

Analysis of Menlo Waypoint

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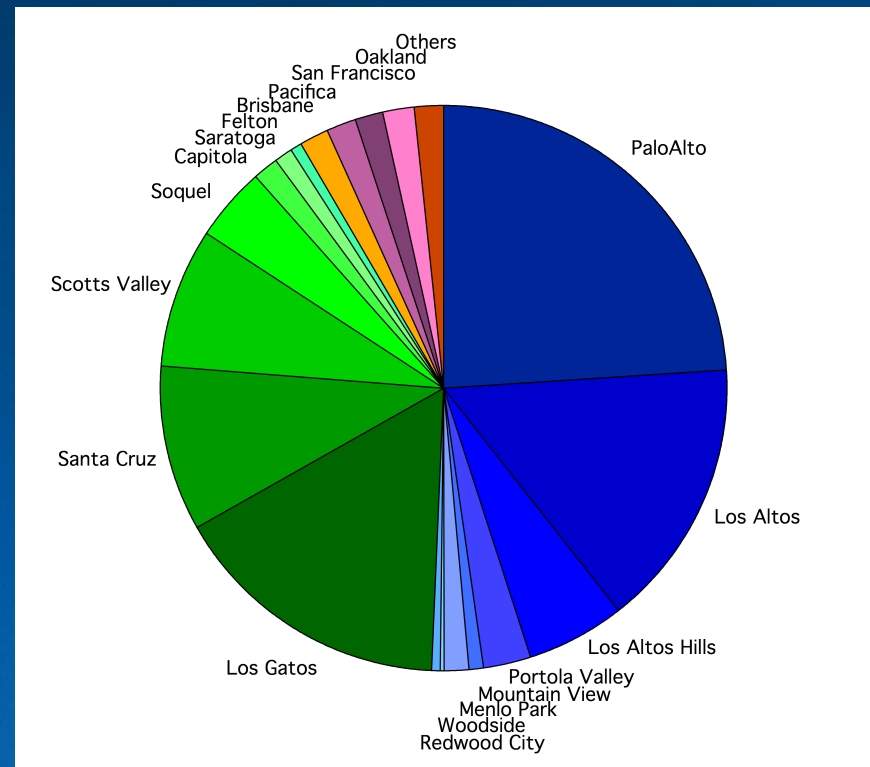
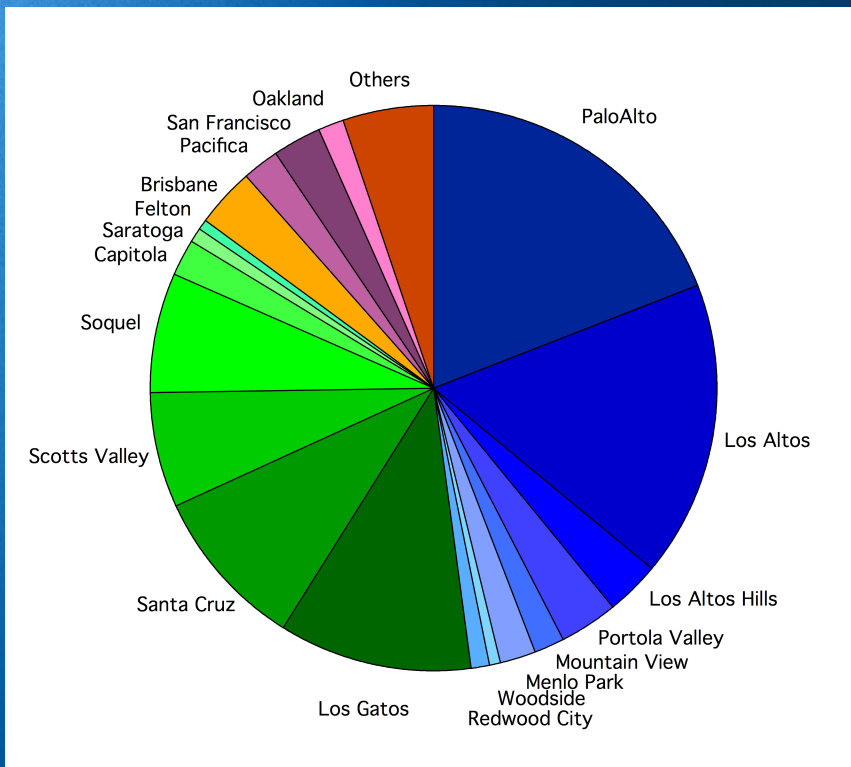
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Airplane Noise Complaints from SFO Director's Report for April 2016

