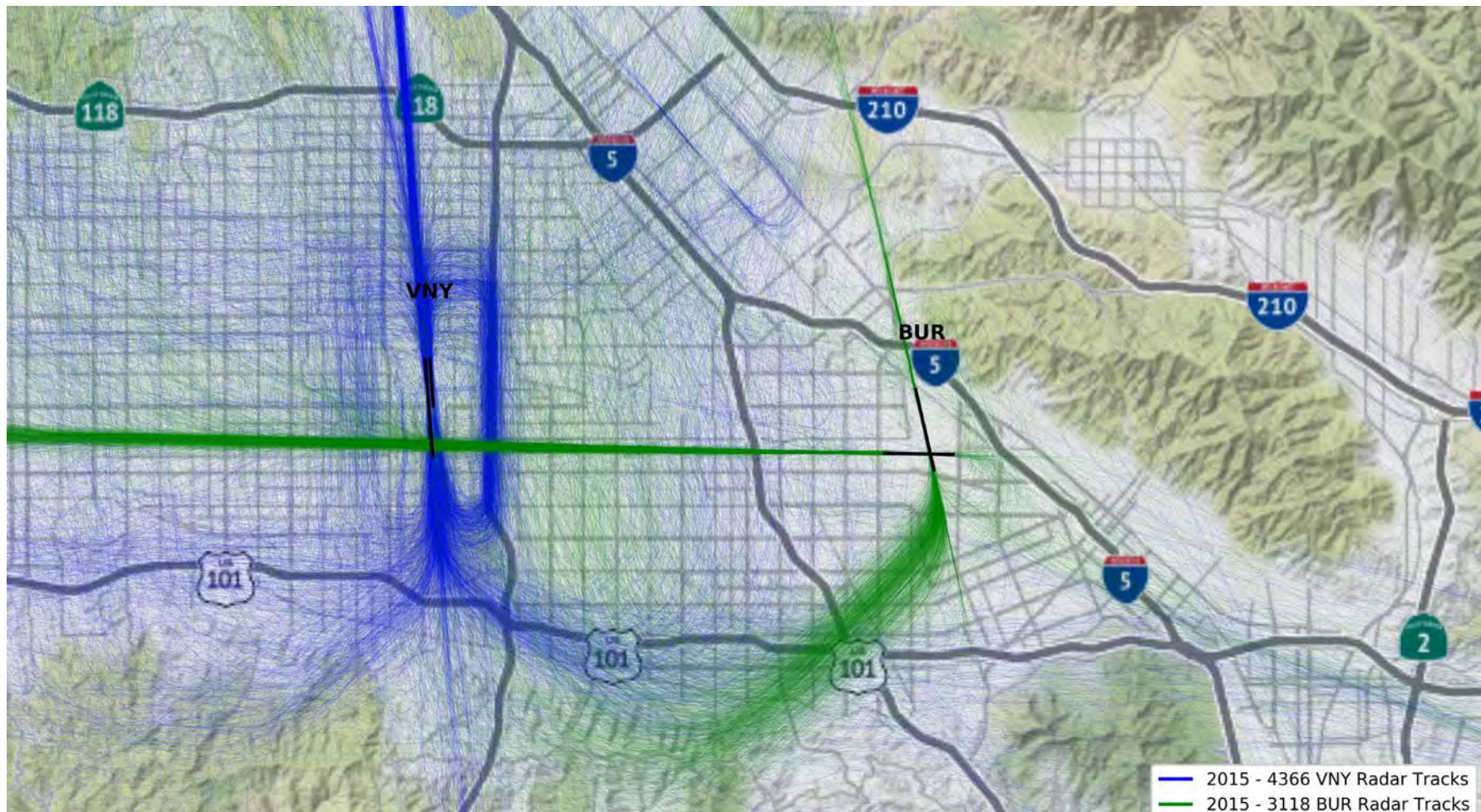
VNY Flight Tracks 2015



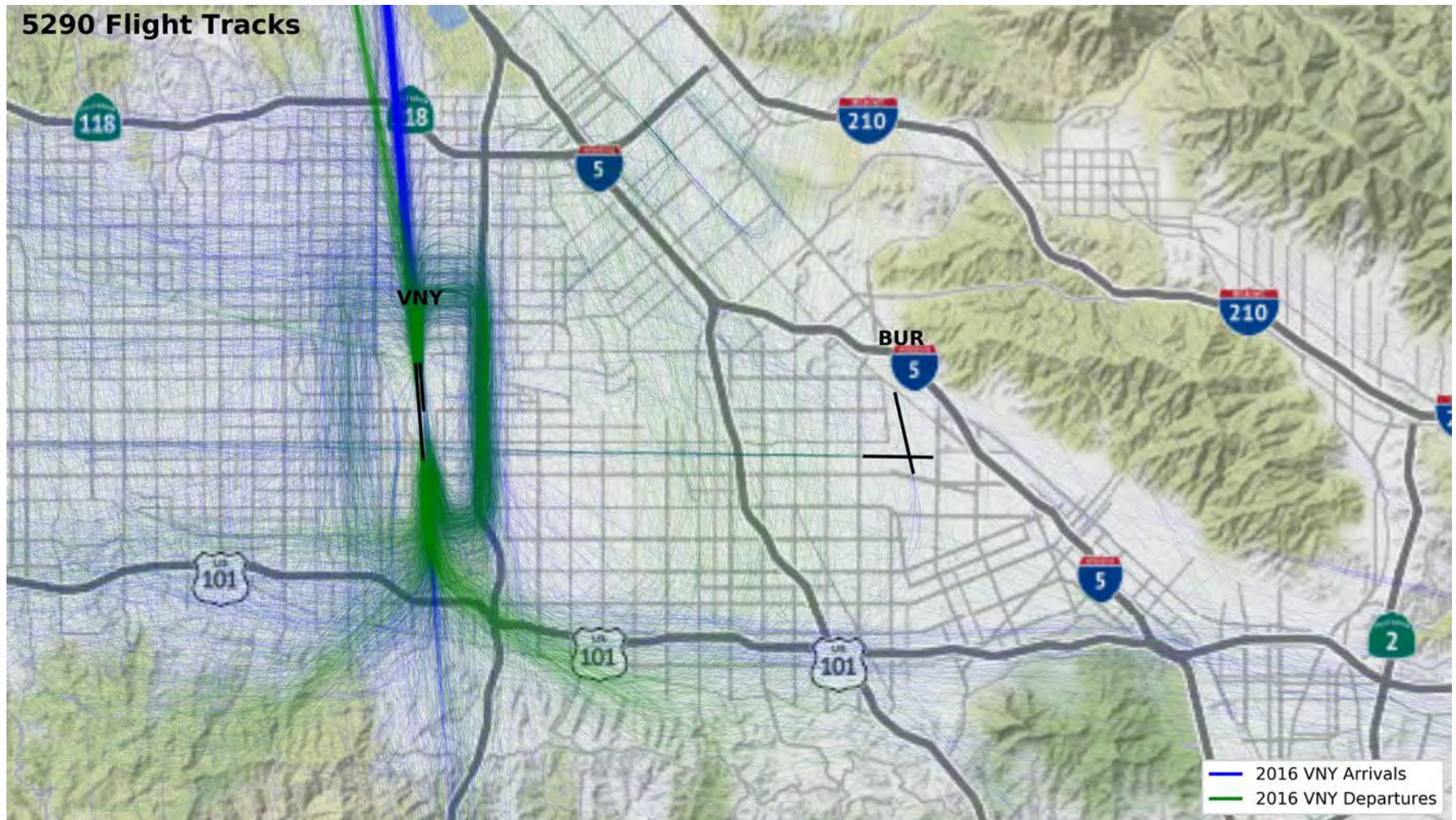
BUR Flight Tracks 2015



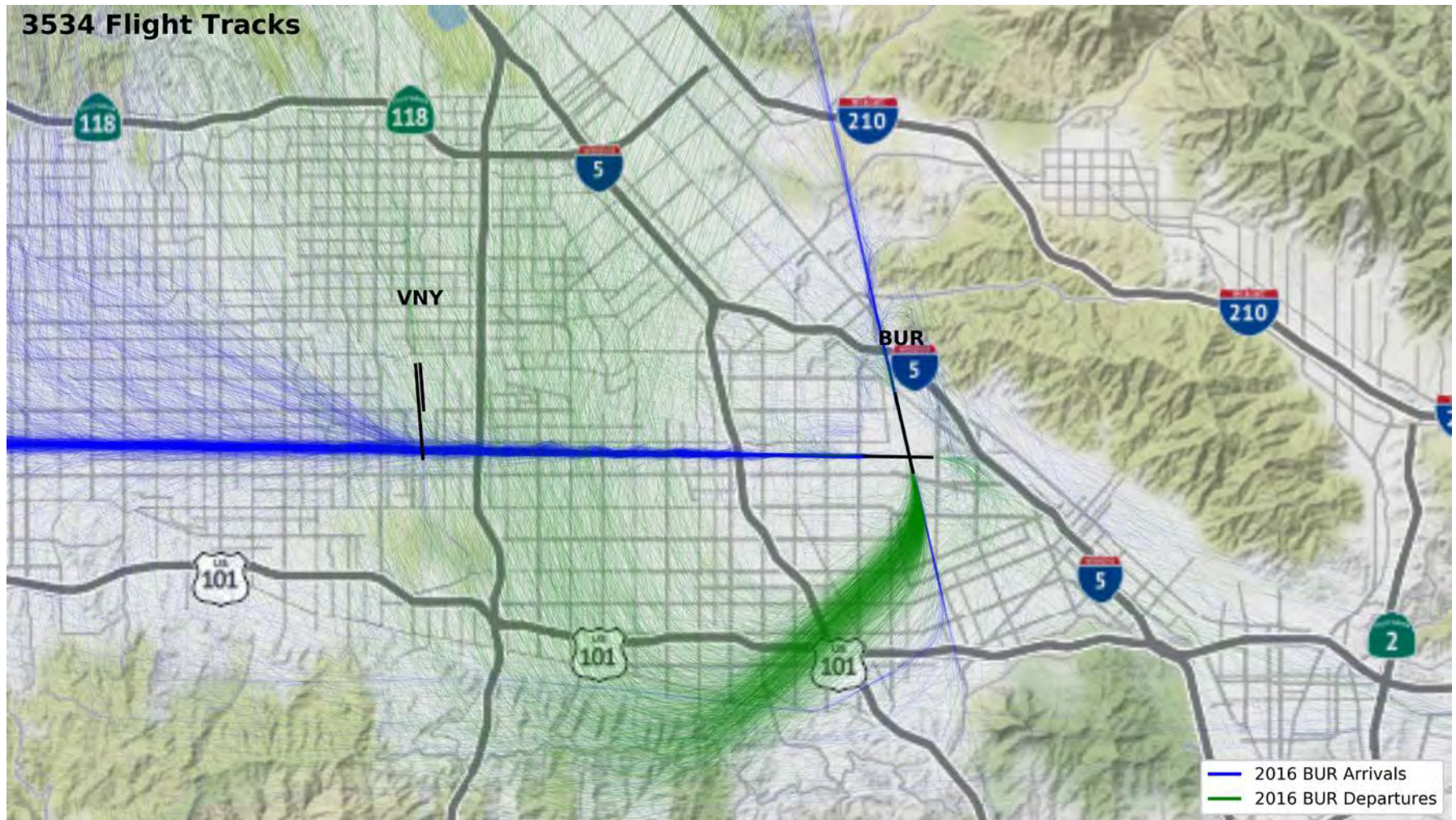
VNY and BUR Flight Tracks Combined 2015



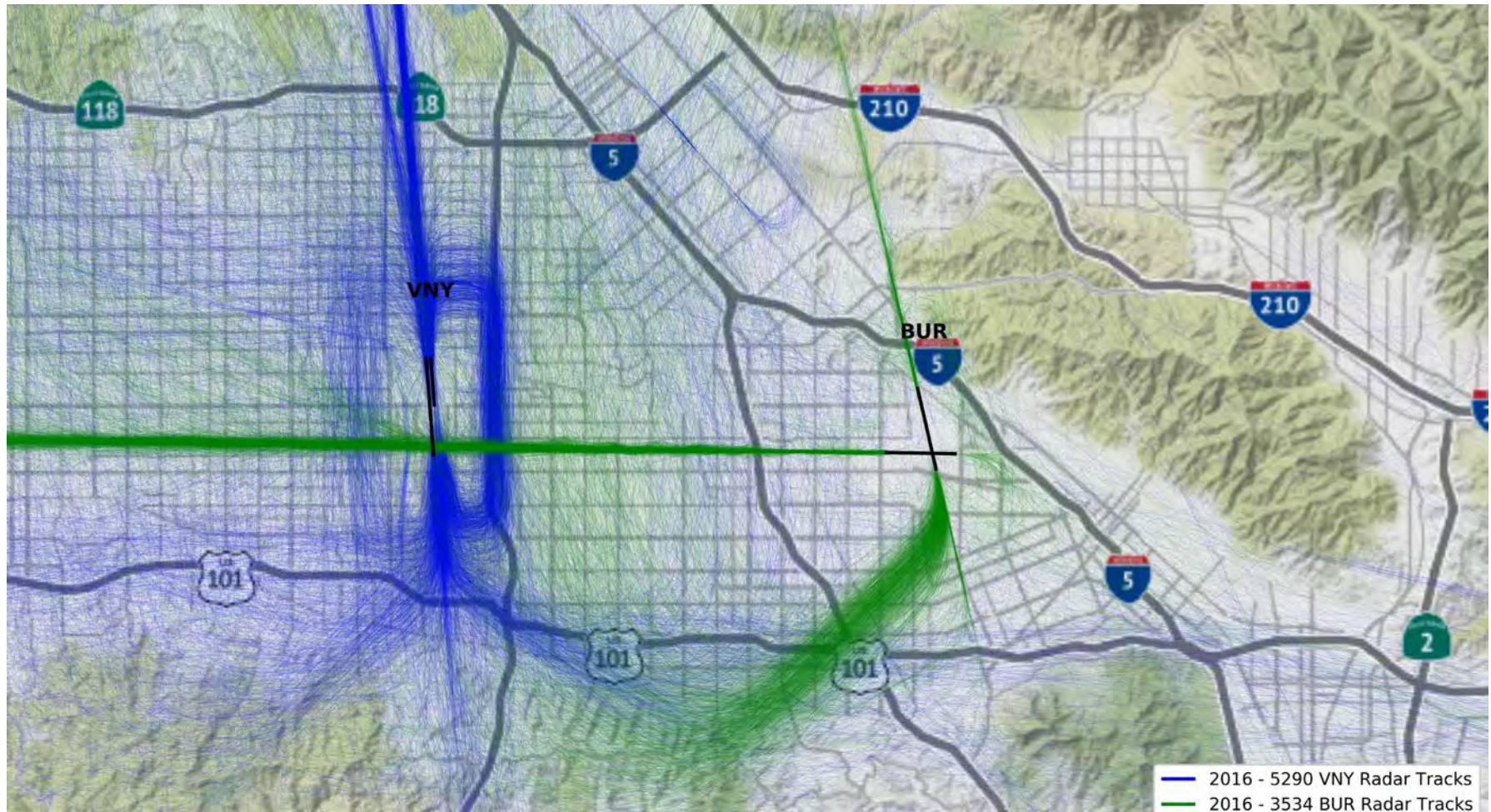
VNY Flight Tracks 2016



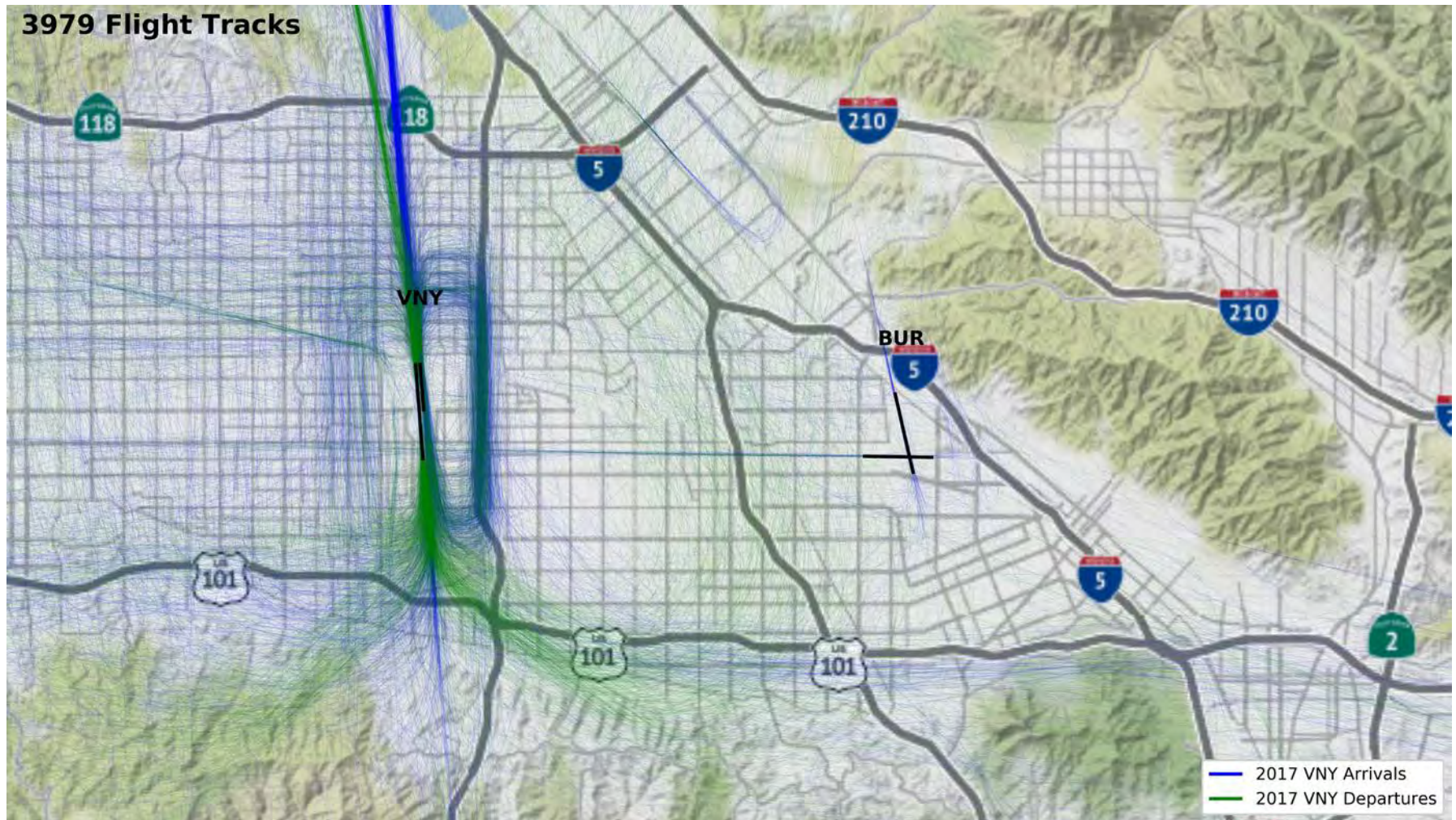
BUR Flight Tracks 2016



VNY and BUR Flight Tracks Combined 2016



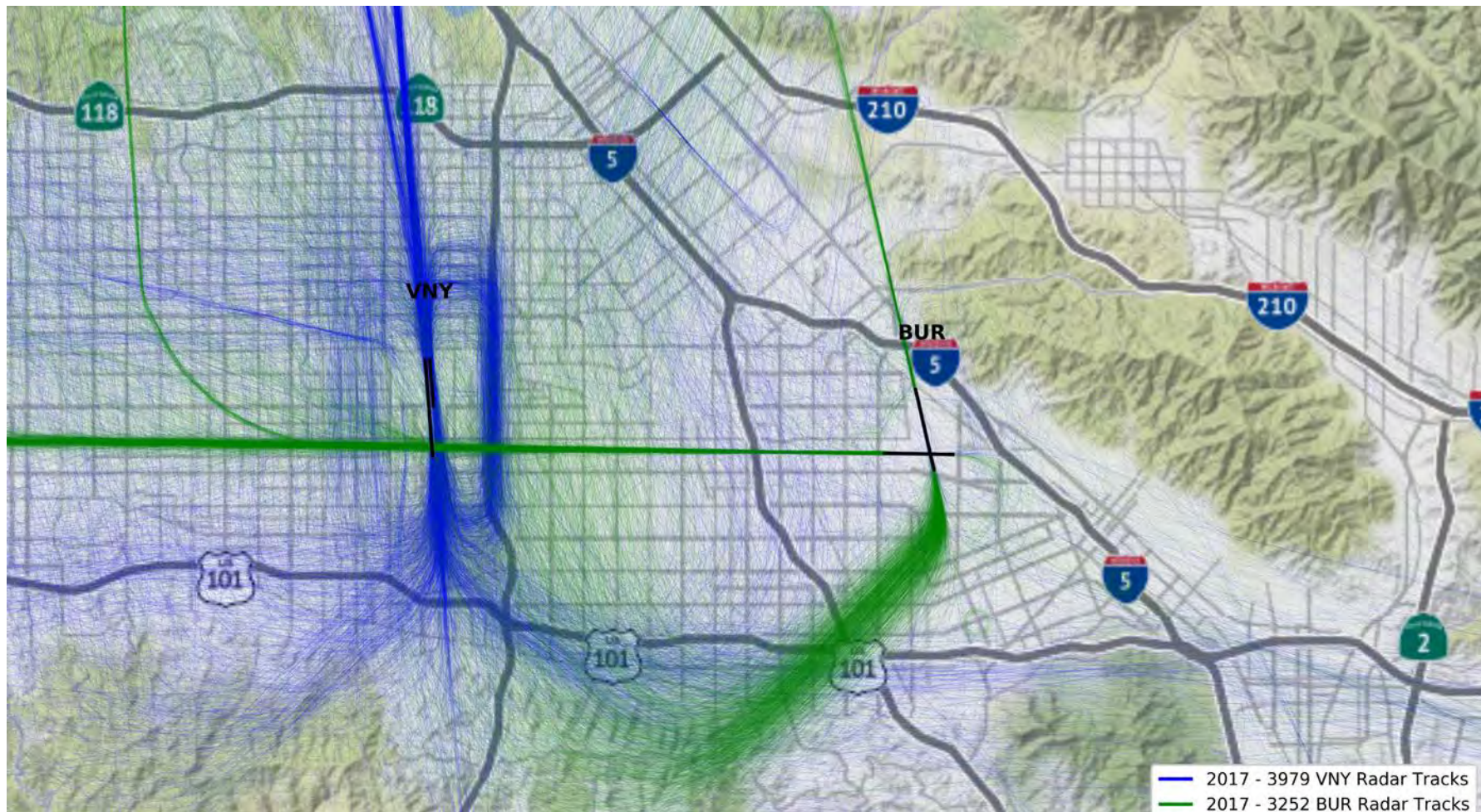
VNY Flight Tracks 2017



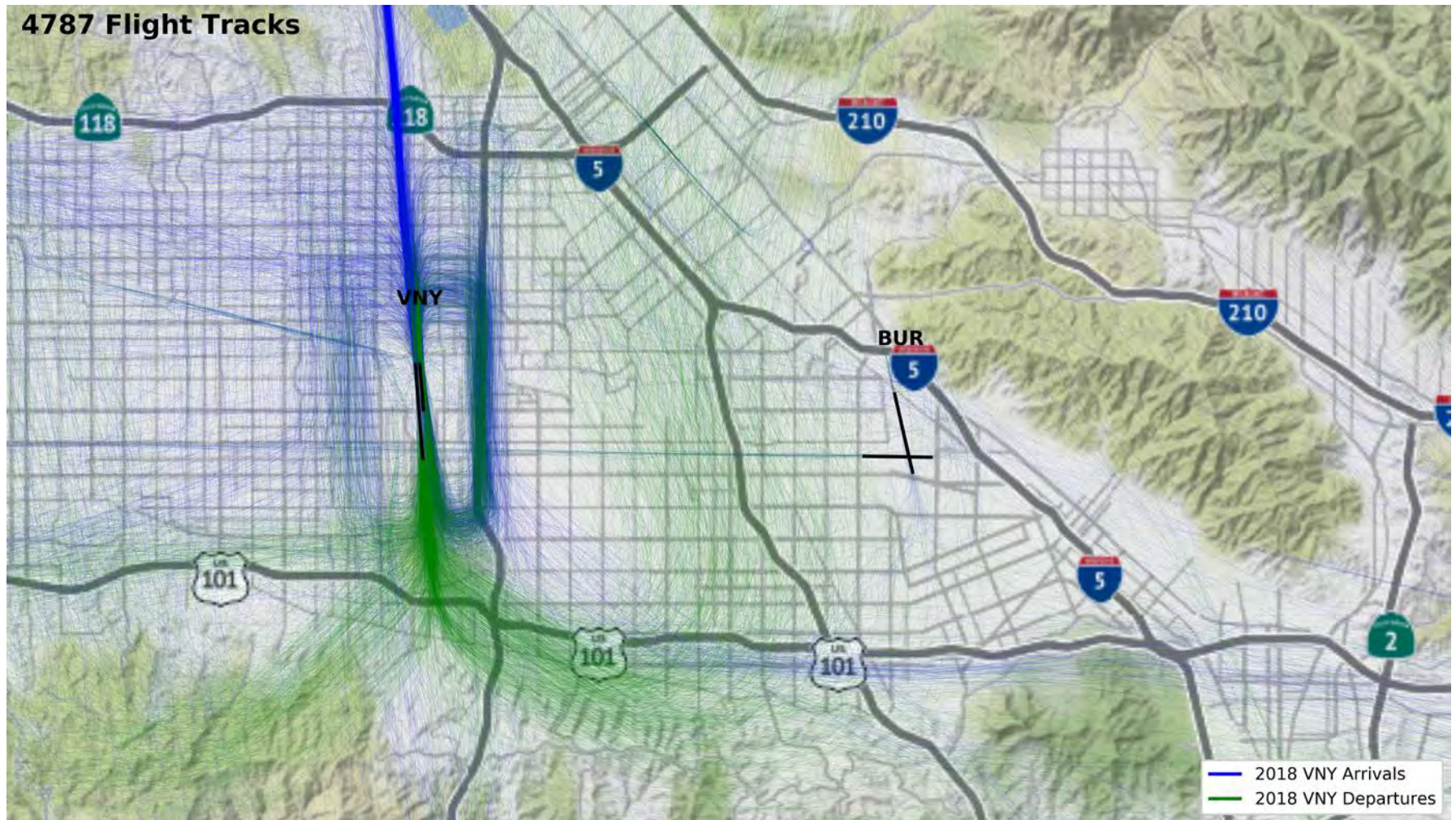
BUR Flight Tracks 2017



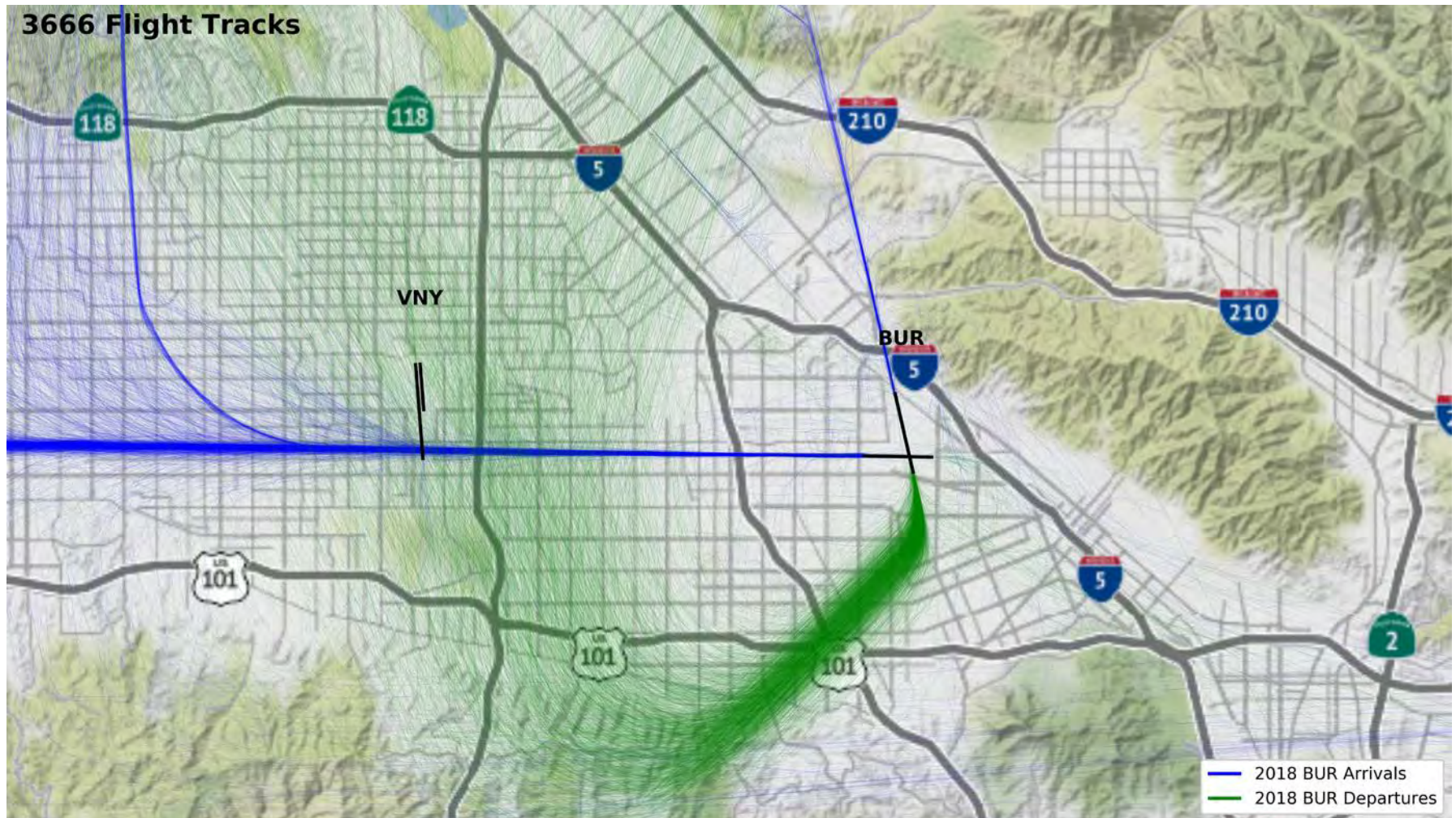
VNY and BUR Flight Tracks Combined 2017



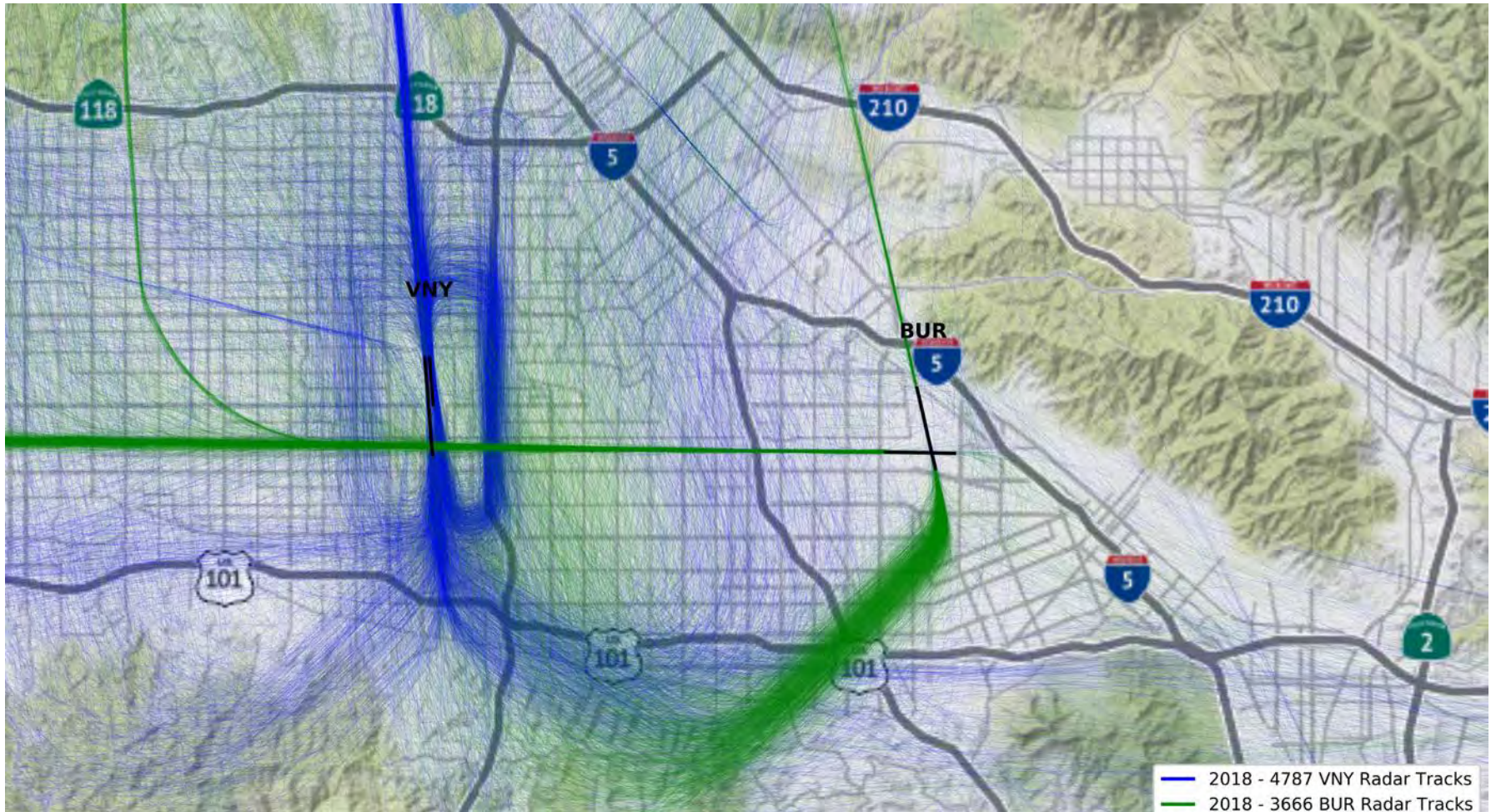
VNY Flight Tracks 2018



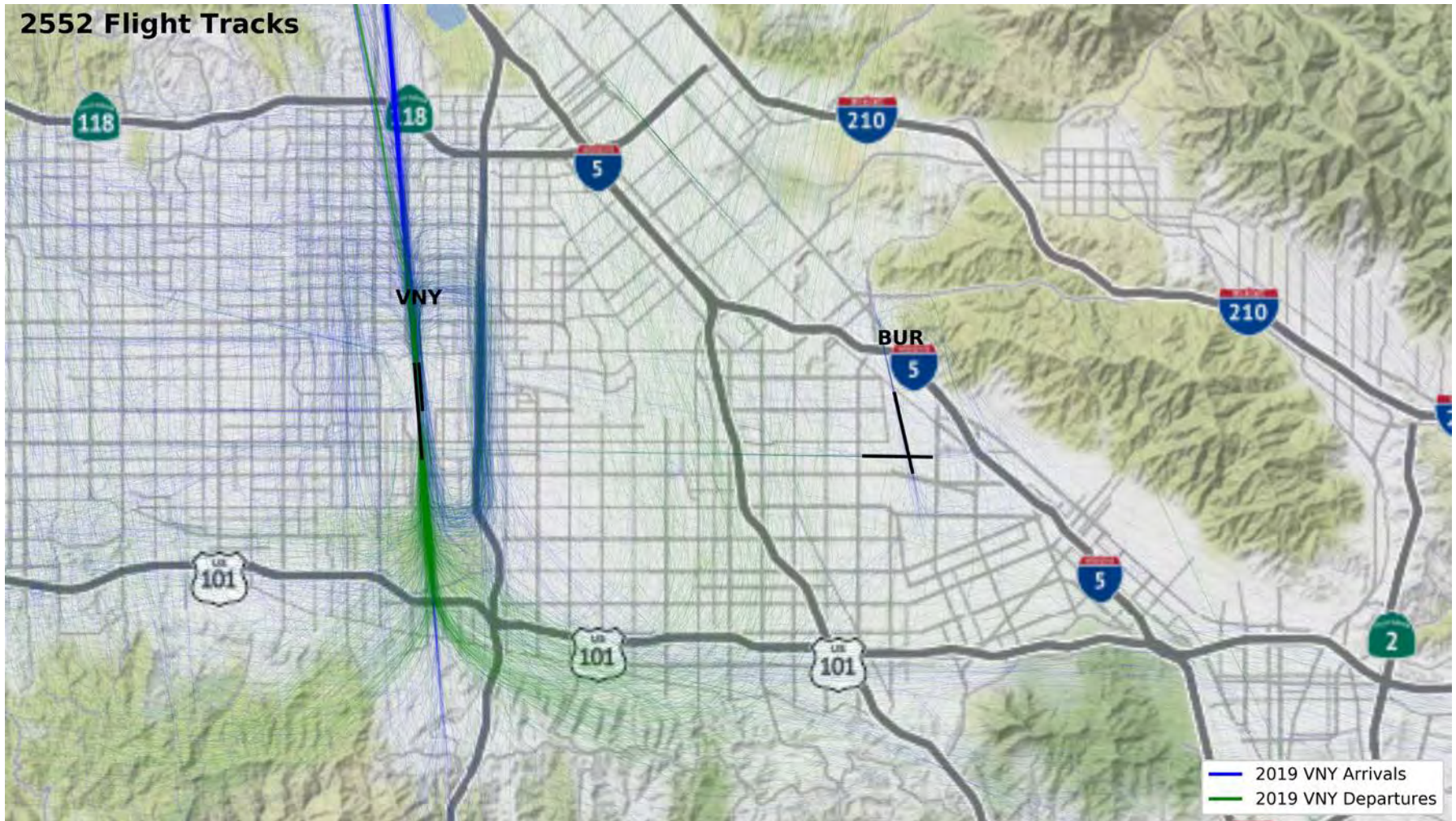
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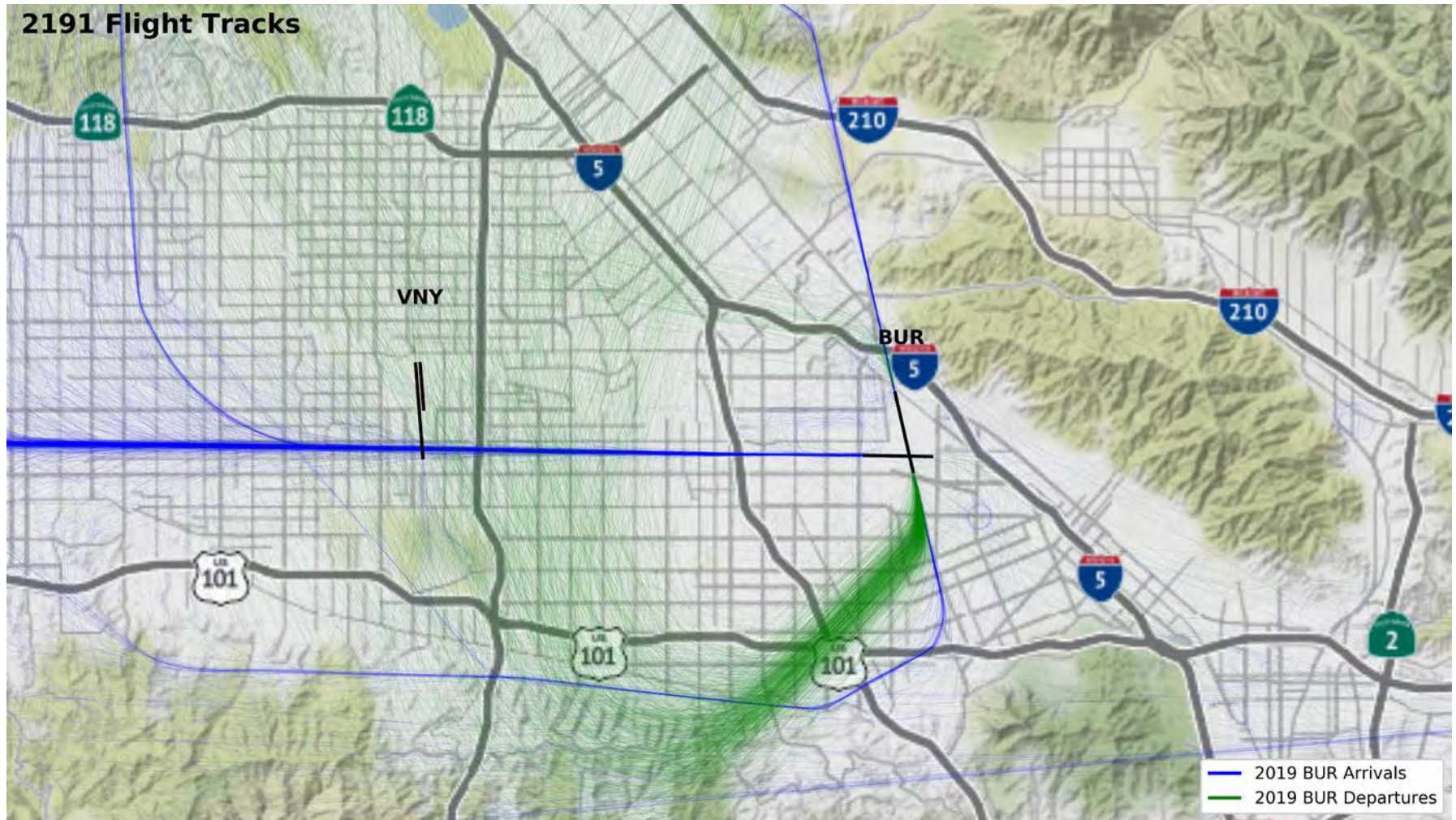
VNY and BUR Flight Tracks Combined 2018



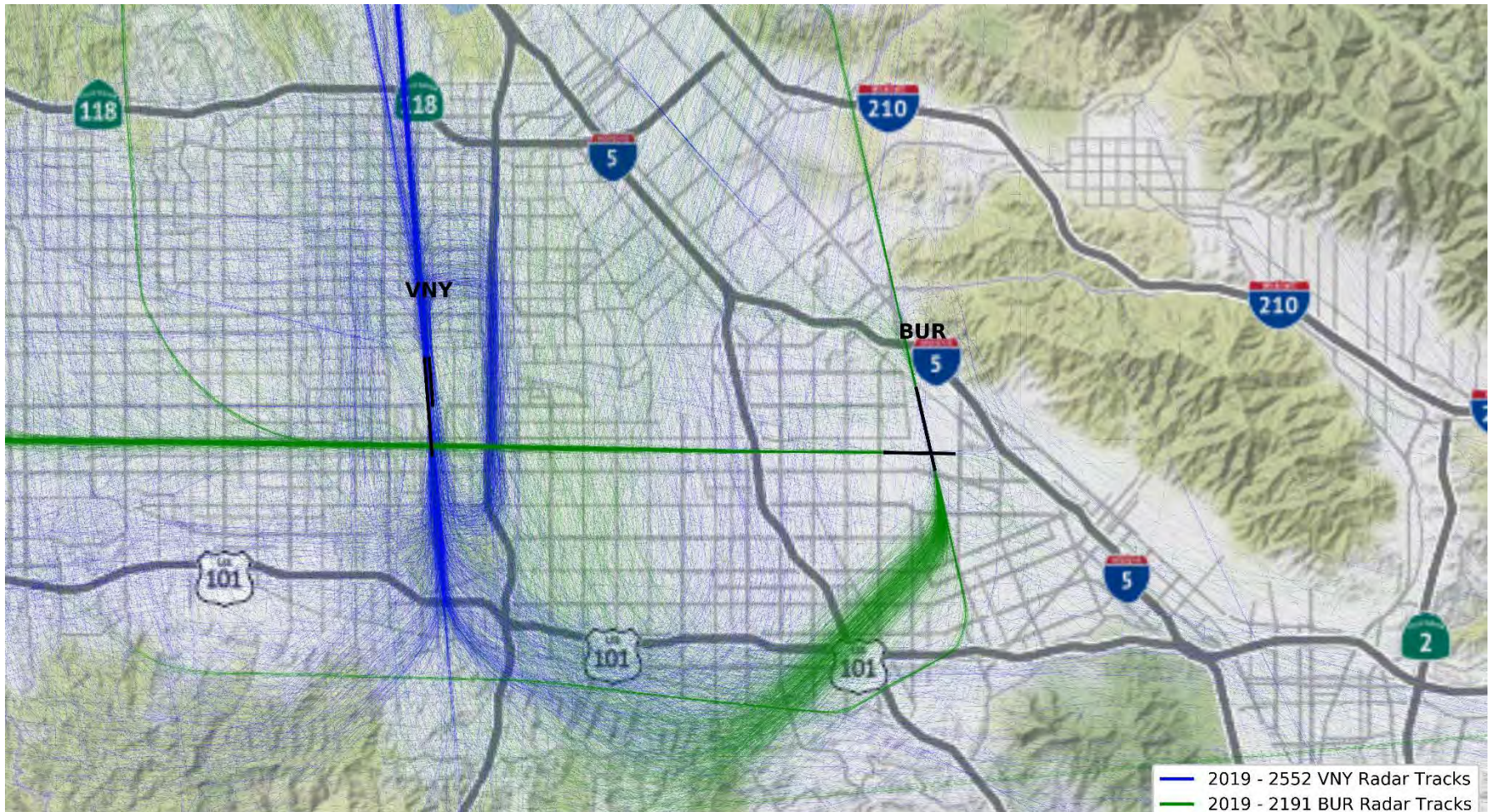
VNY Flight Tracks 2019 (7 days of flight tracks)