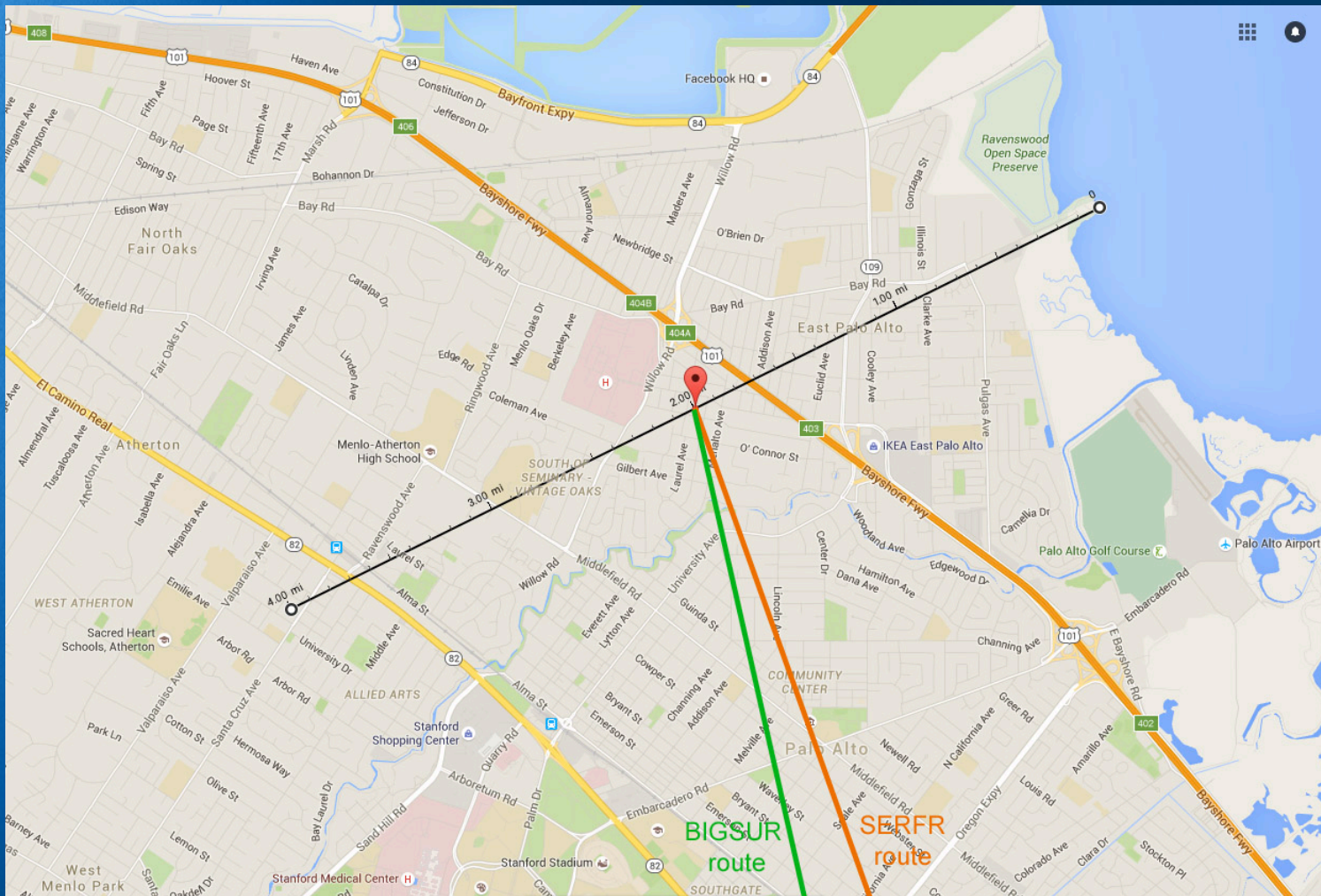
Unique Individuals Filing

Reports Filed

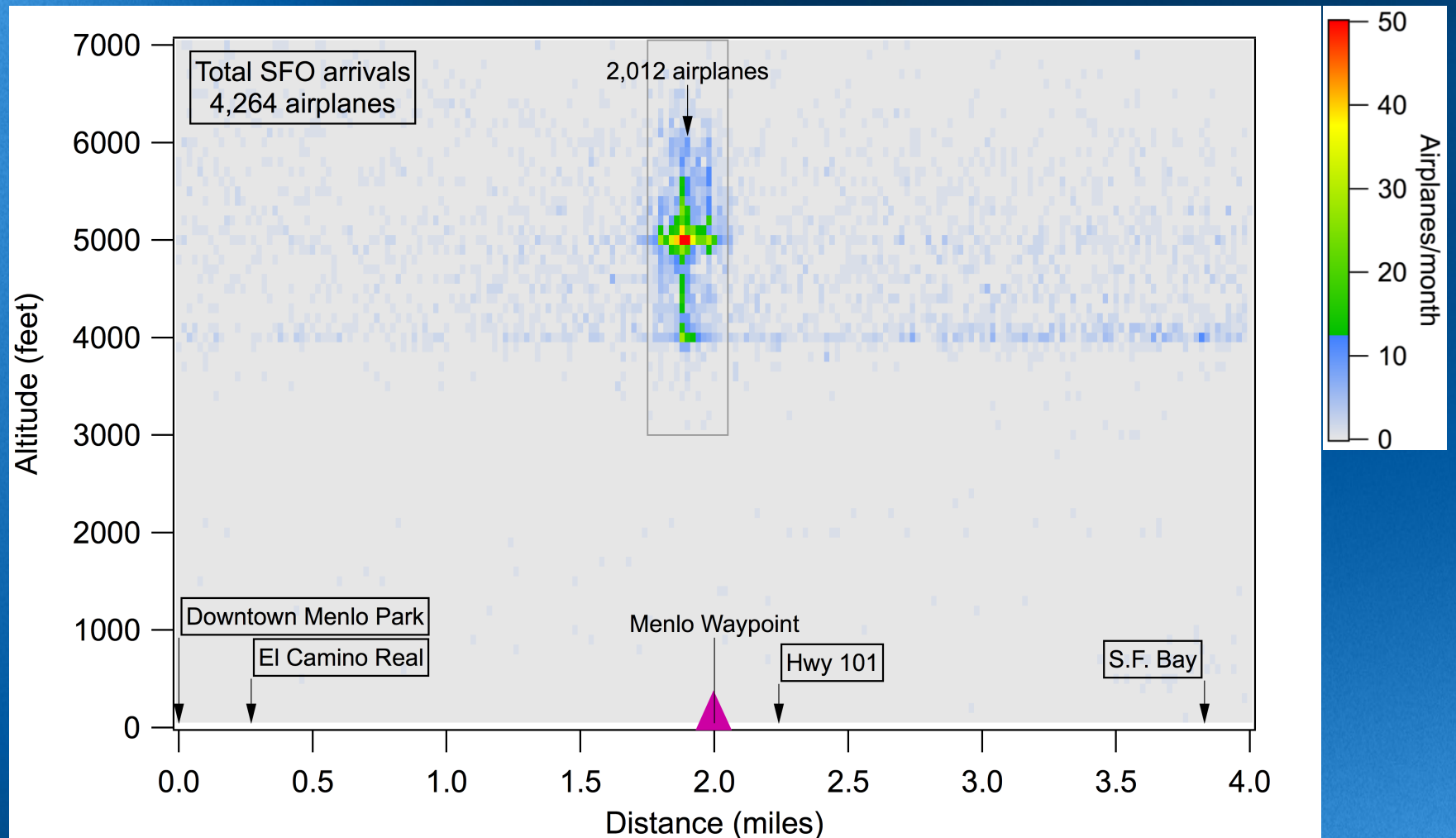


- 48% of unique individuals are from mid-peninsula
- 51% of reports are from mid-peninsula