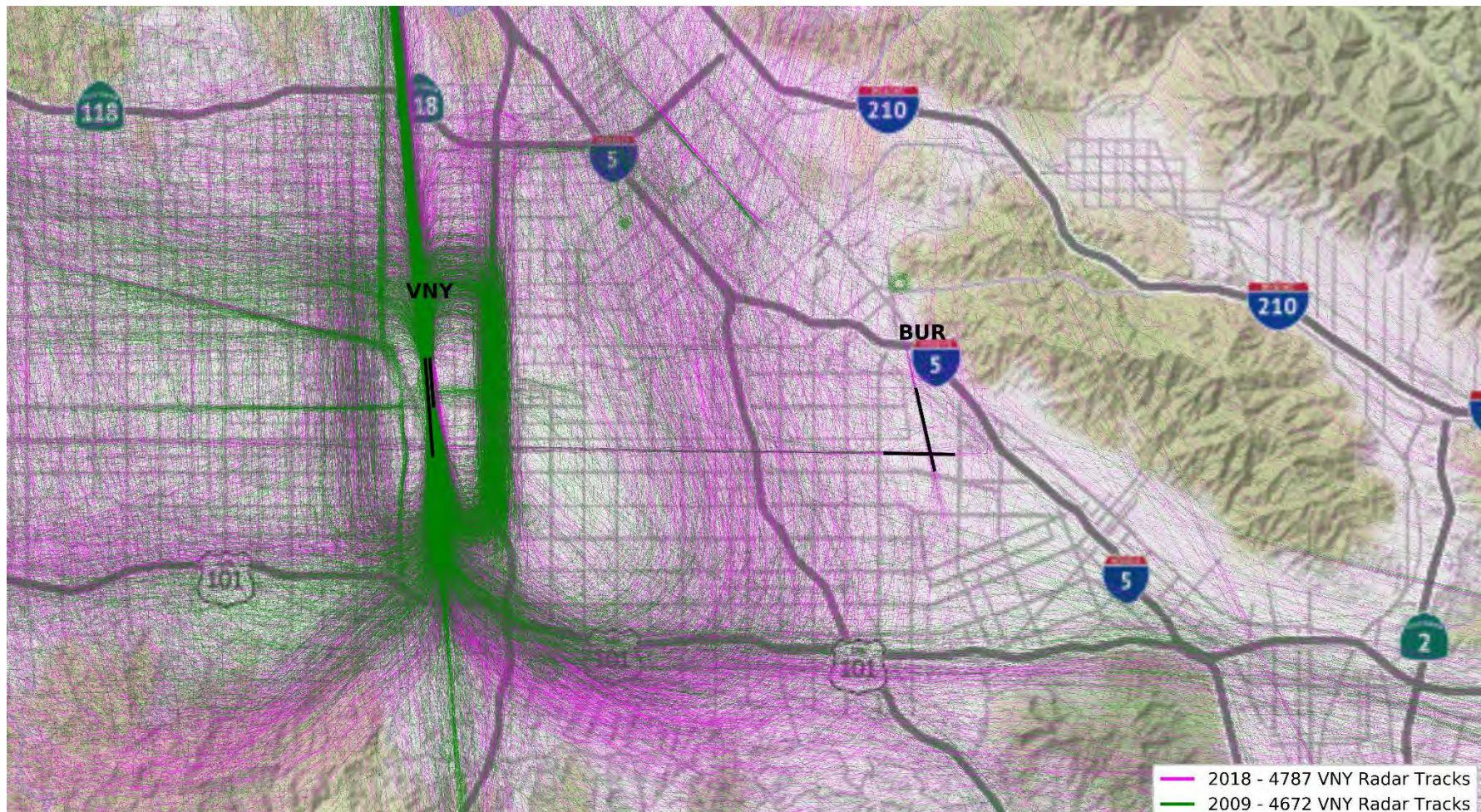
BUR Flight Tracks 2019 (7 days of flight tracks)



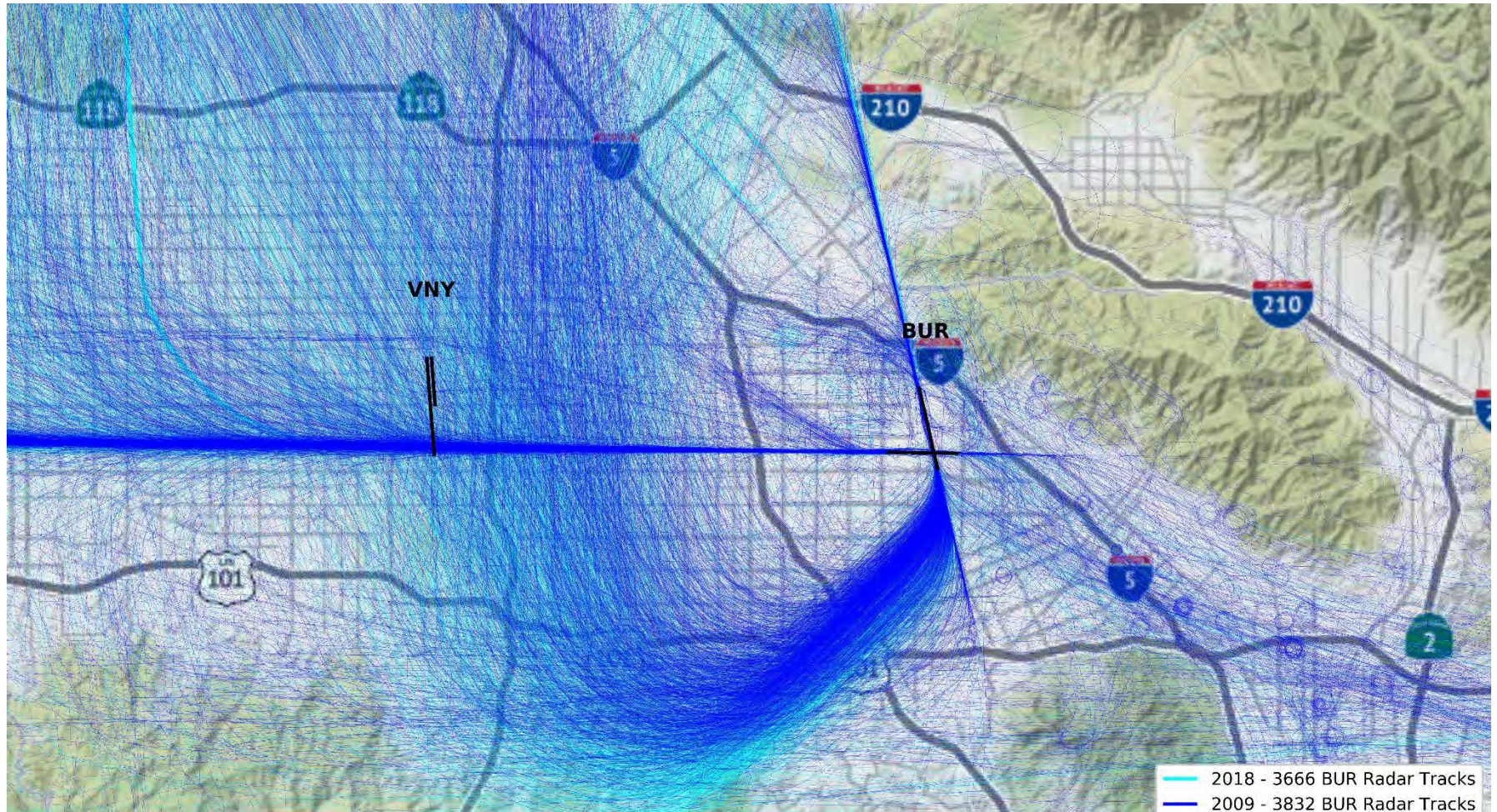
VNY and BUR Flight Tracks Combined 2019 (7 days of flight tracks each airport)



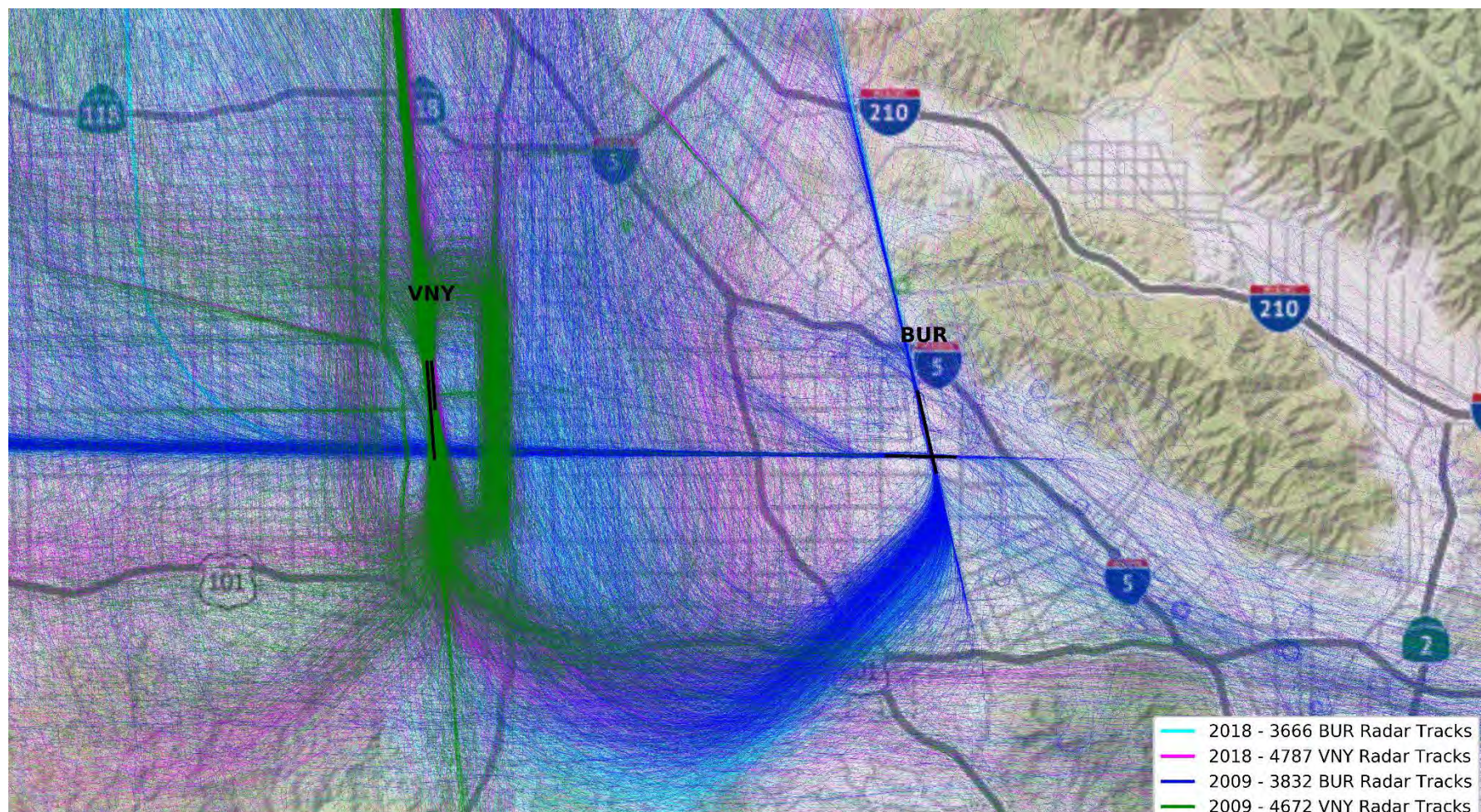
VNY 2009 versus 2018



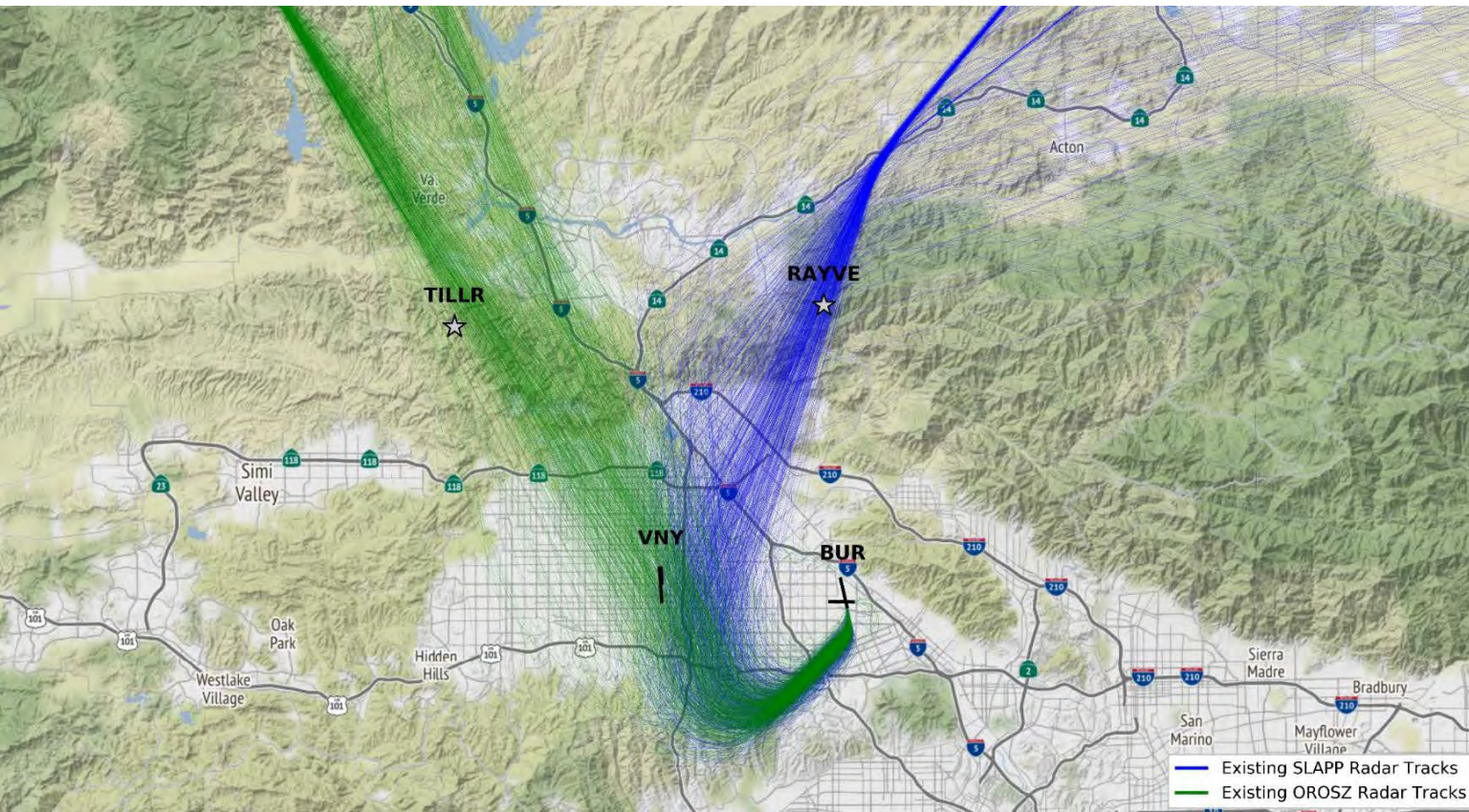
BUR 2009 versus 2018



VNY and BUR 2009 versus 2018 combined



Current Flight Tracks for SLAPP and OROSZ Departure Routes

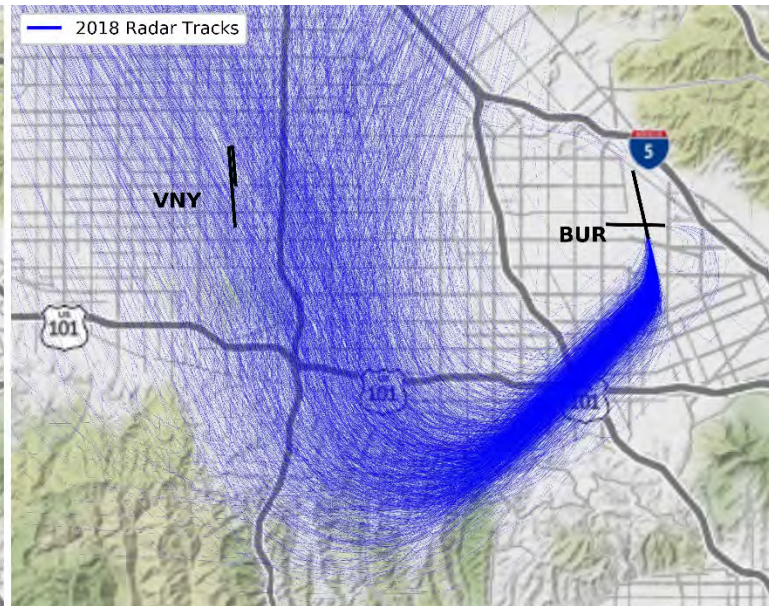
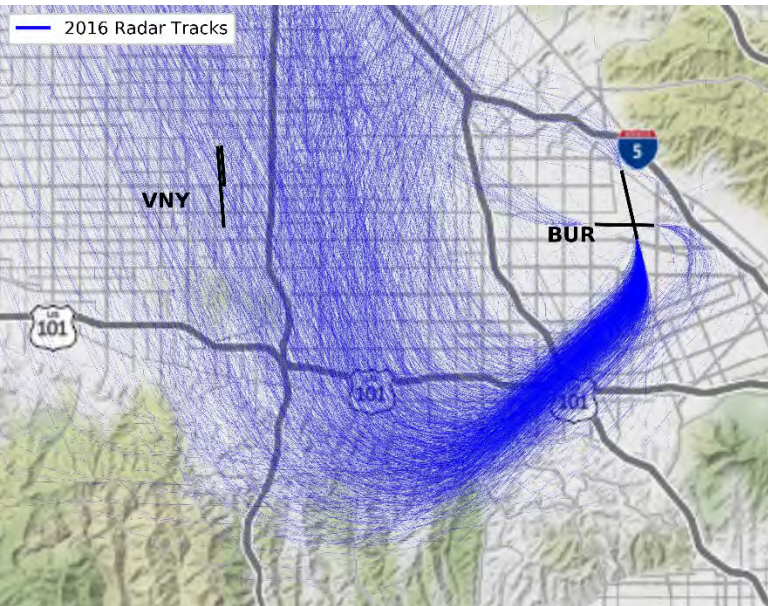


- As part of the Southern California Metroplex Project, the FAA created two new satellite-based departure routes for BUR.
- These routes, which the FAA implemented in March 2017, are called the SLAPP and the OROSZ.
- The satellite-based portions of the routes begin significantly north and northwest of the airport, at the RAYVE and TILLR waypoints. They do not begin in the immediate airport environment.

- 2018 flight tracks for the OROSZ and SLAPP procedures
- 14 random days totaling 1,574 flight tracks .



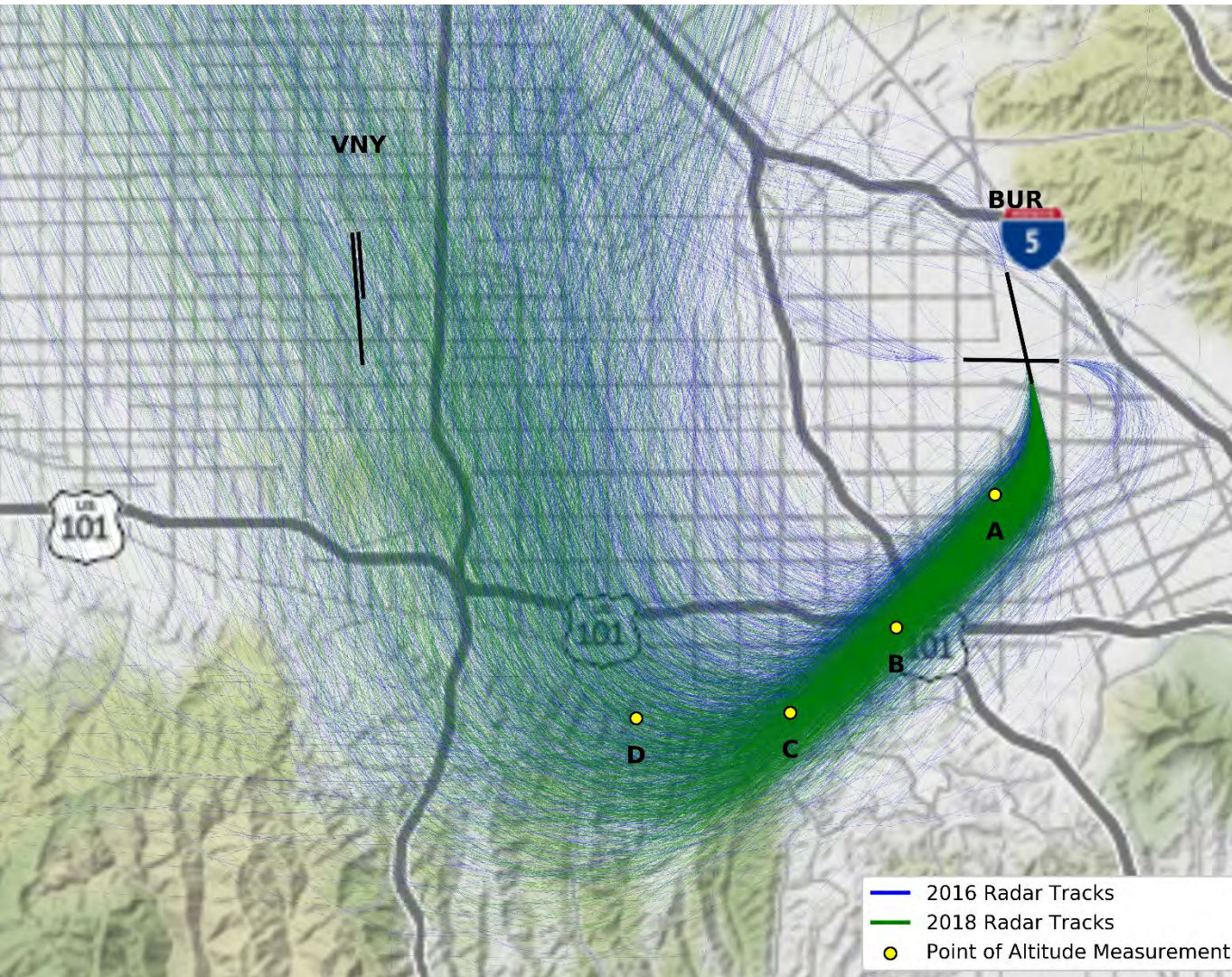
Pre- and Post-Metroplex Flight Tracks



- Air traffic controllers today handle BUR departures the same way after takeoff as they did before the implementation of the SLAPP and OROSZ in March 2017.
- This slide shows pre- and post-Metroplex flight tracks of departures off Runway 15 at BUR.
- The FAA has not implemented any satellite-based route segments in the immediate airport environment.



Locations of the Four Points



- The FAA selected four locations under the BUR departure path to compare pre- and post-Metroplex altitudes.
- Post-Metroplex average altitudes are higher than pre-Metroplex average altitudes over each of the four points.
- Average Altitudes over each point (in Feet):
 - Point A:
 - 2016 1,953
 - 2018 2,058
 - Point B:
 - 2016 2,785
 - 2018 2,957
 - Point C:
 - 2016 3,613
 - 2018 3,865
 - Point D:
 - 2016 4,506
 - 2018 4,879



BUR Runway 15 Departures

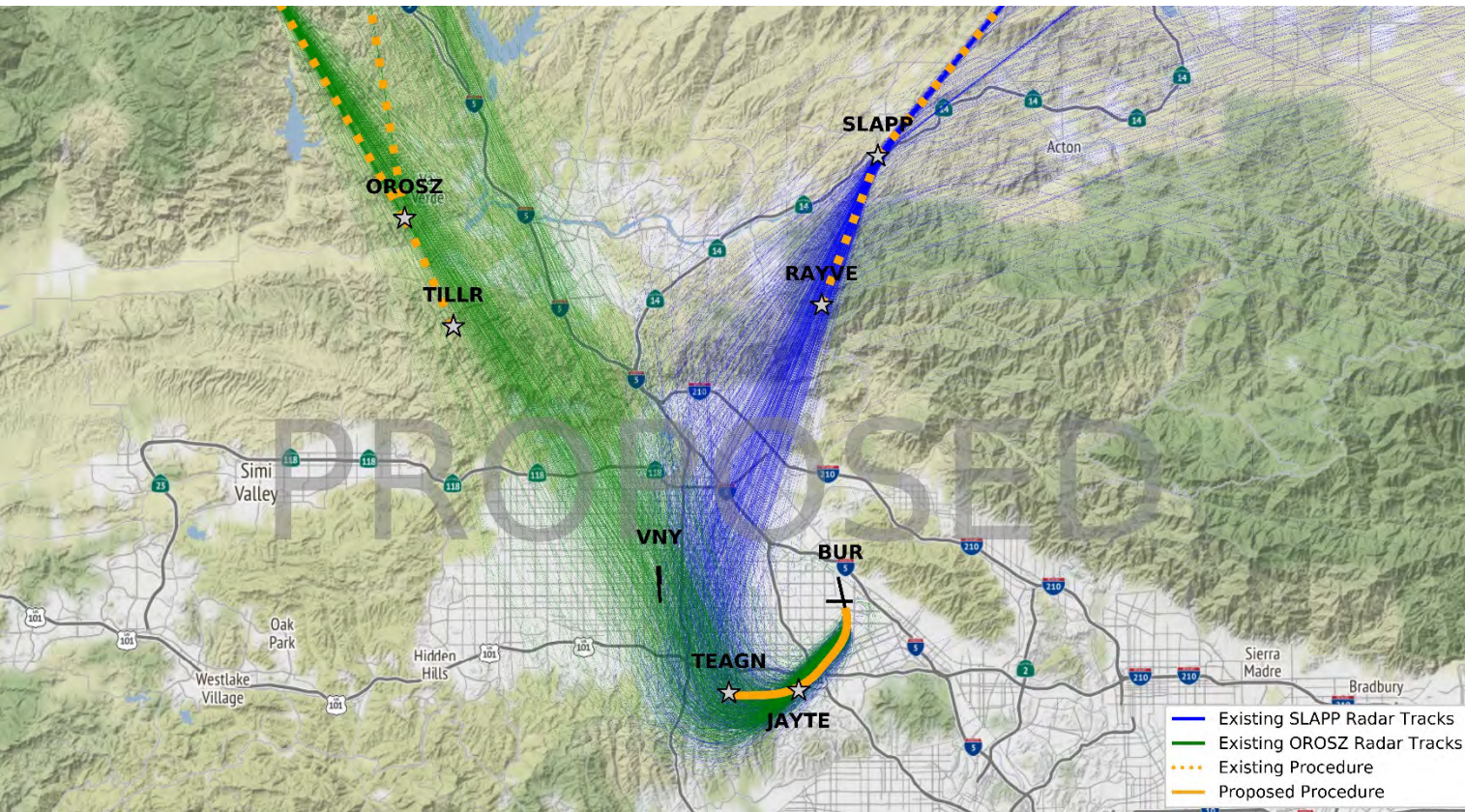
- **Procedurally, no changes have been made that would cause aircraft to fly further south off runway 15.**
- **Potential reasons for aircraft flying further south off runway 15:**
 - Increased temperatures
 - Aircraft weight
 - Aircraft characteristics
 - Traffic in the area



Back up Slides



Proposed SLAPP and OROSZ Procedure Amendments



- Today, aircraft departing from BUR on the SLAPP and OROSZ fly an initial compass heading before controllers turn them toward RAYVE and TILLR.
- The FAA is proposing to amend the SLAPP and the OROSZ.
- The proposed amendments would create an initial satellite-based route segment that aircraft on both routes would follow.
- Aircraft would fly this segment automatically, without receiving instructions from air traffic controllers.
- Aircraft would fly over the JAYTE waypoint at or above 2,400 feet MSL. Controllers would then turn the aircraft north or northwest before they reach the TEAGN waypoint.
- Controllers would vector aircraft until they reach the RAYVE or TILLR waypoints, where they would resume flying satellite-based segments.



Status of the Proposed Amendments

- The FAA has not implemented the proposed amendments to the SLAPP and OROSZ.
- The FAA will prepare an Environmental Assessment of the proposed amendments. The agency made this decision following two FAA workshops about the proposal held in Burbank in November 2018.
- The Environmental Assessment will evaluate the potential environmental impacts of the proposed amendments to the OROSZ and SLAPP, and any reasonable alternatives to the proposed amendments.
- The FAA is in the process of developing a timeline for preparing the Environmental Assessment. The agency will provide Environmental Assessment updates on its Burbank Community Involvement website: https://www.faa.gov/nextgen/nextgen_near_you/community_involvement/bur



Burbank Noise Monitor Locations



Average CNEL Values for Burbank Noise Monitors (by site location)

TABLE 4. AVERAGE CNEL VALUES

| Site No. | 4th Quarter 2015 | 1st Quarter 2016 | 2nd Quarter 2016 | 3rd Quarter 2016 | 4 Quarter Average |
|----------|------------------|------------------|------------------|------------------|-------------------|
| 1 | 61.2 | 60.5 | 60.8 | 61.7 | 61.1 |
| 2 | 58.7 | 58.4 | 57.9 | 59.3 | 58.6 |
| 3 | 59.7 | 59.4 | 59.3 | 60.2 | 59.7 |
| 4 | 55.8 | 58.1 | 56.9 | 56.2 | 56.9 |
| 5 | 55.8 | 59.2 | 57.4 | 56.2 | 57.4 |
| 6 | 51.5 | 55.6 | 55.6 | 52.1 | 54.1 |
| 7 | 54.6 | 55.3 | 55.1 | 53.7 | 54.7 |
| 9 | 61.9 | 60.6 | 60.9 | 62.2 | 61.4 |
| 10 | 52.8 | 54.0 | 53.8 | 55.0 | 54.0 |
| 11 | 53.6 | 53.5 | 53.3 | 52.6 | 53.3 |
| 12 | 52.9 | 53.7 | 53.6 | 53.6 | 53.5 |
| 13 | 57.7 | 56.7 | 56.5 | 57.8 | 57.2 |
| 14 | 56.2 | 56.1 | 55.5 | 56.6 | 56.1 |
| 15 | 58.8 | 58.0 | 58.1 | 59.4 | 58.6 |
| 16 | 60.9 | 61.4 | 60.7 | 61.5 | 61.1 |
| 18 | 61.2 | 60.1 | 60.5 | 61.7 | 60.9 |
| 19 | 62.0 | 61.2 | 61.2 | 62.6 | 61.8 |
| 20 | 64.4 | 64.1 | 63.9 | 64.9 | 64.4 |
| 21 | 66.1 | 65.5 | 65.5 | 66.6 | 65.9 |
| 22 | 60.0 | 60.5 | 60.7 | 59.2 | 60.1 |

TABLE 4. AVERAGE CNEL VALUES

| Site No. | 1st Quarter 2018 | 2nd Quarter 2018 | 3rd Quarter 2018 | 4th Quarter 2018 | 4 Quarter Average |
|----------|------------------|------------------|------------------|------------------|-------------------|
| 1 | 61.4 | 62.2 | 61.5 | 61.8 | 61.7 |
| 2 | 59.2 | 59.8 | 59.3 | 59.5 | 59.5 |
| 3 | 60.4 | 61.3 | 61.0 | 61.0 | 60.9 |
| 4 | 57.3 | 57.2 | 56.2 | 57.9 | 57.2 |
| 5 | 57.9 | 57.0 | 55.8 | 58.9 | 57.5 |
| 6 | 55.6 | 54.2 | 52.7 | 58.0 | 55.6 |
| 7 | 55.2 | 56.0 | 55.2 | 55.9 | 55.6 |
| 9 | 61.7 | 62.5 | 62.3 | 62.2 | 62.2 |
| 10 | 52.4 | 56.1 | 52.9 | 53.0 | 53.9 |
| 11 | 52.7 | 51.9 | — | 52.1 | 52.2 |
| 12 | 54.2 | 54.2 | 52.9 | 55.5 | 54.3 |
| 13 | 57.4 | 58.3 | 56.9 | 57.4 | 57.5 |
| 14 | 57.4 | 58.4 | 57.5 | 57.7 | 57.8 |
| 15 | 59.5 | 60.5 | 60.0 | 59.8 | 60.0 |
| 16 | 61.7 | 62.7 | 62.1 | 62.8 | 62.4 |
| 18 | 61.5 | 62.1 | 61.9 | 61.5 | 61.8 |
| 19 | 62.3 | 63.4 | 63.0 | 62.5 | 62.8 |
| 20 | 65.0 | 65.9 | 65.7 | 65.6 | 65.6 |
| 21 | 66.5 | 67.5 | 67.2 | 66.9 | 67.0 |
| 22 | 60.6 | 60.9 | 60.5 | 60.9 | 60.8 |



Los Angeles World Airports (LAWA) Briefing

By: [Clark Desing](#)

Date: [December 4, 2019](#)



Federal Aviation
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Overview

- **The following presentation is divided into three topics:**
 - Van Nuys (VNY) Airport - PPRRY Waypoint
 - Community Concerns Analysis: South of VNY and Burbank (BUR) Airports
 - Flight Track Analysis and Annual Operations: VNY and BUR



VNY - PPRRY Waypoint



Background: JAAYT Waypoint

- **During the SoCal Metroplex, the JAAYT waypoint was shared during LAWA meetings and public outreach.**
- **Due to criteria, the proposed location of the JAAYT waypoint required a waiver.**
 - The waiver was denied on September 16, 2016 and the JAAYT waypoint was removed from the proposed procedures.
- **April 27, 2017: ROSCOE, WLKKR and HARYS departures were published, without the JAAYT or PPRRY waypoints.**



Background: JAAYT Waypoint

- **June 2017: LAWA notified the FAA that the three procedures caused aircraft to violate the current noise abatement procedures for VNY.**
 - At that time, LAWA requested to have a new waypoint created in the proposed JAAYT location, where aircraft started their turn prior to the Metroplex changes.
 - The expectation of the additional waypoint was that it would eliminate aircraft violating the noise abatement procedures.
 - In response, the FAA created the PPRRY waypoint. Its exact placement was determined by design criteria.
- **May 24, 2018: PPRRY was added to the ROSCOE, WLKKR and HARYS departure procedures.**



Background: PPRRY Waypoint

- The PPRRY waypoint is located 31.99 feet north of where the JAAYT waypoint was proposed.
- The PPRRY waypoint is located approximately 1.24 Nautical Miles (NM) south of the departure end of runway 16R.
- Aircraft on the ROSCOE, WLKKR and HARYS departures are flying approximately 0.5 NM further south.



LAWA Report: VNY Southerly Jet Departures

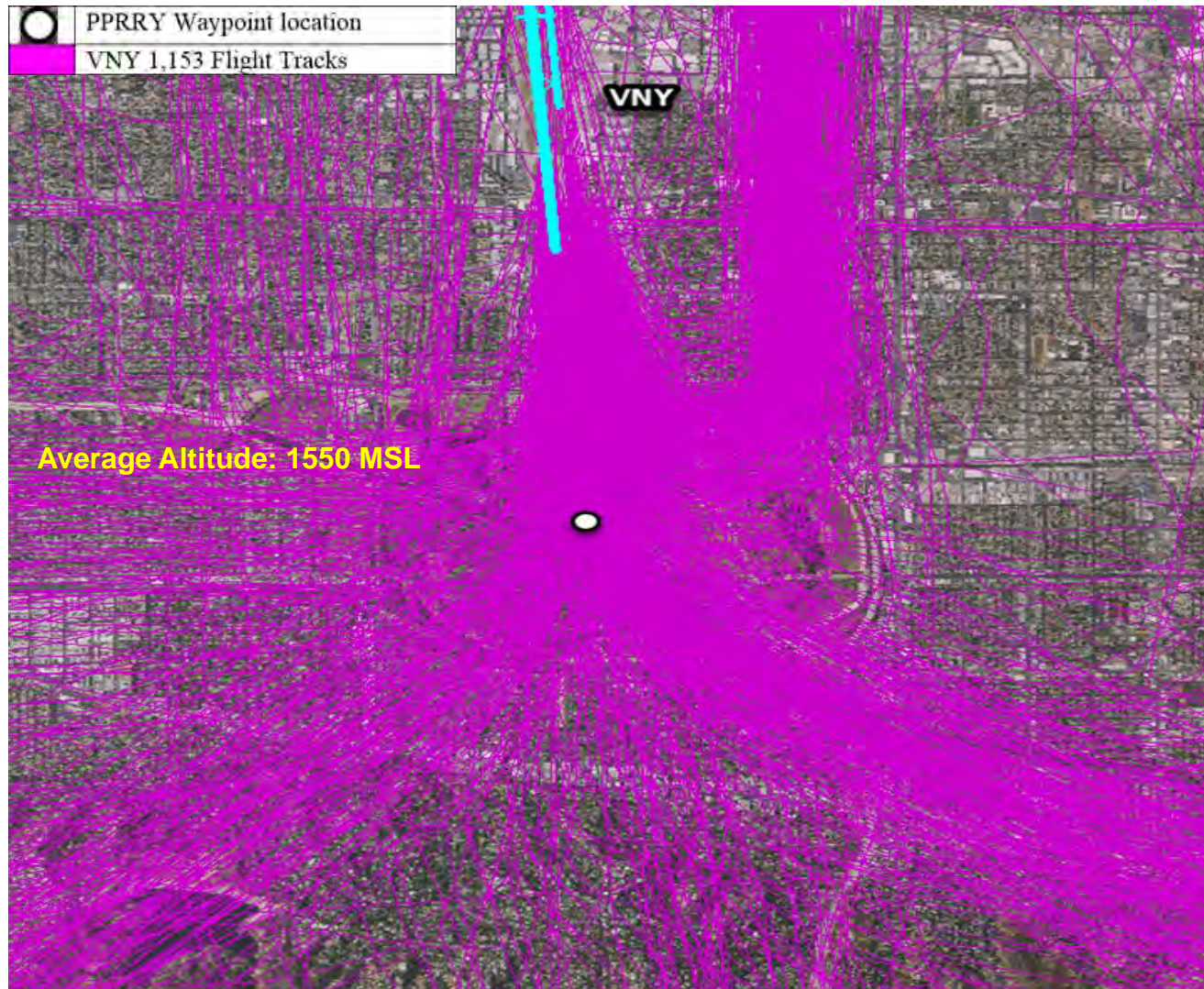
- **The November 6, 2018 report:**
 - States that “most jets turning at PPRRY “finish” turns here (approximately 0.6 nm farther south)
 - Changes observed since revised Metroplex procedures published May 24, 2018:
 - Increased altitudes overall
 - Shift in distribution of flights
 - Increase in some areas
 - Decrease in other areas



Location: PPRYY Waypoint



Pre-Metroplex Flight Tracks: February 8-15, 2017

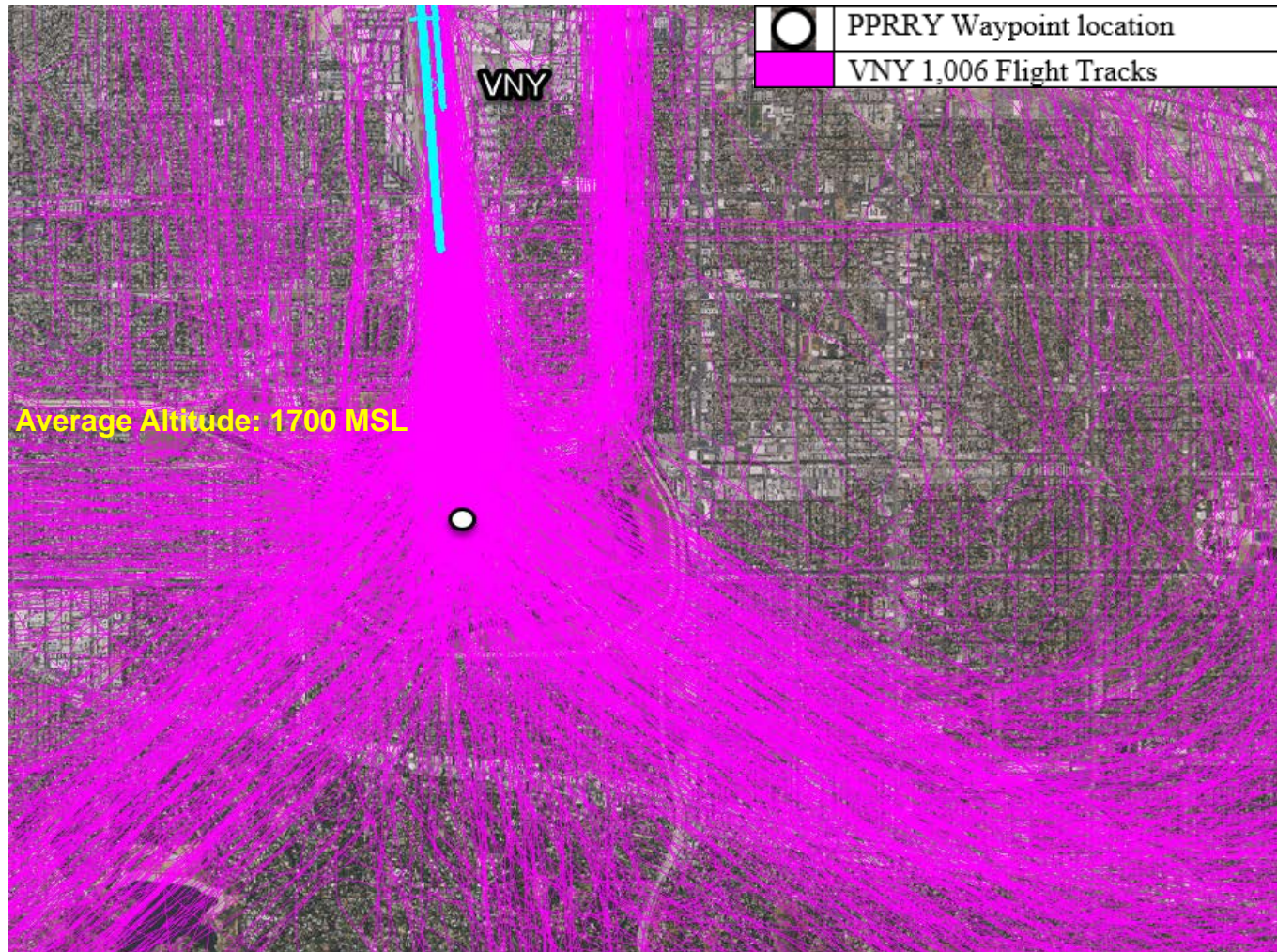


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Post-Metroplex: July 5-12, 2017

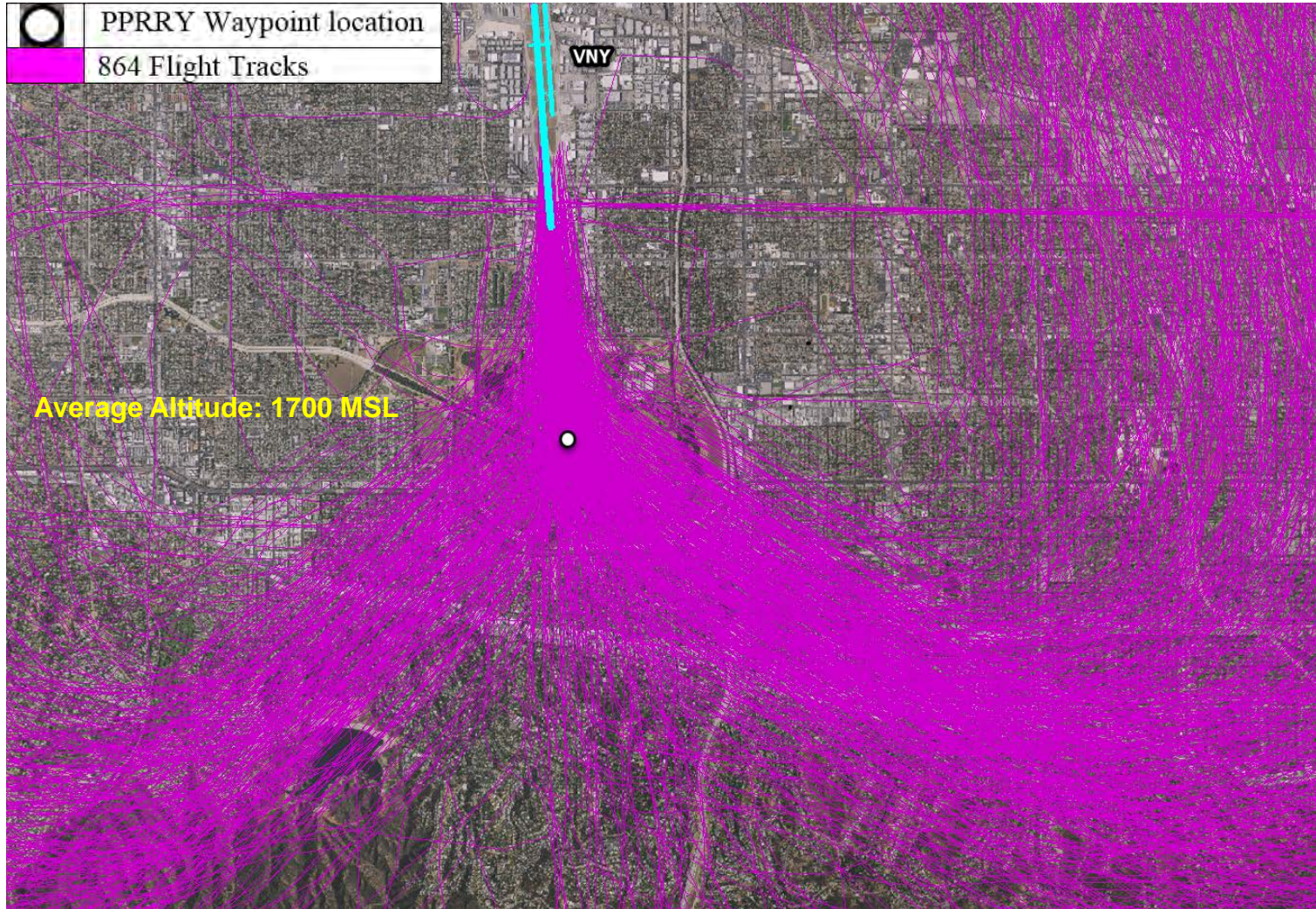


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

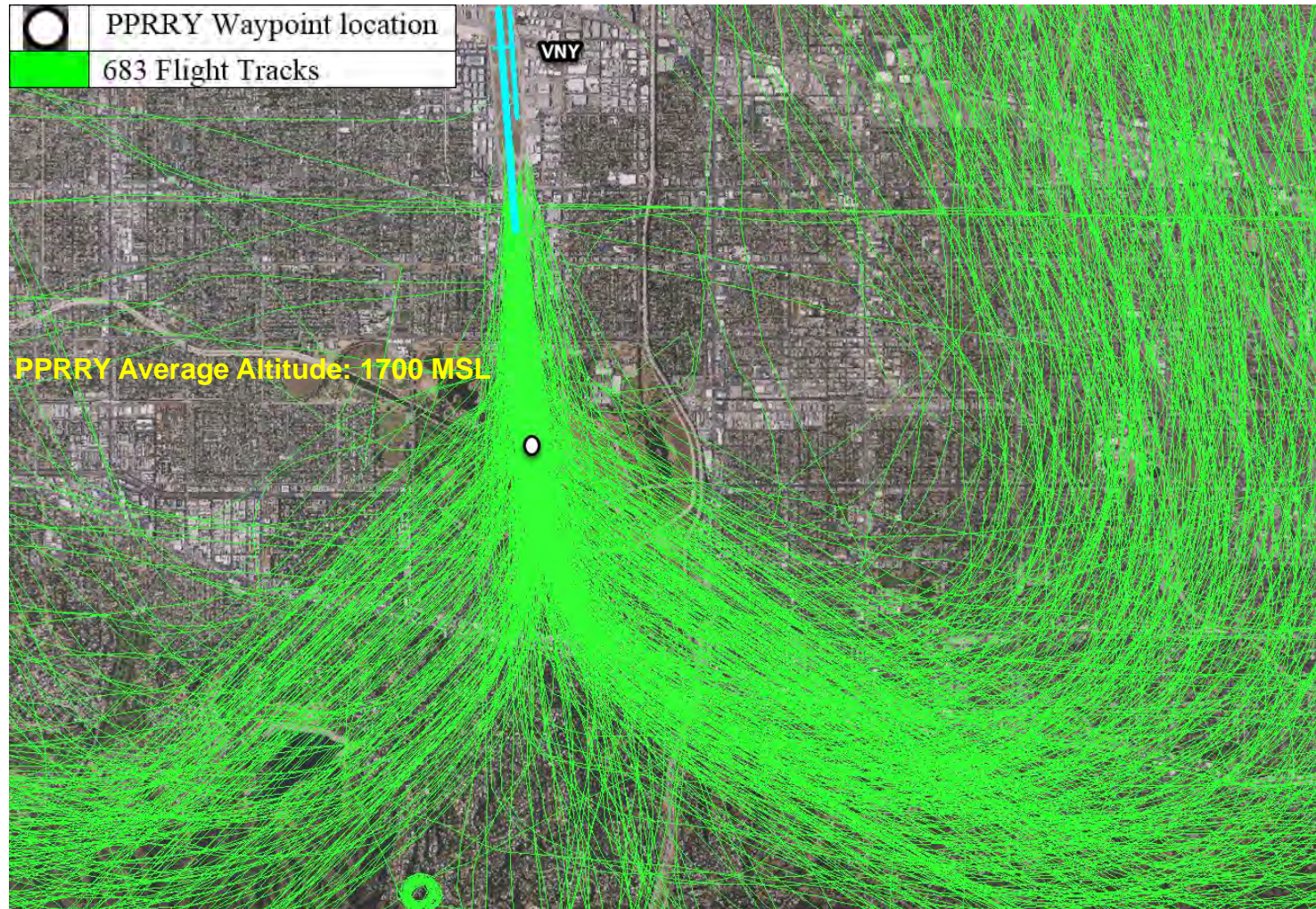
Pre-PPRRY Flight Tracks: May 9-16, 2018



NOTE: The flight track count is representative of the dates analyzed.



Post-PPRRY Flight Tracks: June 1-7, 2018

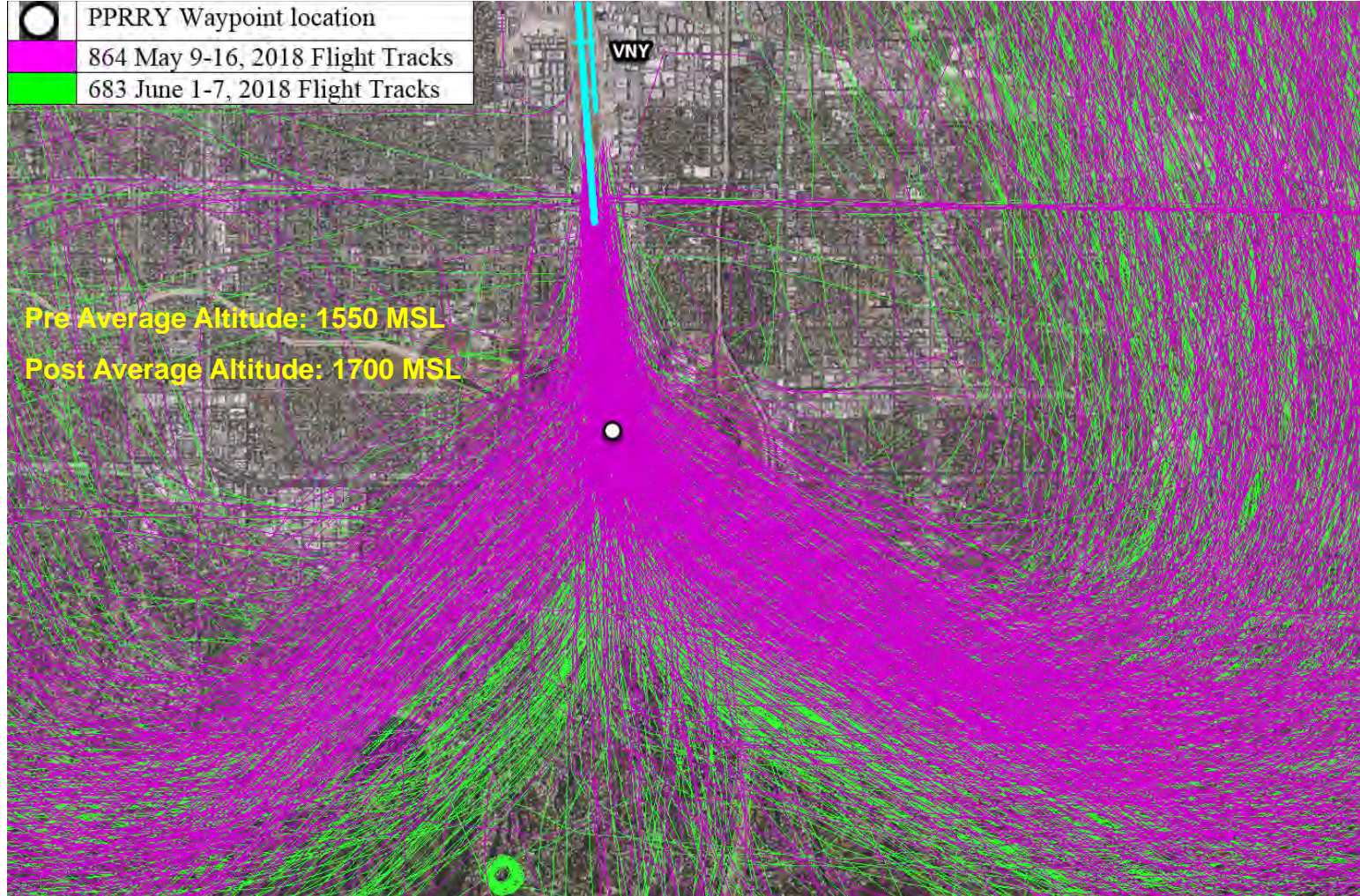


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Pre-PPRRY & Post-PPRRY Flight Tracks

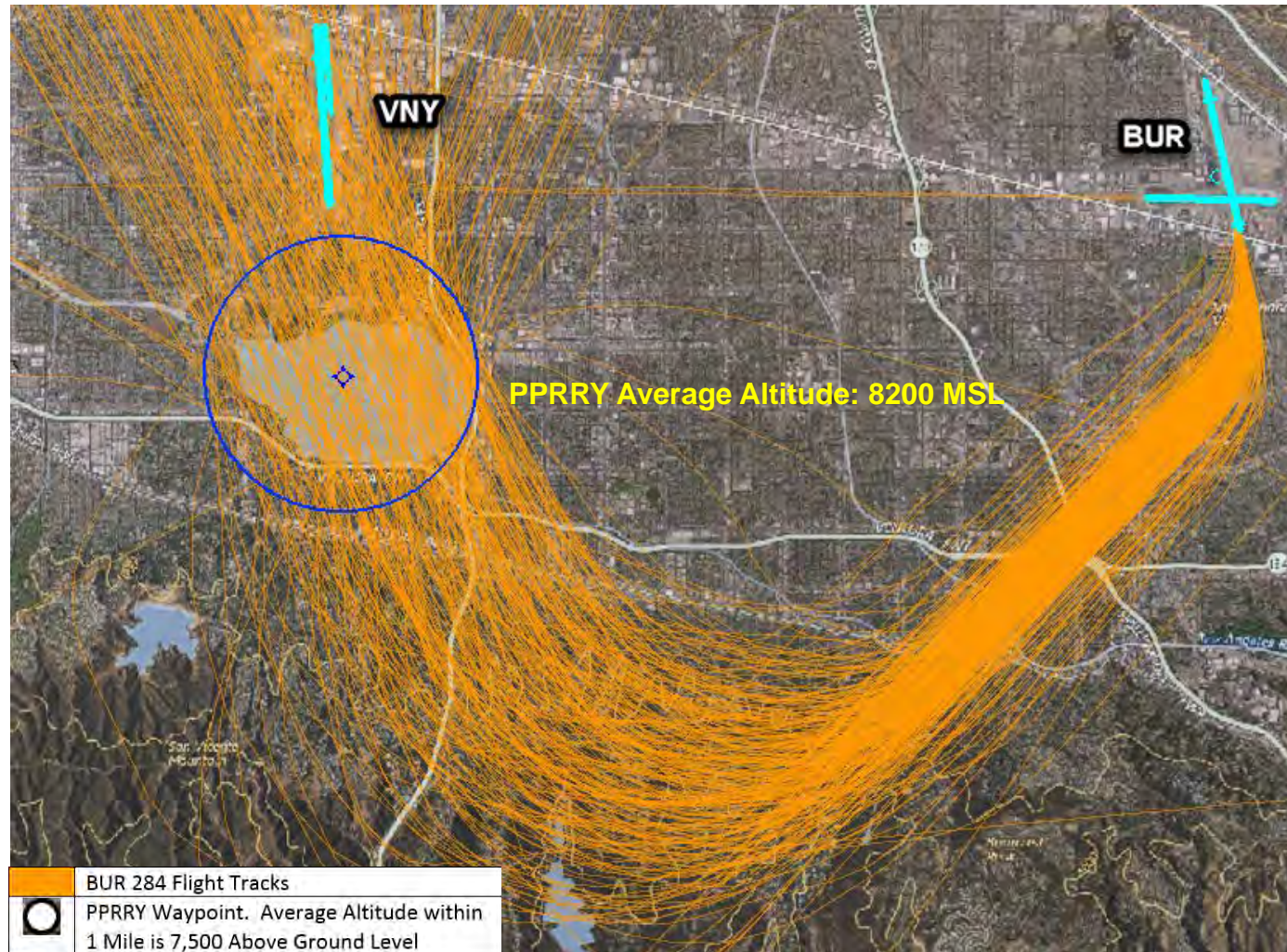


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

BUR Departures over PPRRY June 1-7, 2018



NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Community Concerns Burbank (BUR) & Van Nuys (VNY)

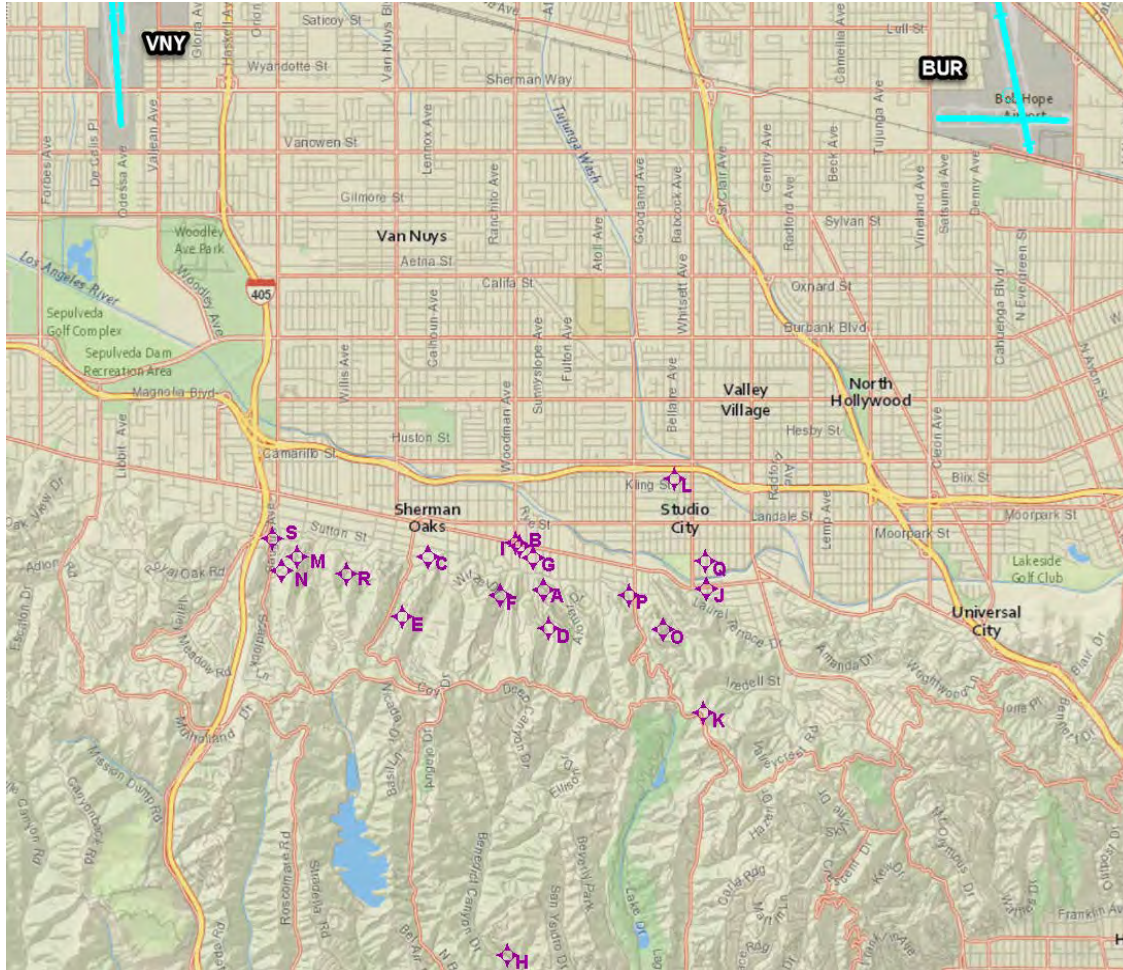


Overview

- The FAA has received numerous complaints from residents south of BUR and VNY.
- Specific addresses have been broken into street locations ONLY, not actual addresses.
- The analysis includes flight tracks from pre and post Metroplex, along with numerous other dates to show the history of flight tracks over the area of concern.
- A side view depicting altitudes at the street locations.



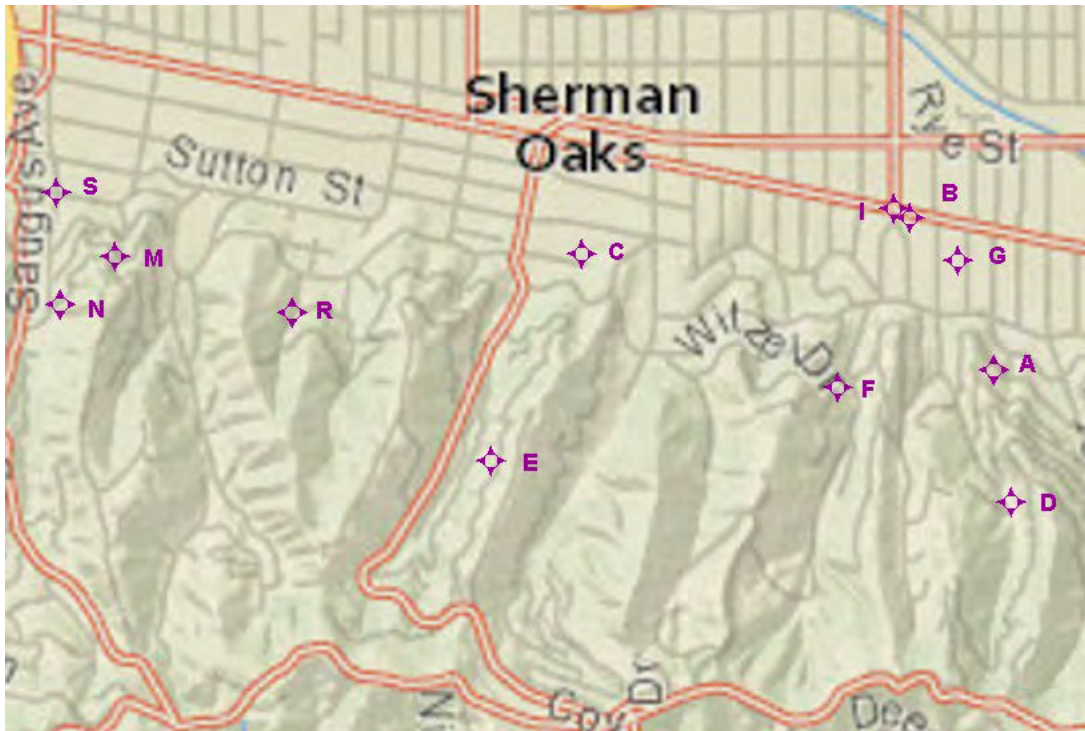
Locations from VNY and BUR



- Location A: Contour Dr, Sherman Oaks
- Location B: Ventura Blvd, Sherman Oaks
- Location C: Roblar Place, Sherman Oaks
- Location D: Ventura Canyon Ave, Sherman Oaks
- Location E: Oakfield Dr, Sherman Oaks
- Location F: Davana Rd, Sherman Oaks
- Location G: Allott Ave, Sherman Oaks
- Location H: Benedict Canyon Beverly Hills
- Location I: Ventura Blvd & Woodman Ave, S O
- Location J: Ventura Blvd, Studio City
- Location K: Mulholland Dr, Beverly Hills
- Location L: Kling St, Studio City
- Location M: Encanto Dr, Sherman Oaks
- Location N: Rayneta Dr, Sherman Oaks
- Location O: Alta Mesa Dr, Studio City
- Location P: Van Noord Ave, Studio City
- Location Q: Rhodes Ave, Studio City
- Location R: Crisp Canyon, Sherman Oaks
- Location S: Valley Vista Blvd, Sherman Oaks



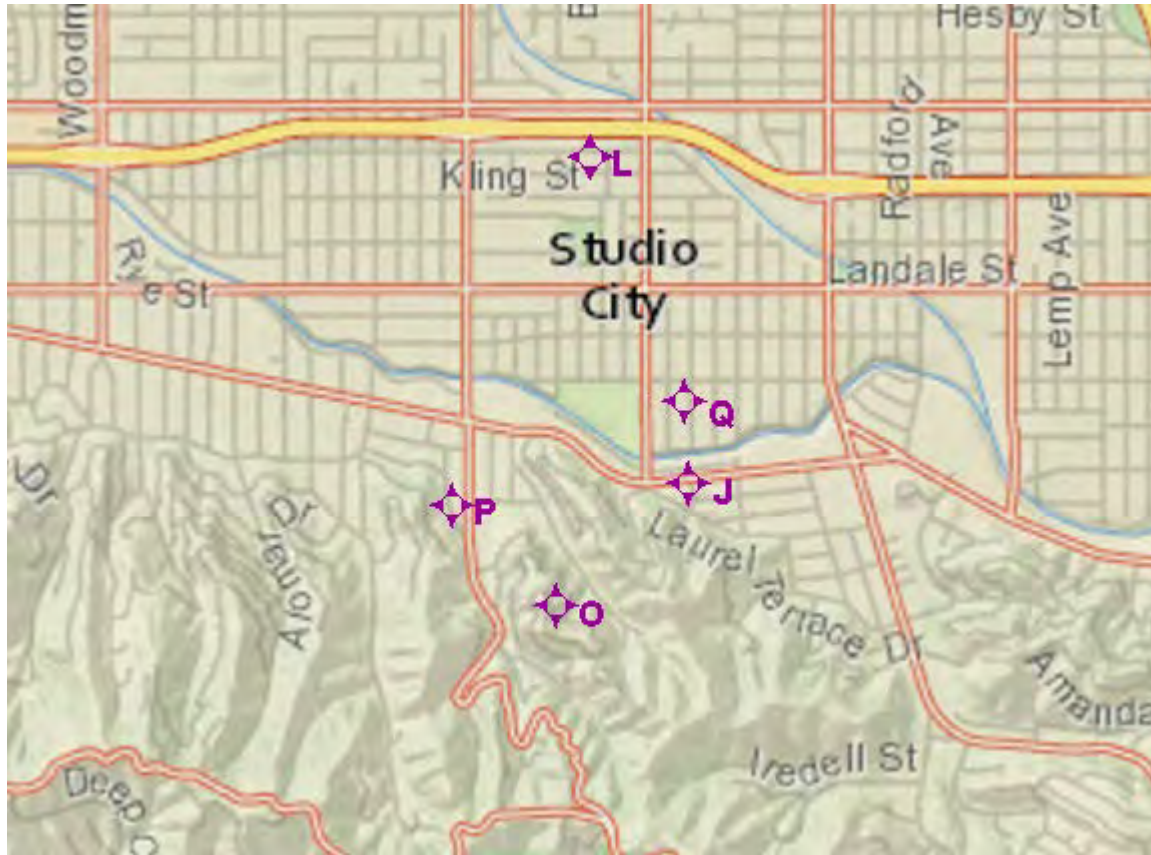
Close-up Location: Sherman Oaks



- Location A: Contour Dr, Sherman Oaks
- Location B: Ventura Blvd, Sherman Oaks
- Location C: Roblar Place, Sherman Oaks
- Location D: Ventura Canyon Ave, Sherman Oaks
- Location E: Oakfield Dr, Sherman Oaks
- Location F: Davana Rd, Sherman Oaks
- Location G: Allott Ave, Sherman Oaks
- Location I: Ventura Blvd & Woodman Ave, S O
- Location M: Encanto Dr, Sherman Oaks
- Location N: Rayneta Dr, Sherman Oaks
- Location R: Crisp Canyon, Sherman Oaks
- Location S: Valley Vista Blvd, Sherman Oaks



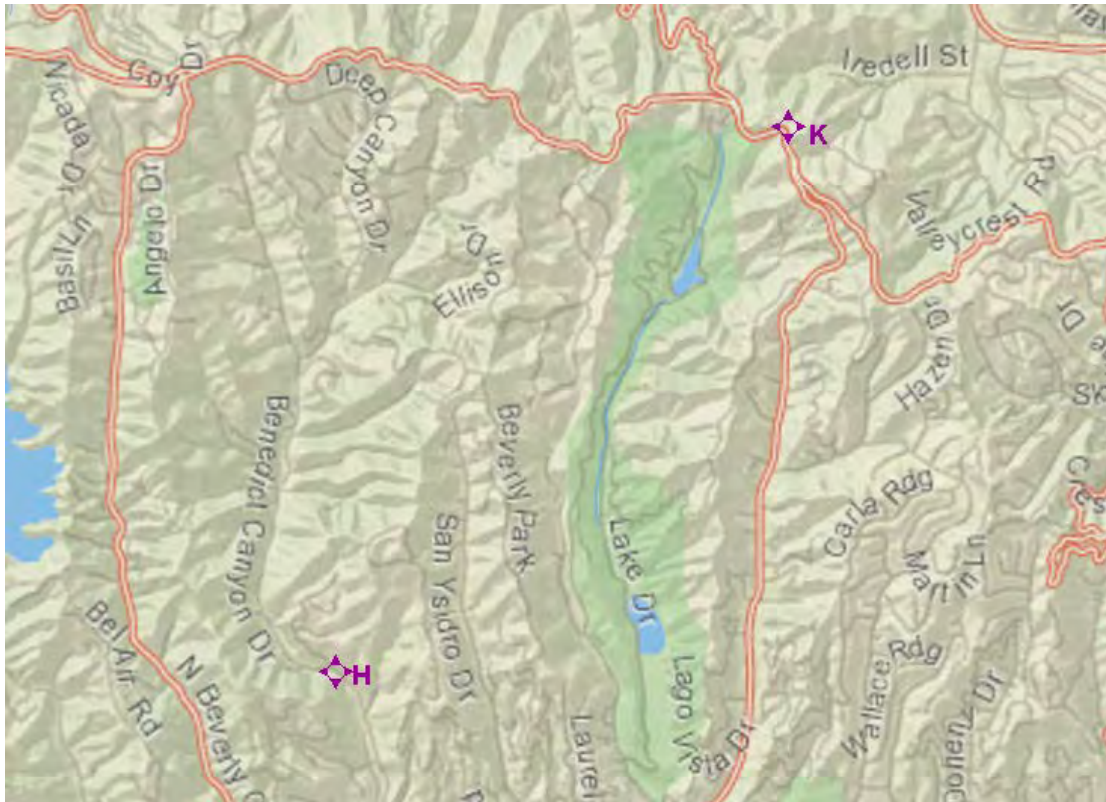
Close-up Location: Studio City



- Location J: Ventura Blvd, Studio City
- Location L: Kling St, Studio City
- Location O: Alta Mesa Dr, Studio City
- Location P: Van Noord Ave, Studio City
- Location Q: Rhodes Ave, Studio City



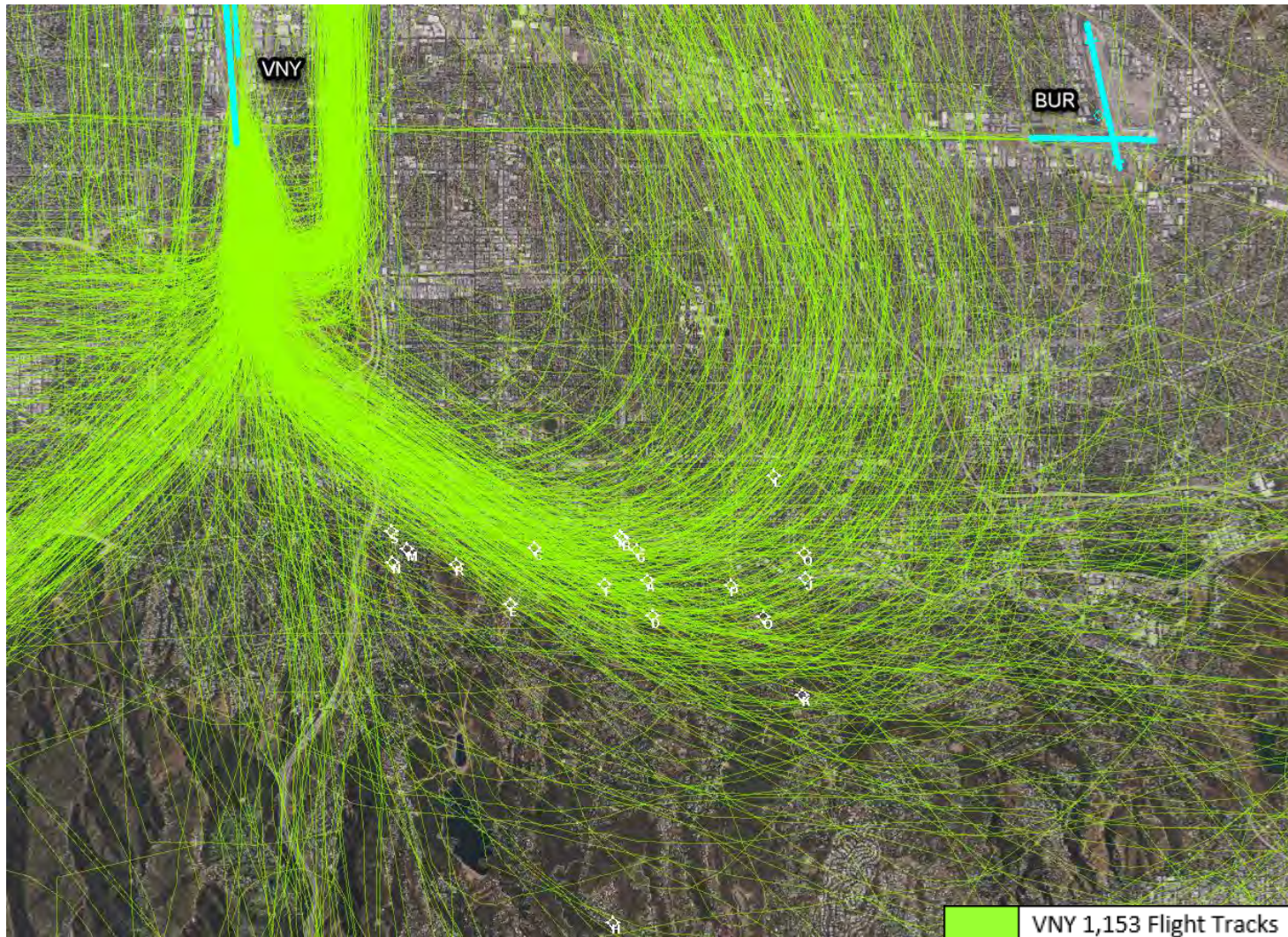
Close-up Location: Beverly Hills



- Location H: Benedict Canyon Beverly Hills
- Location K: Mulholland Drive, Beverly Hills



Pre-Metroplex VNY Departures: February 8-15, 2017

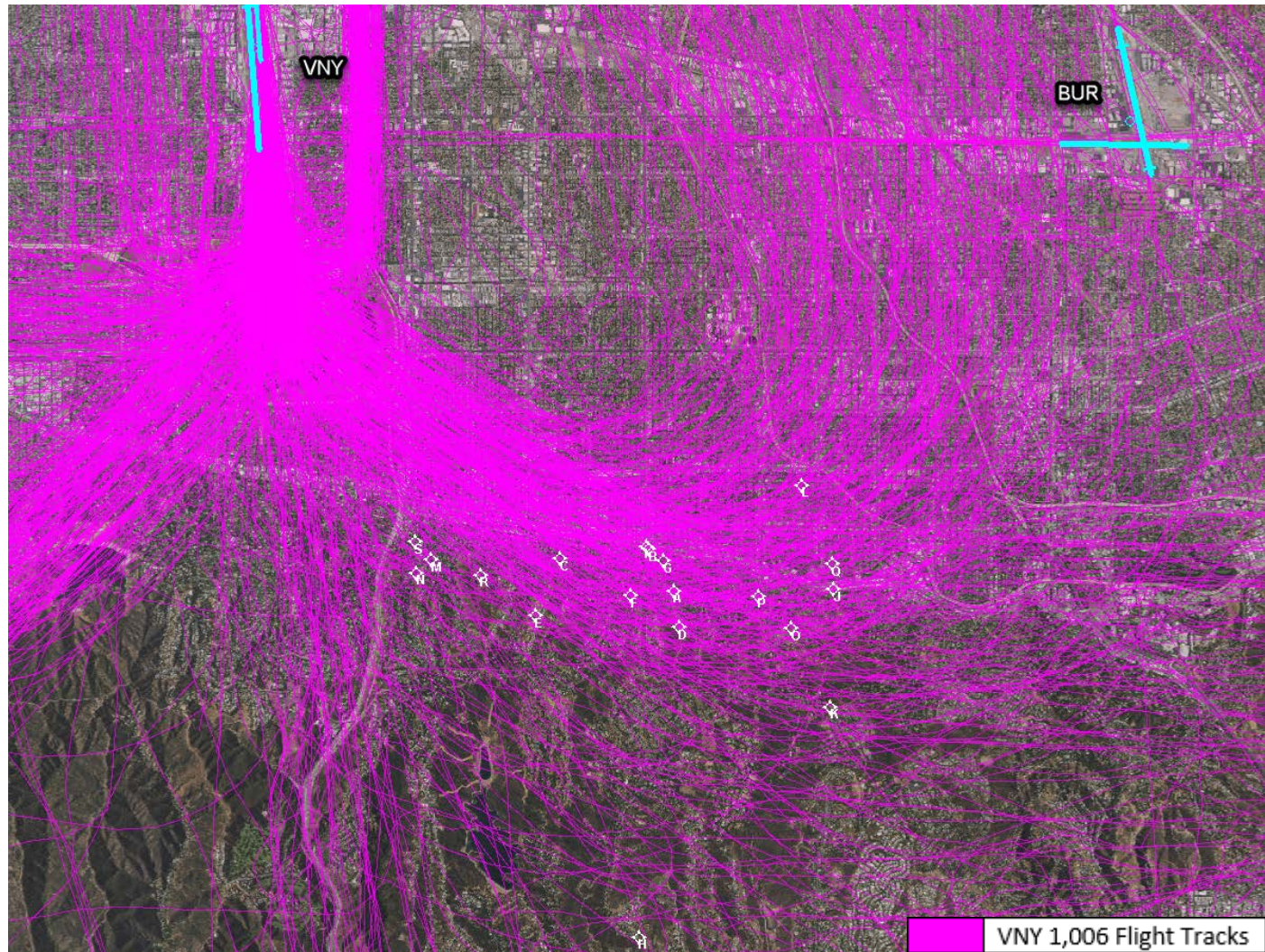


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Post-Metroplex VNY Departures: July 5-12, 2017

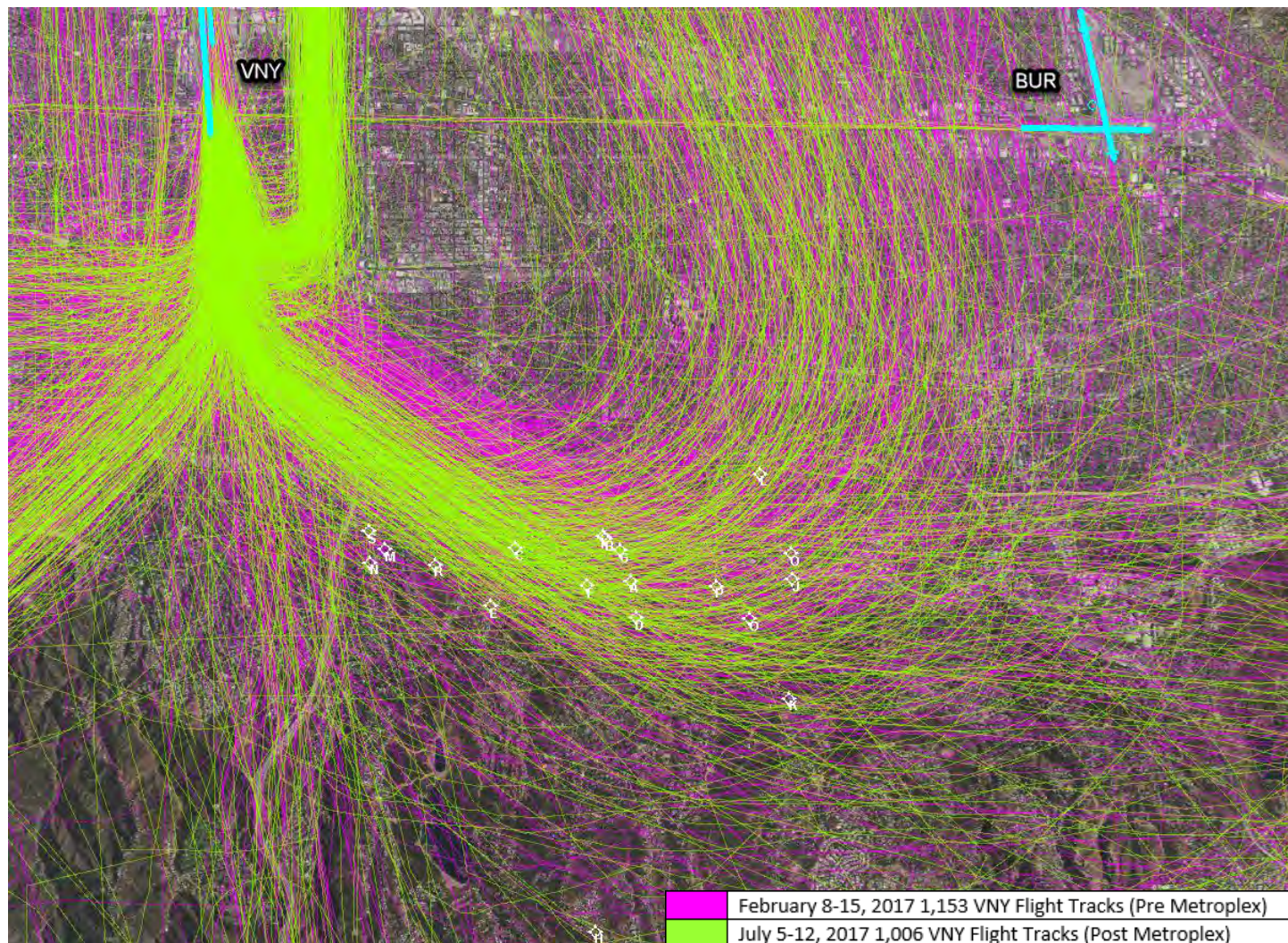


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

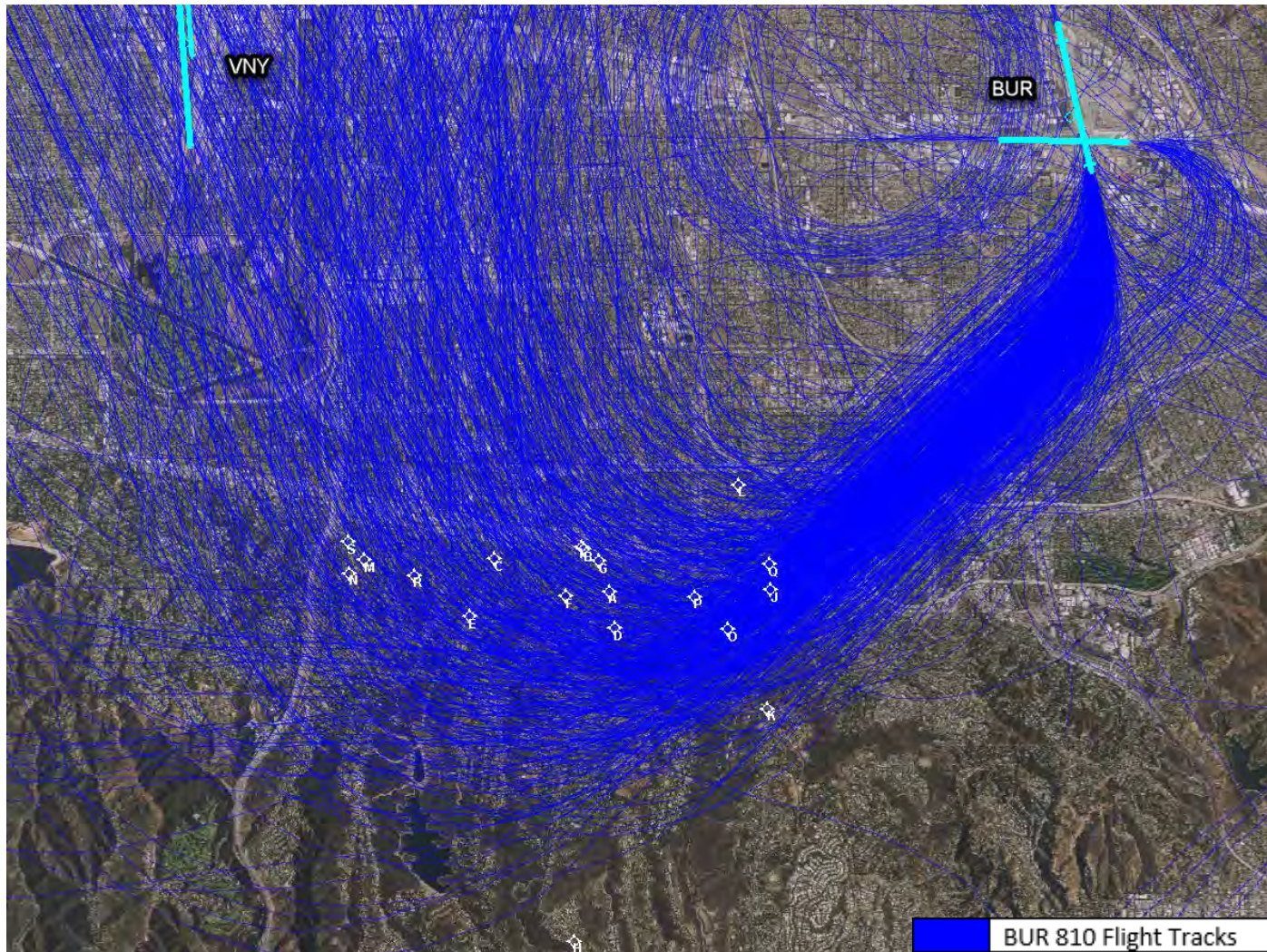
Pre and Post-Metroplex VNY Departures



NOTE: The flight track count is representative of the dates analyzed.



Pre-Metroplex BUR Departures: February 8-15, 2017

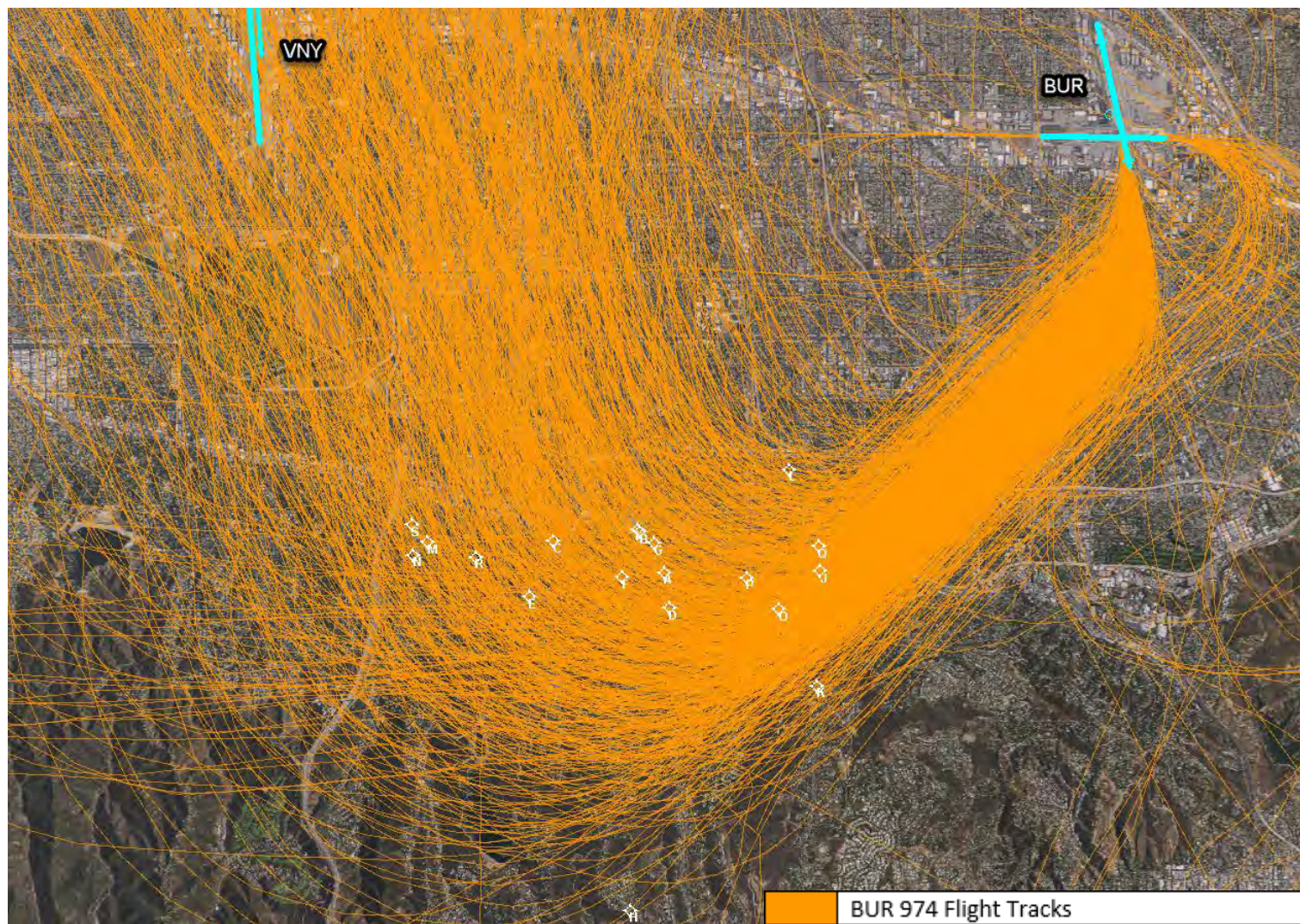


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Post-Metroplex BUR Departures: July 5-12, 2017