Map of Location for Window over Menlo Waypoint

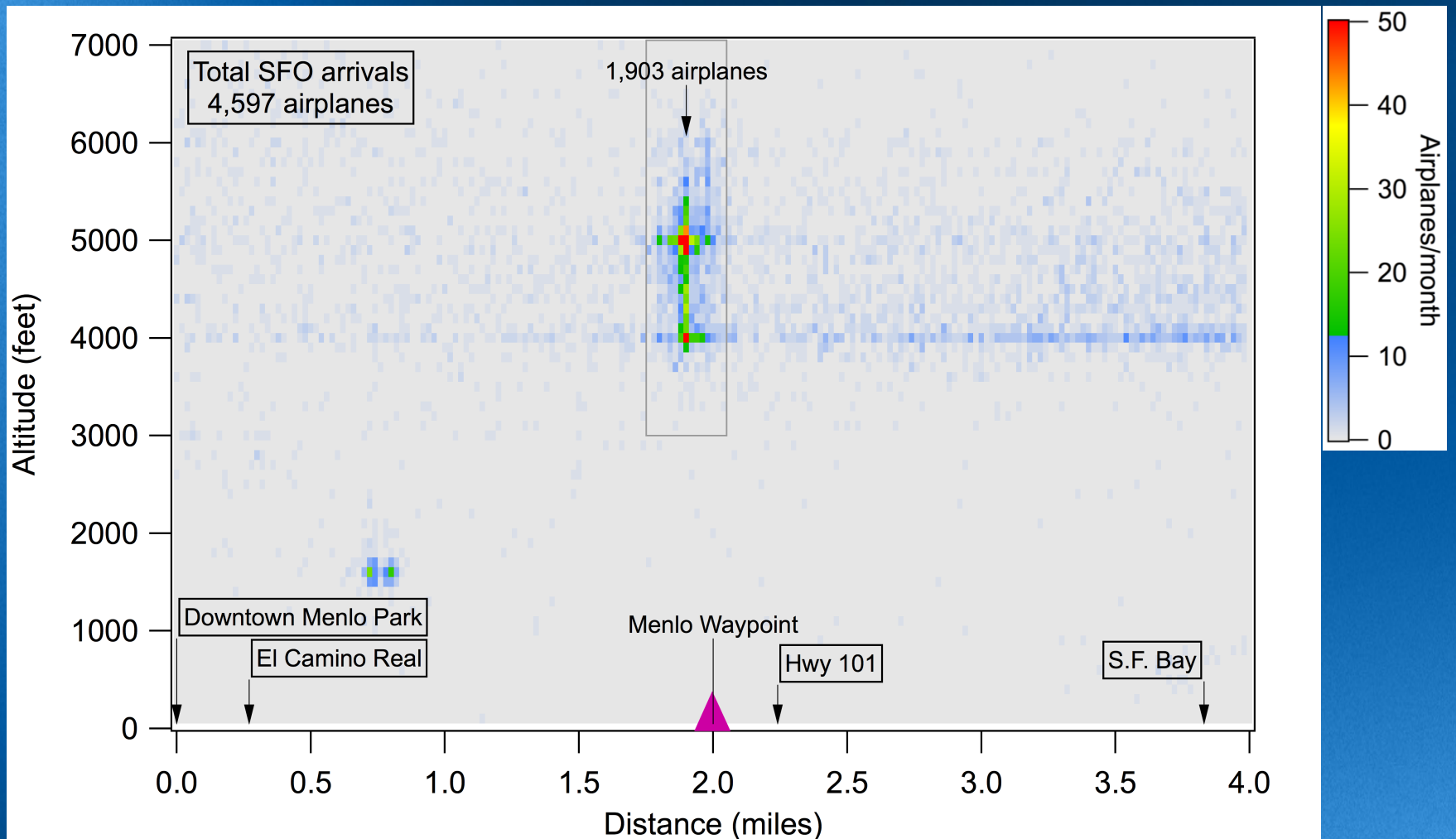


Menlo Waypoint 2011