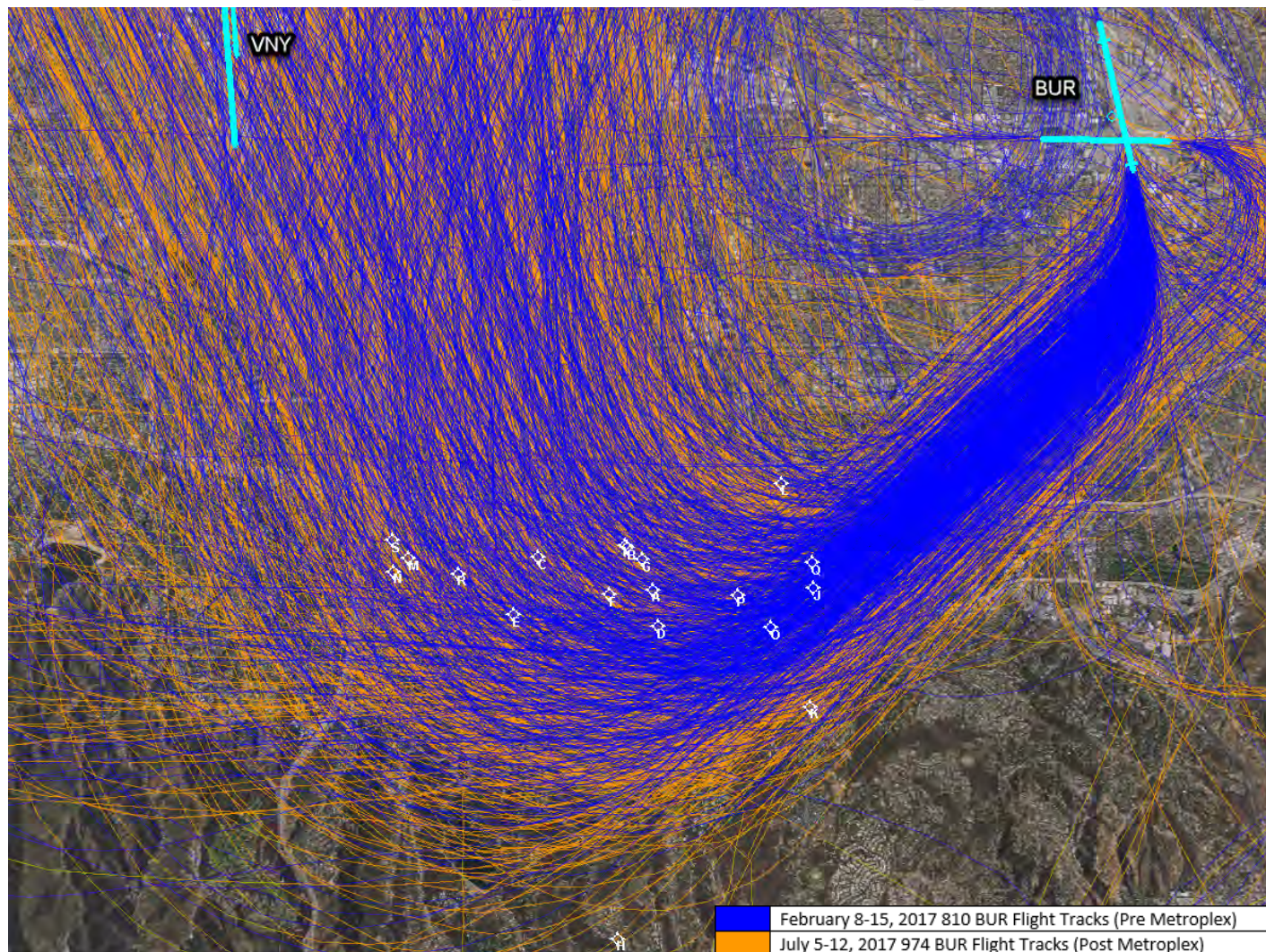


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

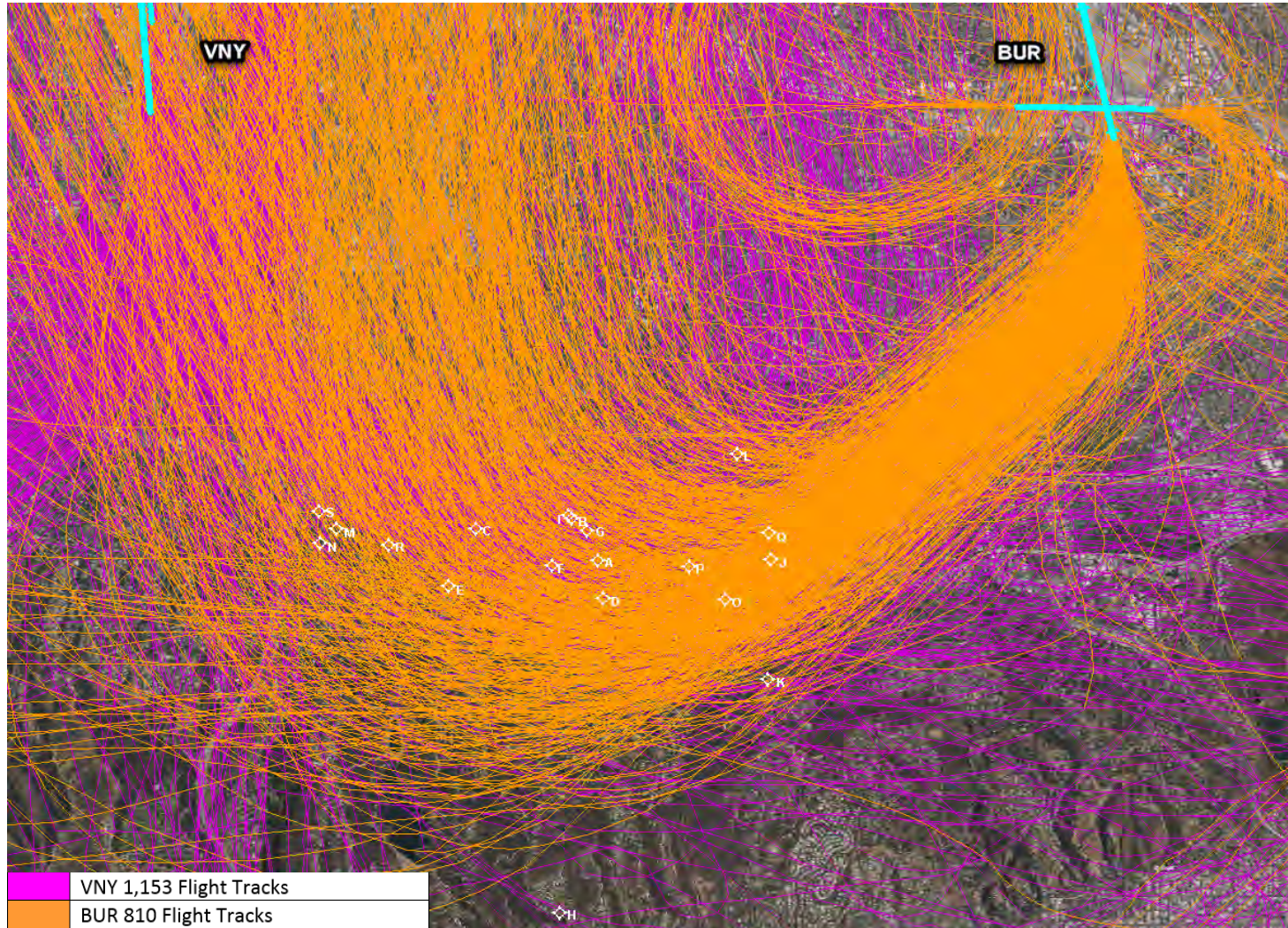
Pre and Post-Metroplex BUR Departures



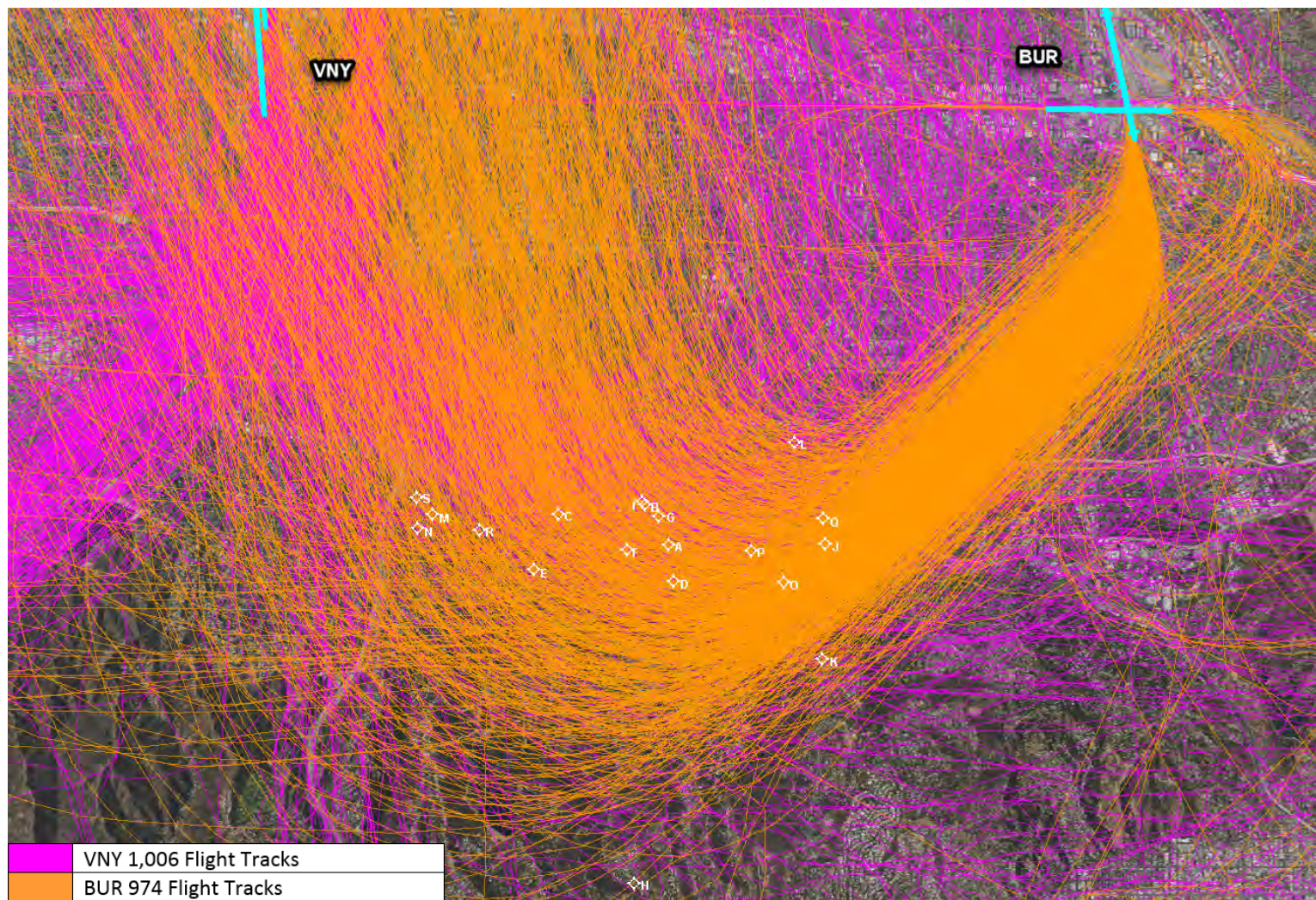
NOTE: The flight track count is representative of the dates analyzed.



Pre-Metroplex Departures: February 8-15, 2017



Post-Metroplex Departures: July 5-12, 2017

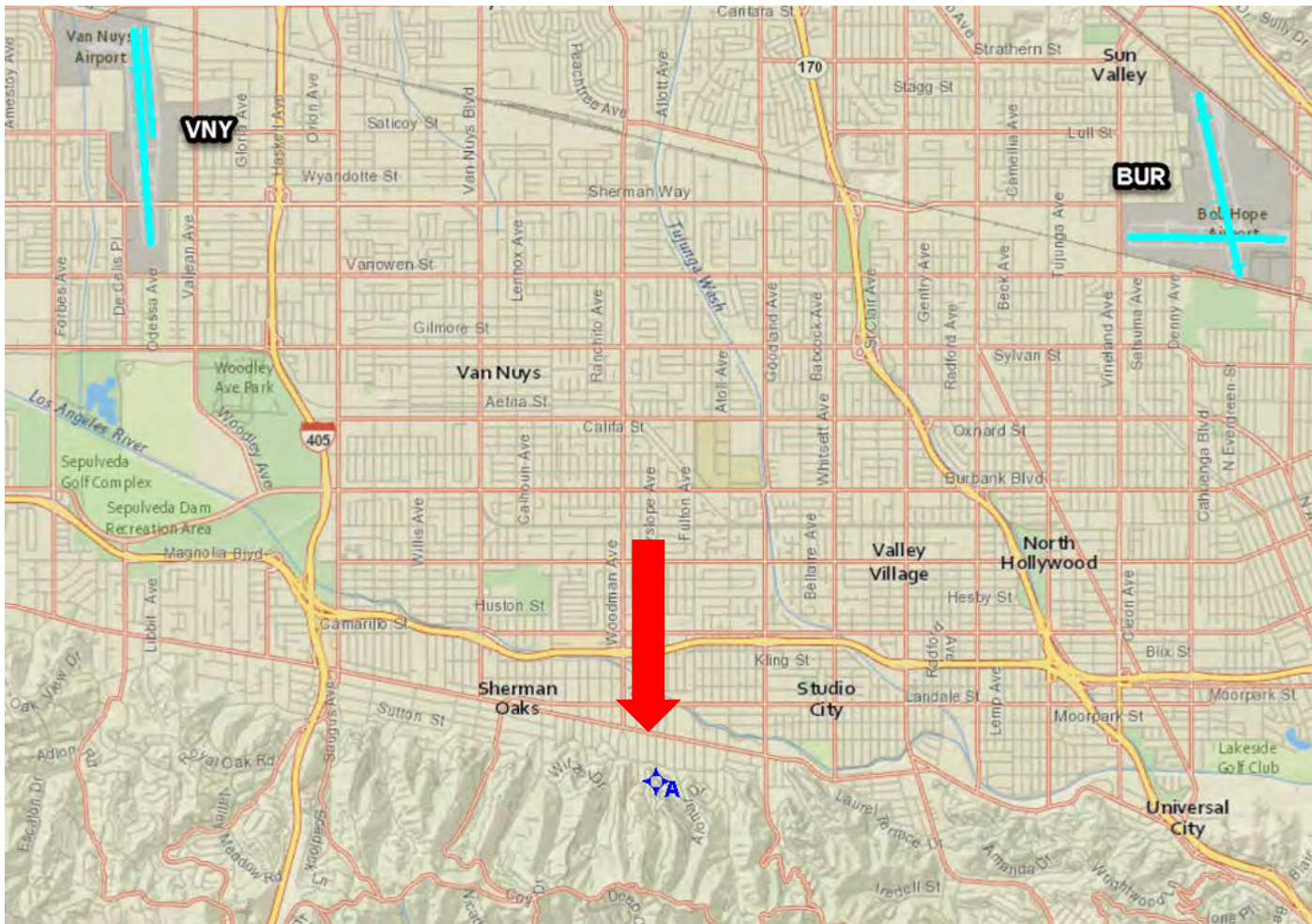


NOTE: The flight track count is representative of the dates analyzed.



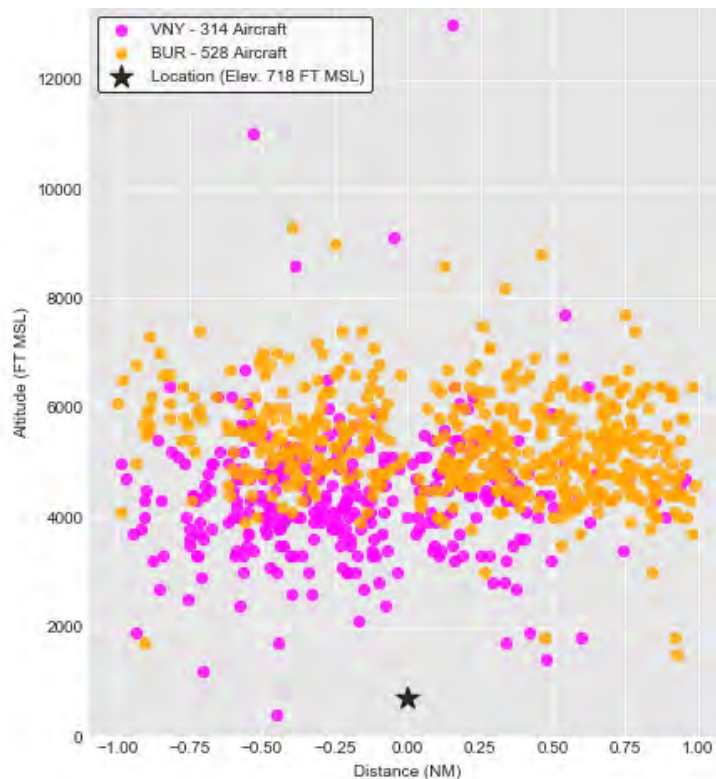
Federal Aviation
Administration

Location A: Contour Drive, Sherman Oaks

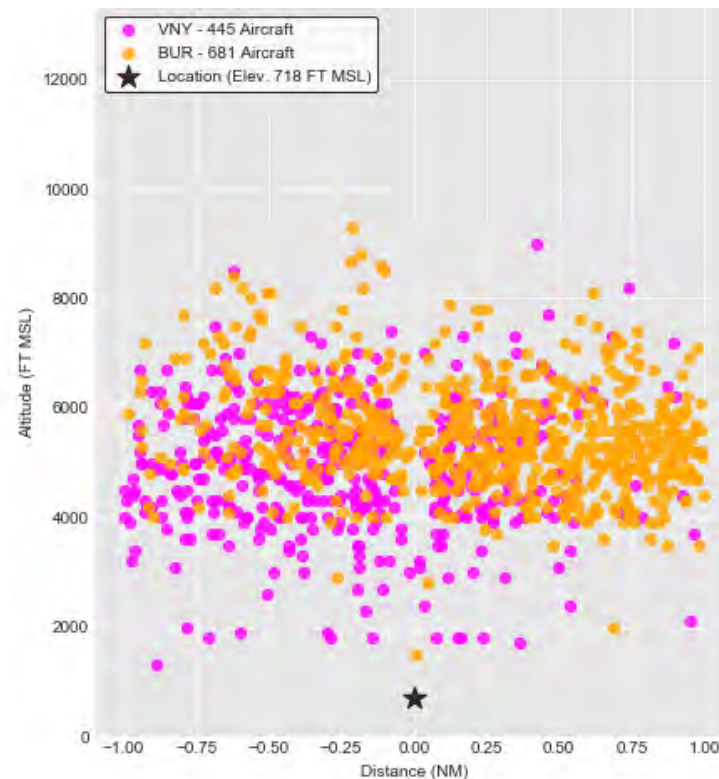


Altitudes over Location A: Contour Drive, Sherman Oaks

February 8-15, 2017



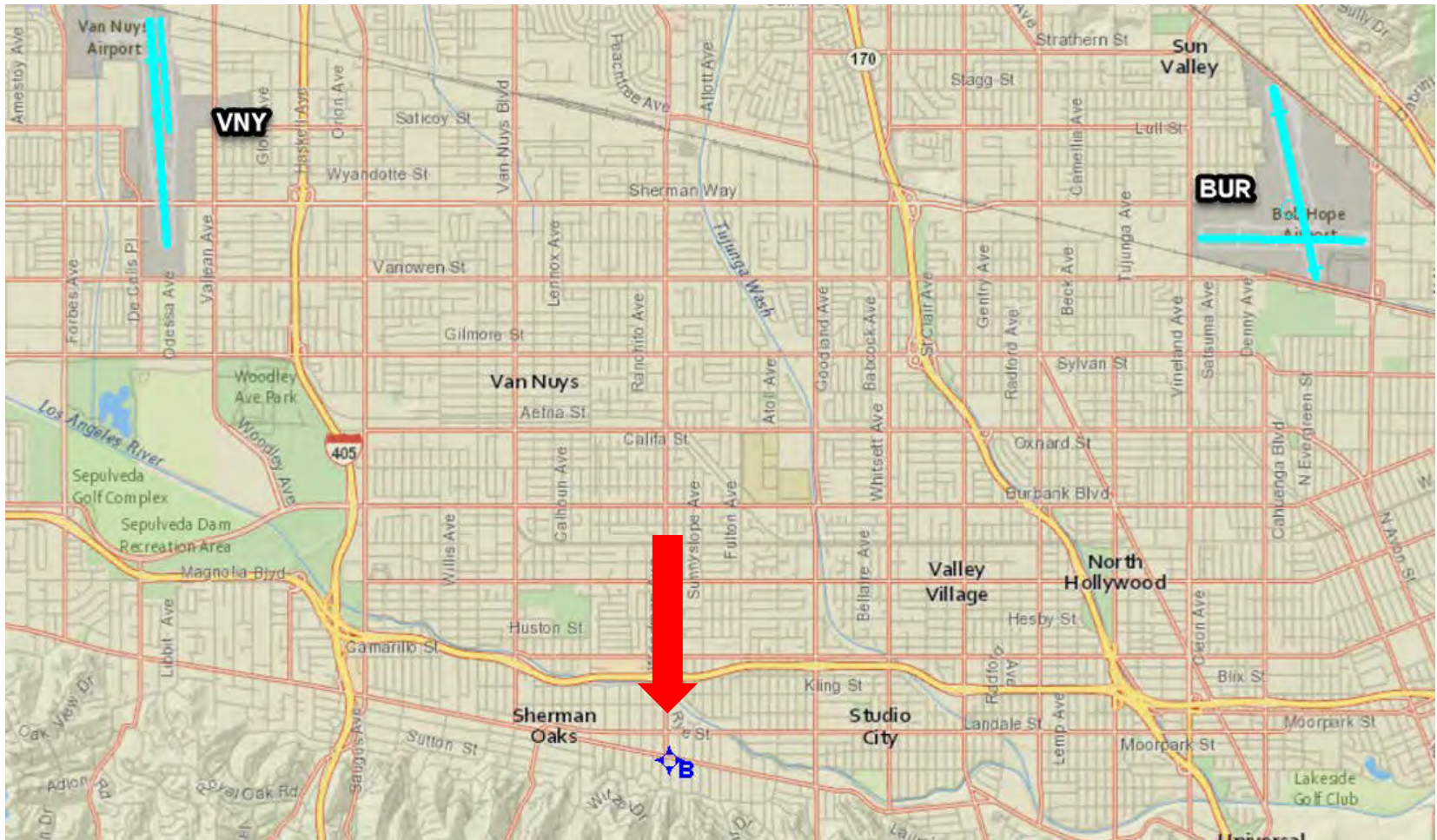
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

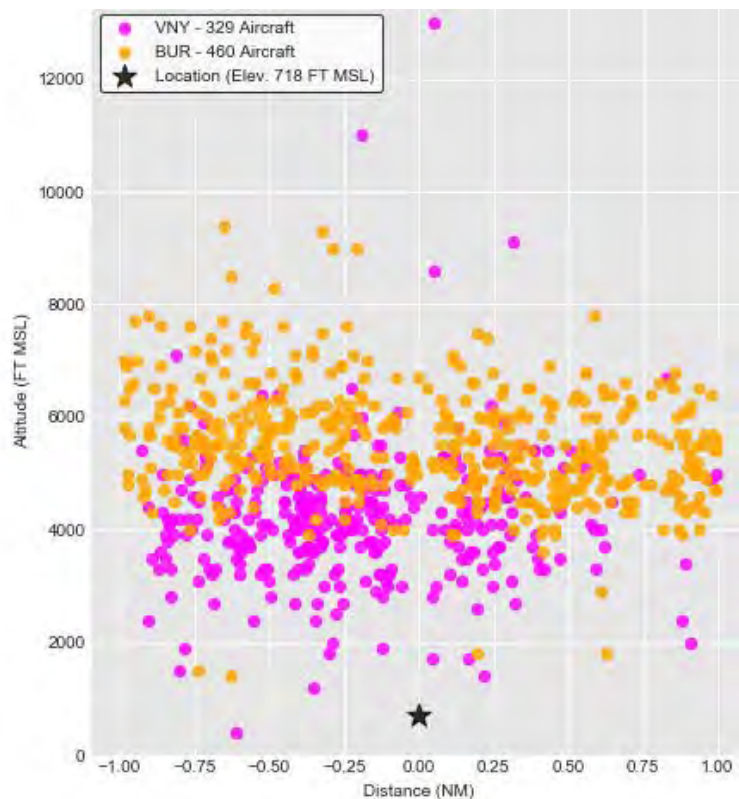


Location B: Ventura Blvd, Sherman Oaks

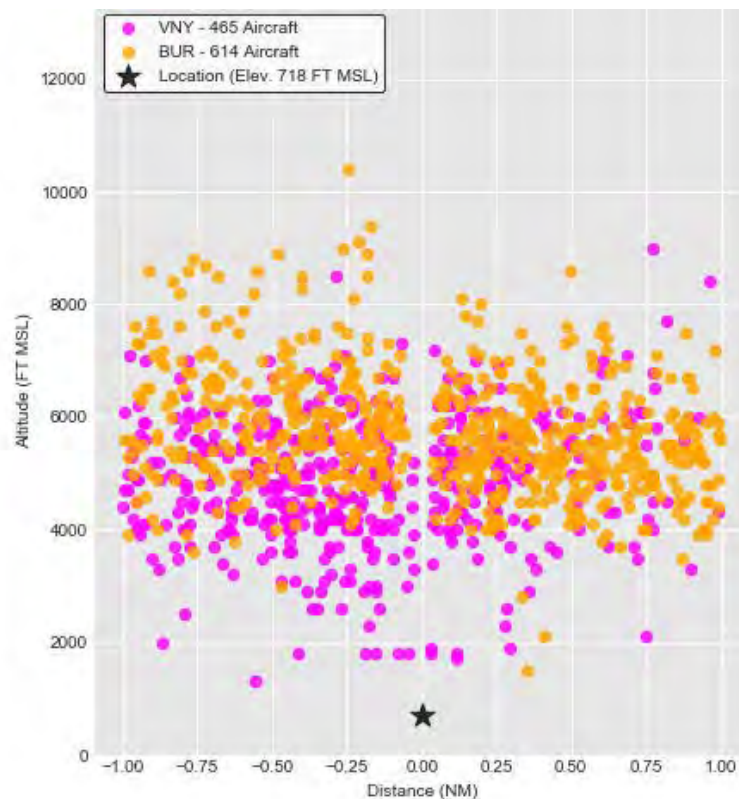


Altitudes over Location B: Ventura Blvd, Sherman Oaks

February 8-15, 2017



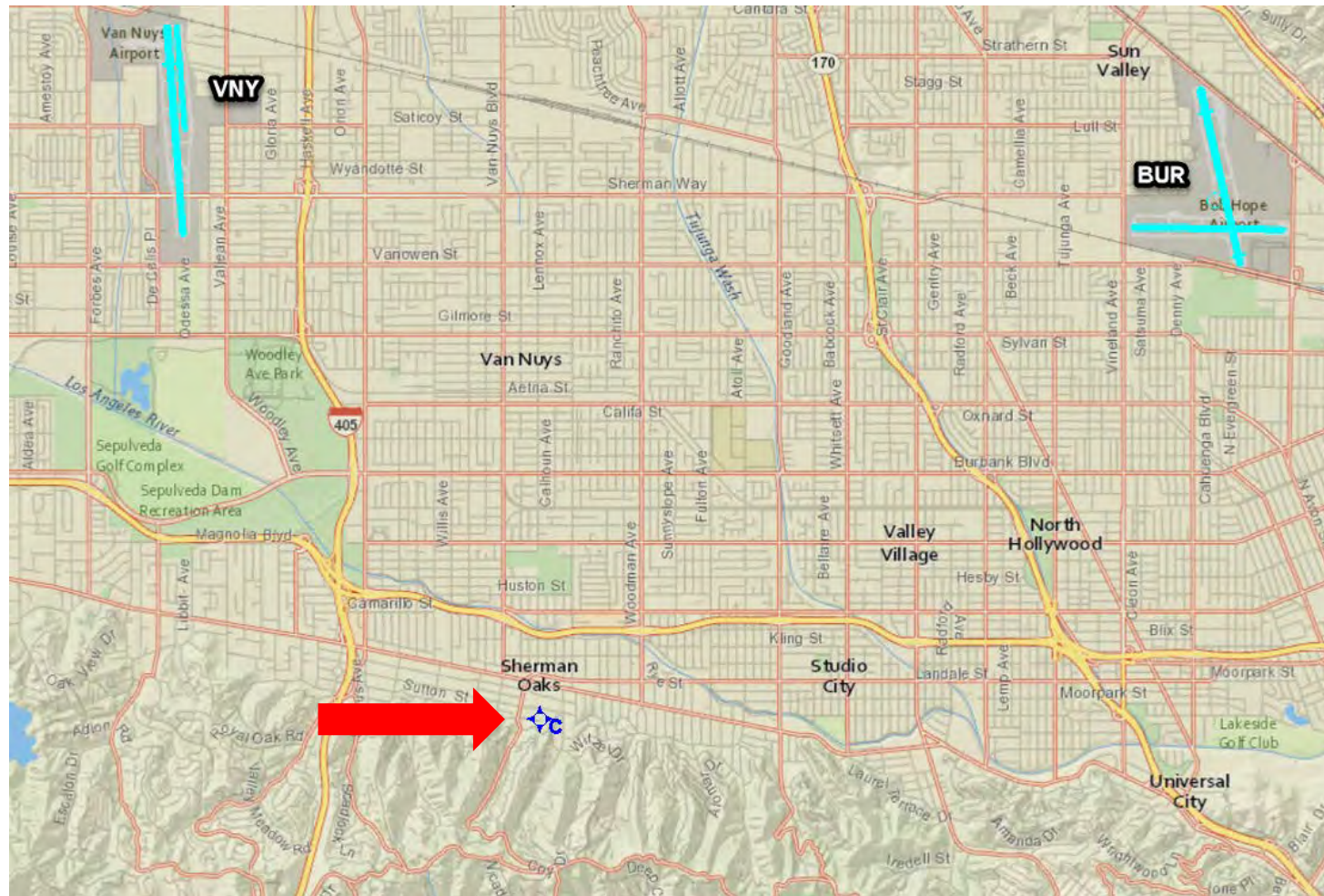
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

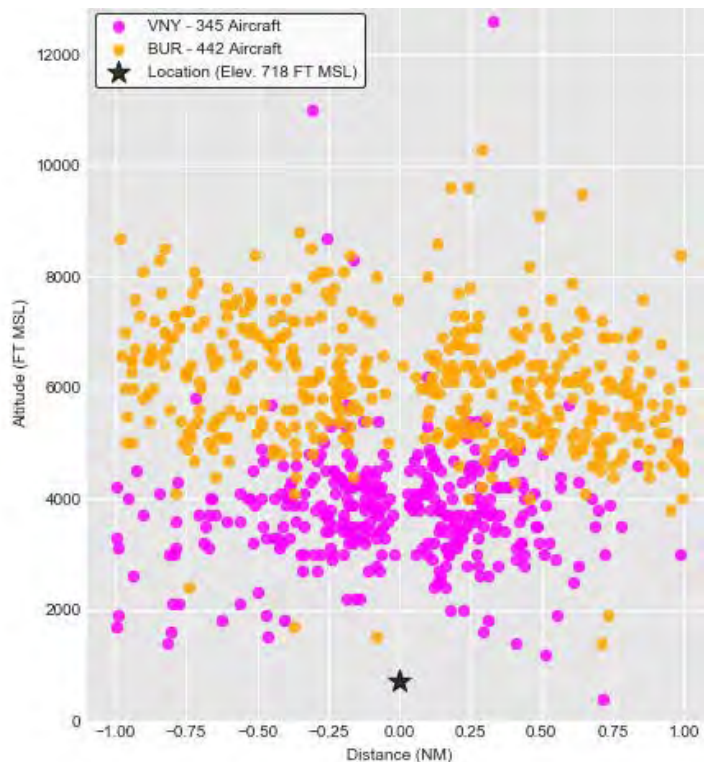


Location C: Roblar Place, Sherman Oaks

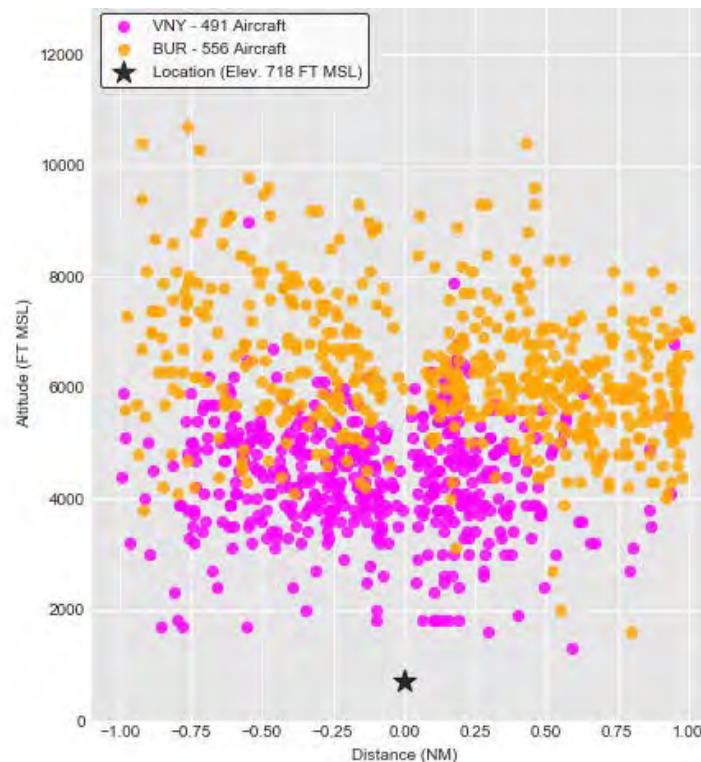


Altitudes over Location C: Roblar Place, Sherman Oaks

February 8-15, 2017



February 8-15, 2019

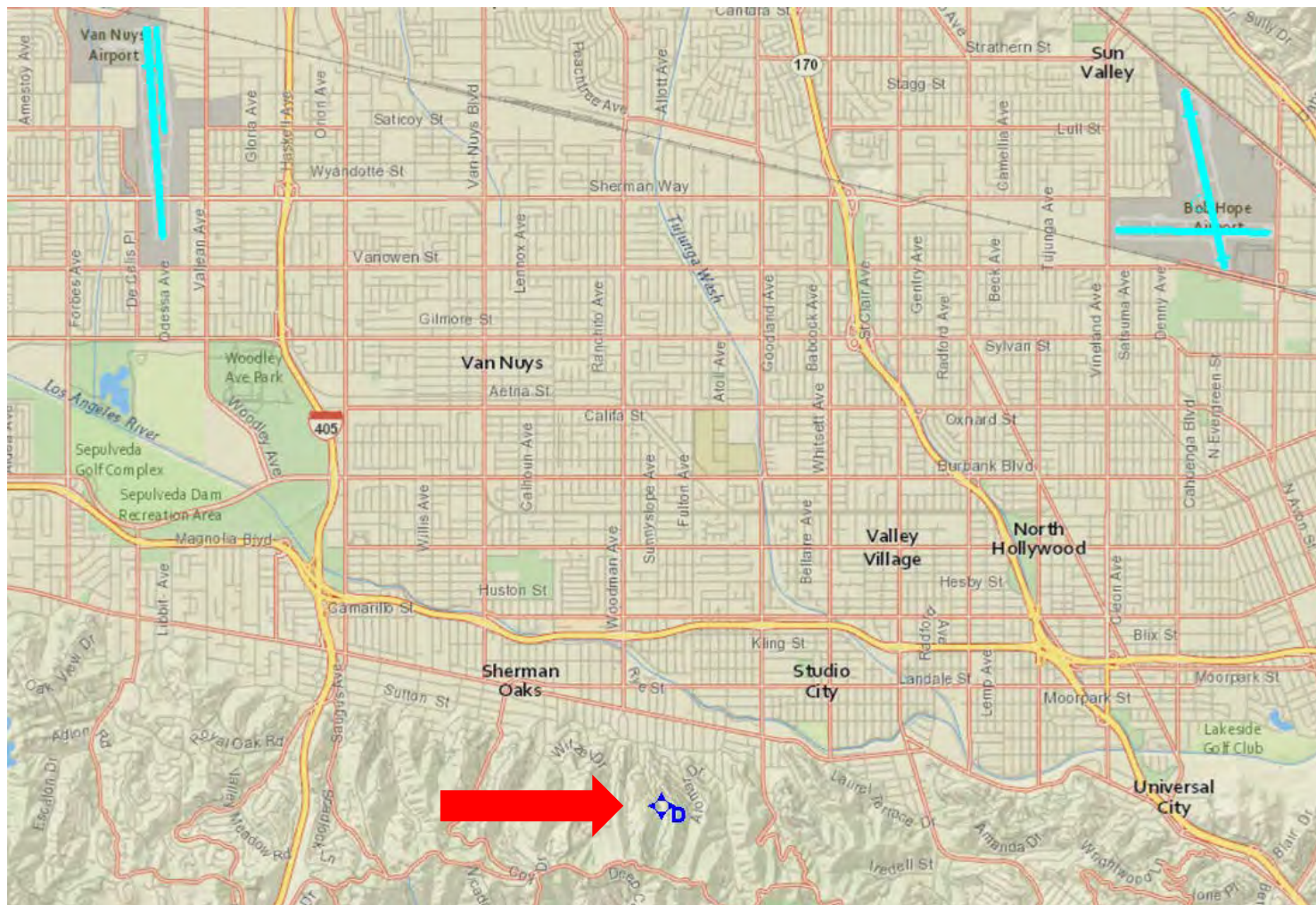


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



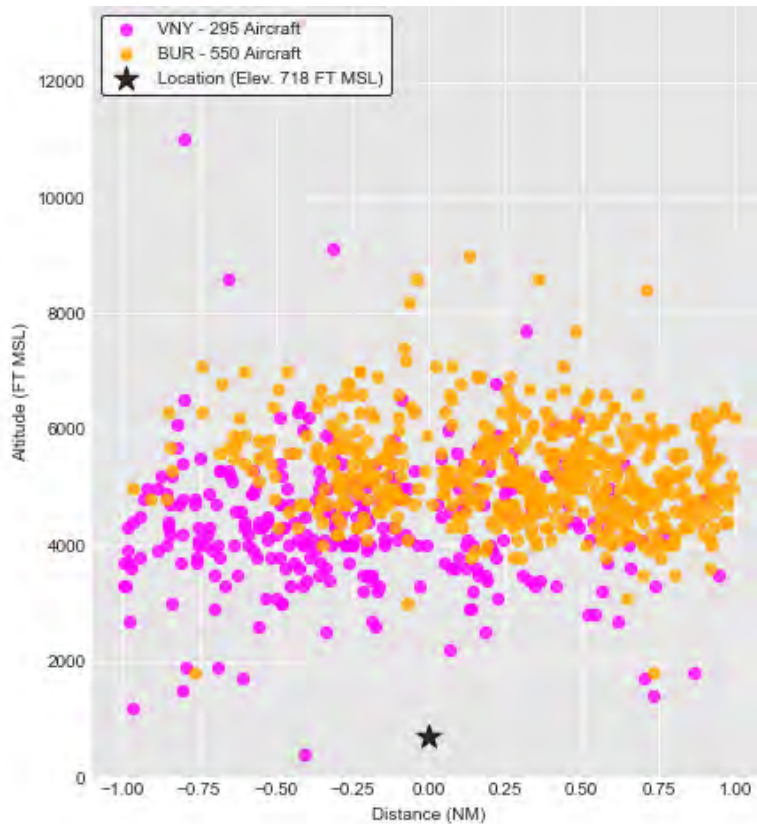
Federal Aviation
Administration

Location D: Ventura Canyon Ave, Sherman Oaks

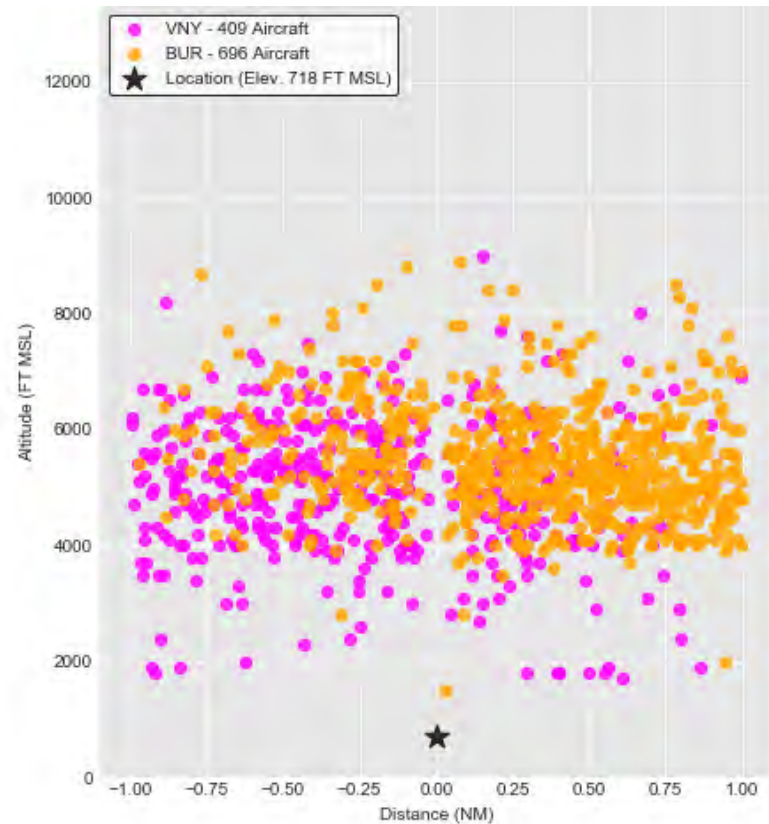


Altitudes over Location D: Ventura Canyon Ave, Sherman Oaks

February 8-15, 2017



February 8-15, 2019

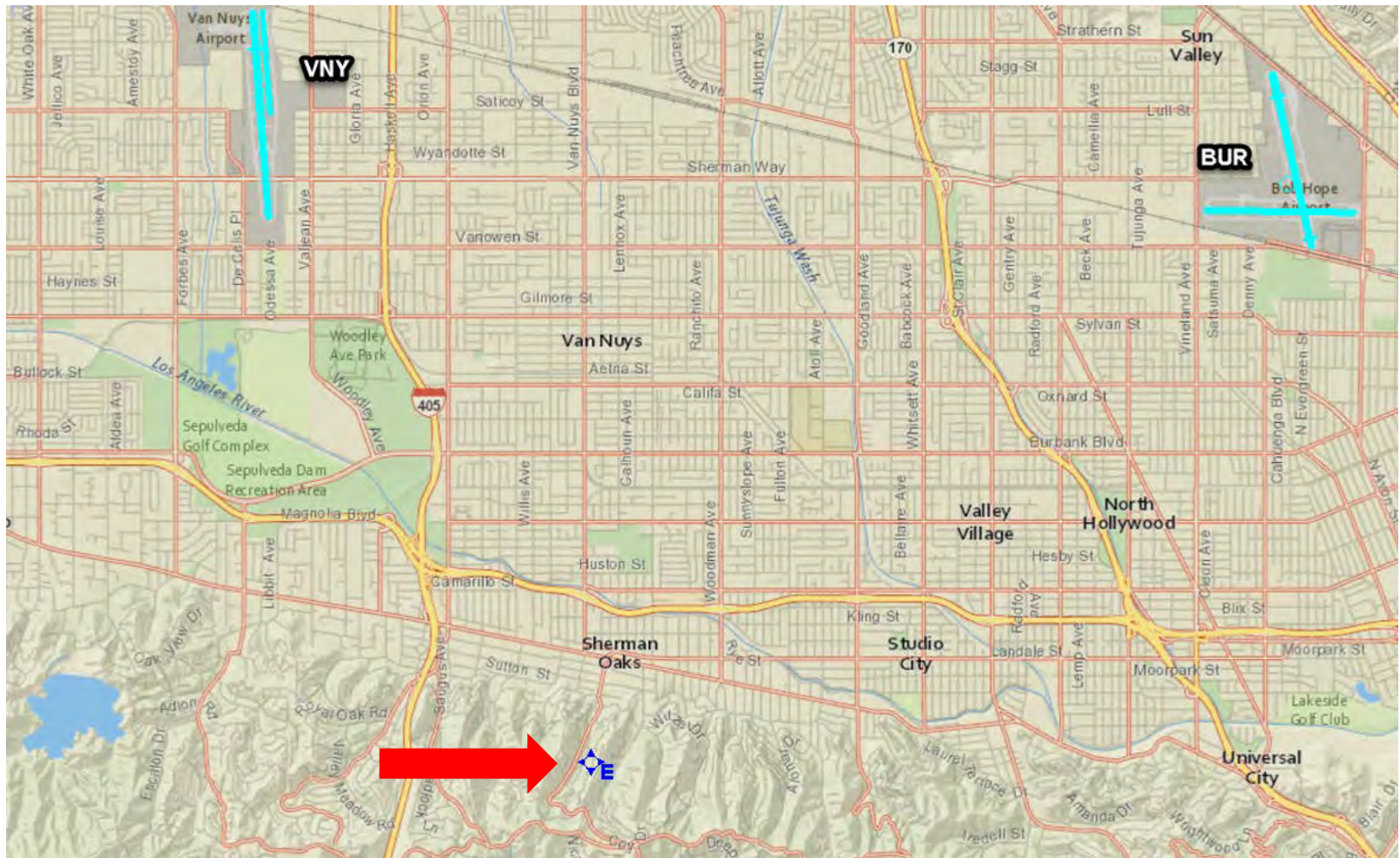


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



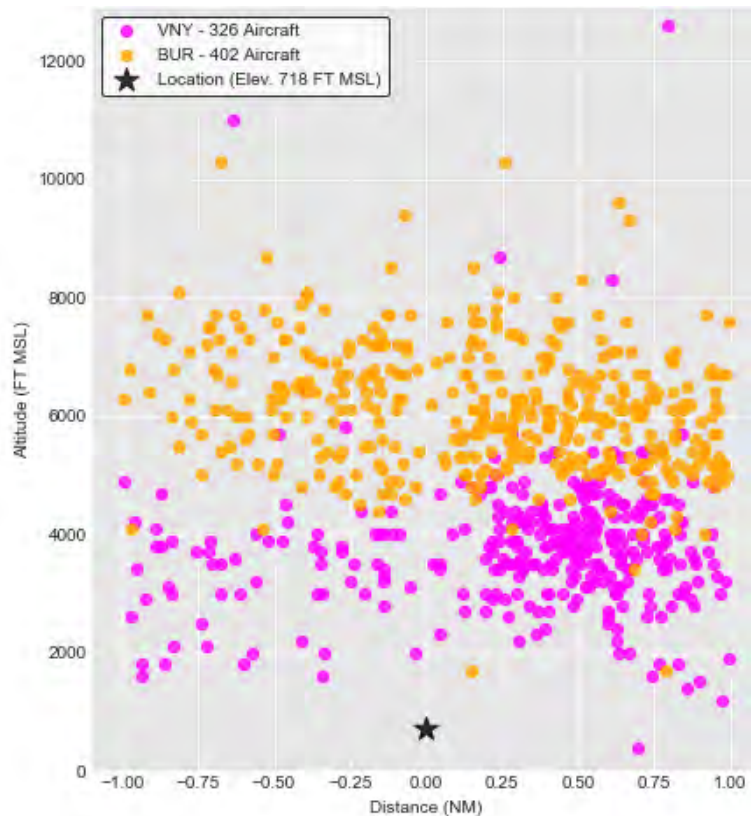
Federal Aviation
Administration

Location E: Oakfield Drive, Sherman Oaks

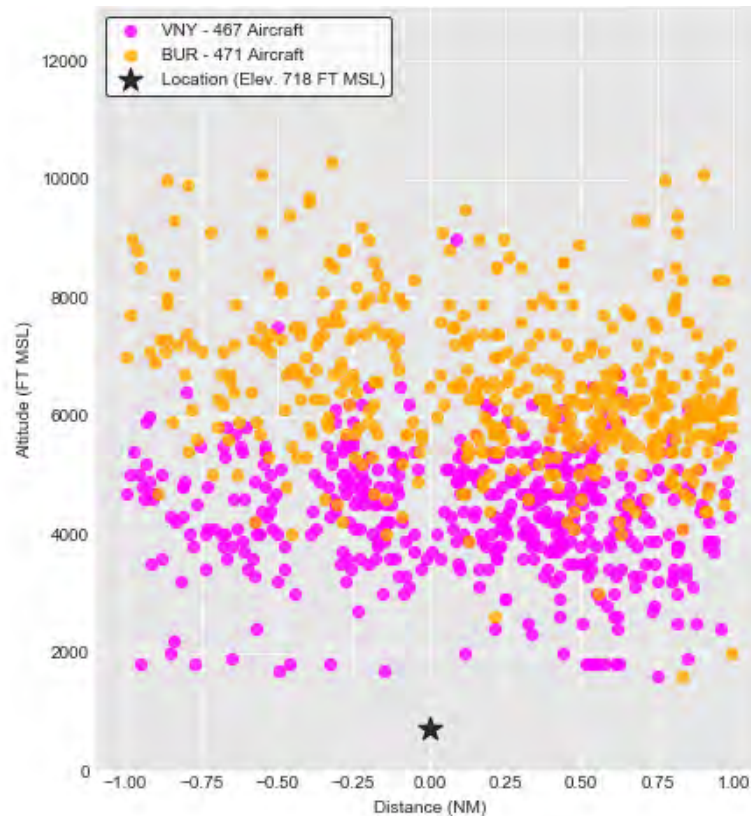


Altitudes over Location E: Oakfield Drive, Sherman Oaks

February 8-15, 2017



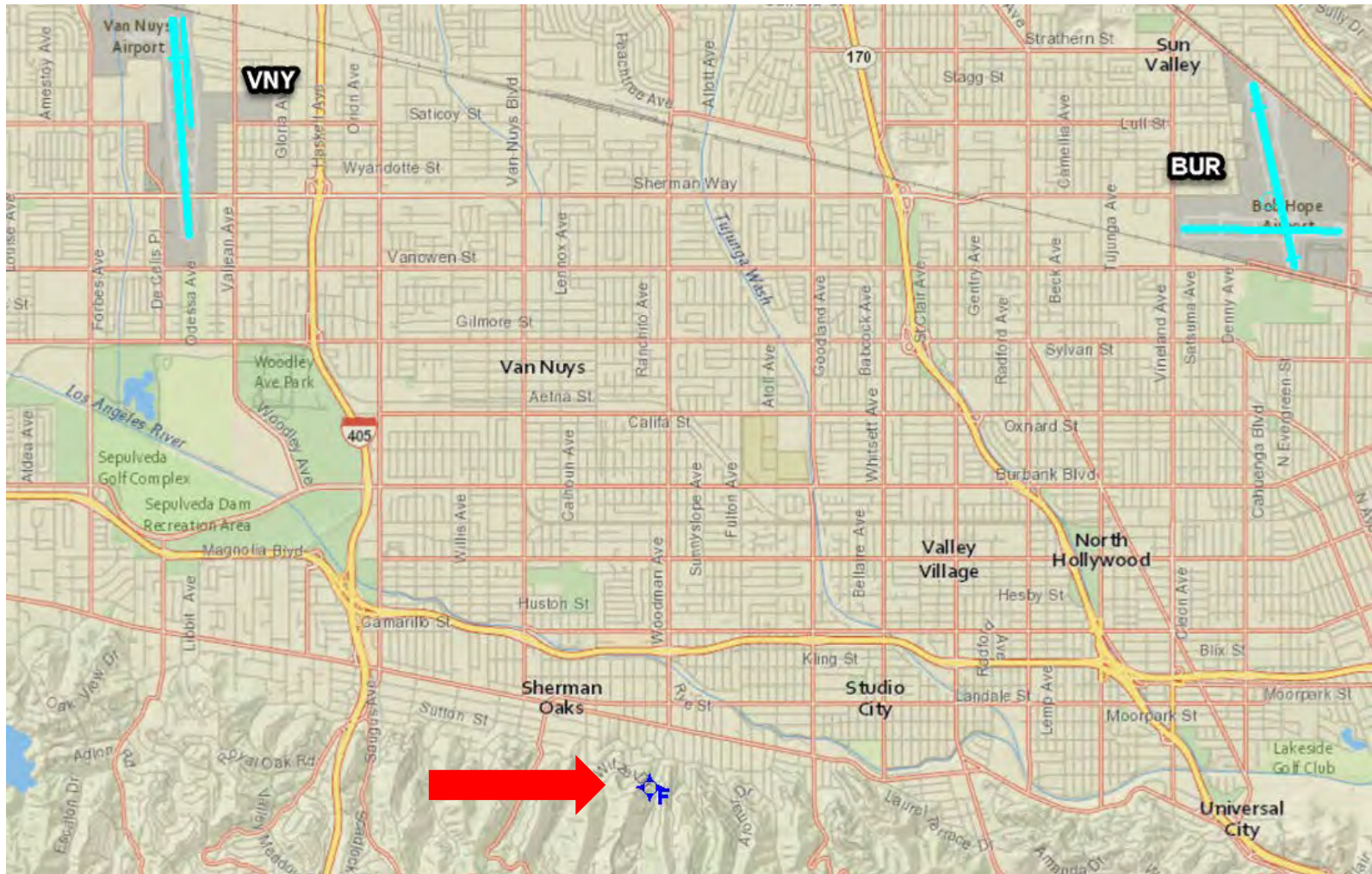
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