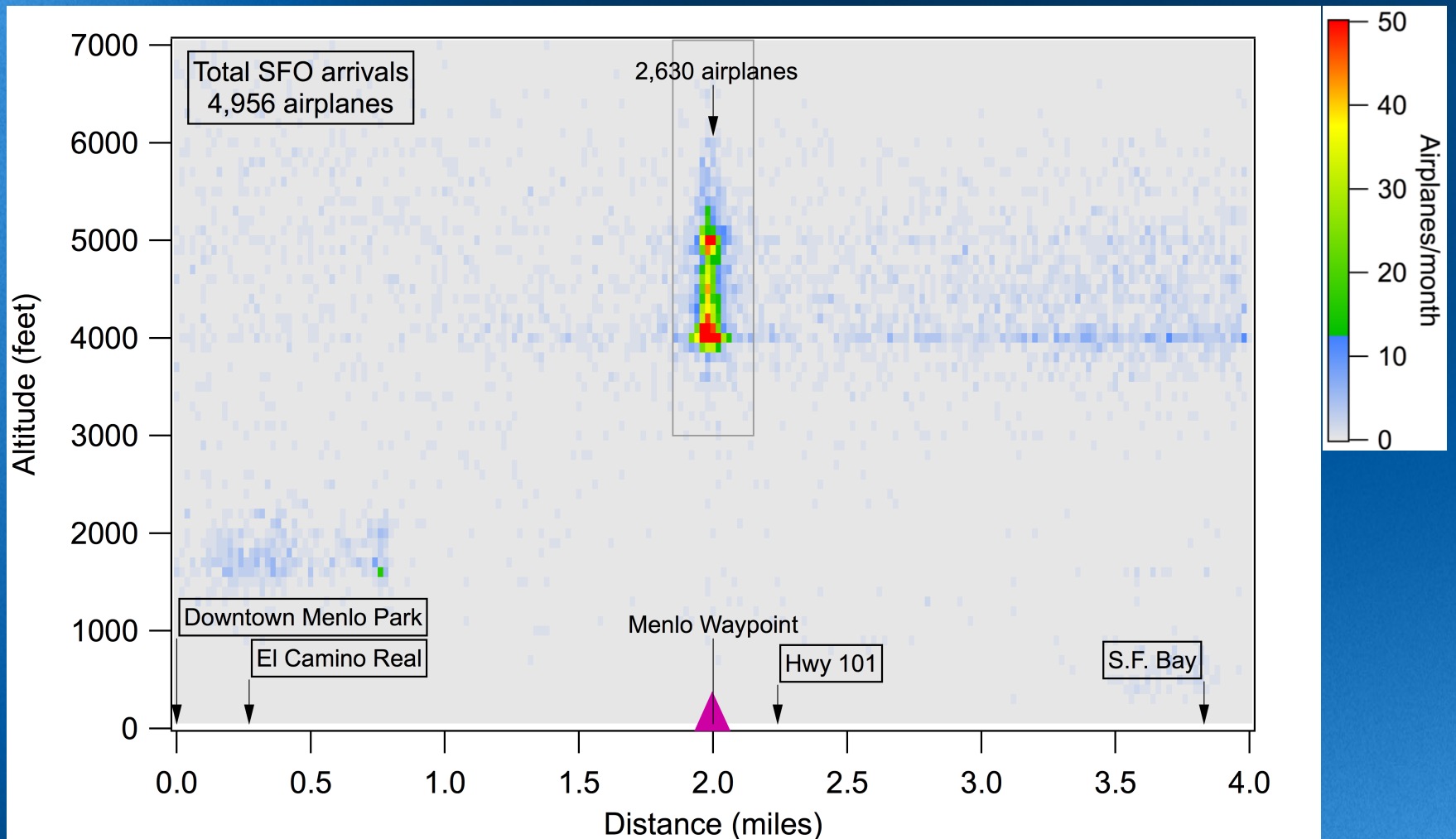
*Average altitude in corridor (grey rectangle) = 5,019 feet
Analysis for month of September.*