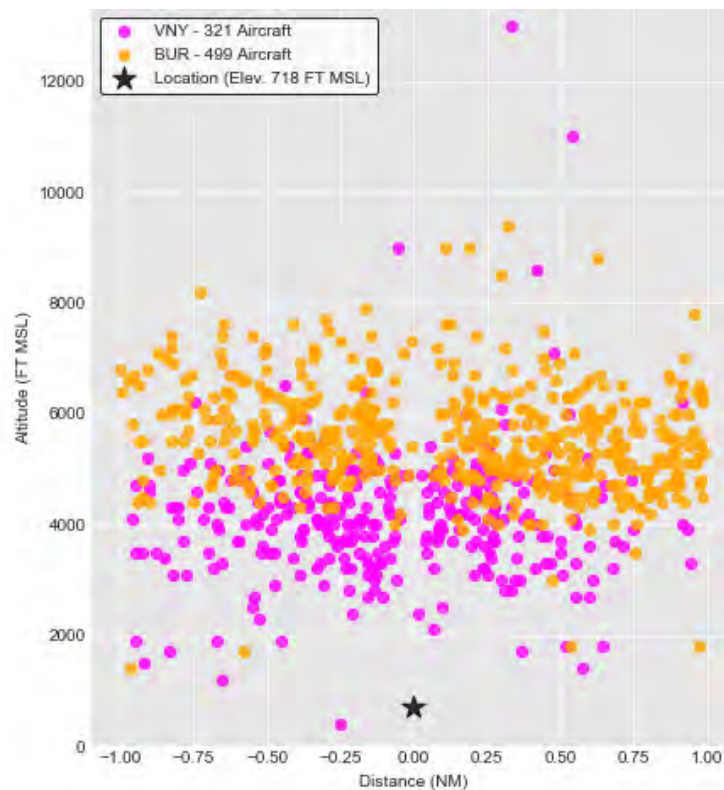


Location F: Davana Road, Sherman Oaks

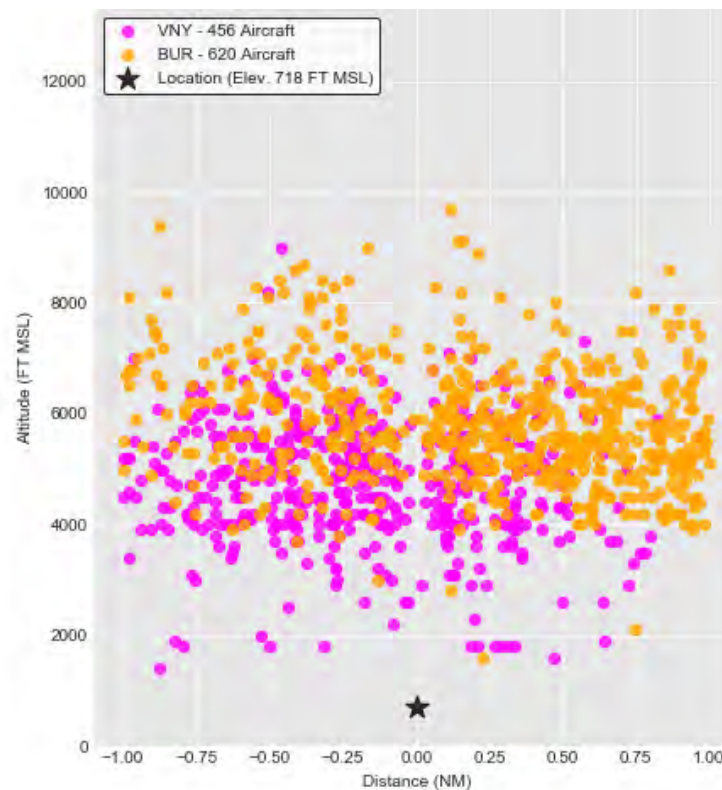


Altitudes over Location F: Davana Road, Sherman Oaks

February 8-15, 2017



February 8-15, 2019

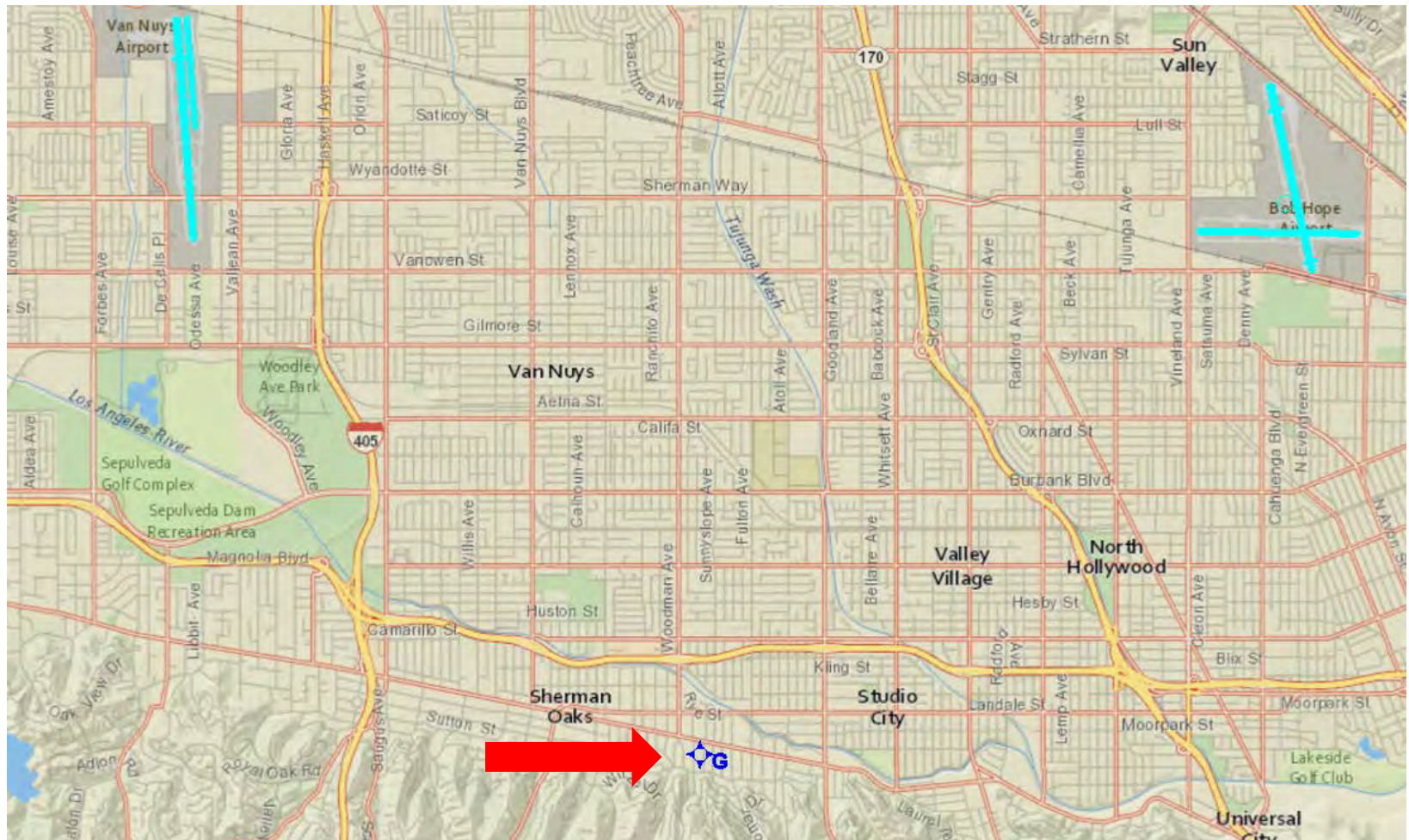


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



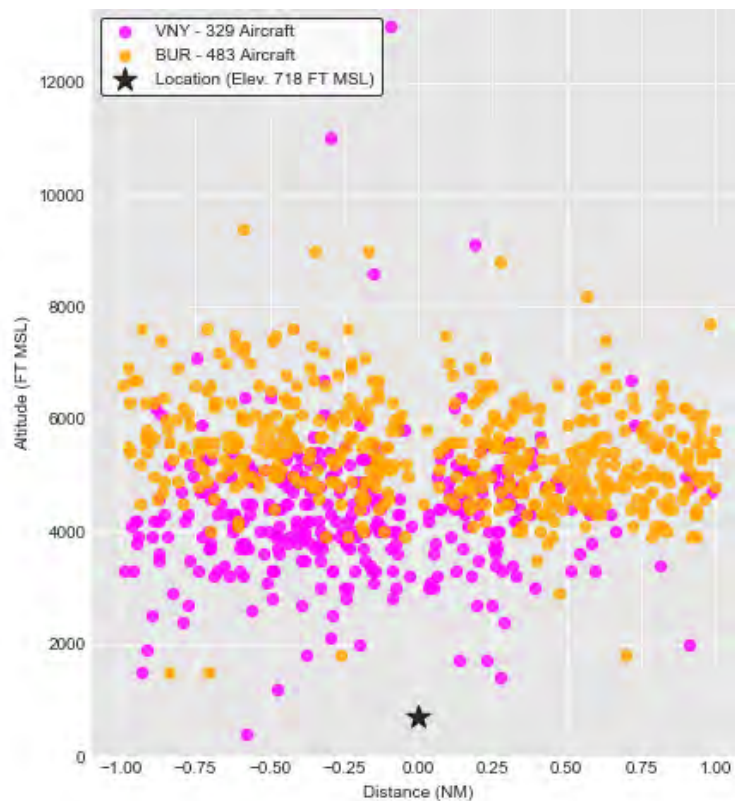
Federal Aviation
Administration

Location G: Allott Ave, Sherman Oaks

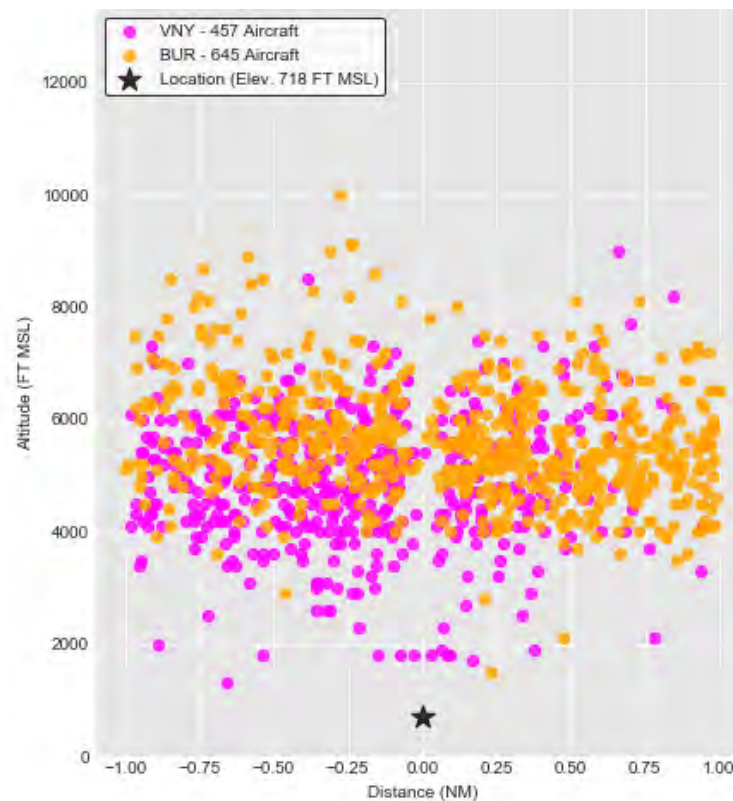


Altitudes over Location G: Allott Ave, Sherman Oaks

February 8-15, 2017



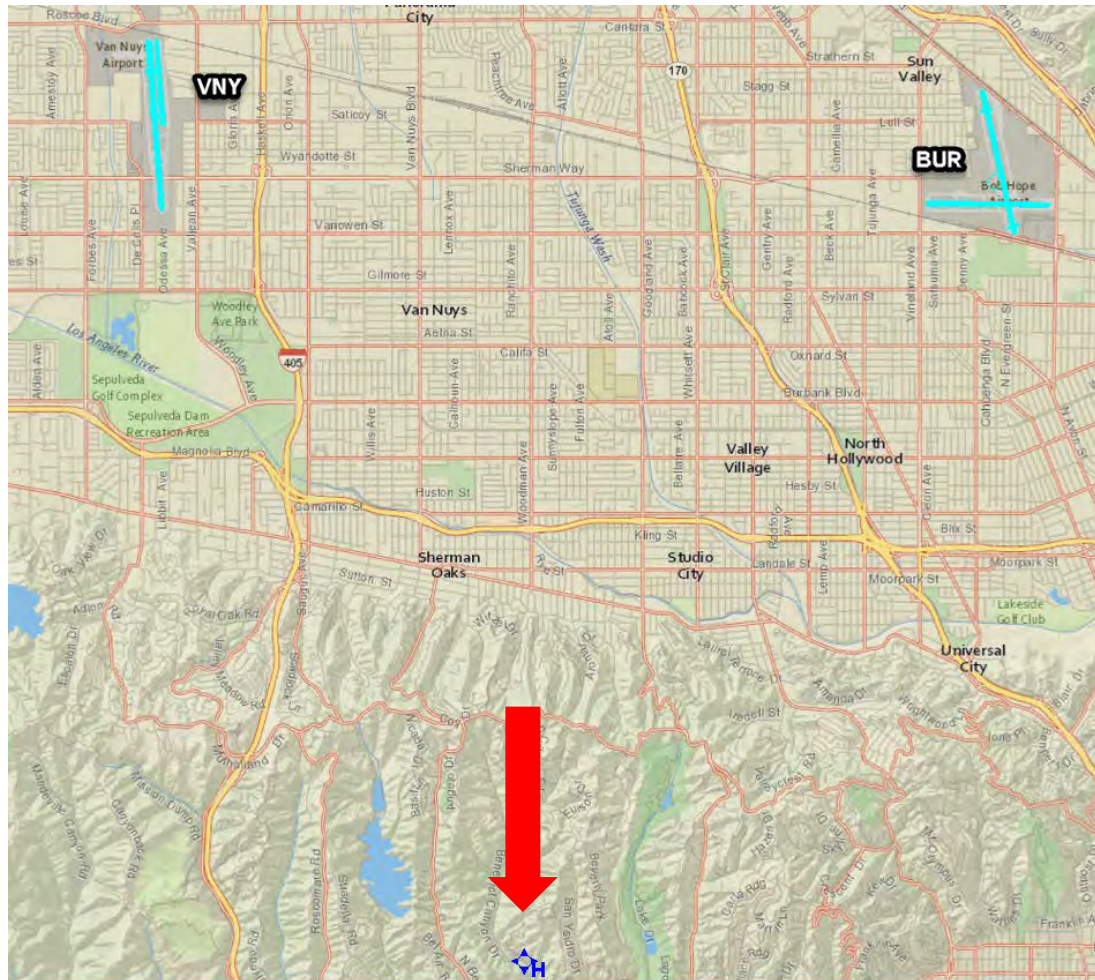
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

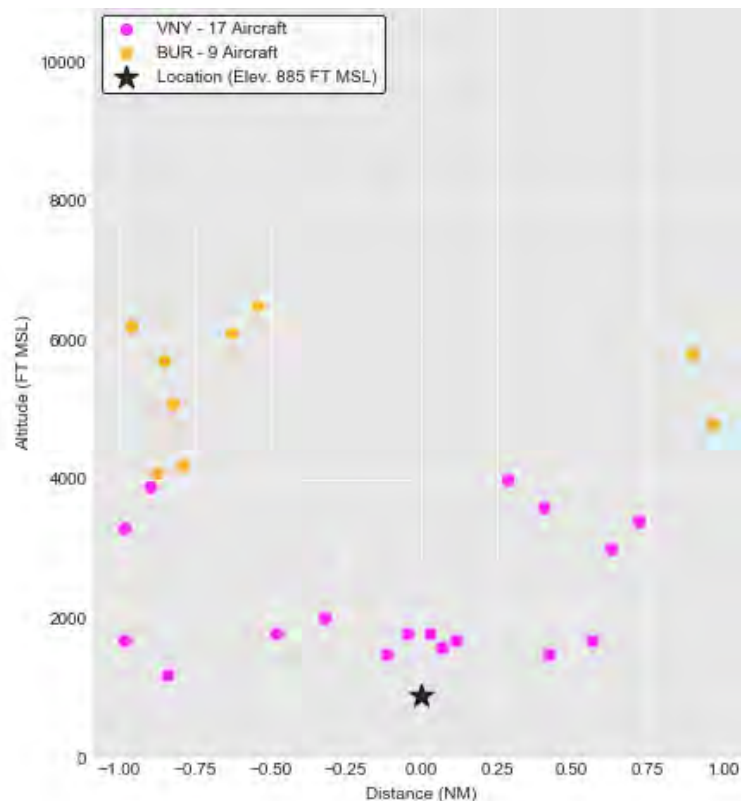


Location H: Benedict Canyon, Beverly Hills

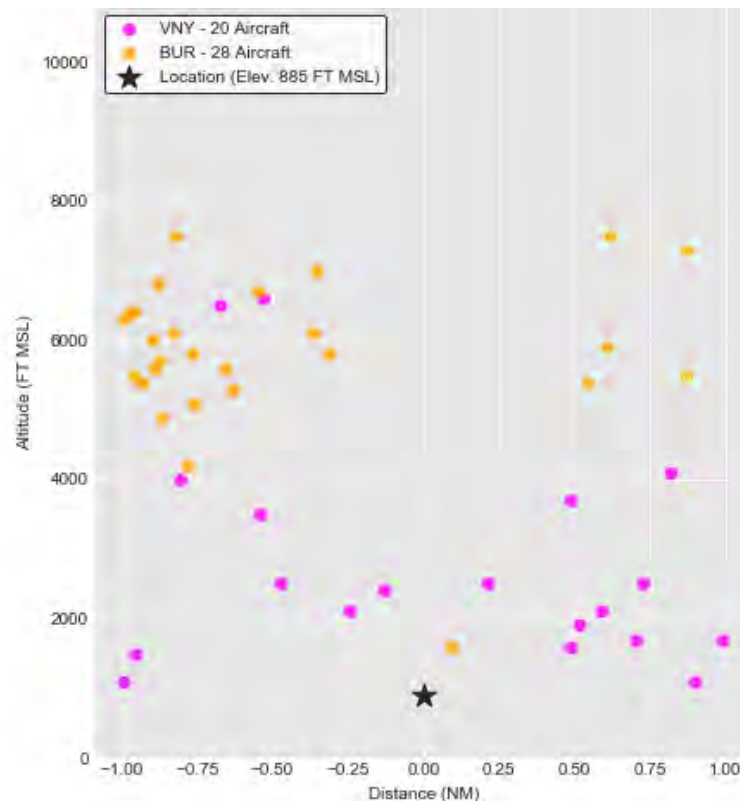


Altitudes over Location H: Benedict Canyon, Beverly Hills

February 8-15, 2017



February 8-15, 2019

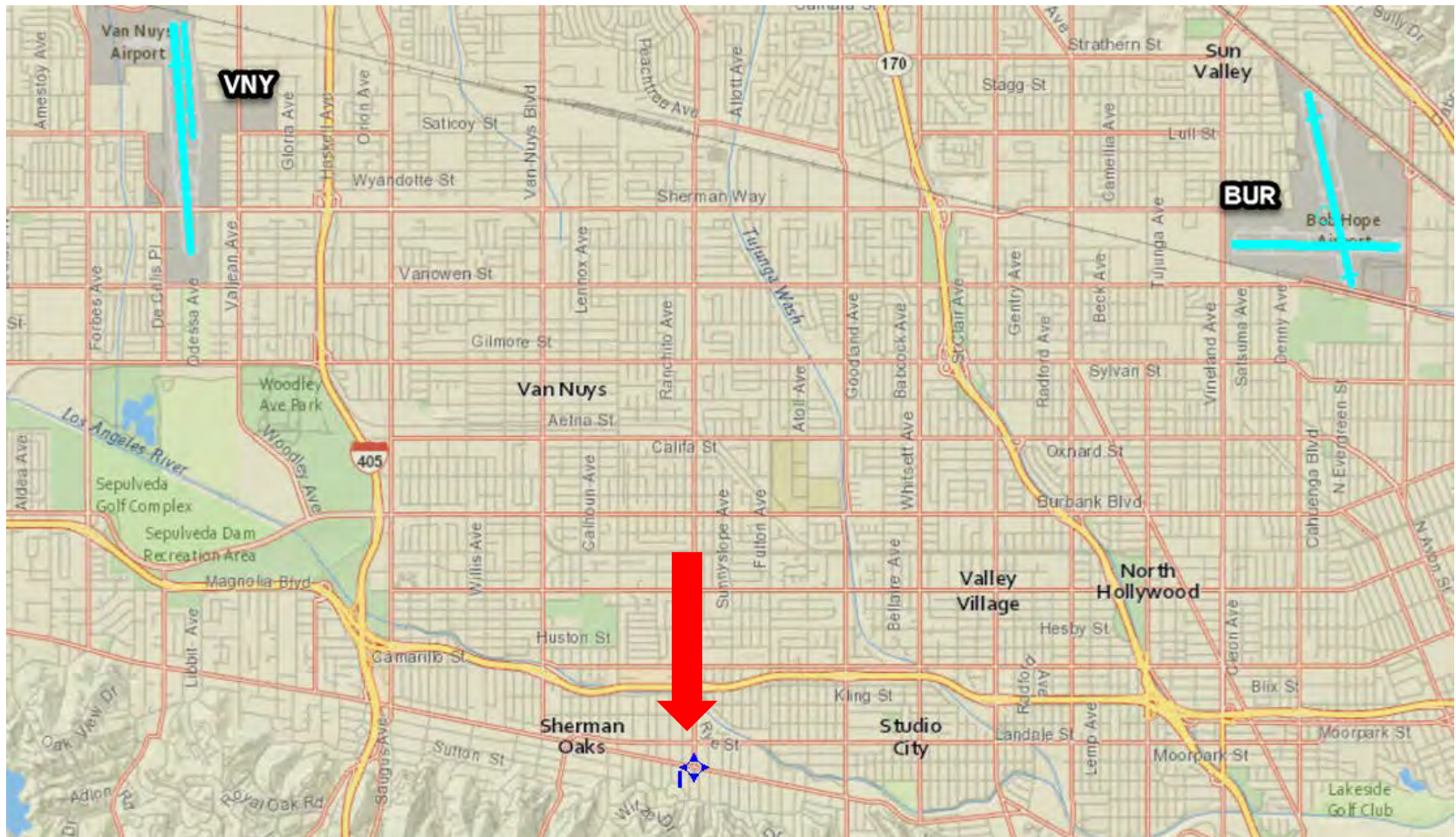


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



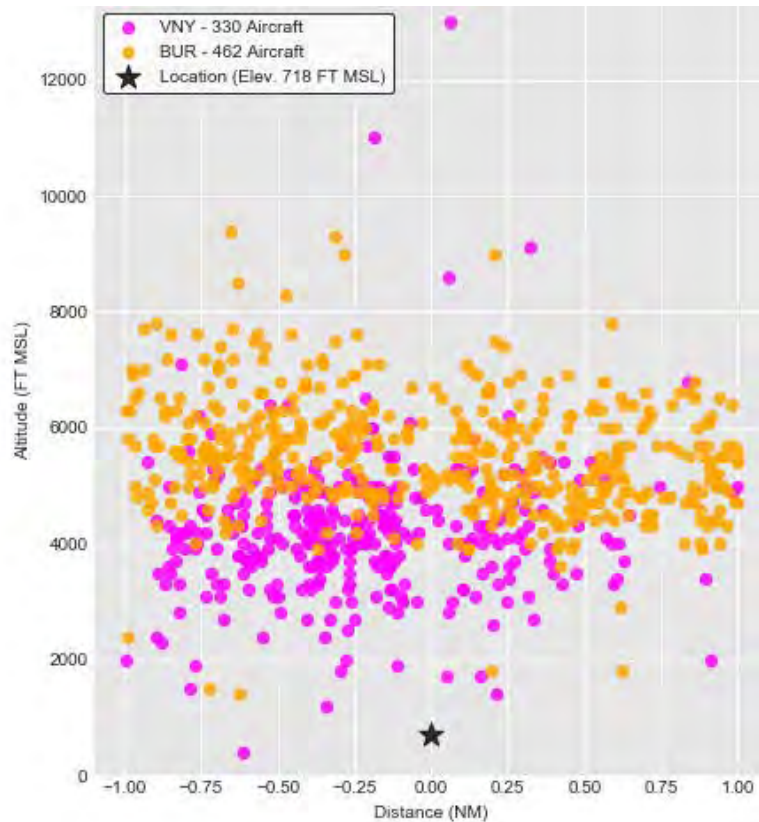
Federal Aviation
Administration

Location I: Ventura Blvd & Woodman Ave, Sherman Oaks

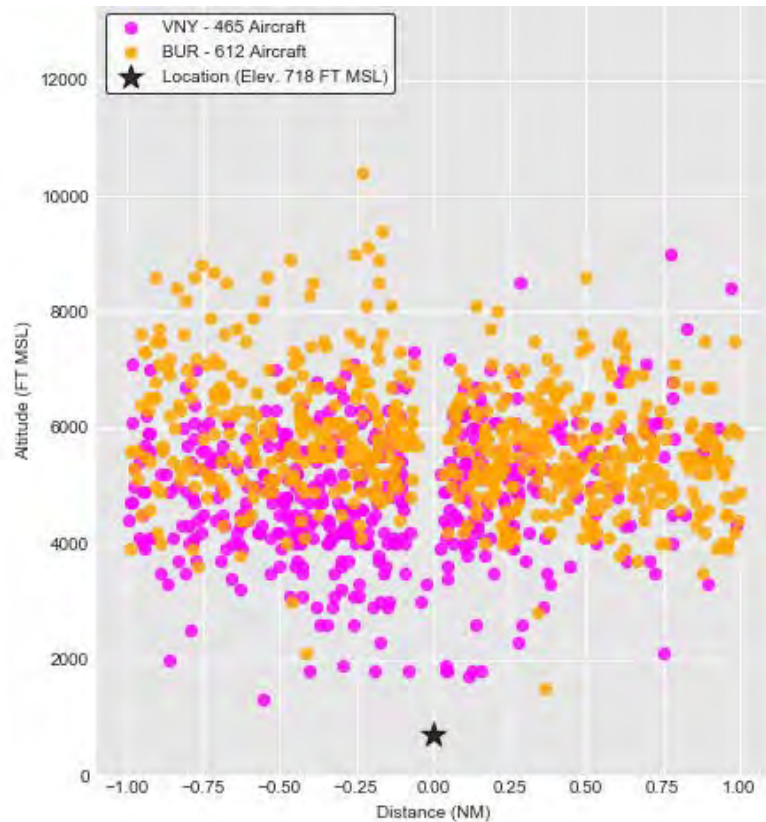


Altitudes over Location I: Ventura Blvd & Woodman Ave, Sherman Oaks

February 8-15, 2017



February 8-15, 2019

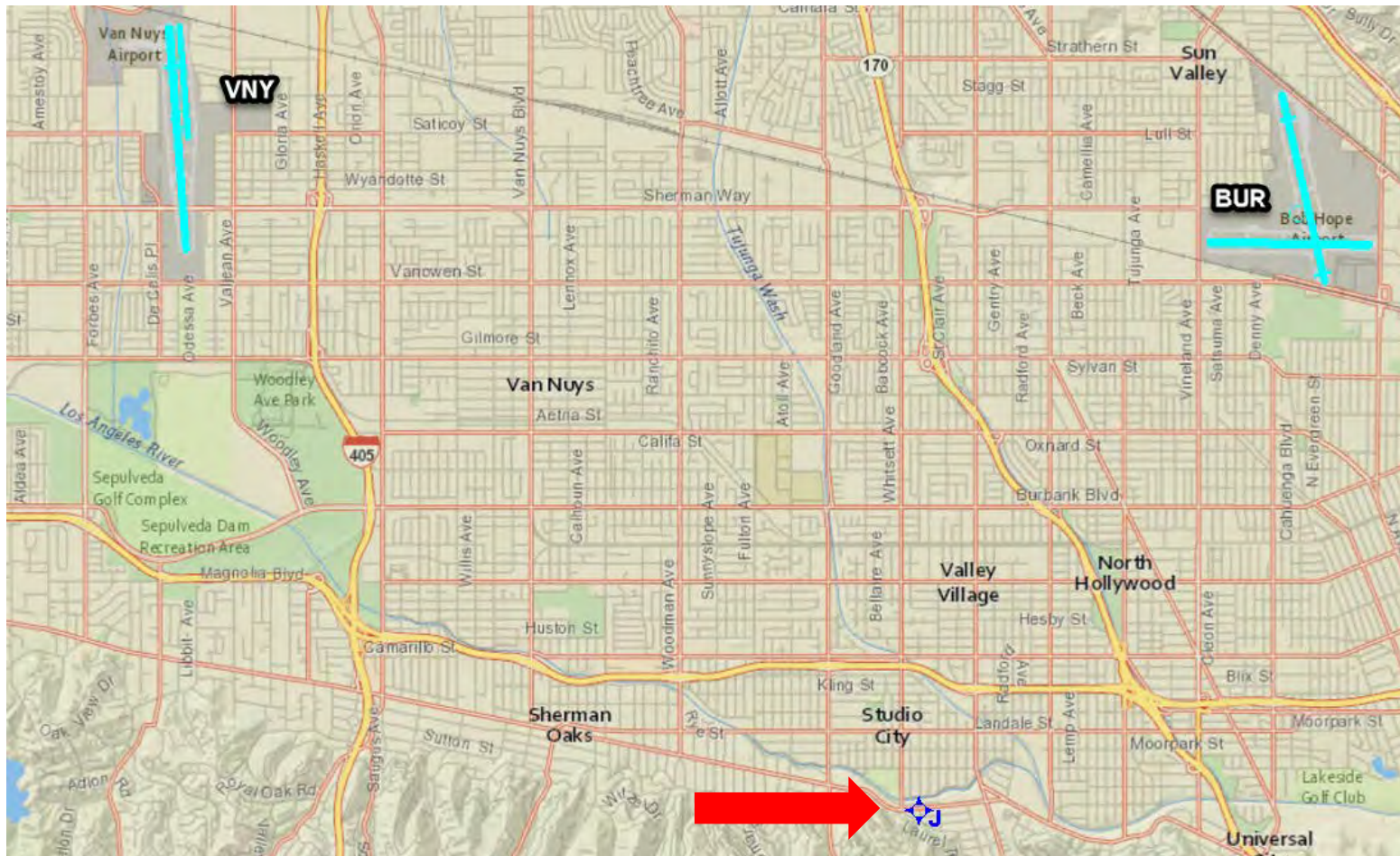


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



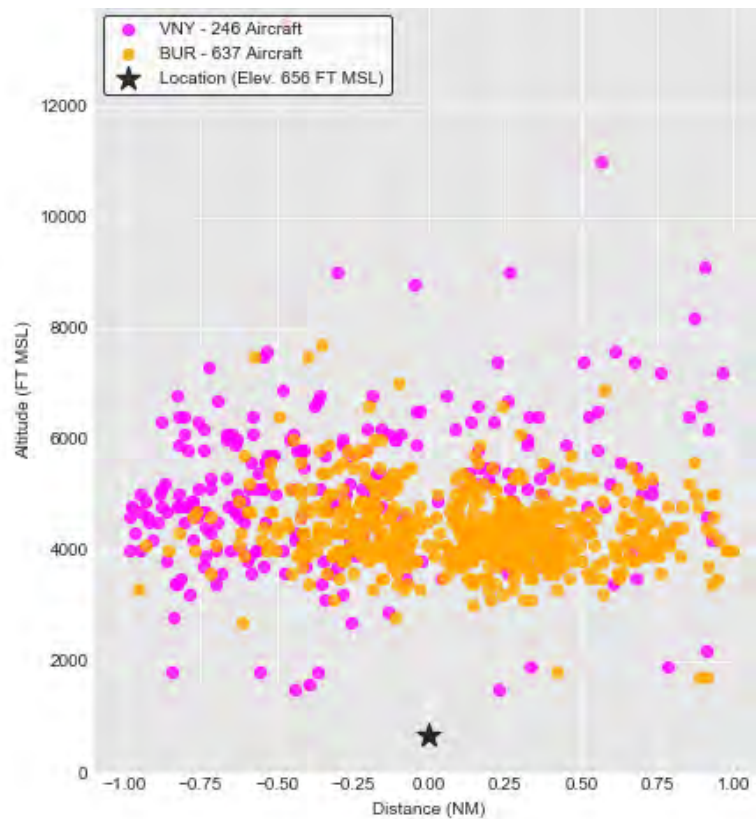
Federal Aviation
Administration

Location J: Ventura Blvd, Studio City

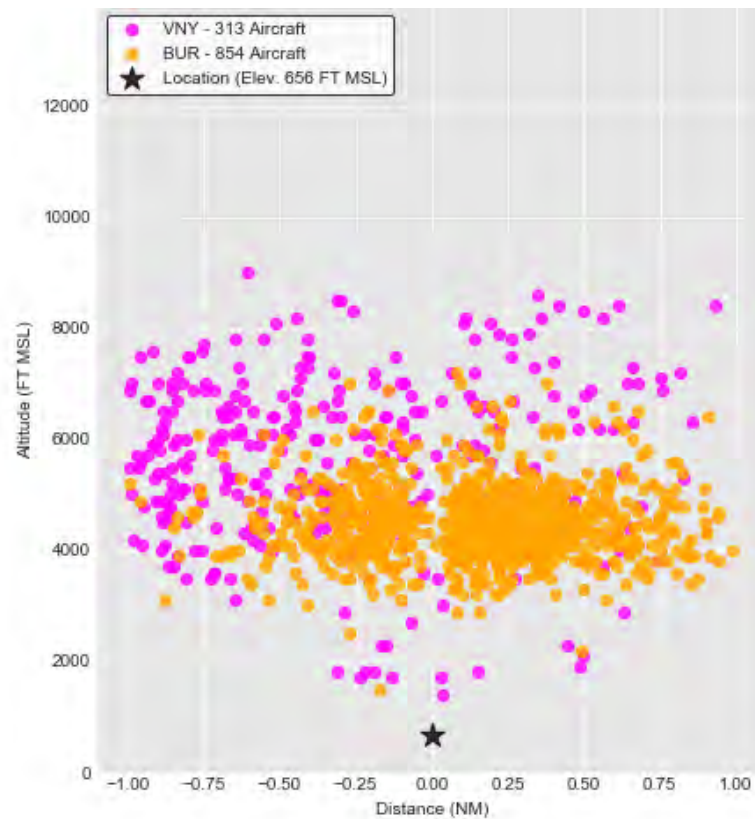


Altitudes over Location J: Ventura Blvd, Studio City

February 8-15, 2017



February 8-15, 2019

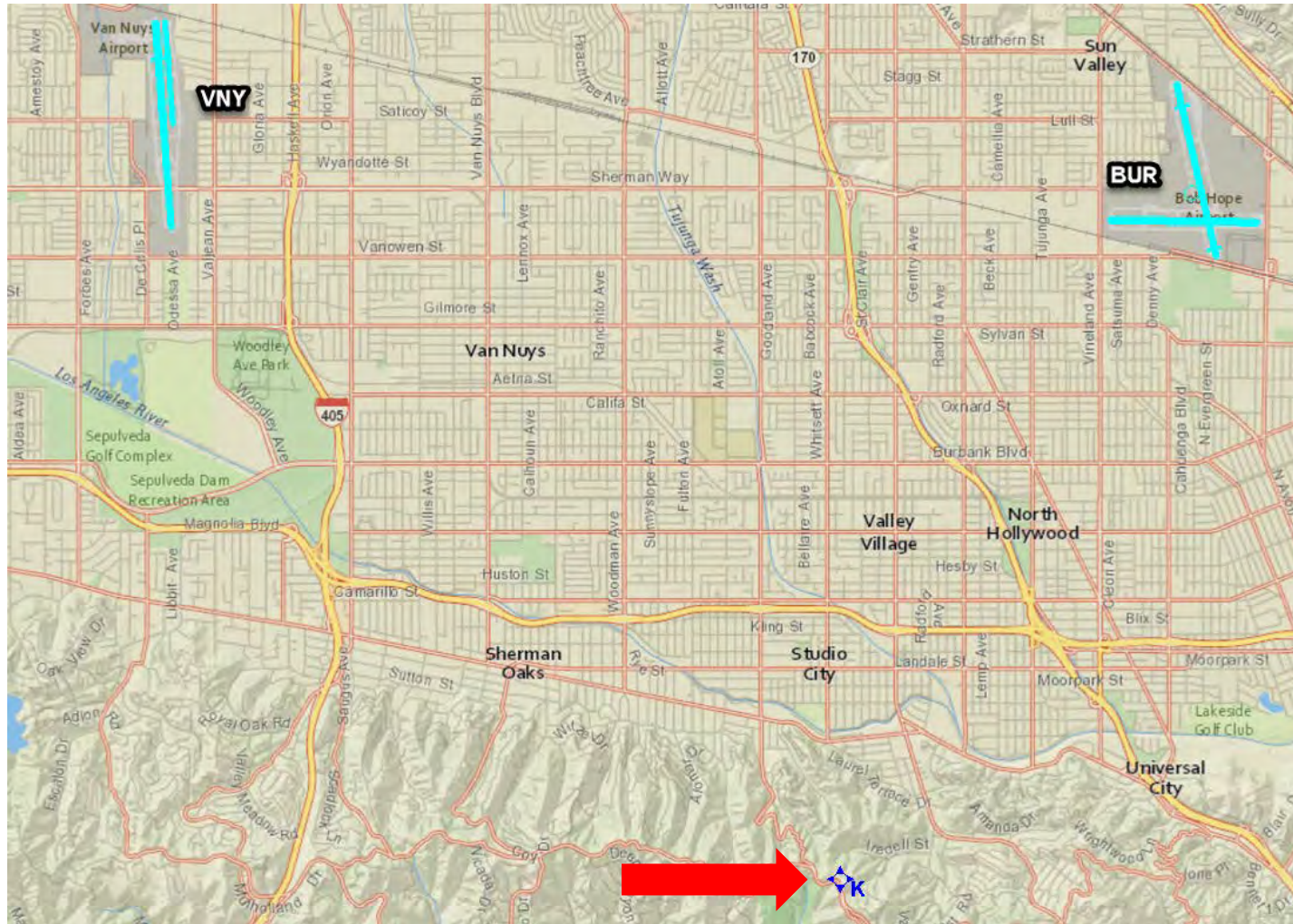


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



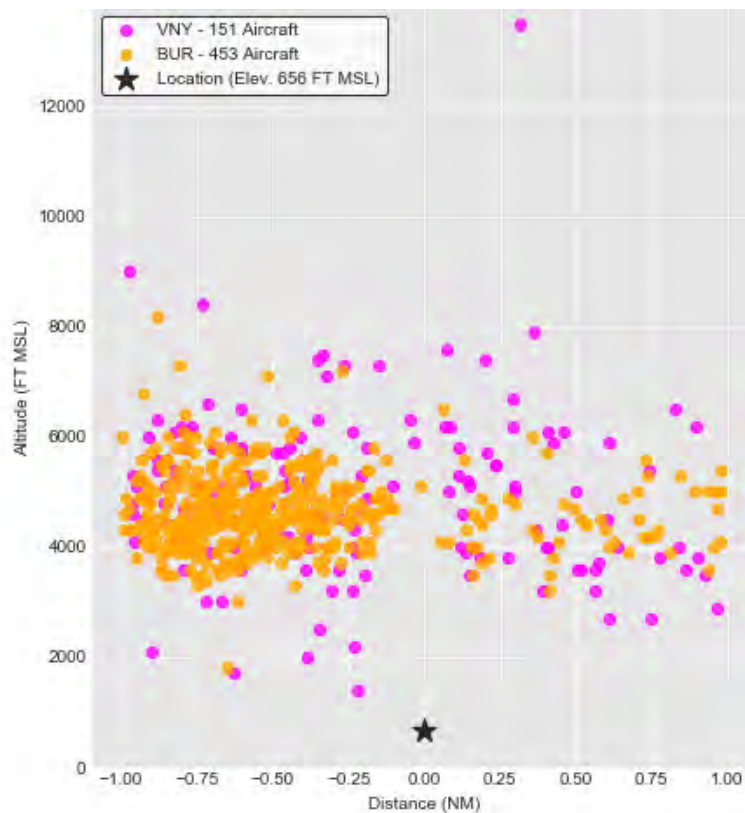
Federal Aviation
Administration

Location K: Mulholland Drive, Beverly Hills

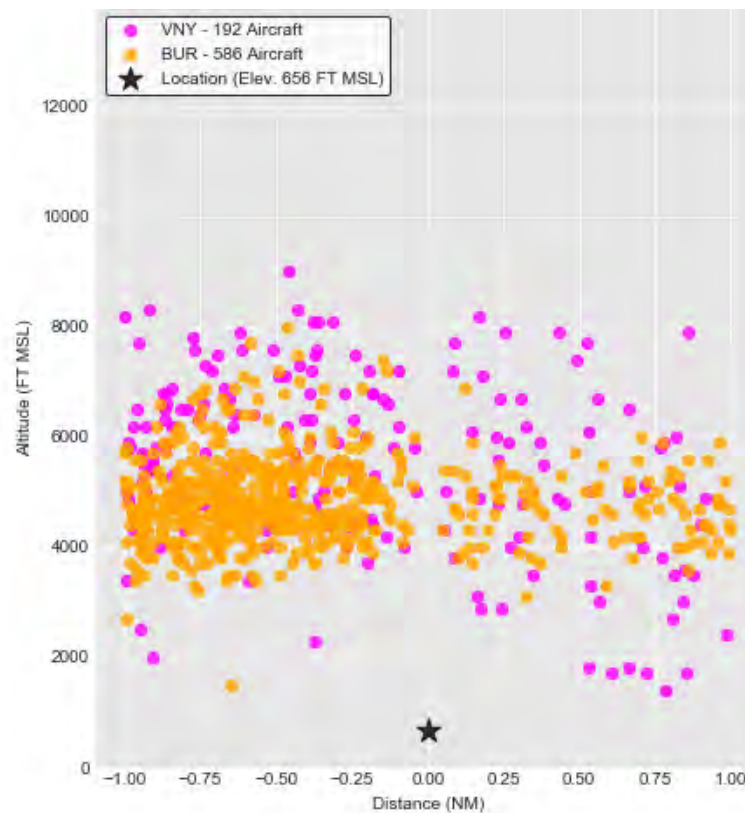


Altitudes over Location K: Mulholland Drive, Beverly Hills

February 8-15, 2017



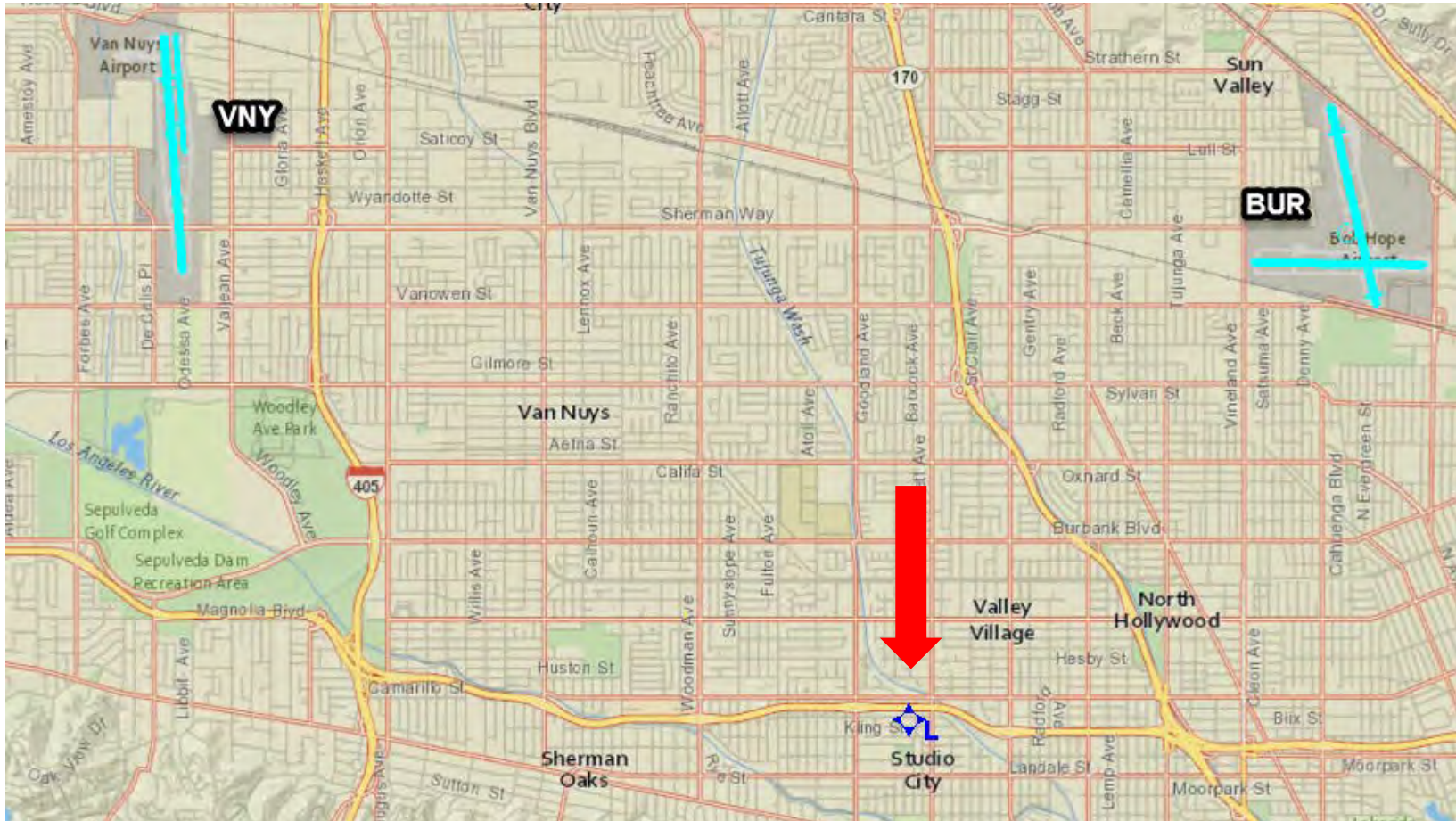
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

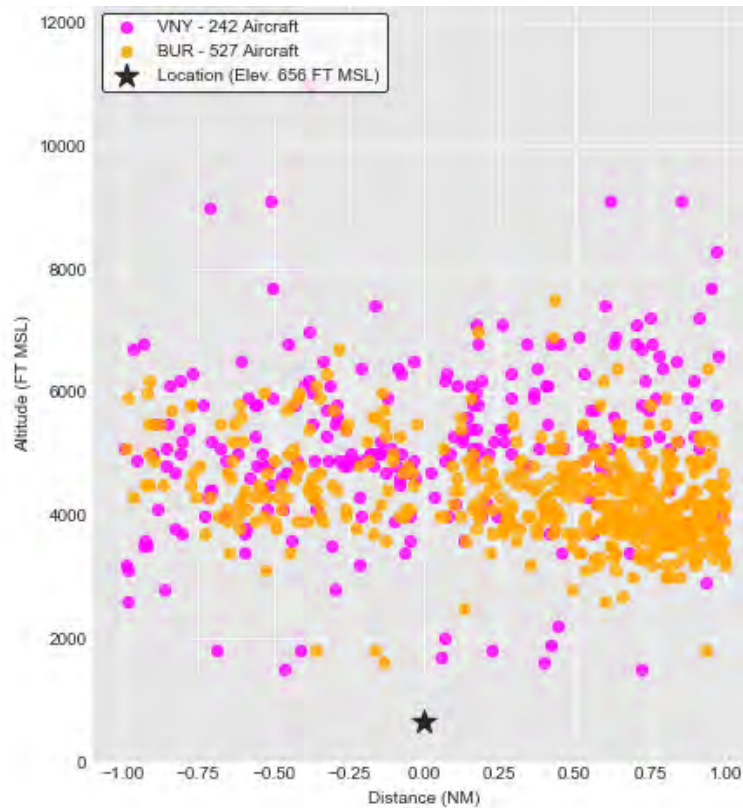


Location L: Kling Street, Studio City

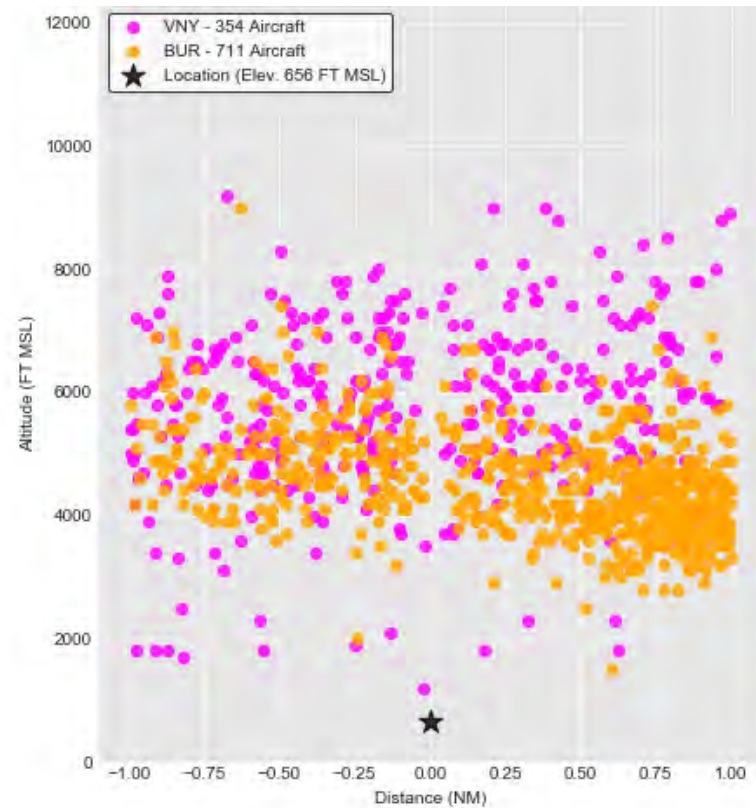


Altitudes over Location L: Kling Street, Studio City

February 8-15, 2017



February 8-15, 2019

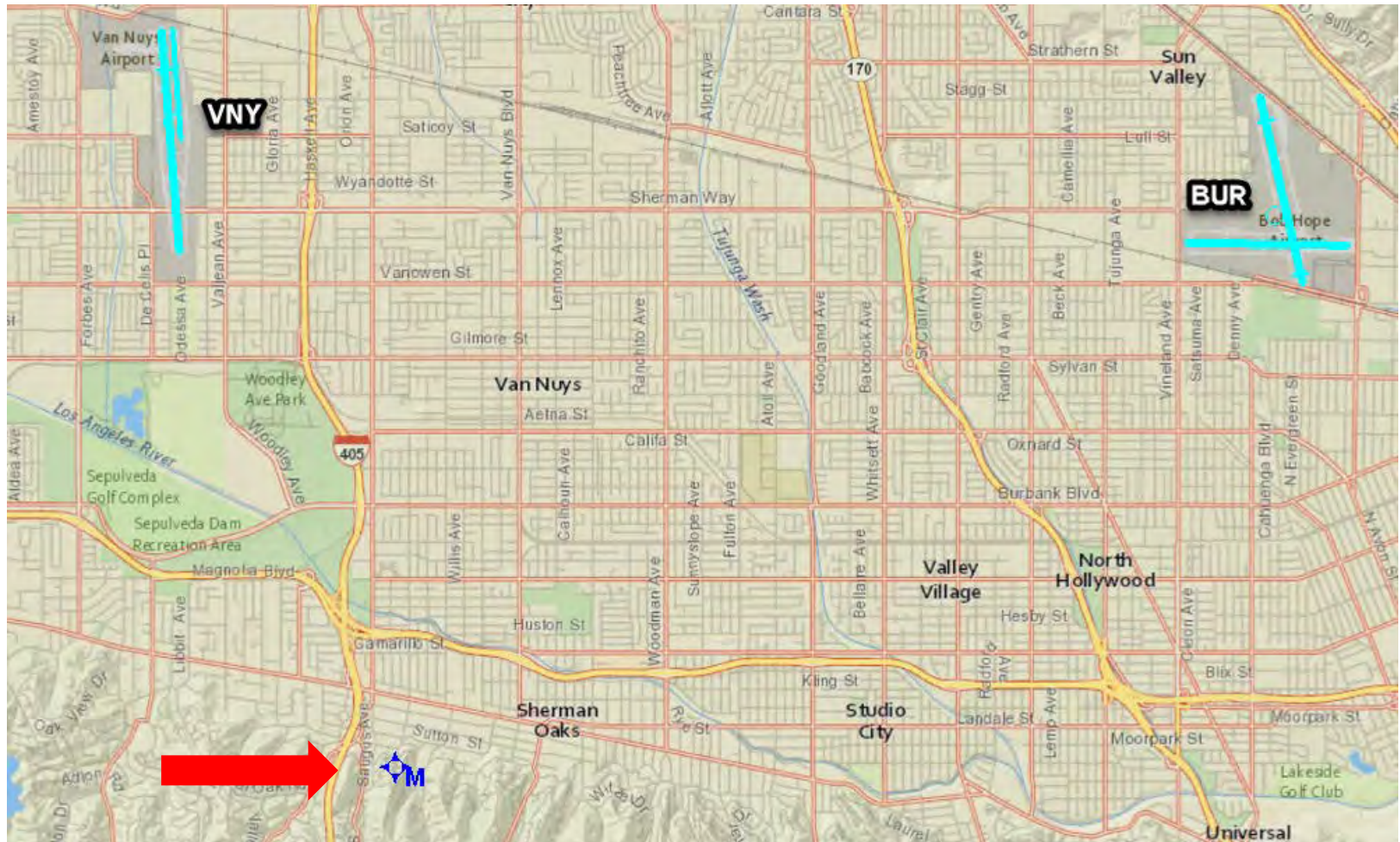


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



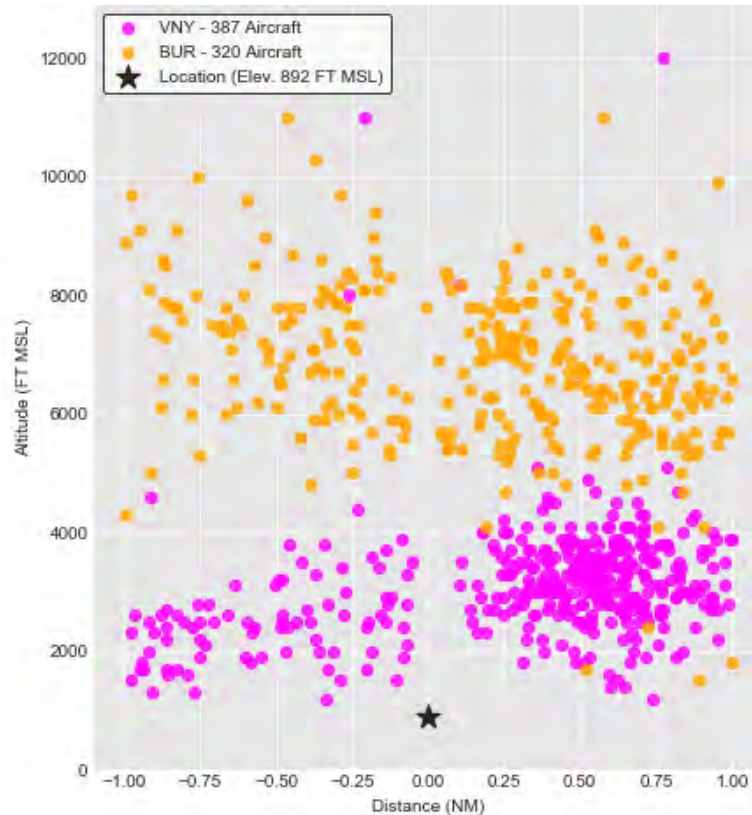
Federal Aviation
Administration

Location M: Encanto Drive, Sherman Oaks

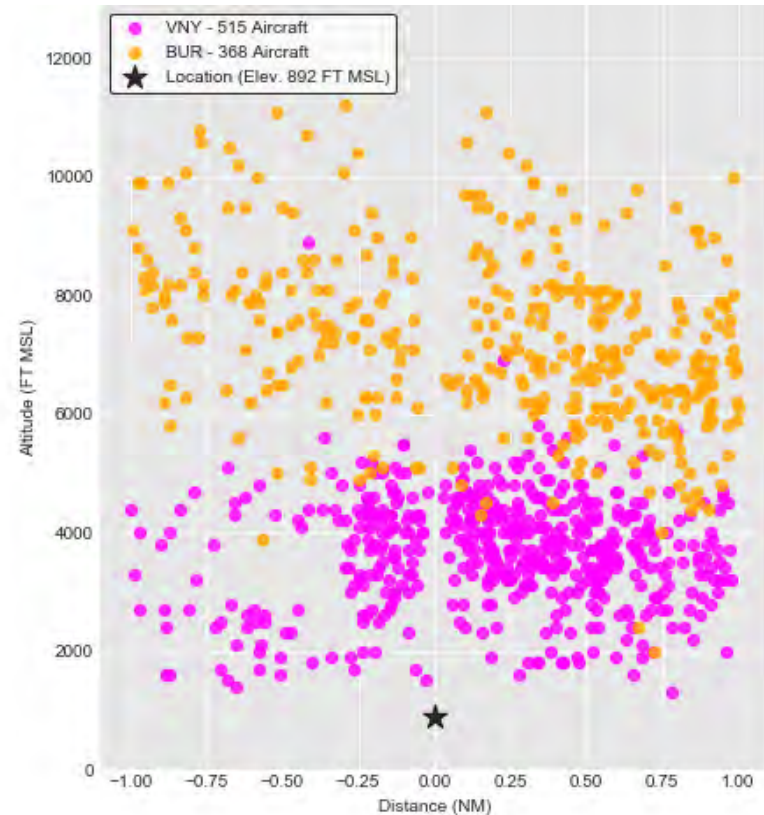


Altitudes over Location M: Encanto Drive, Sherman Oaks

February 8-15, 2017



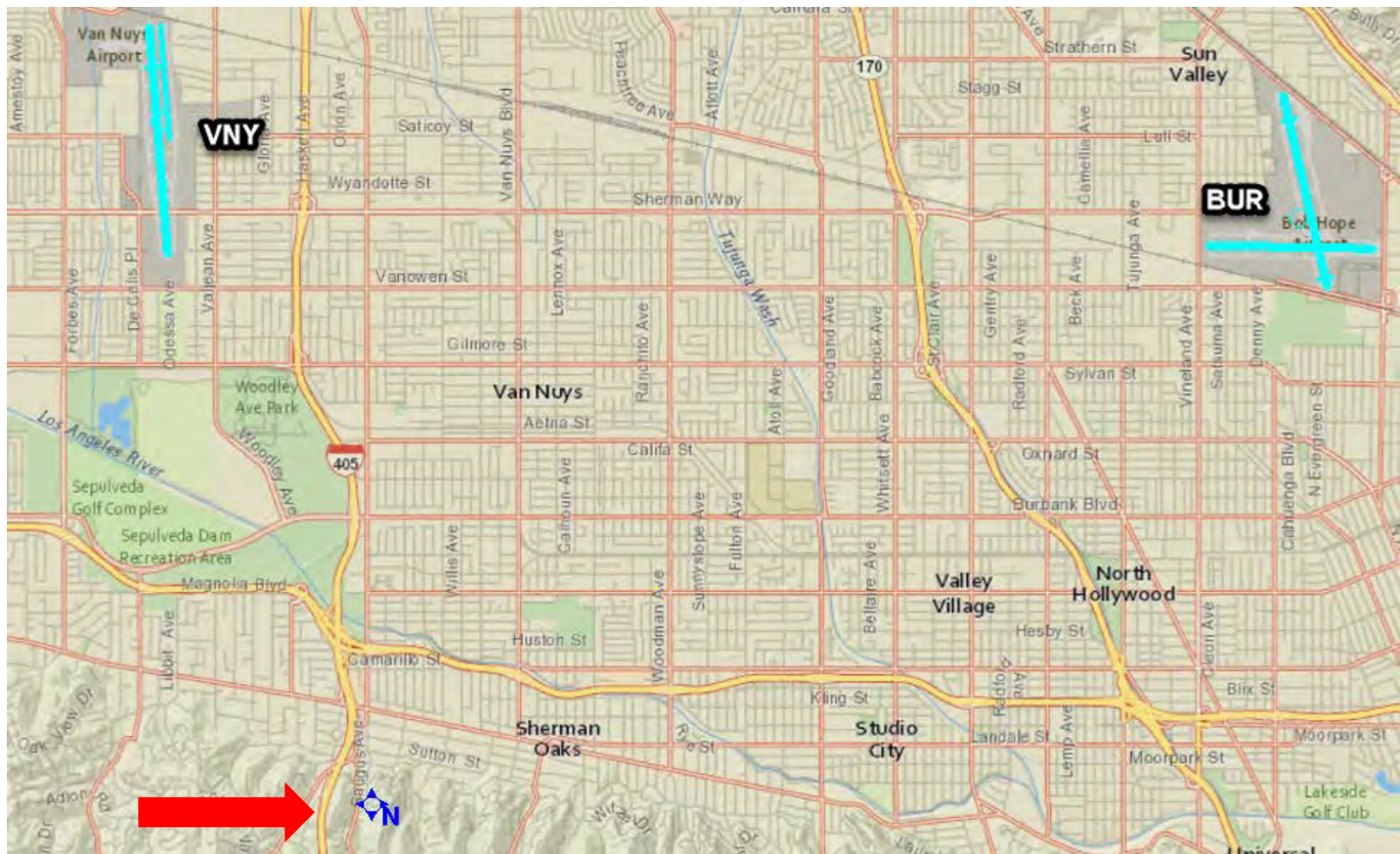
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



Location N: Rayneta Drive, Sherman Oaks

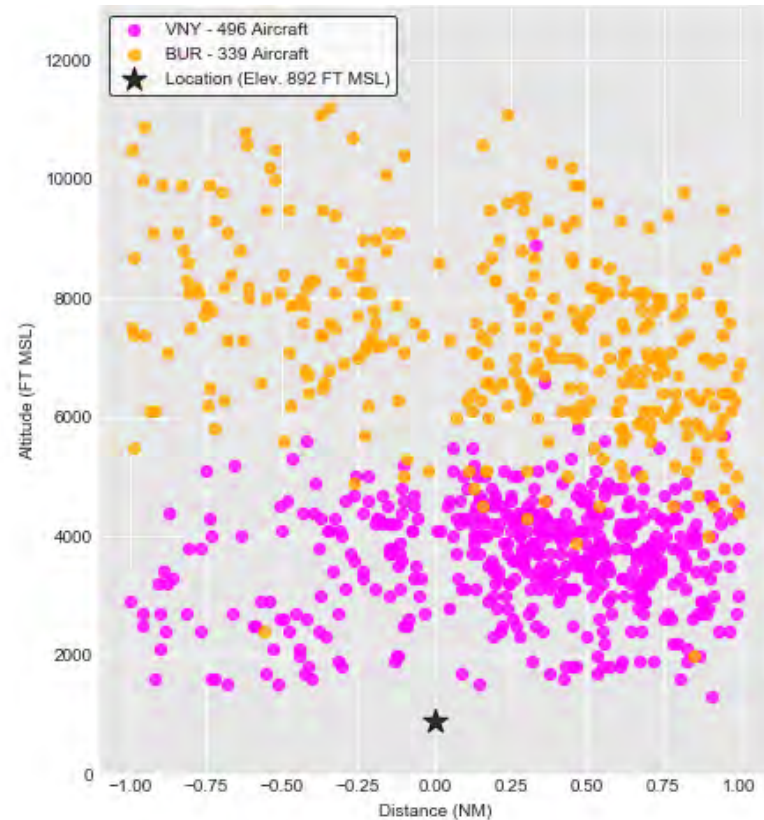


Altitudes over Location N: Rayneta Drive, Sherman Oaks

February 8-15, 2017



February 8-15, 2019

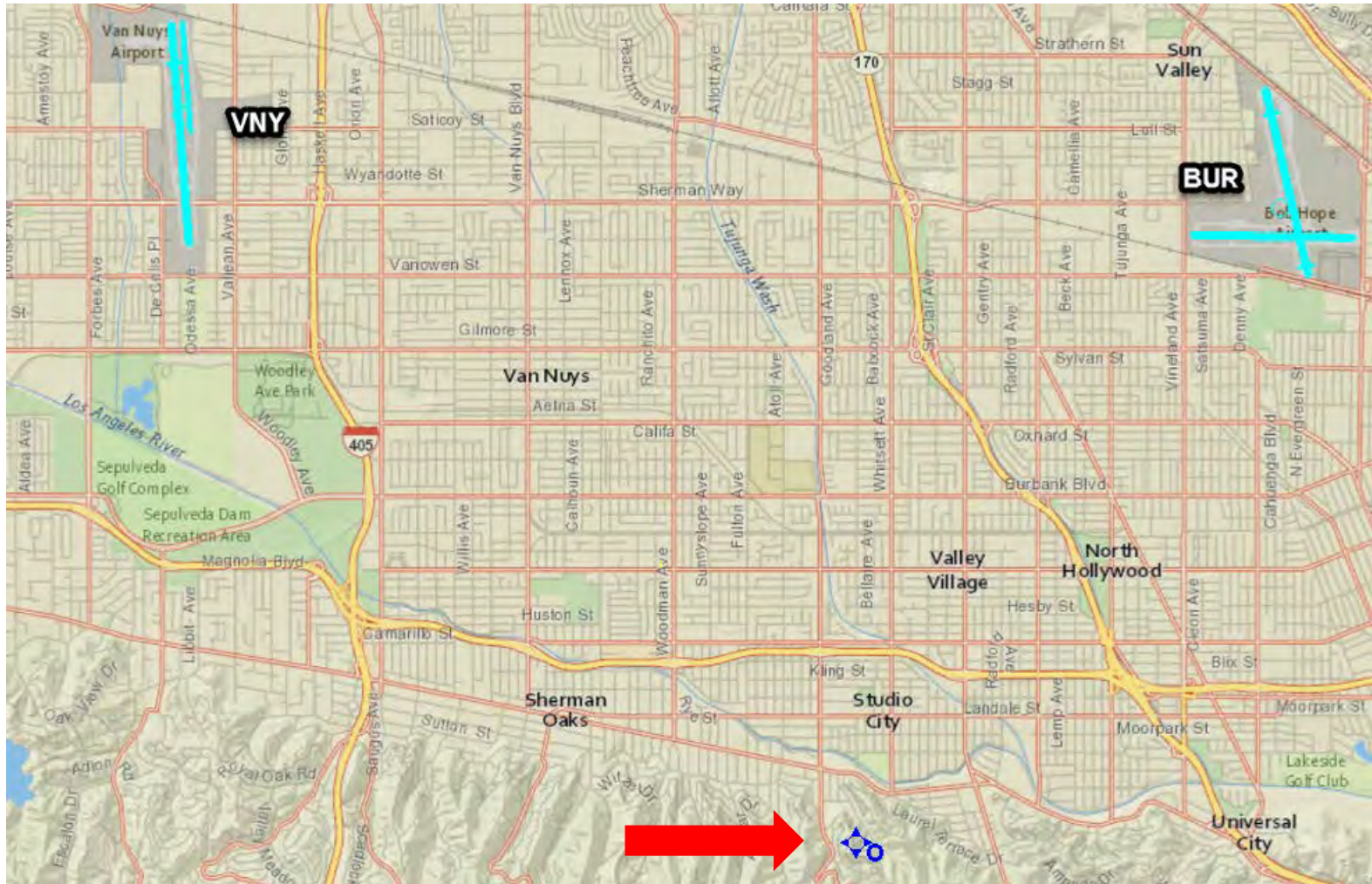


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



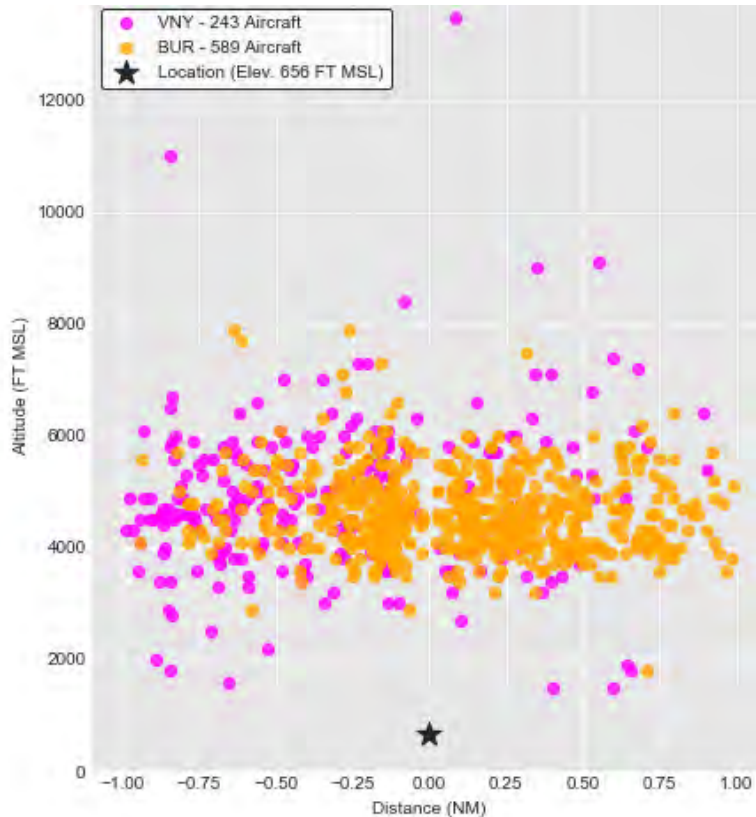
Federal Aviation
Administration

Location O: Alta Mesa Dr, Studio City

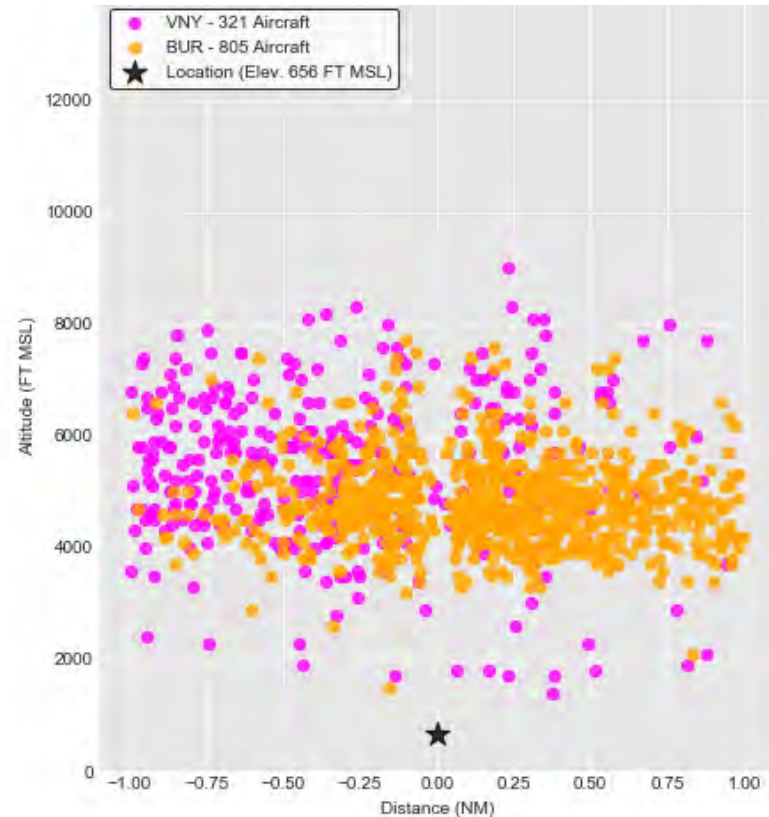


Altitudes over Location O: Alta Mesa Dr, Studio City

February 8-15, 2017



February 8-15, 2019

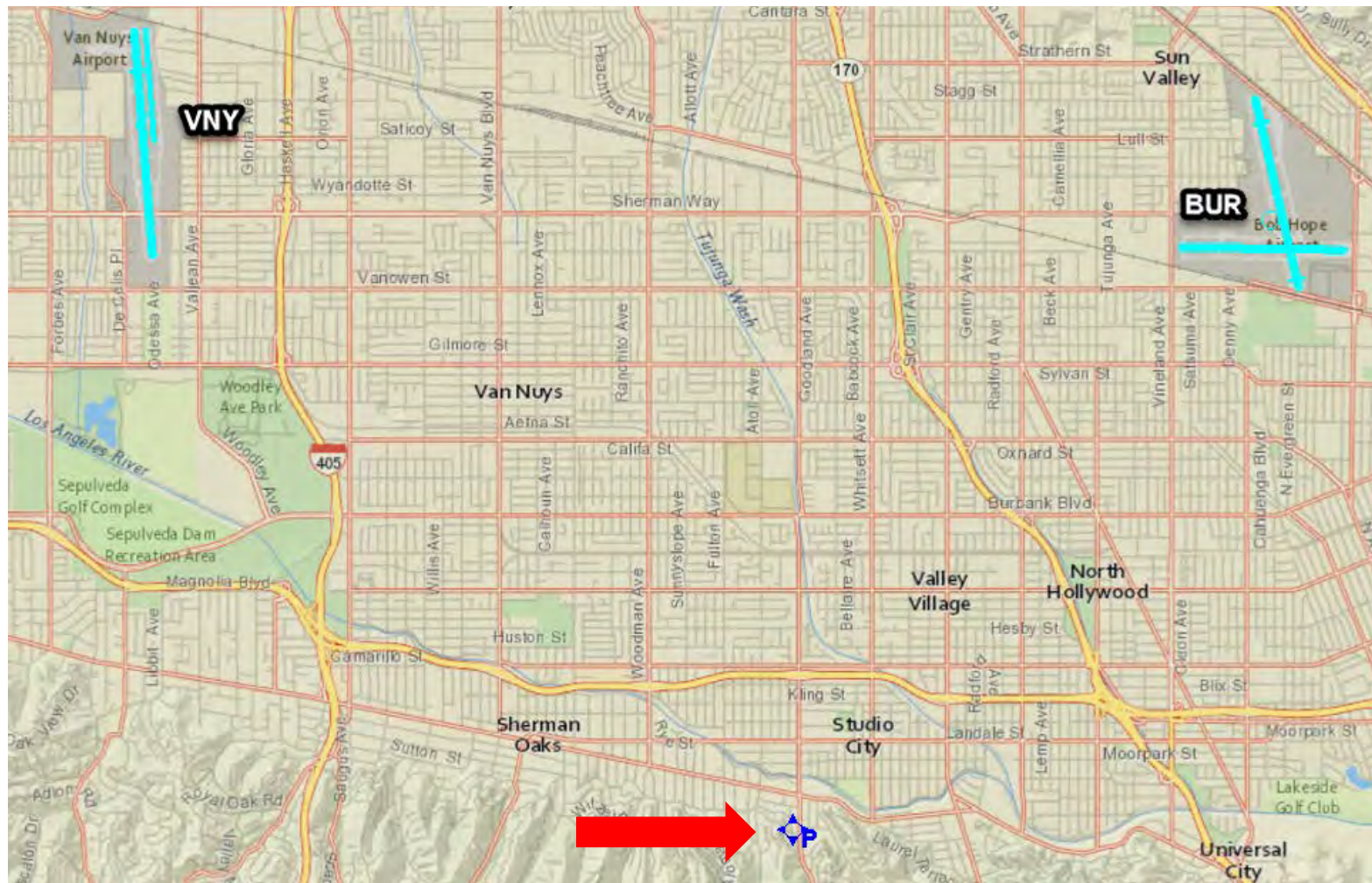


These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.



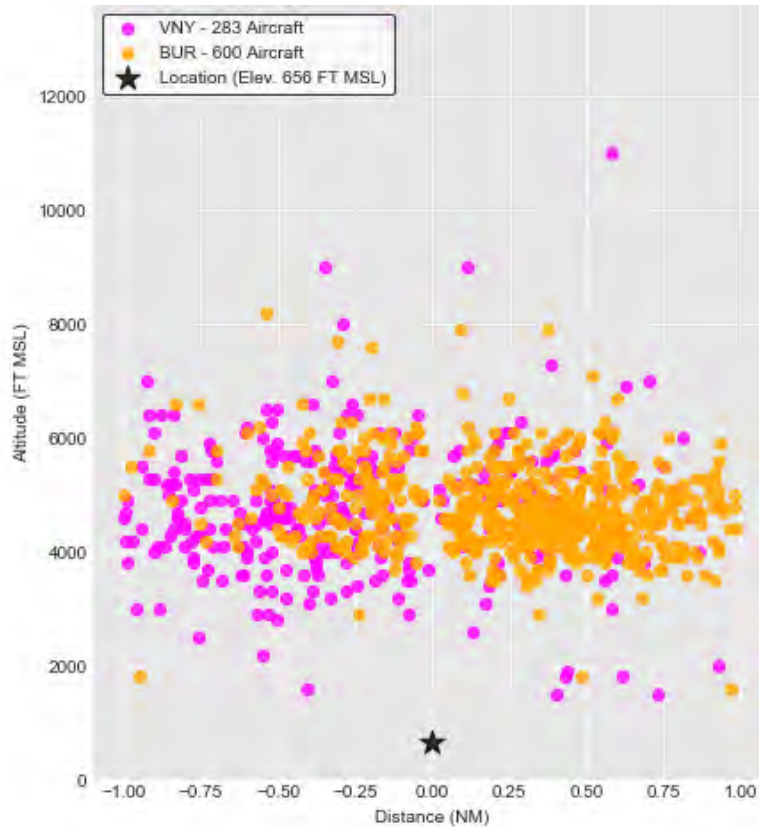
Federal Aviation
Administration

Location P: Van Noord Ave, Studio City

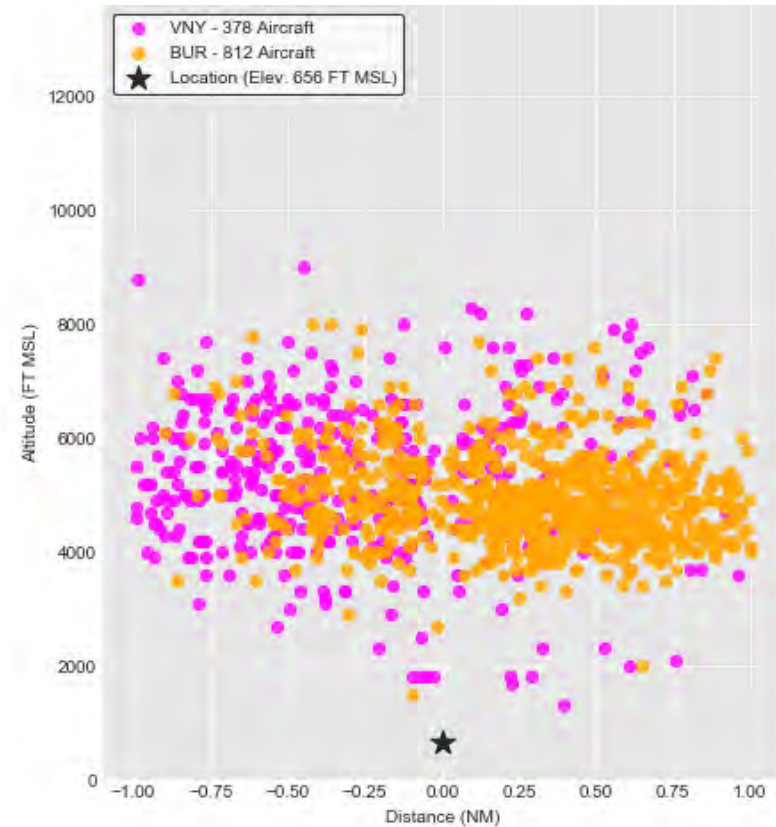


Altitudes over Location P: Van Noord Ave, Studio City

February 8-15, 2017



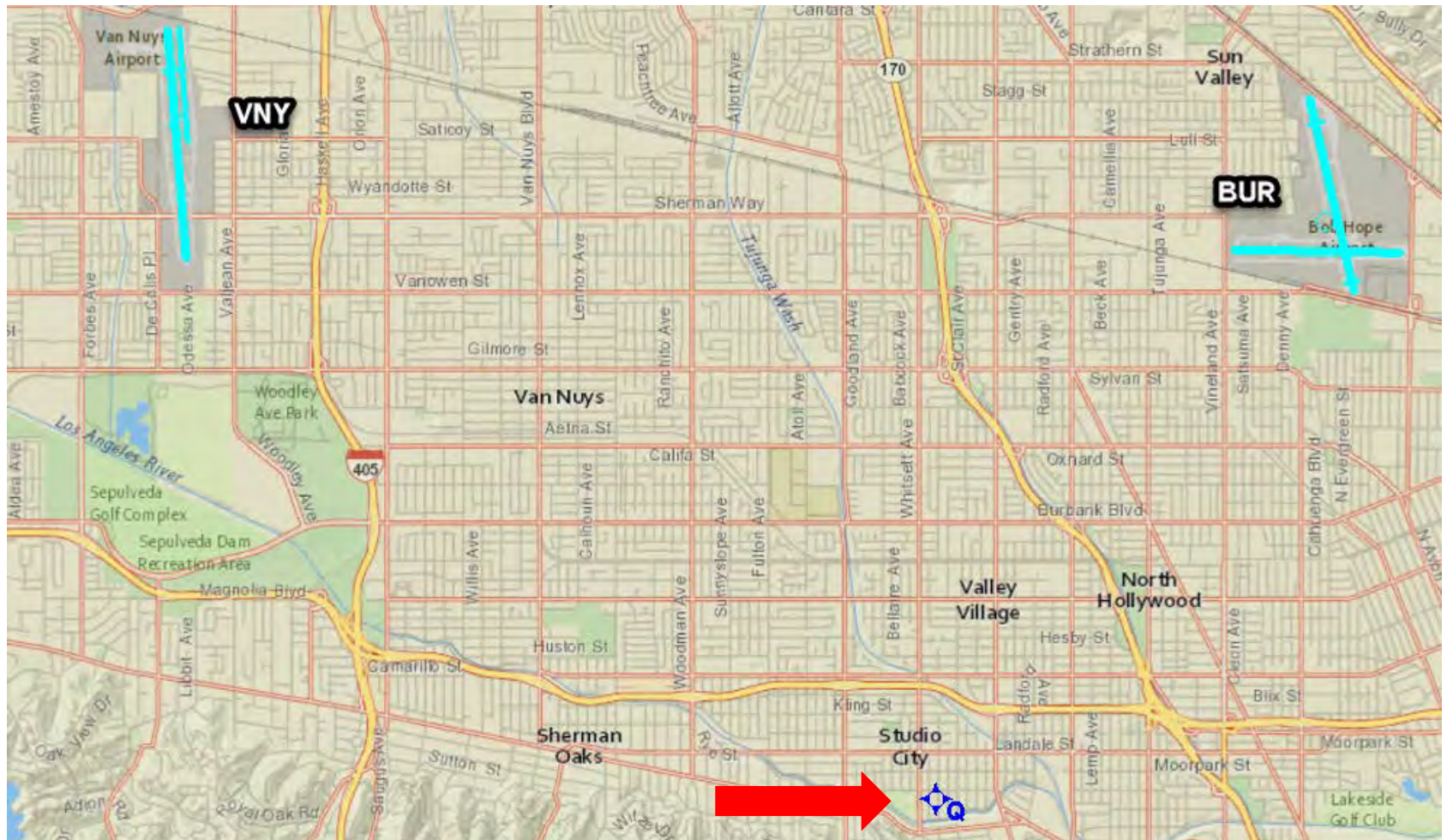
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

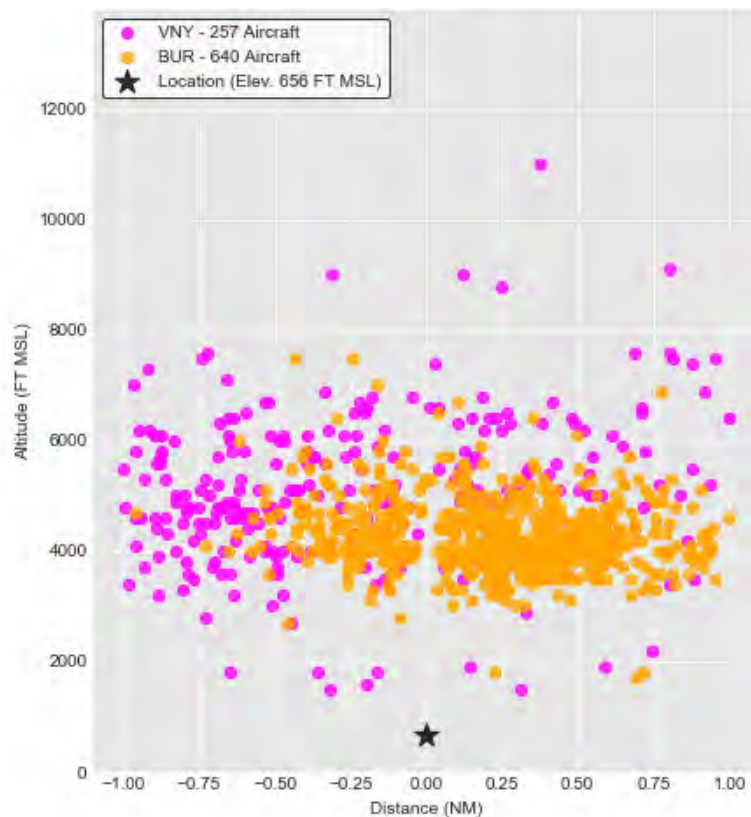


Location Q: Rhodes Ave, Studio City

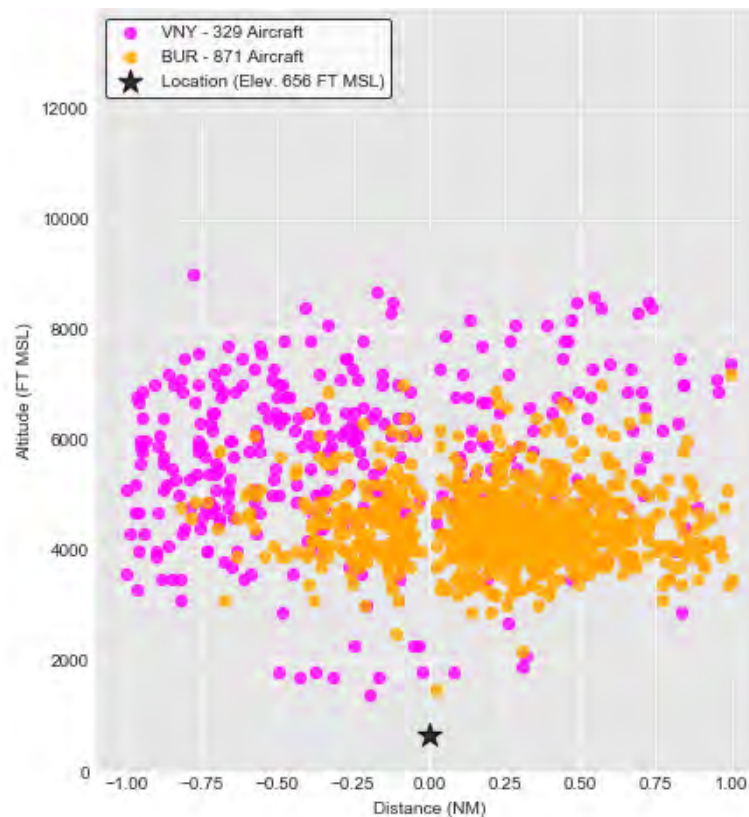


Altitudes over Location Q: Rhodes Ave, Studio City

February 8-15, 2017



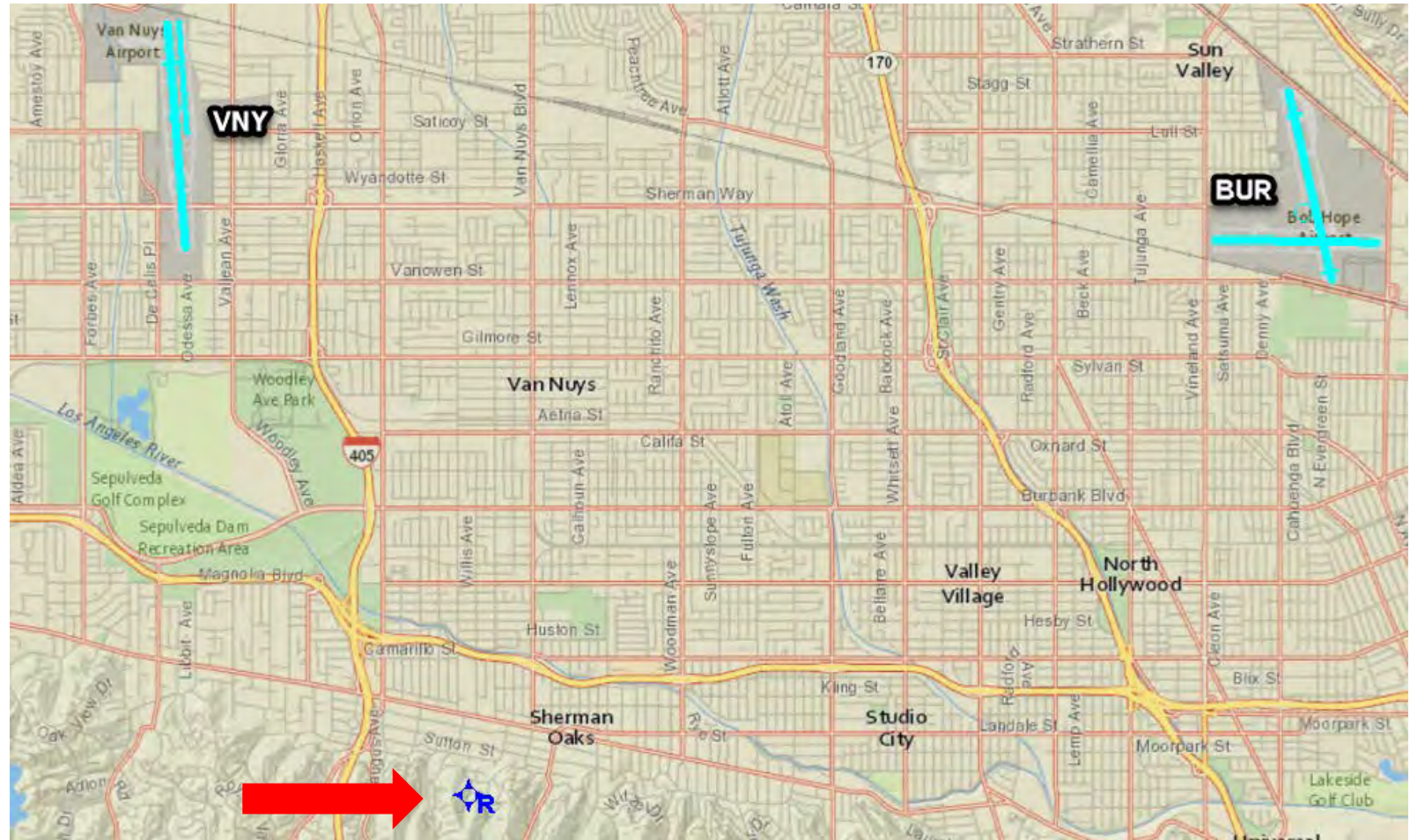
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