Menlo Waypoint 2013



*Average altitude in corridor (grey rectangle) = 4,798 feet
Analysis for month of September.*

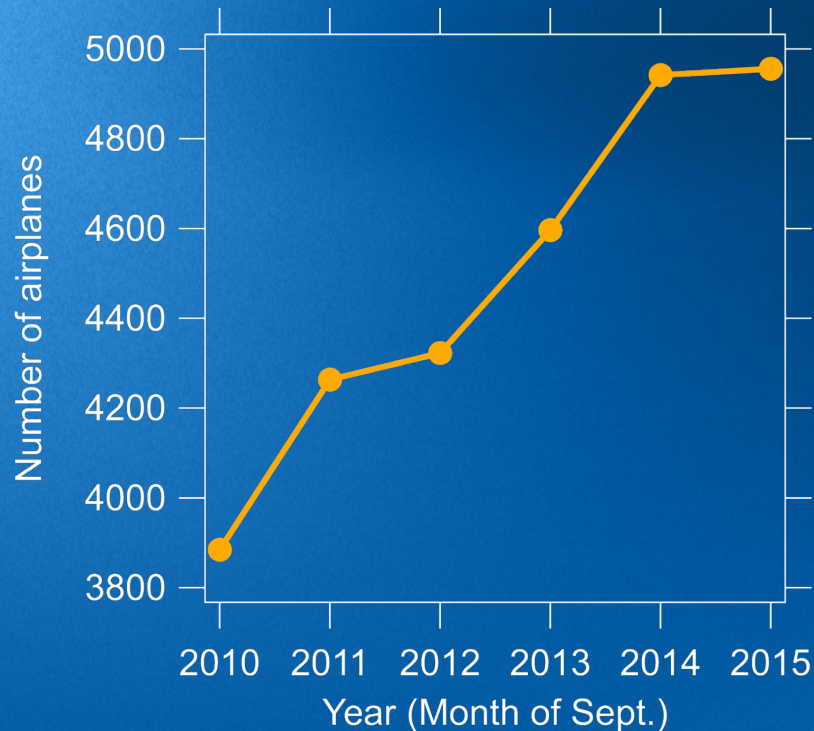
Menlo Waypoint 2015



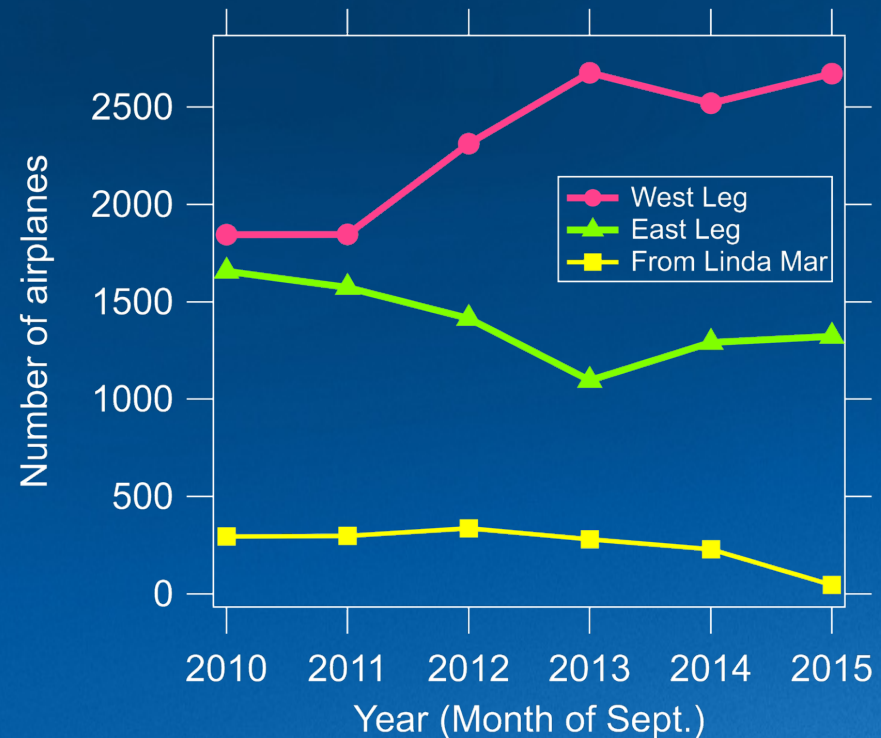
*Average altitude in corridor (grey rectangle) = 4,452 feet
Analysis for month of September.*