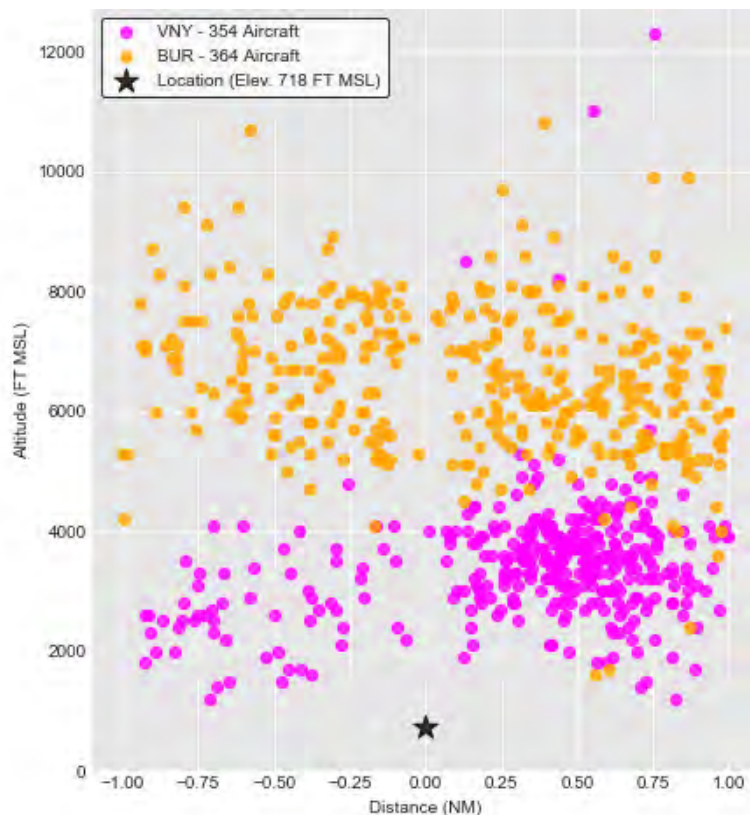


Location R: Crisp Canyon, Sherman Oaks

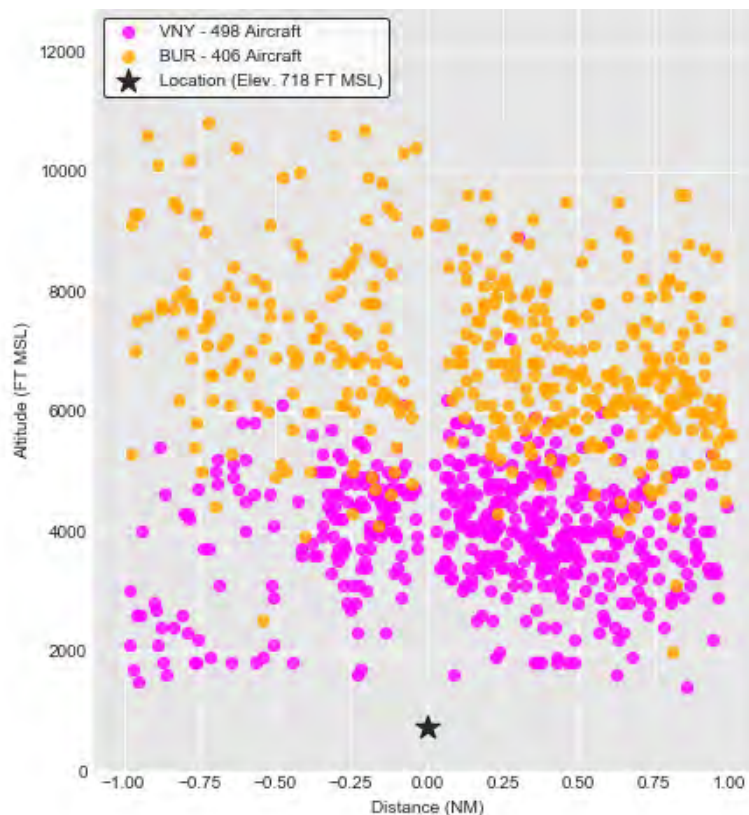


Altitudes over Location R: Crisp Canyon, Sherman Oaks

February 8-15, 2017



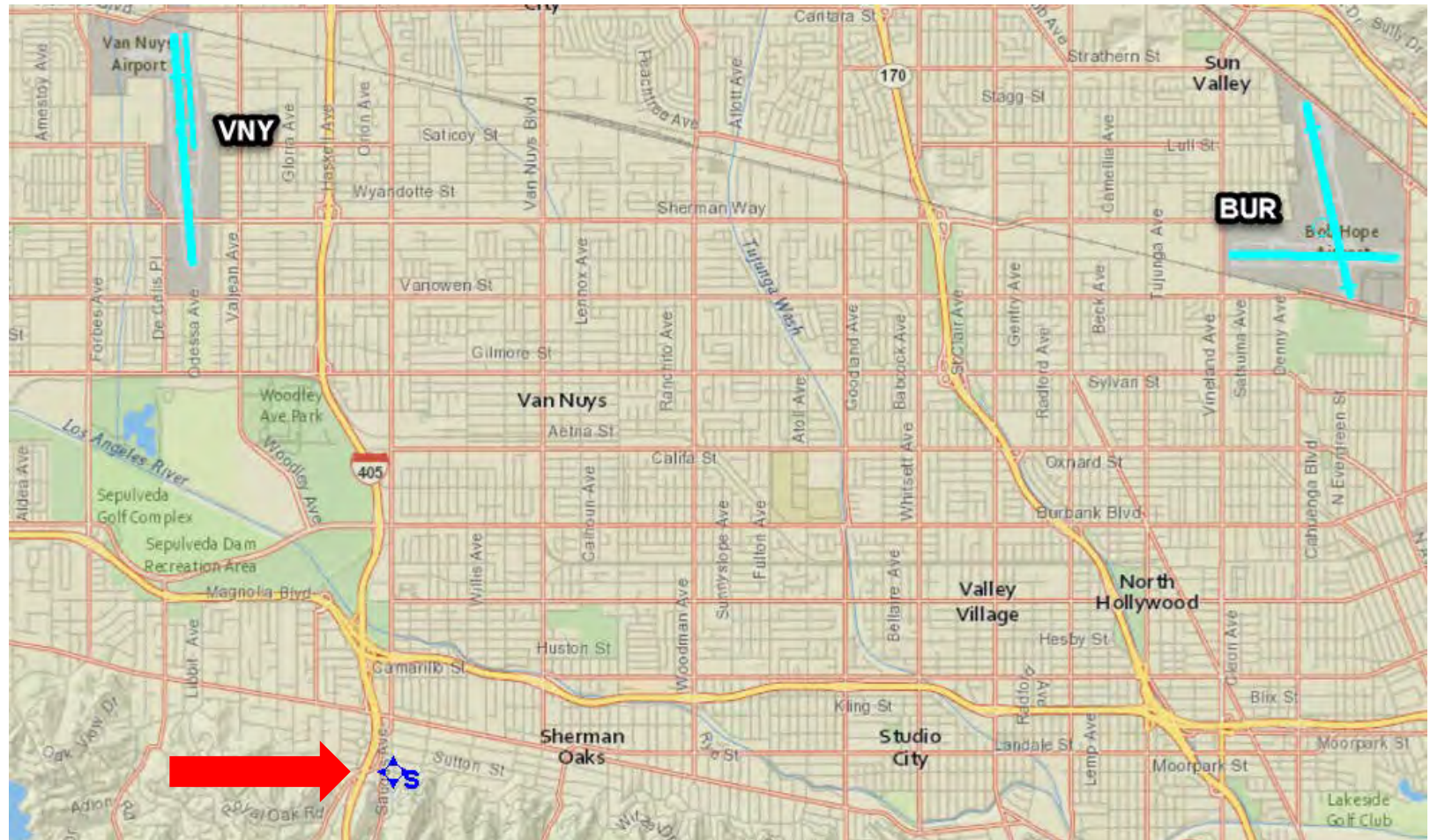
February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

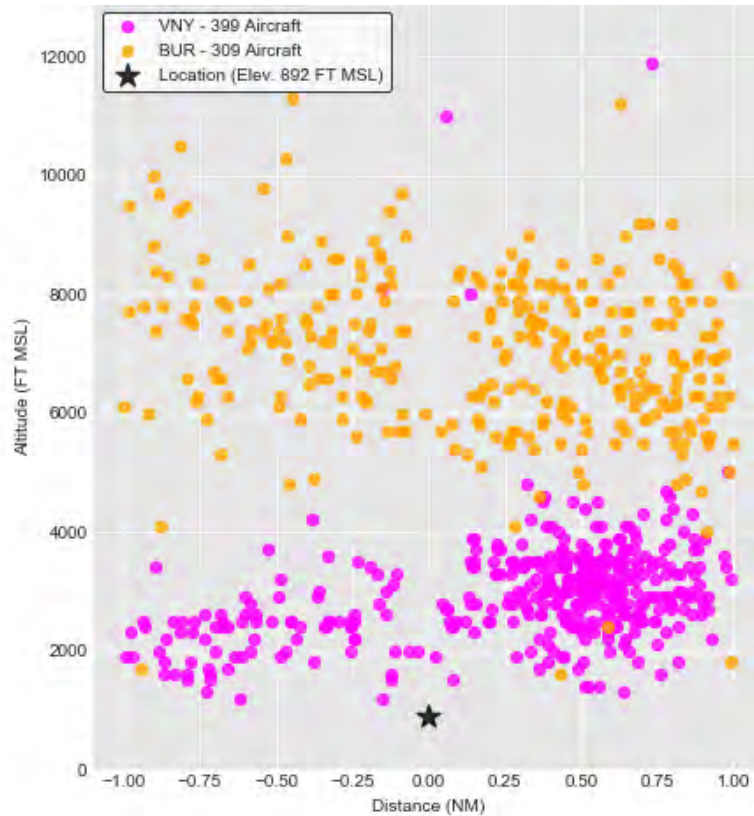


Location S: Valley Vista Blvd, Sherman Oaks

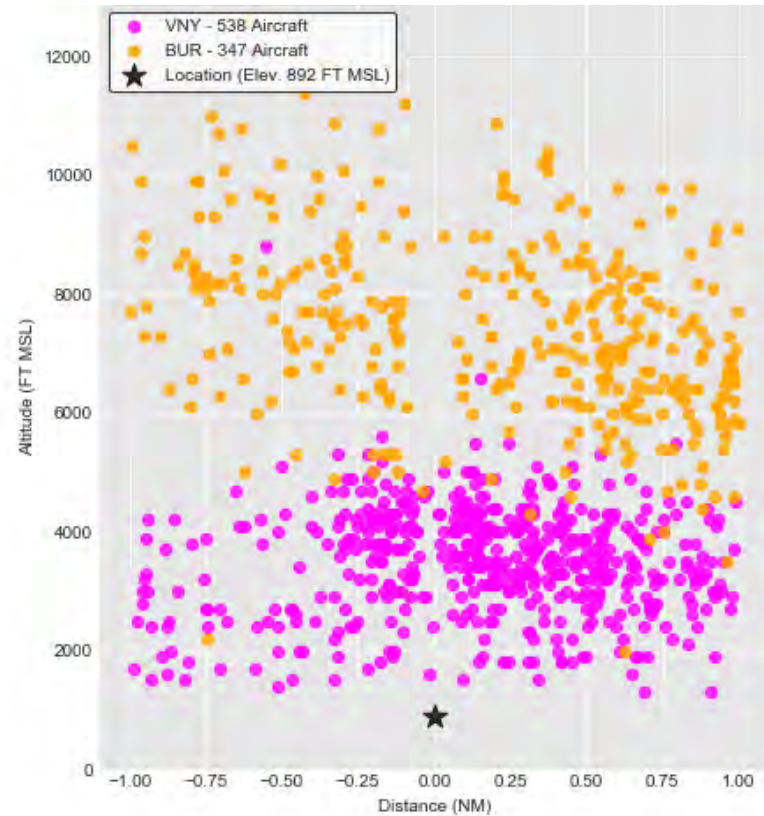


Altitudes over Location S: Valley Vista Blvd, Sherman Oaks

February 8-15, 2017



February 8-15, 2019



These cross section shows the Pre and Post Metroplex altitudes near the location provided. The dots indicate the altitude of each aircraft at their closest point to the location. The Star indicates the location at its elevation.

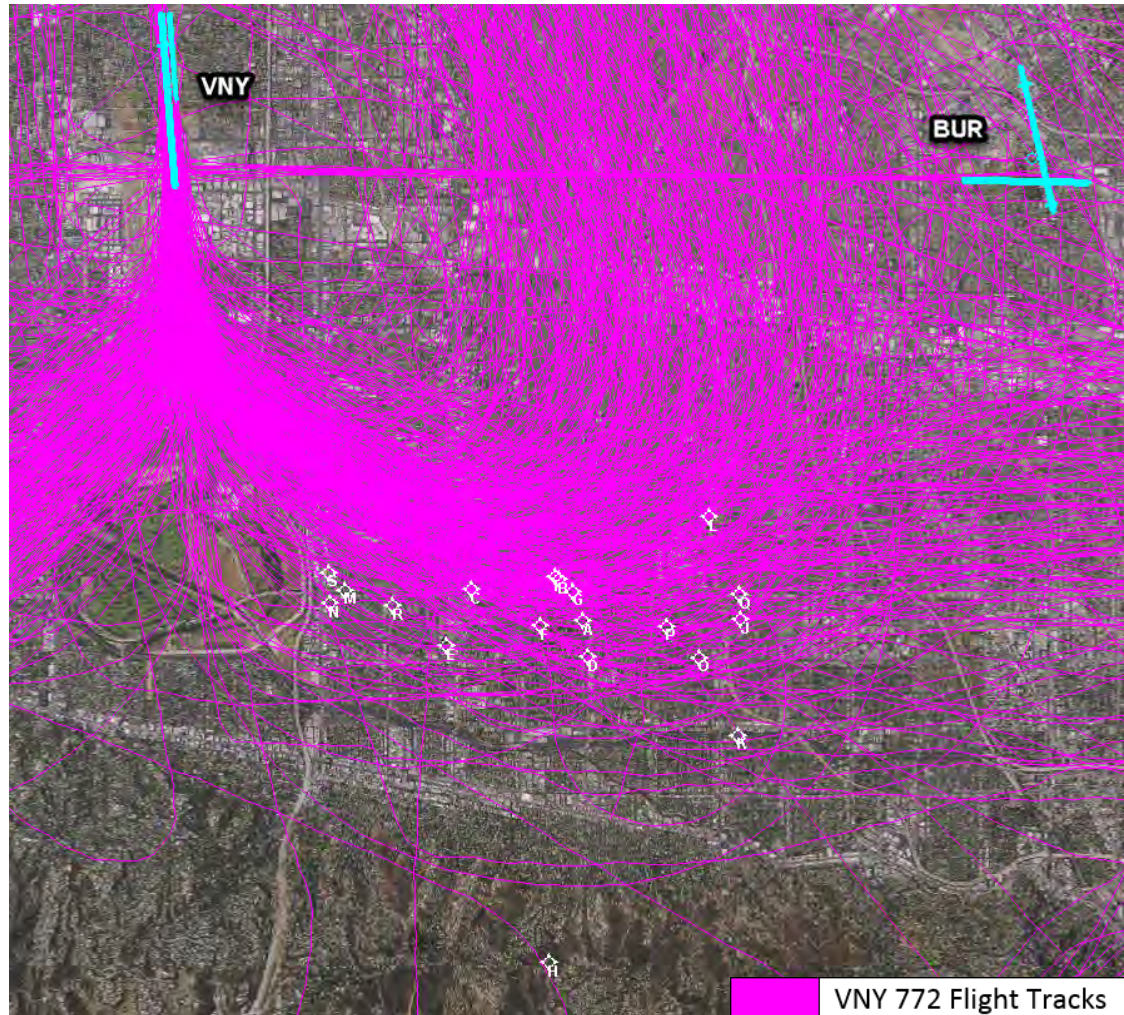


Federal Aviation
Administration

Additional Slides – Historic



VNY Flight Tracks: October 12-18, 2004

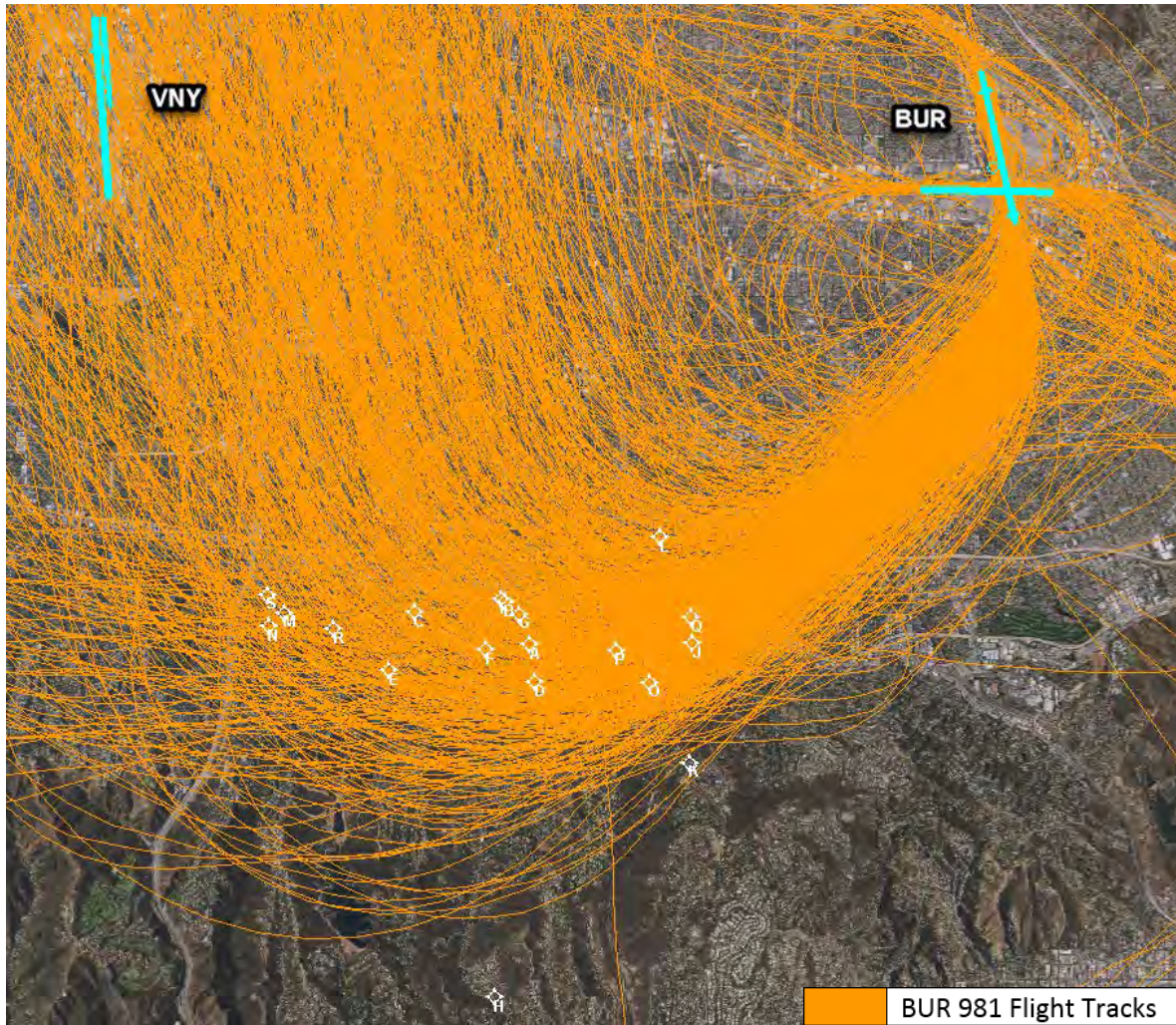


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

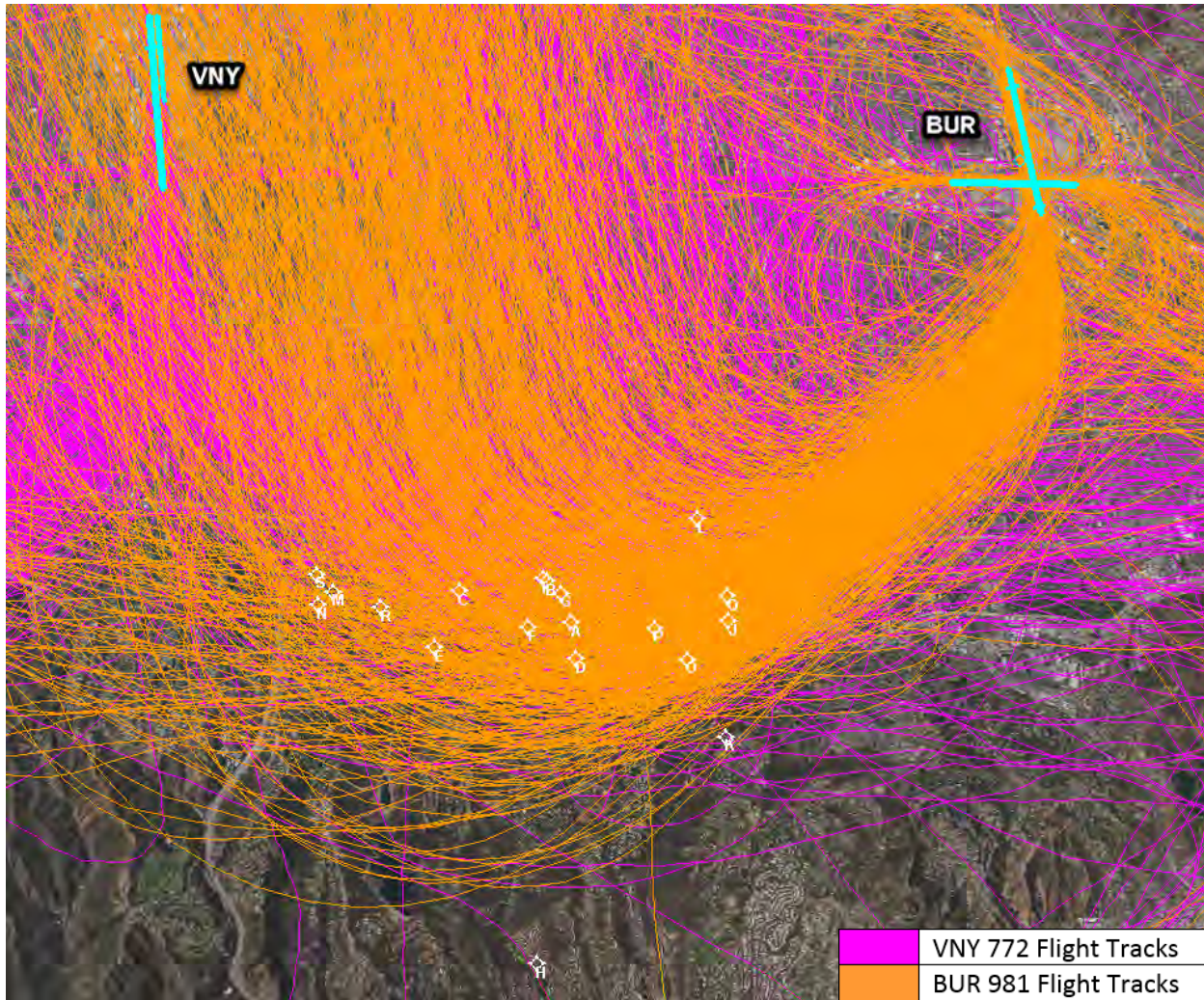
BUR Flight Tracks: October 12-18, 2004



NOTE: The flight track count is representative of the dates analyzed.



VNY and BUR Flight Tracks: October 12-18, 2004

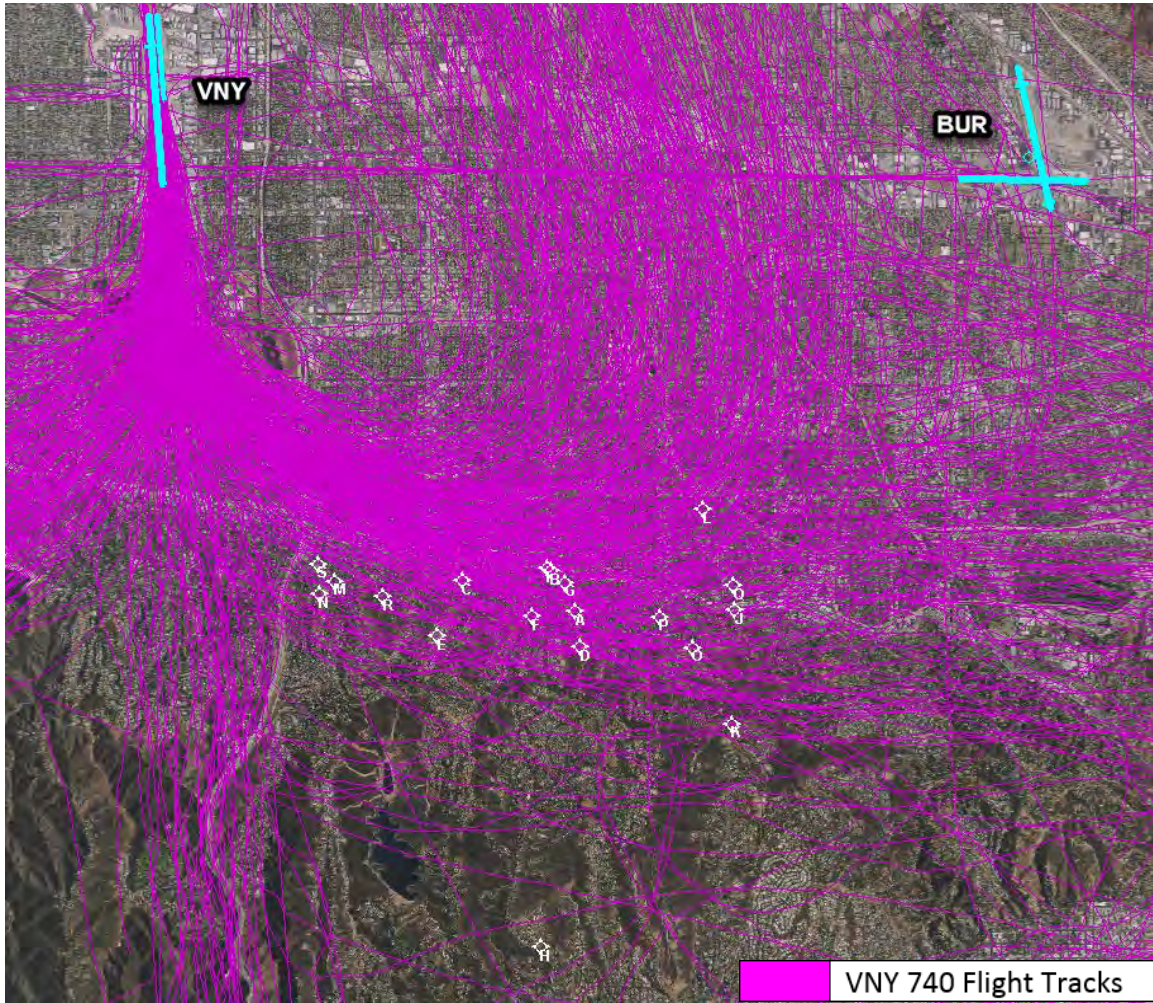


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

VNY Flight Tracks: October 12-18, 2007

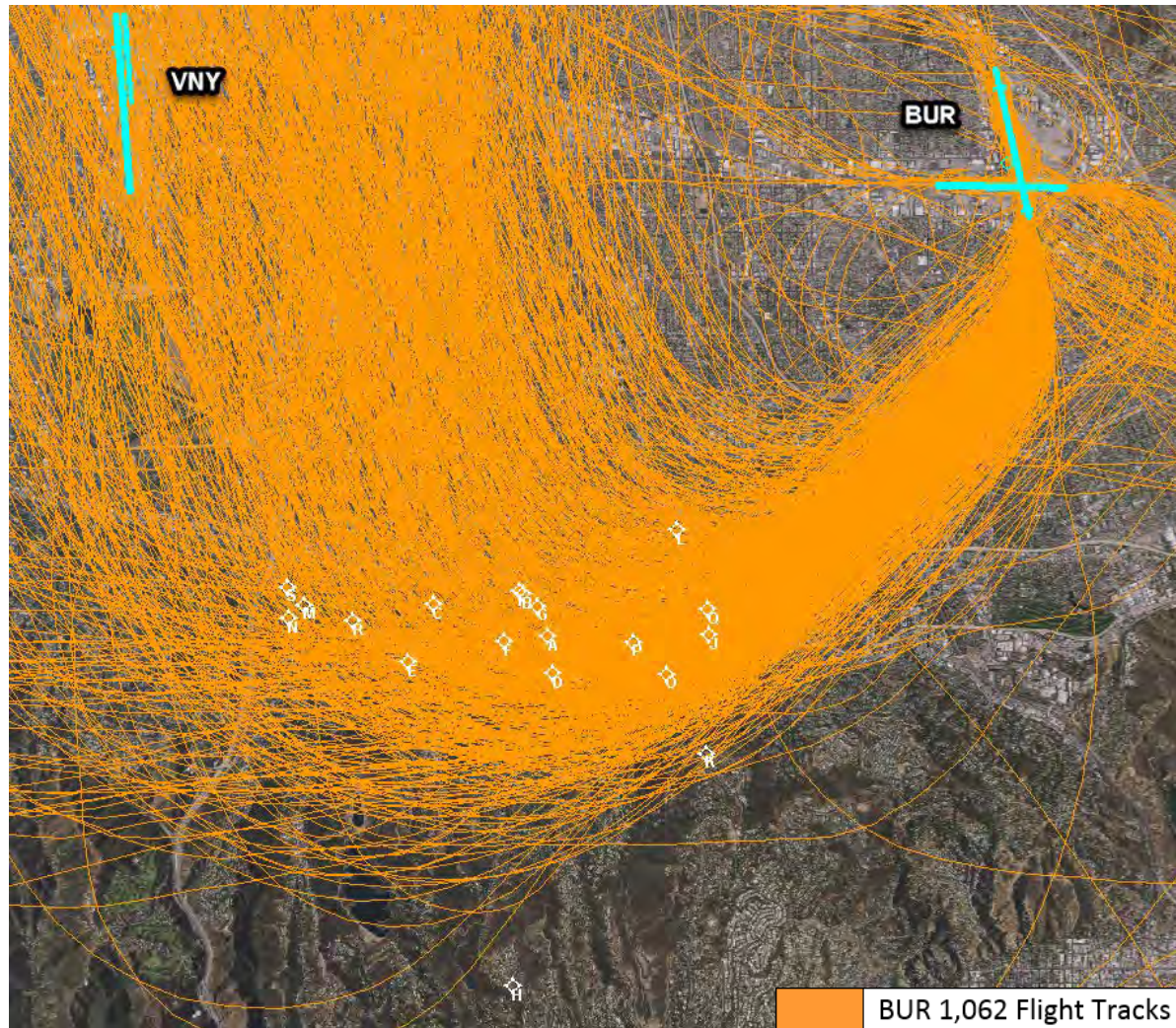


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

BUR Flight Tracks: October 12-18, 2007

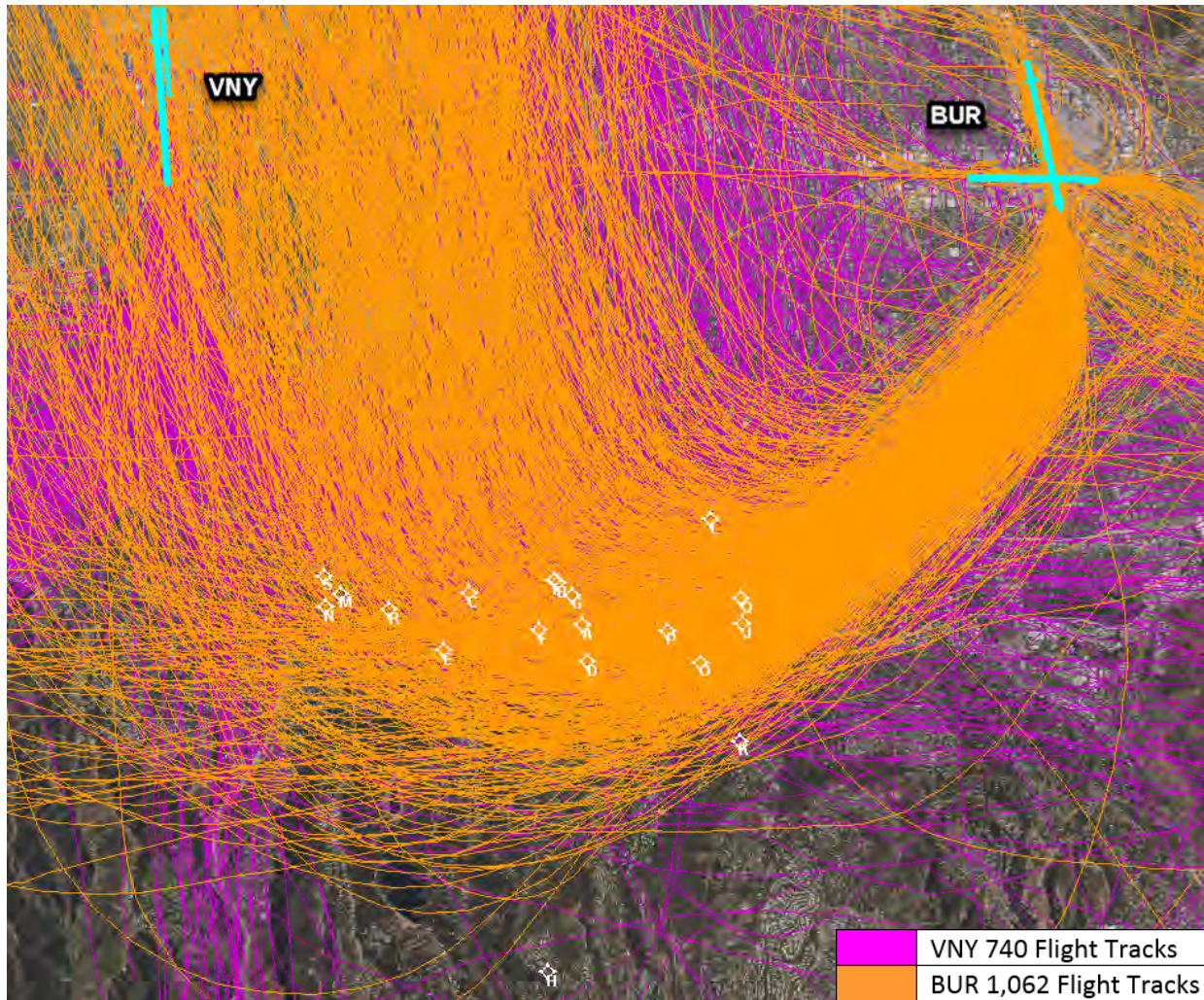


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

VNY and BUR Flight Tracks: October 12-18, 2007



NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Flight Track Analysis VNY and BUR

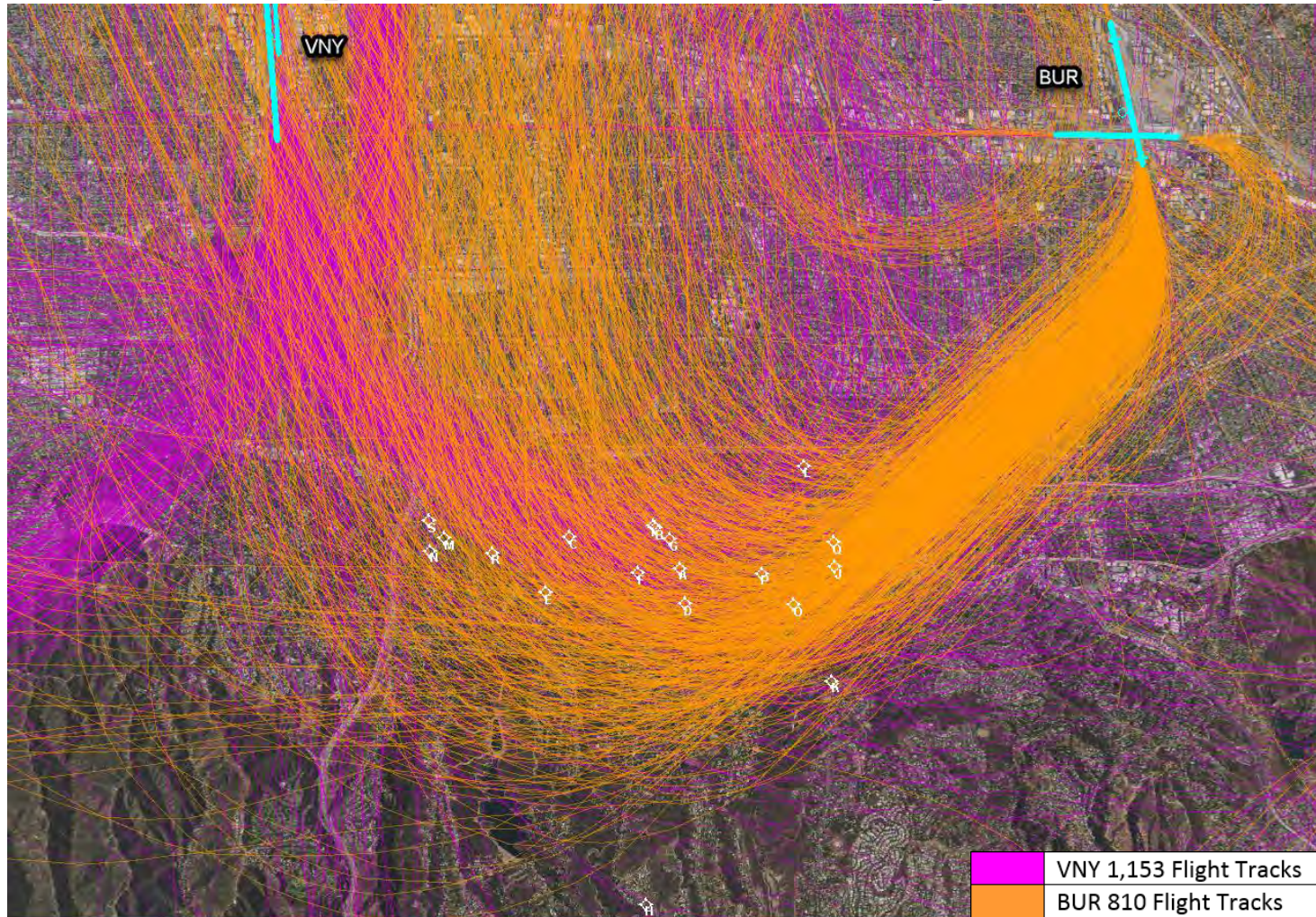


Overview

- **This analysis focused on pre and post Metroplex flight tracks for VNY and BUR.**
- **Annual operations were included to show total operations at each airport.**



Pre-Metroplex: February 8-15, 2017

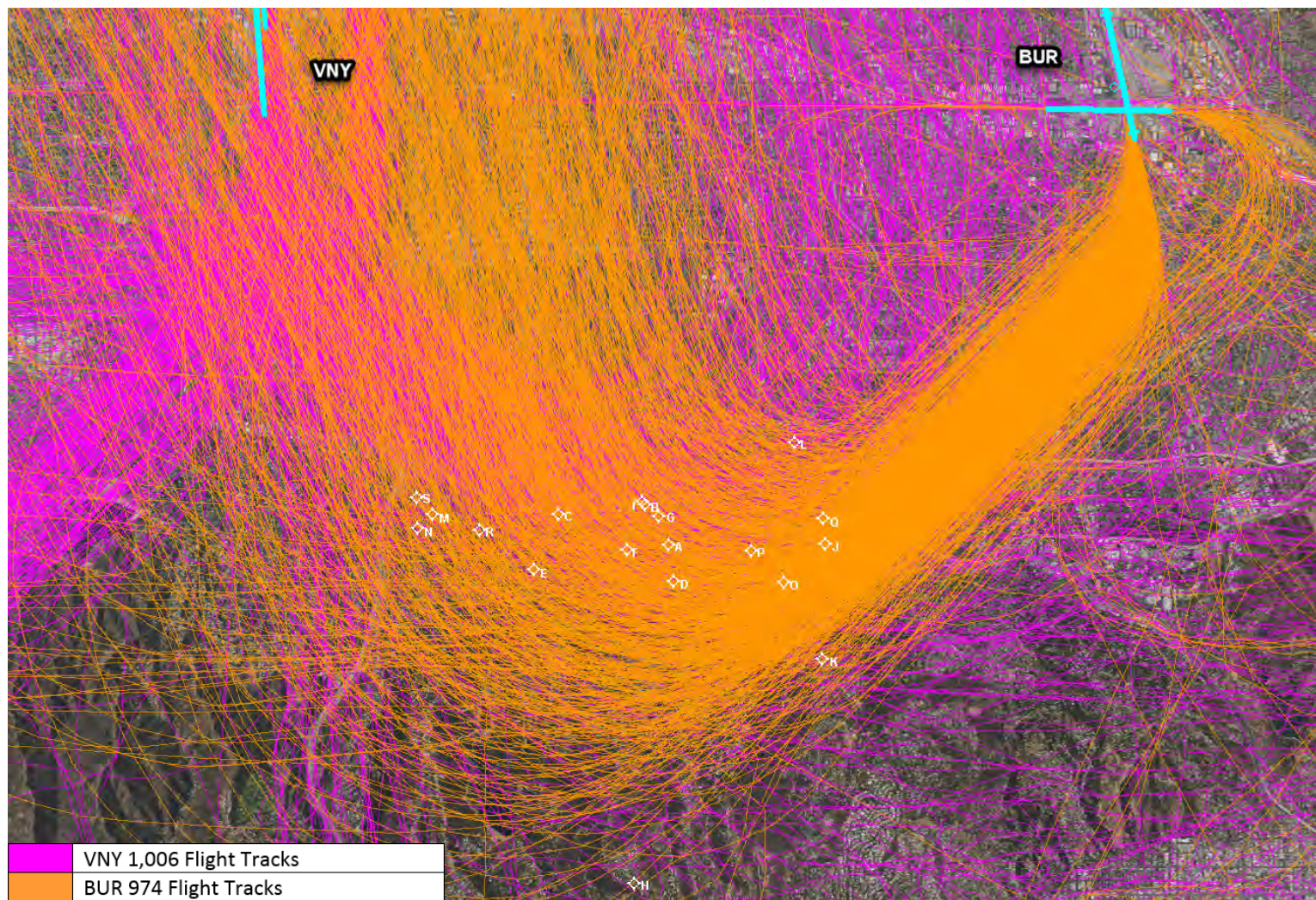


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

Post-Metroplex Departures: July 5-12, 2017

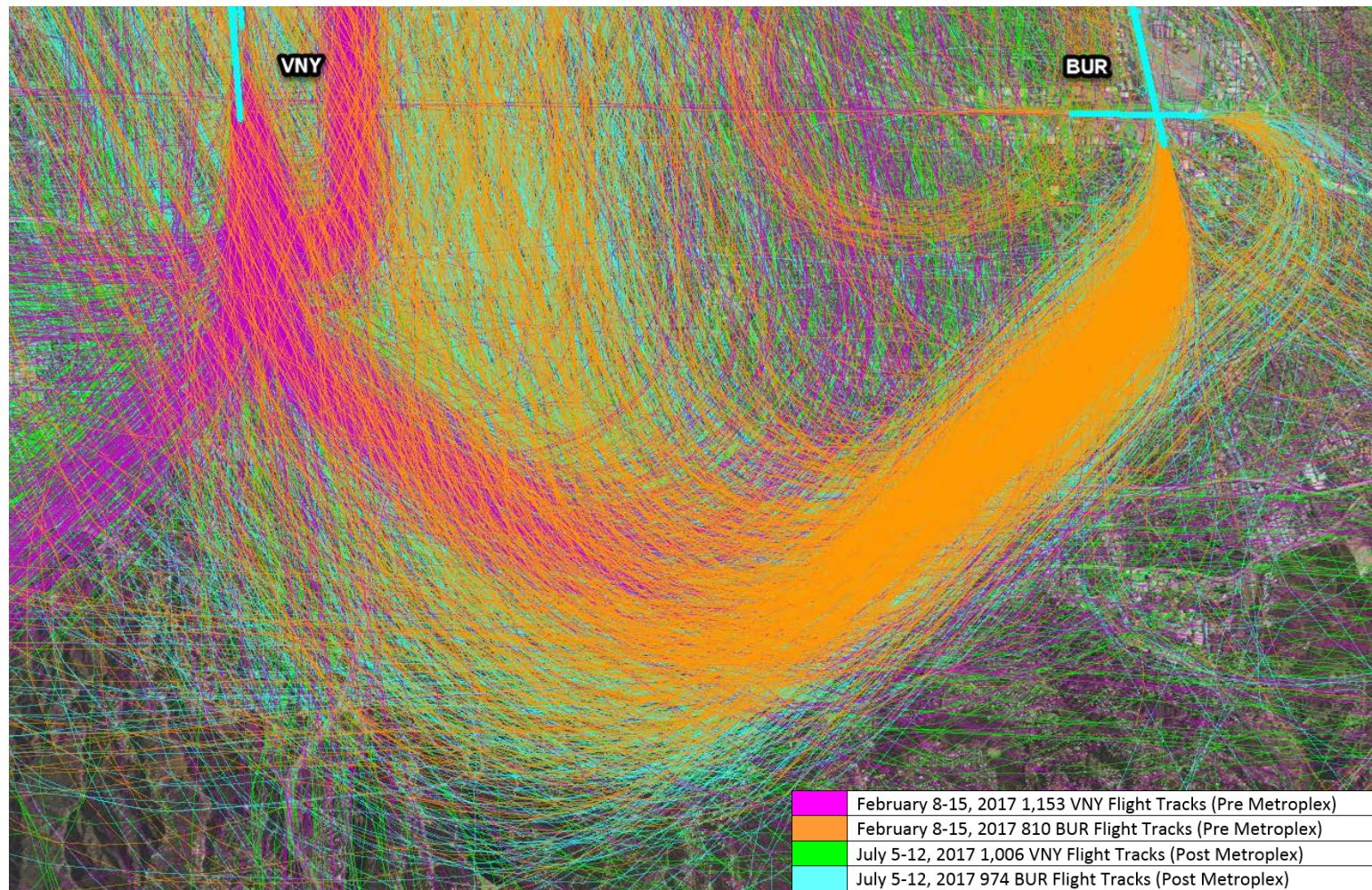


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

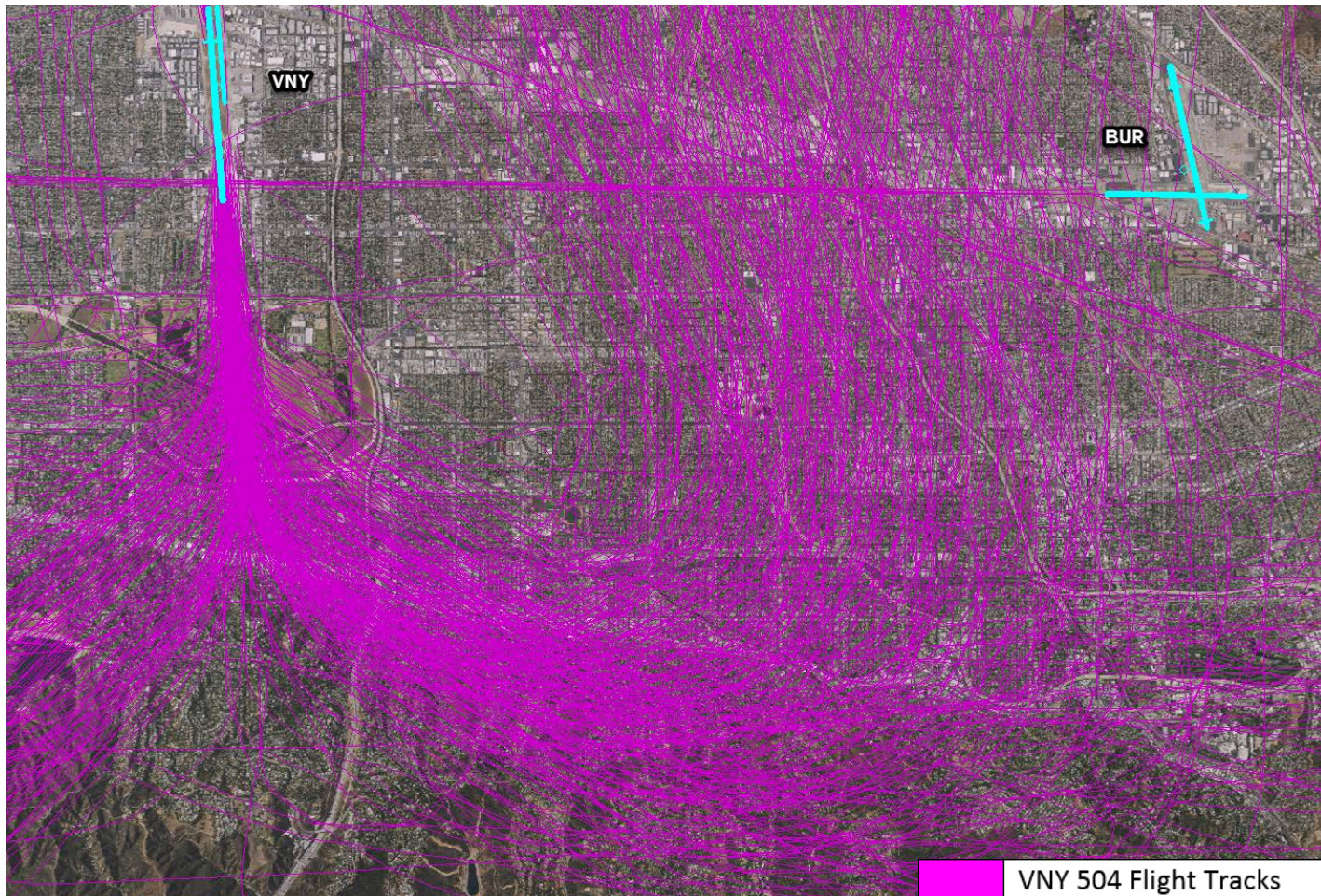
VNY and BUR Flight Tracks: Pre/Post Metroplex



NOTE: The flight track count is representative of the dates analyzed.



VNY Flight Tracks: October 12-18, 2018

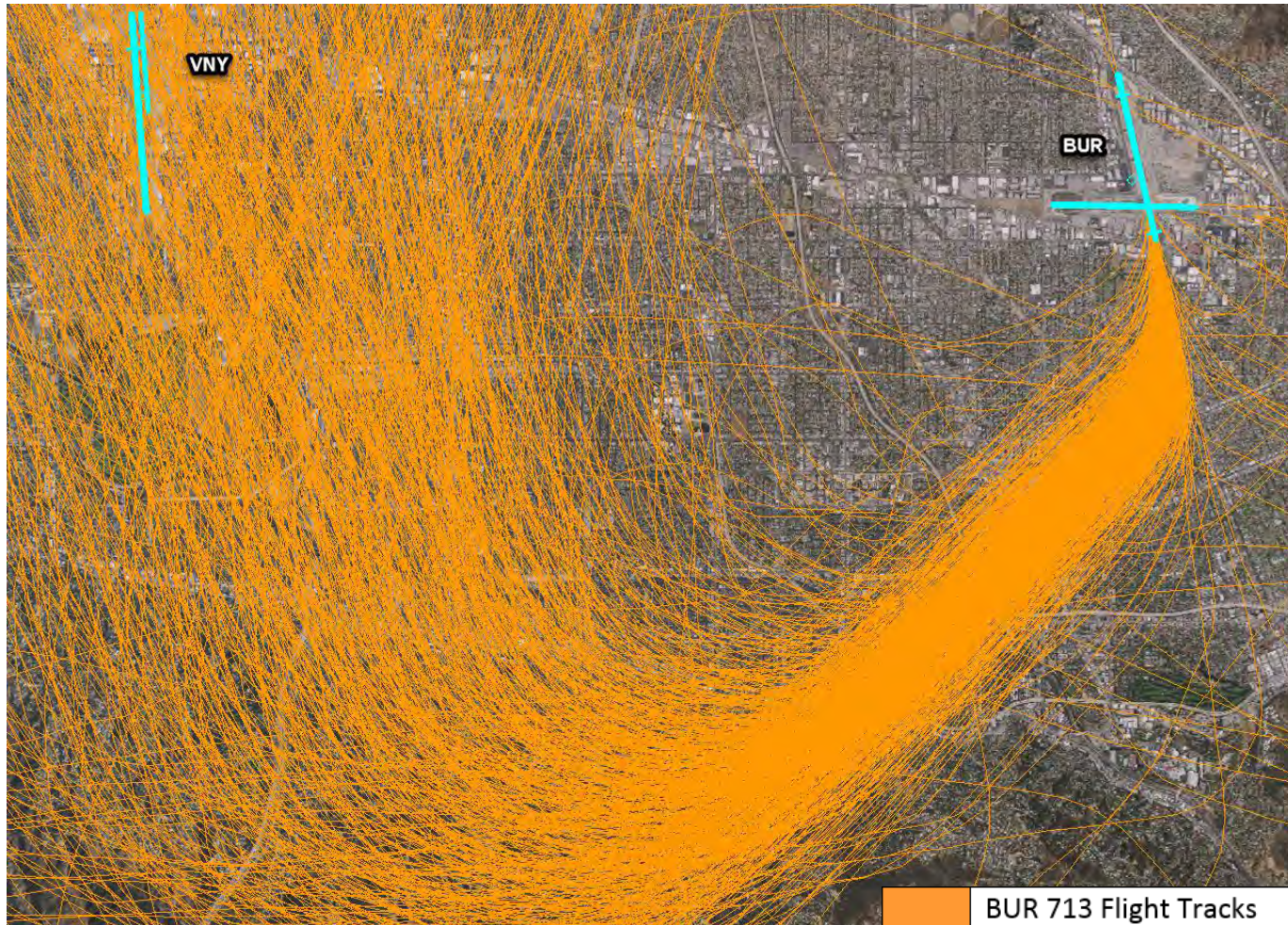


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

BUR Flight Tracks: October 12-18, 2018

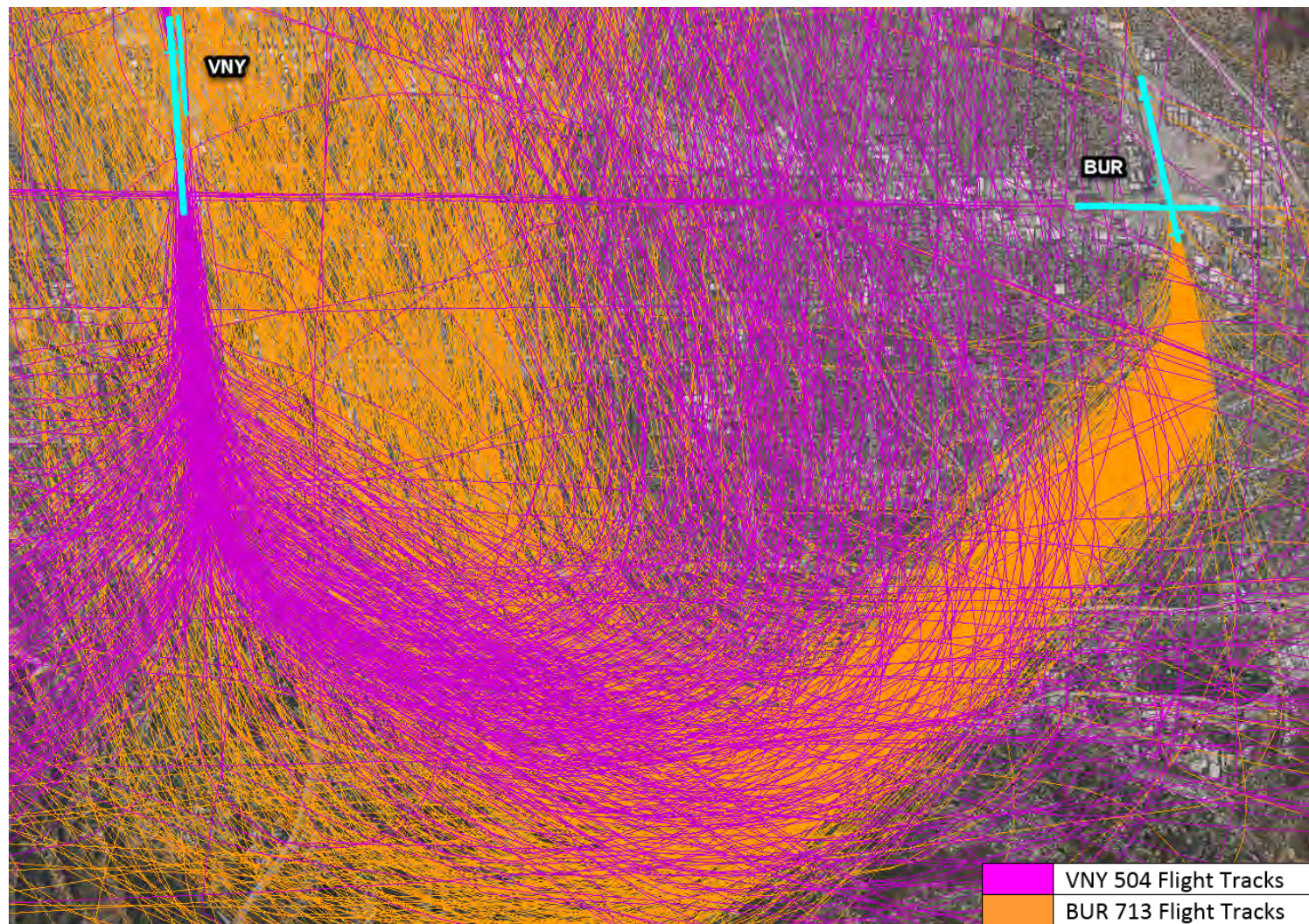


NOTE: The flight track count is representative of the dates analyzed.



Federal Aviation
Administration

VNY and BUR Flight Tracks: October 12-18, 2018



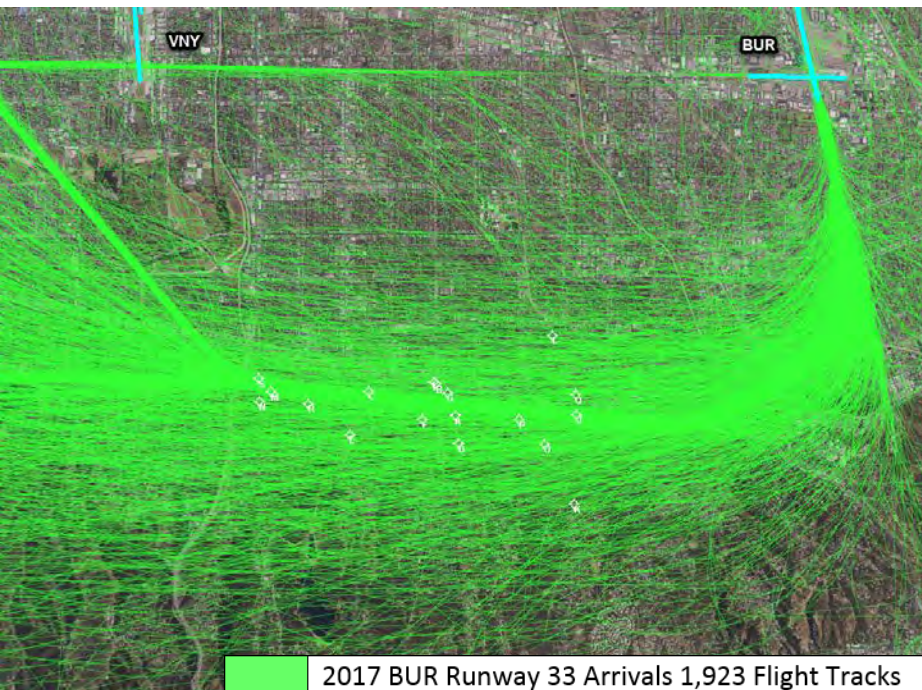
NOTE: The flight track count is representative of the dates analyzed.



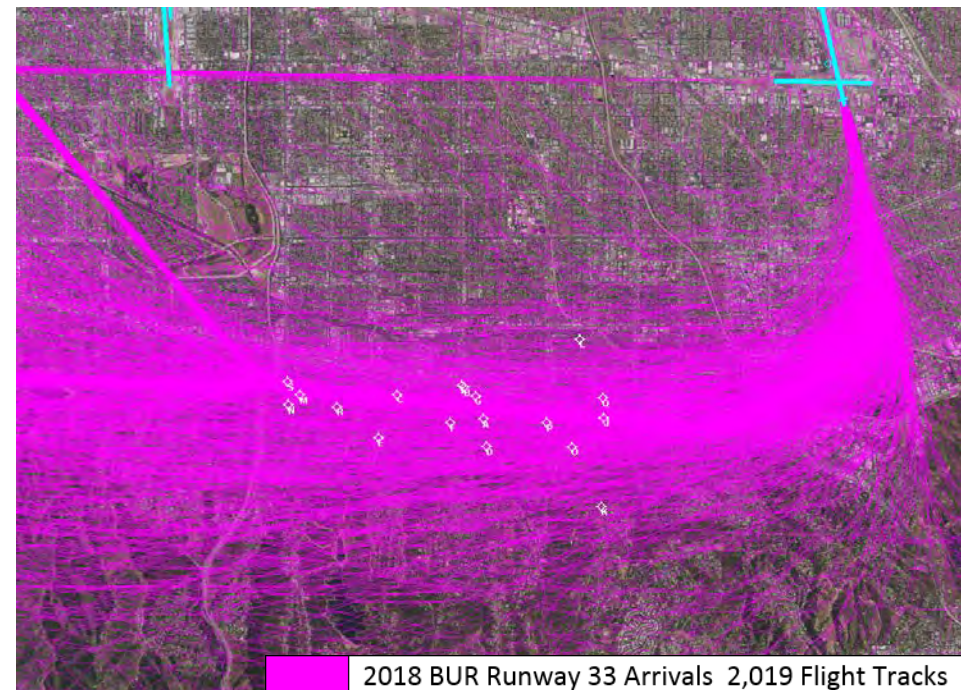
Federal Aviation
Administration

BUR Runway 33 Arrival Flight Tracks

**January 1 –
December 31,
2017 Flight Tracks**



**January 1 –
December 31,
2018 Flight Tracks**



Operations Network (OPSNET) Information

- **Data provided on slides 84 and 86 were collected OPSNET.**
- **OPSNET is the official source of FAA air traffic operations and delay data.**
- **For traffic count purposes, an air carrier aircraft is considered to be an aircraft capable of carrying more than 60 passengers.**



VNY Annual Operations: 2002-2018

| Calendar Year | Air Carrier | Air Taxi | Itinerant | | | Local | | | Total Operations |
|---------------|--------------|----------------|------------------|--------------|------------------|------------------|------------|------------------|------------------|
| | | | General Aviation | Military | Total | Civil | Military | Total | |
| 2002 | 0 | 16,408 | 326,291 | 322 | 343,021 | 155,420 | 36 | 155,456 | 498,477 |
| 2003 | 0 | 13,931 | 299,438 | 429 | 313,798 | 146,778 | 110 | 146,888 | 460,686 |
| 2004 | 0 | 16,018 | 297,676 | 248 | 313,942 | 134,714 | 46 | 134,760 | 448,702 |
| 2005 | 0 | 15,276 | 280,508 | 251 | 296,035 | 115,248 | 34 | 115,282 | 411,317 |
| 2006 | 0 | 16,157 | 266,524 | 318 | 282,999 | 111,502 | 414 | 111,916 | 394,915 |
| 2007 | 0 | 15,931 | 187,585 | 200 | 203,716 | 109,491 | 24 | 109,515 | 374,464 |
| 2008 | 0 | 11,376 | 118,345 | 71 | 129,792 | 116,931 | 54 | 116,985 | 386,706 |
| 2009 | 0 | 8,616 | 228,210 | 212 | 237,038 | 114,169 | 26 | 114,195 | 351,233 |
| 2010 | 0 | 9,076 | 204,158 | 311 | 213,545 | 97,710 | 56 | 97,766 | 311,311 |
| 2011 | 224 | 10,463 | 192,012 | 274 | 202,973 | 95,044 | 32 | 95,076 | 298,049 |
| 2012 | 253 | 10,585 | 154,419 | 378 | 165,635 | 93,481 | 16 | 93,497 | 259,132 |
| 2013 | 148 | 12,072 | 154,383 | 346 | 166,949 | 101,558 | 24 | 101,582 | 268,531 |
| 2014 | 119 | 14,019 | 140,582 | 365 | 155,085 | 77,831 | 15 | 77,846 | 232,931 |
| 2015 | 98 | 14,538 | 128,062 | 398 | 143,096 | 67,474 | 0 | 67,474 | 210,570 |
| 2016 | 55 | 17,134 | 129,862 | 381 | 147,432 | 66,130 | 4 | 66,134 | 213,566 |
| 2017 | 58 | 20,384 | 130,540 | 536 | 151,518 | 72,876 | 4 | 72,880 | 224,398 |
| 2018 | 196 | 27,365 | 137,158 | 690 | 165,409 | 90,441 | 5 | 90,446 | 255,855 |
| 2019 | 7 | 4,791 | 18,815 | 56 | 23,669 | 6,219 | 0 | 6,219 | 29,888 |
| Total: | 1,158 | 254,140 | 3,394,568 | 5,786 | 3,655,652 | 1,773,017 | 900 | 1,773,917 | 5,630,731 |



VNY Performance Categories: 2018

- **Jet** **59,274**
- **Prop** **30,335**
- **Turboprop** **4,873**
- **Unknown** **20,839**



BUR Annual Operations: 2002-2018

| Calendar Year | Air Carrier | Air Taxi | Itinerant | | | Local | | | Total Operations |
|---------------|----------------|----------------|------------------|--------------|------------------|----------------|------------|----------------|------------------|
| | | | General Aviation | Military | Total | Civil | Military | Total | |
| 2002 | 56,667 | 28,660 | 63,223 | 353 | 148,903 | 13,009 | 0 | 13,009 | 161,912 |
| 2003 | 58,854 | 27,351 | 69,597 | 303 | 156,105 | 21,974 | 0 | 21,974 | 178,079 |
| 2004 | 56,300 | 31,511 | 68,207 | 309 | 156,327 | 24,076 | 13 | 24,089 | 180,416 |
| 2005 | 52,594 | 40,374 | 73,344 | 530 | 166,842 | 6,186 | 72 | 6,258 | 173,100 |
| 2006 | 56,348 | 33,949 | 97,197 | 455 | 187,949 | 7,812 | 0 | 7,812 | 195,761 |
| 2007 | 60,078 | 29,522 | 68,477 | 367 | 158,444 | 5,060 | 8 | 5,068 | 170,171 |
| 2008 | 58,744 | 25,421 | 12,801 | 88 | 97,054 | 8,872 | 31 | 8,903 | 120,838 |
| 2009 | 53,258 | 21,178 | 23,628 | 177 | 98,241 | 10,948 | 70 | 11,018 | 109,259 |
| 2010 | 50,551 | 22,341 | 25,032 | 210 | 98,134 | 13,395 | 27 | 13,422 | 111,556 |
| 2011 | 46,959 | 20,767 | 35,585 | 306 | 103,617 | 19,475 | 0 | 19,475 | 123,092 |
| 2012 | 44,591 | 21,063 | 37,577 | 676 | 103,907 | 31,728 | 0 | 31,728 | 135,635 |
| 2013 | 42,397 | 22,570 | 36,326 | 598 | 101,891 | 29,227 | 4 | 29,231 | 131,122 |
| 2014 | 39,706 | 21,204 | 33,842 | 756 | 95,508 | 23,001 | 45 | 23,046 | 118,554 |
| 2015 | 40,302 | 20,817 | 37,422 | 989 | 99,530 | 28,612 | 26 | 28,638 | 128,168 |
| 2016 | 43,846 | 20,205 | 39,688 | 1,164 | 104,903 | 27,485 | 3 | 27,488 | 132,391 |
| 2017 | 51,486 | 19,625 | 37,430 | 1,080 | 109,621 | 22,036 | 2 | 22,038 | 131,659 |
| 2018 | 53,678 | 22,509 | 31,495 | 718 | 108,400 | 23,623 | 0 | 23,623 | 132,023 |
| 2019 | 8,675 | 4,055 | 4,499 | 79 | 17,308 | 5,033 | 0 | 5,033 | 22,341 |
| Total: | 875,034 | 433,122 | 795,370 | 9,158 | 2,112,684 | 321,552 | 301 | 321,853 | 2,456,077 |



BUR Performance Categories: 2018

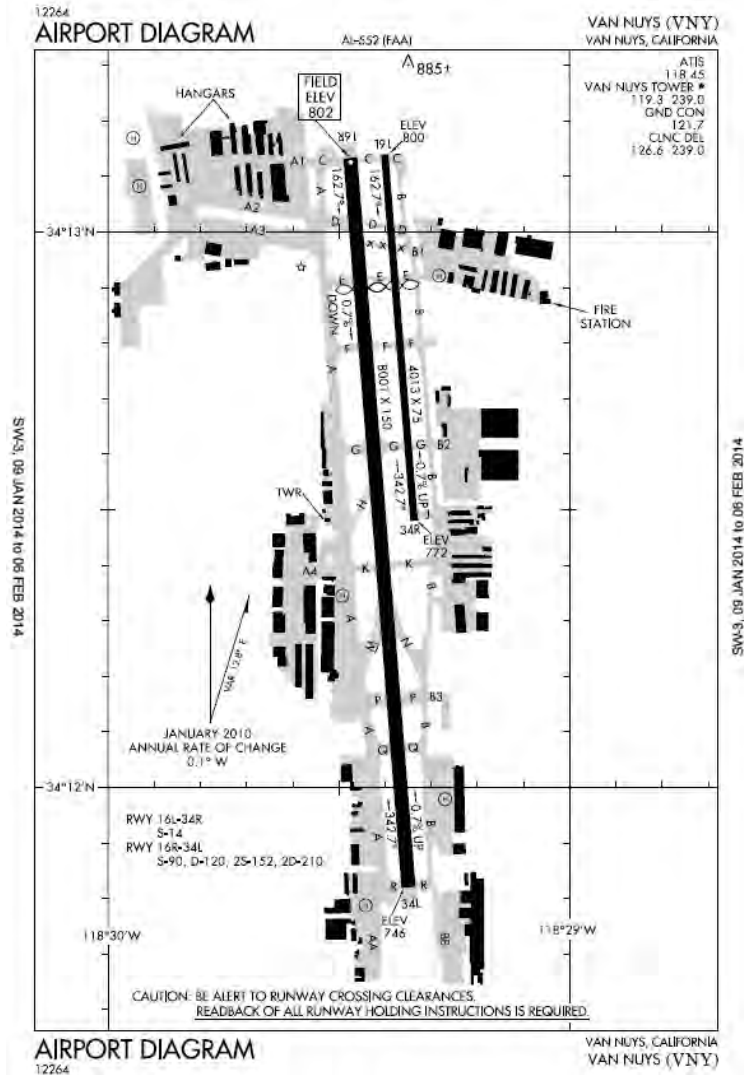
- **Jet** **80,487**
- **Prop** **4,446**
- **Turboprop** **7,011**
- **Unknown** **1,844**



Backup Slides

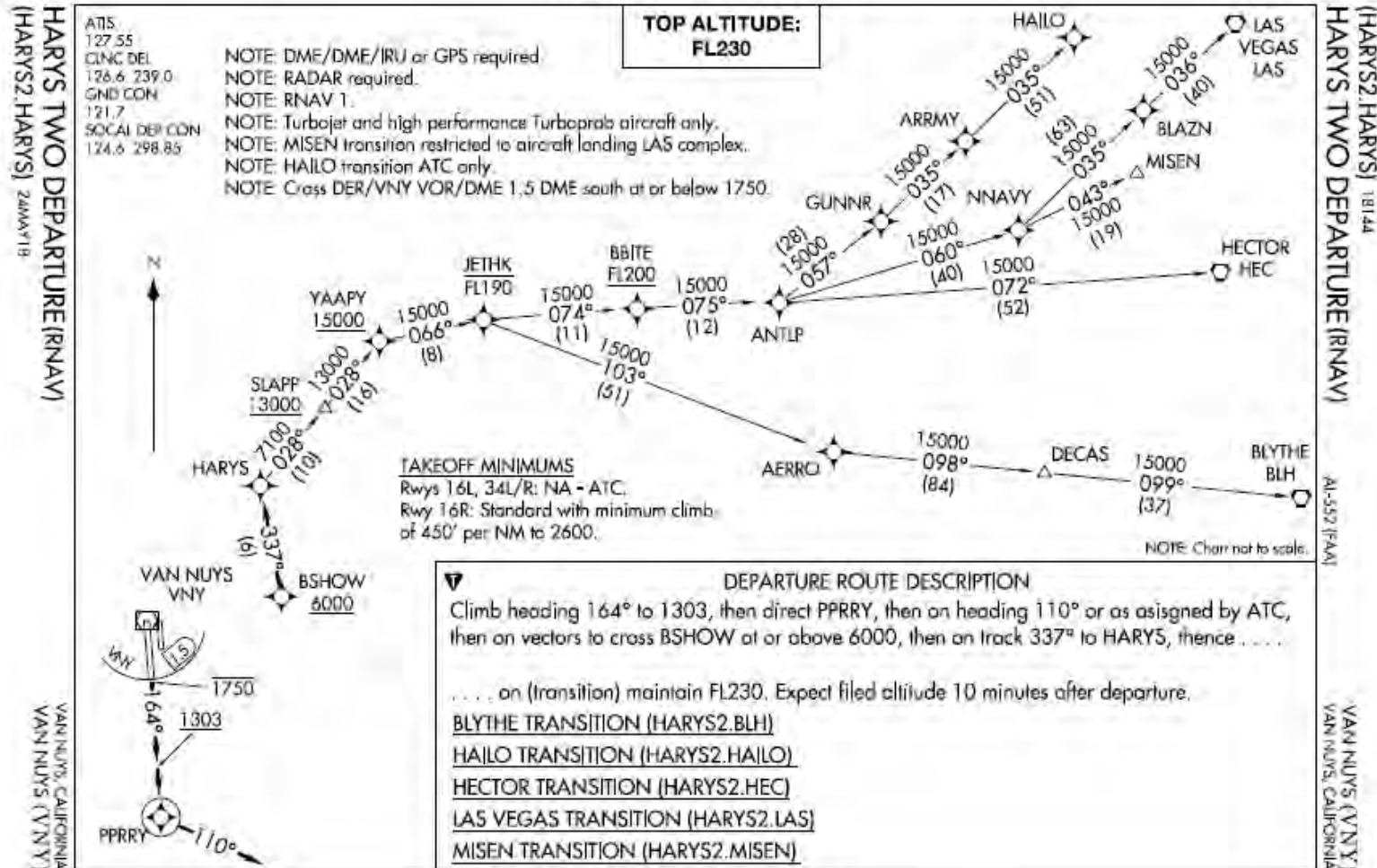


VNY Airport Diagram



VNY HARYS RNAV Departure

SW-3, 28 FEB 2019 to 28 MAR 2019

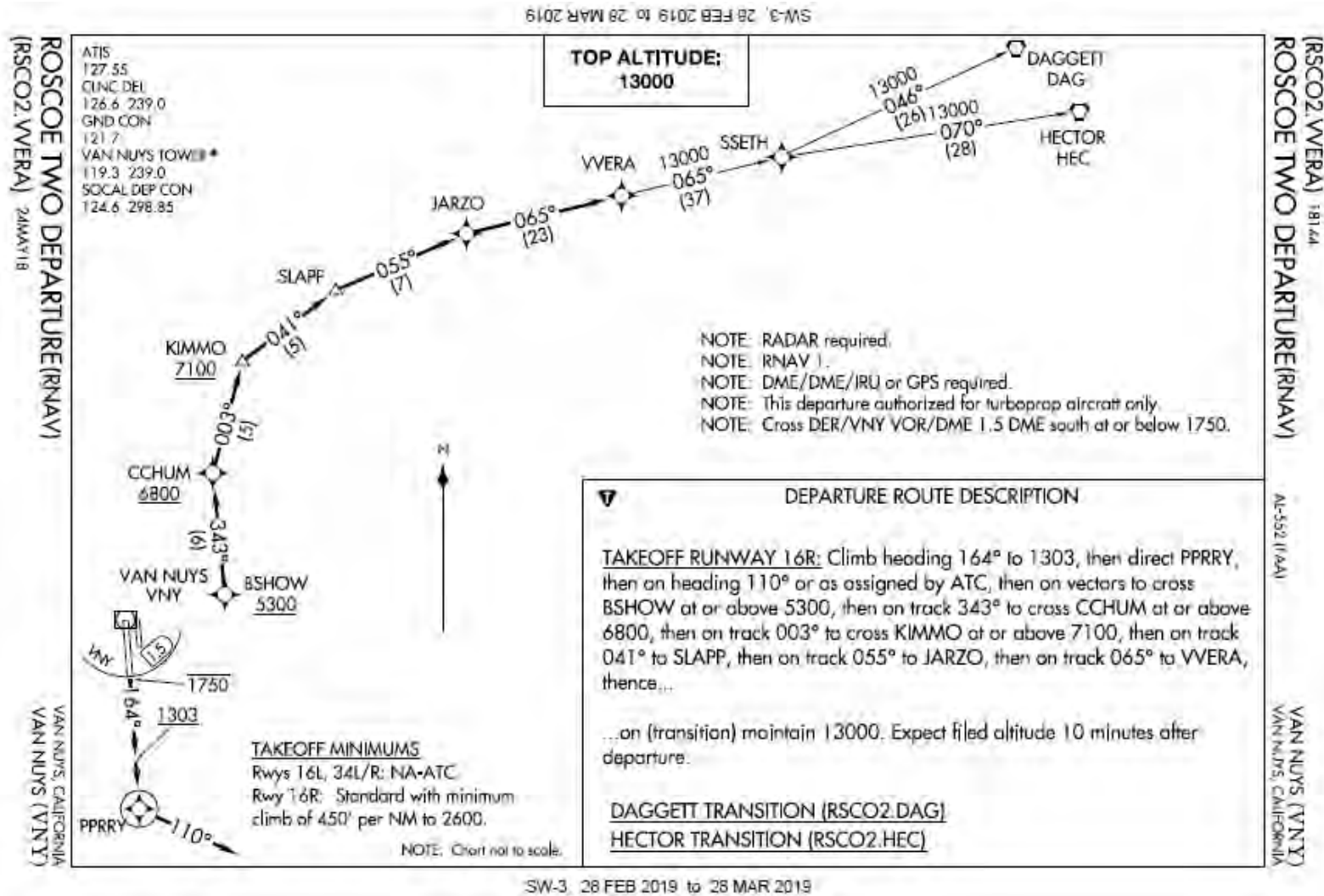


SW-3, 28 FEB 2019 to 28 MAR 2019



Federal Aviation
Administration

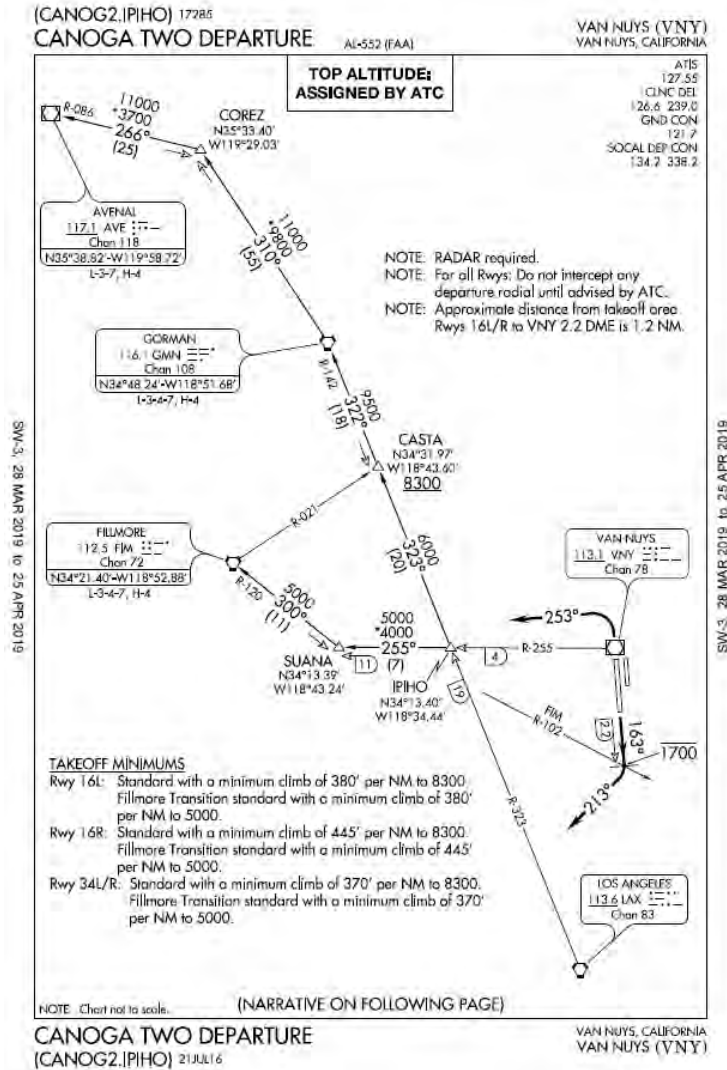
VNY ROSCOE RNAV Departure



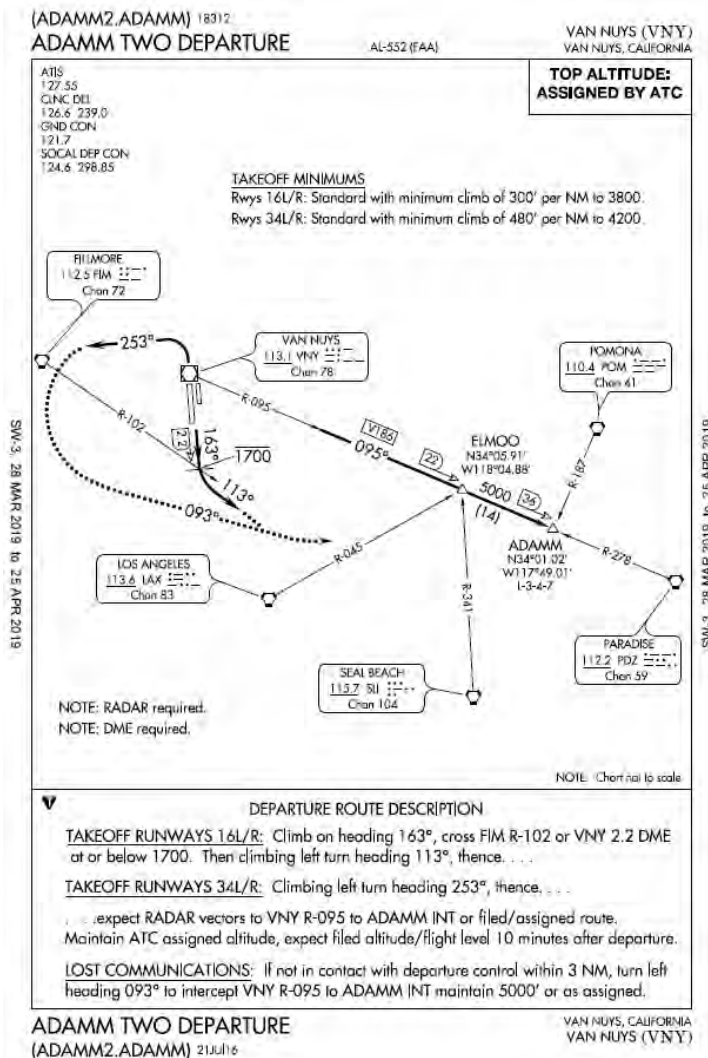
VNY WLKKR RNAV Departure



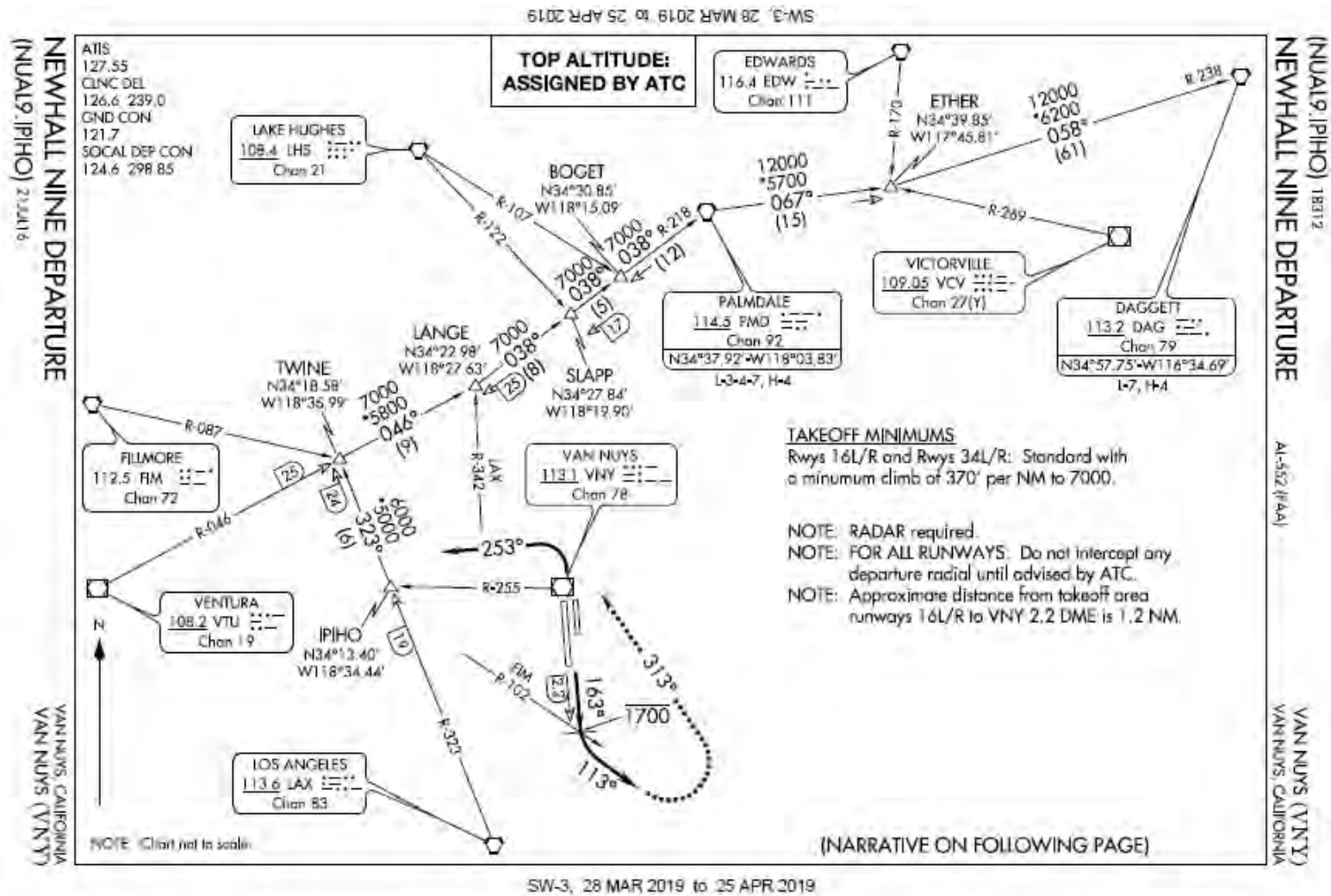
CANOGA TWO Departure



ADAMM TWO Departure



NEWHALL NINE Departure



VNY Procedures

- **Standard Instrument Arrivals:**
 - FERNANDO SEVEN
 - IVINS ONE (RNAV)
 - JANNY FIVE (RNAV)
 - LYNXX EIGHT
 - THRNE THREE (RNAV)
 - WEESL ONE (RNAV)
- **Instrument Approach Procedures:**
 - ILS Y RWY 16R
 - ILS Z RWY 16R
 - LDA-C
 - VOR-A
 - VOR-B



VNY Procedures

- **Departure Procedures**

- ADAMM TWO
- CANOGA TWO
- HARYS TWO (RNAV)
- HAYEZ EIGHT (RNAV)
- NEWHALL NINE
- ROSCOE TWO (RNAV)
- VVERA TWO (RNAV)
- WLKKR THREE (RNAV)



VNY Noise Abatement



BOARD FILE NO. 2013 x 1704

RESOLUTION NO. 25735

WHEREAS, the Board of Airport Commissioners was requested by Los Angeles World Airports (LAWA) staff to affirm and formalize a long-standing, informal "No Early Turn" policy for fixed-wing aircraft at Van Nuys Airport (VNY); and

WHEREAS, LAWA has implemented several noise abatement initiatives aimed at reducing aircraft noise in the surrounding community and the Board's formalizing this policy will enhance the current noise abatement program; and

WHEREAS, LAWA staff, with input from the VNY Citizens Advisory Council, agreed that the Board affirming this policy, along with enhanced and continual outreach to flight schools, pilots, and other local general aviation airports, will mitigate aircraft noise for neighborhoods adjacent to VNY; and

WHEREAS, the VNY "No Early Turn" policy is as follows:

Pilots departing Runways 16L and 16R are requested to fly runway heading until reaching the Sepulveda Flood Control Basin (south of Victory Boulevard) before initiating any turns, unless specifically instructed otherwise by the Federal Aviation Administration Air Traffic Control; and

Pilots departing Runways 34L and 34R are requested to fly runway heading until reaching an altitude of 1800' mean sea level (MSL) before initiating any turns, unless specifically instructed otherwise by the Federal Aviation Administration Air Traffic Control; and

WHEREAS, the Board's affirmation of this policy will have no fiscal impact on LAWA's Operating Budget; and

WHEREAS, this action is exempt from the California Environmental Quality Act (CEQA) pursuant to Article II Section 2(n) of the Los Angeles City CEQA Guidelines; and

WHEREAS, actions taken on this item by the Board will become final pursuant to the provisions of Los Angeles City Charter Section 245;

NOW, THEREFORE, BE IT RESOLVED that the Board of Airport Commissioners determined that this action is exempt from the California Environmental Quality Act requirements, affirmed the VNY "No Early Turn" Policy for fixed-wing aircraft and authorized the Executive Director to implement the policy.

oOo

I hereby certify that this Resolution No. 25735 is true and correct, as adopted by the Board of Airport Commissioners at its Special Meeting held on Thursday, June 18, 2015.

Sandra J. Miller – Secretary
BOARD OF AIRPORT COMMISSIONERS

- Signed on June 18, 2015
- Metroplex team notified on June 21, 2017 of issue with early turns

LAX

LA/DeLario

Van Nuys

City of Los Angeles

Eric Garcetti
Mayor

Board of Airport
Commissioners

Sean D. Burton
President

Valeria C. Velasco
Vice President

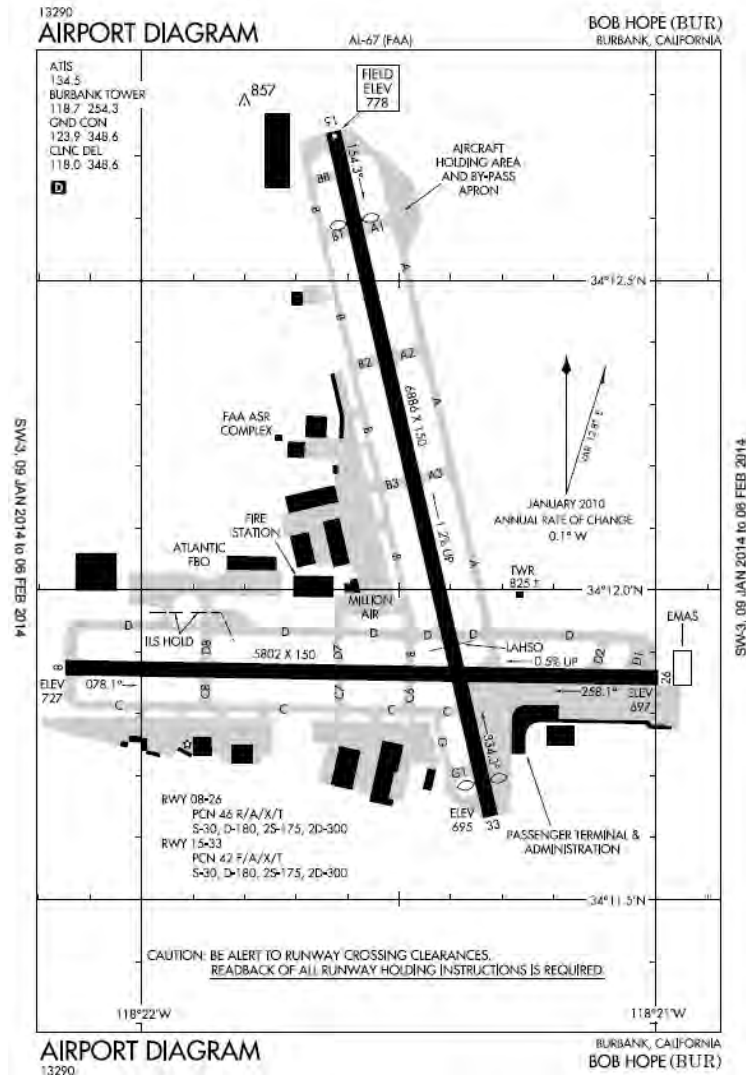
Gabriel L. Eshaghtian
Jackie Goldberg

Beatrice C. Hsu
Matthew M. Johnson
Dr. Cynthia A. Tate

Gina Marie Lindsay
Executive Director



BUR Airport Diagram



BUR Procedures

- **Standard Instrument Arrivals:**
 - FERNANDO SEVEN
 - JANNY FIVE
 - LYNXX EIGHT
 - ROKKR TWO (RNAV)
 - THRNE THREE (RNAV)
 - WEESL ONE (RNAV)
- **Instrument Approach Procedures:**
 - ILS Y OR LOC Y RWY 08
 - ILS Y OR LOC Z RWY 08
 - RNAV (RNP) Y RWY 08
 - RNAV (GPS) Z RWY 08
 - RNAV (GPS) – A
 - VOR RWY 08
 - FOUR STACKS VISUAL RWY 15



BUR Procedures

- **Departure Procedures:**
 - ELMOO EIGHT
 - OROSZ TWO (RNAV)
 - SLAPP ONE (RNAV)
 - VAN NUYS THREE
 - VVERA TWO (RNAV)