Trends over Menlo Waypoint

Total Planes in Window

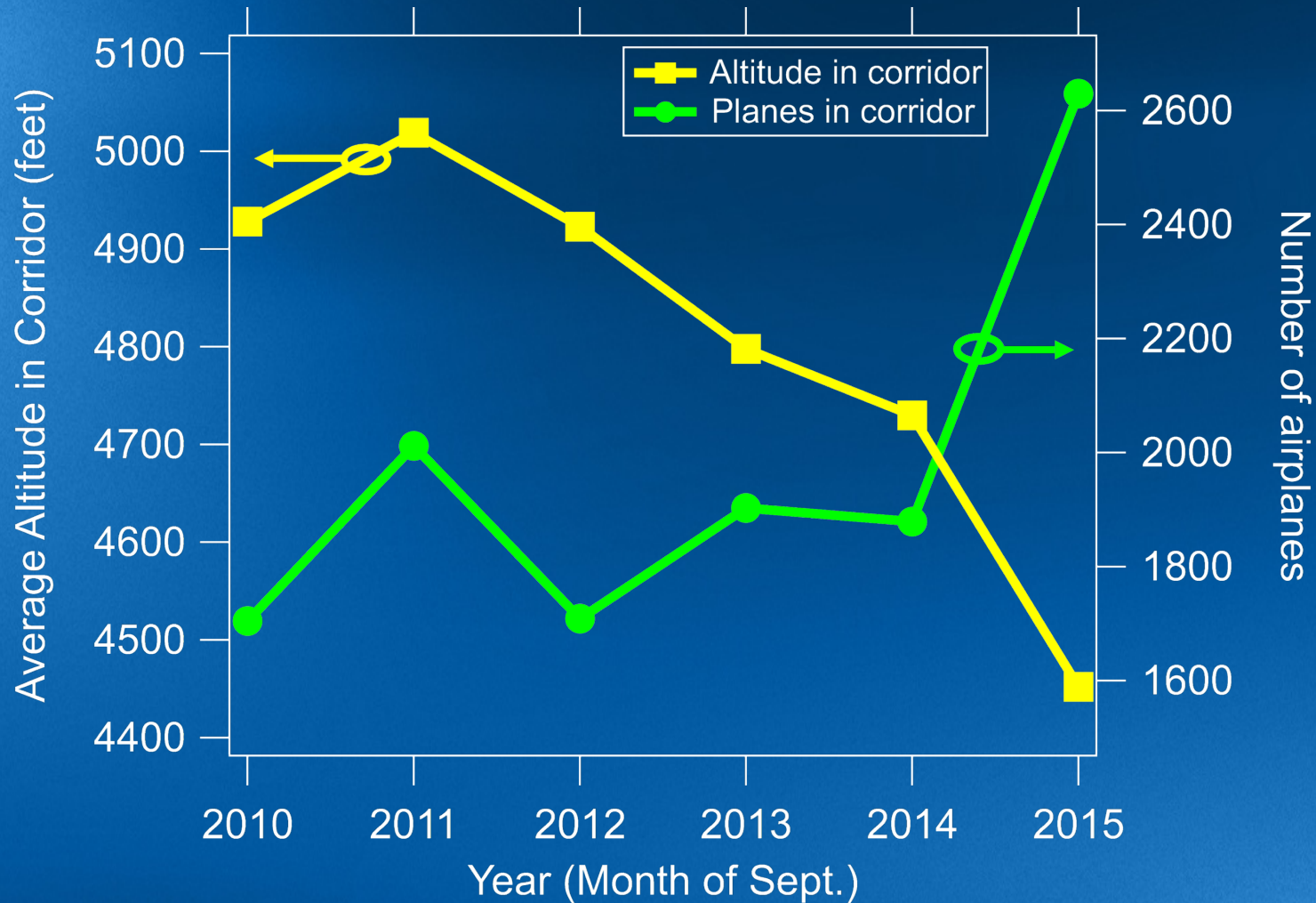


West Leg (over peninsula) vs. East Leg (over S.F. bay)



- *Steady increase in number of airplanes near Menlo waypoint over time.*
- *Increase comes from air traffic flying over peninsula instead of S.F. Bay*

Trends in Bigsur/Serfr Corridor



- *General decrease in altitude in the corridor over Menlo waypoint.*
- *Large increase in concentration in airplanes over Menlo waypoint in 2015.*

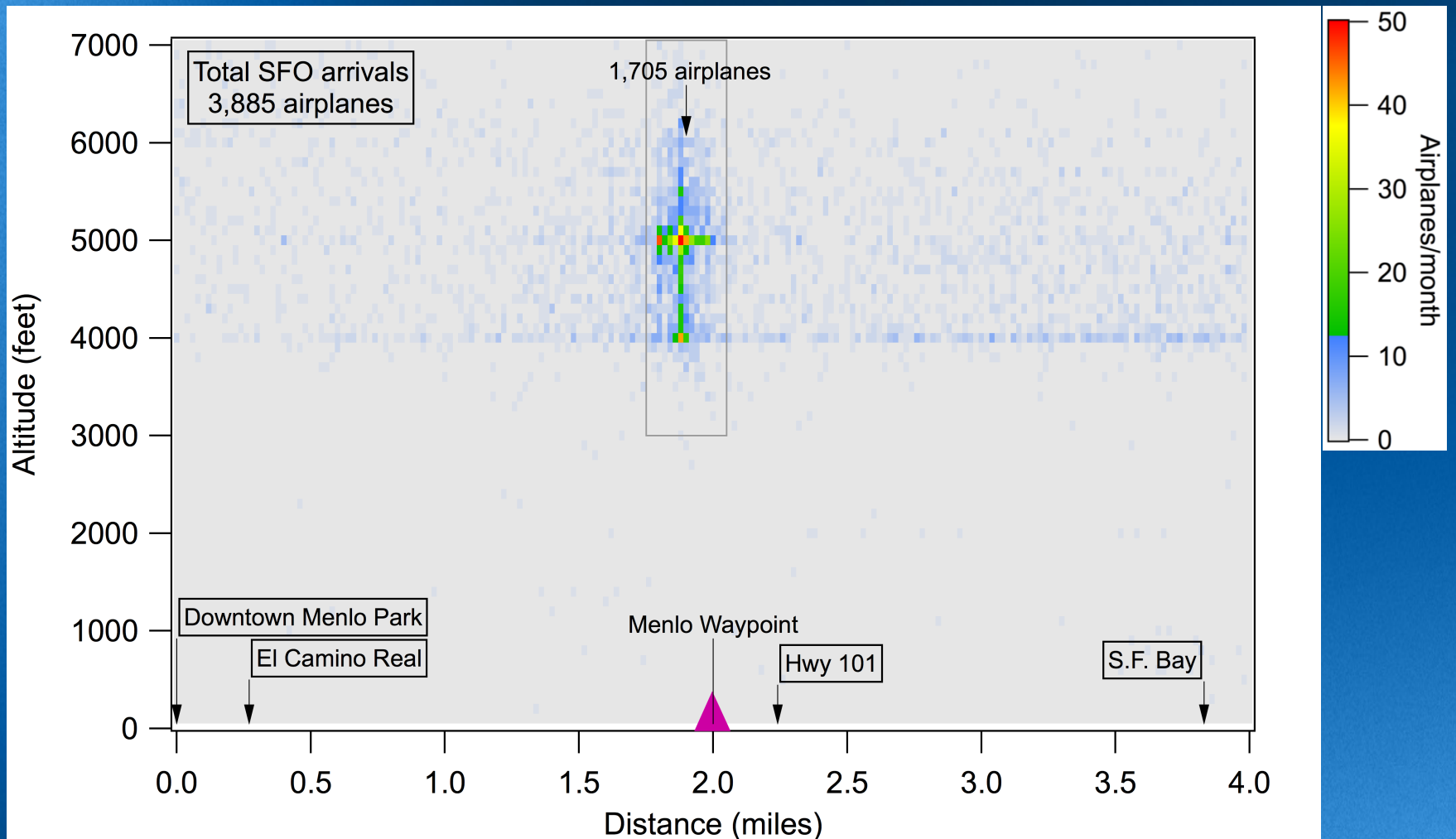
Proposed Solutions That Need More Attention

- Route night flights away from populated areas
 - Over the full length of the bay or ocean (northern and southern arrivals)
 - Using higher altitudes
- Move northern arrivals back to east leg of BDEGA route
 - Over the bay instead of over land
- Use the southern over the bay flight path (FAITH IAF)
- Distribute solutions over large area
 - Herring bone or trident dispersion
 - Use multiple routes to enter bay area,
 - The BDEGA route consists of two routes and Serfr has only one.
 - Do not disperse by using delayed vectoring

Summary

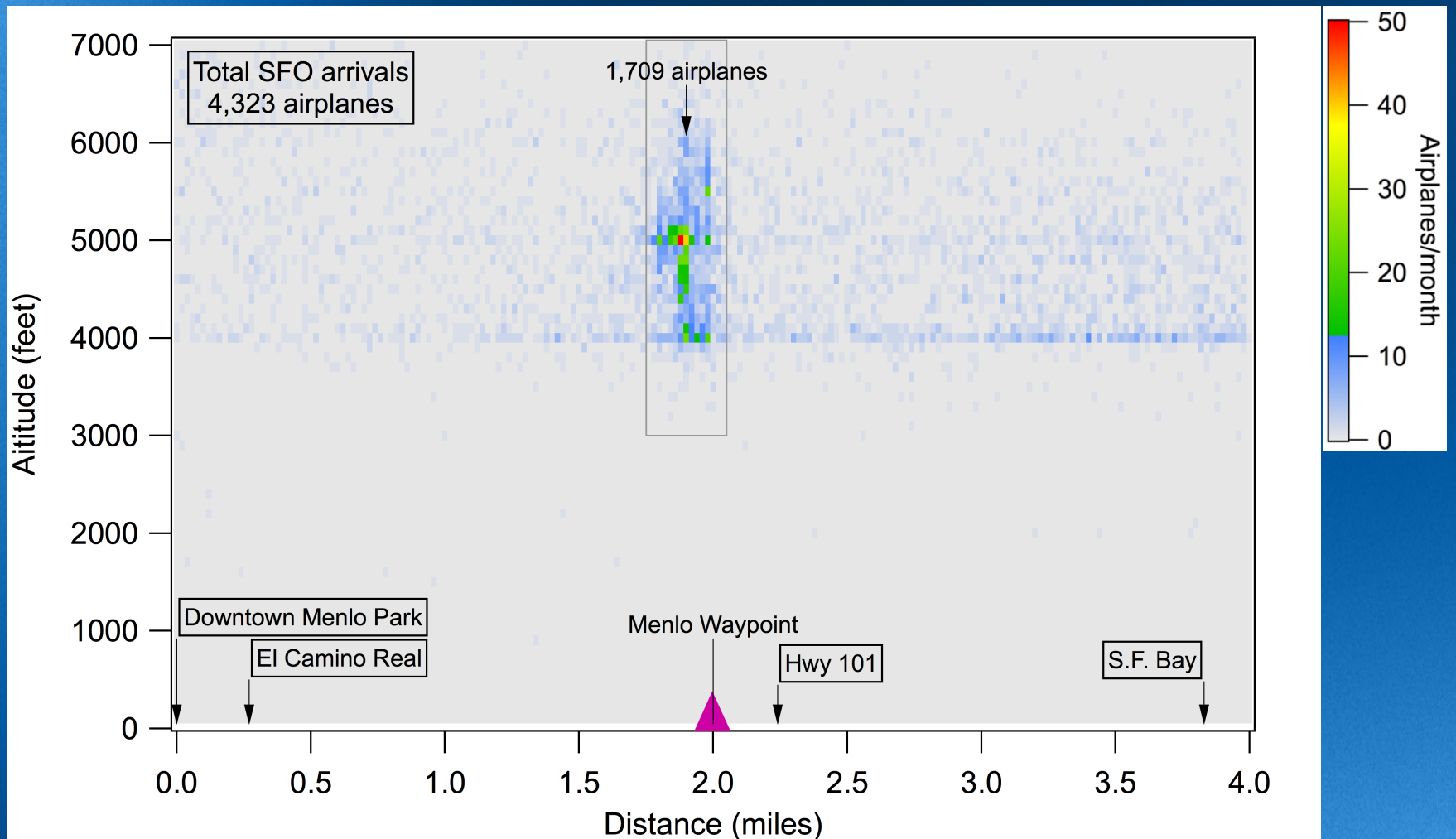
- There has been a steady increase in the number of airplanes flying in the area of the Menlo waypoint.
 - Move northern arrivals back to over S.F. bay (east leg of Bodega route)
- The average altitude of airplanes in the corridor over the Menlo waypoint have been gradually dropping.
 - The majority of altitude reduction over Menlo waypoint was in 2015.
 - Raise the altitude of airplanes during clear days with visual approach.
- The number of airplanes concentrated into the corridor significantly increased in 2015.
 - Introduce additional routes/dispersion (full-length of bay, herring bone)

Menlo Waypoint 2010



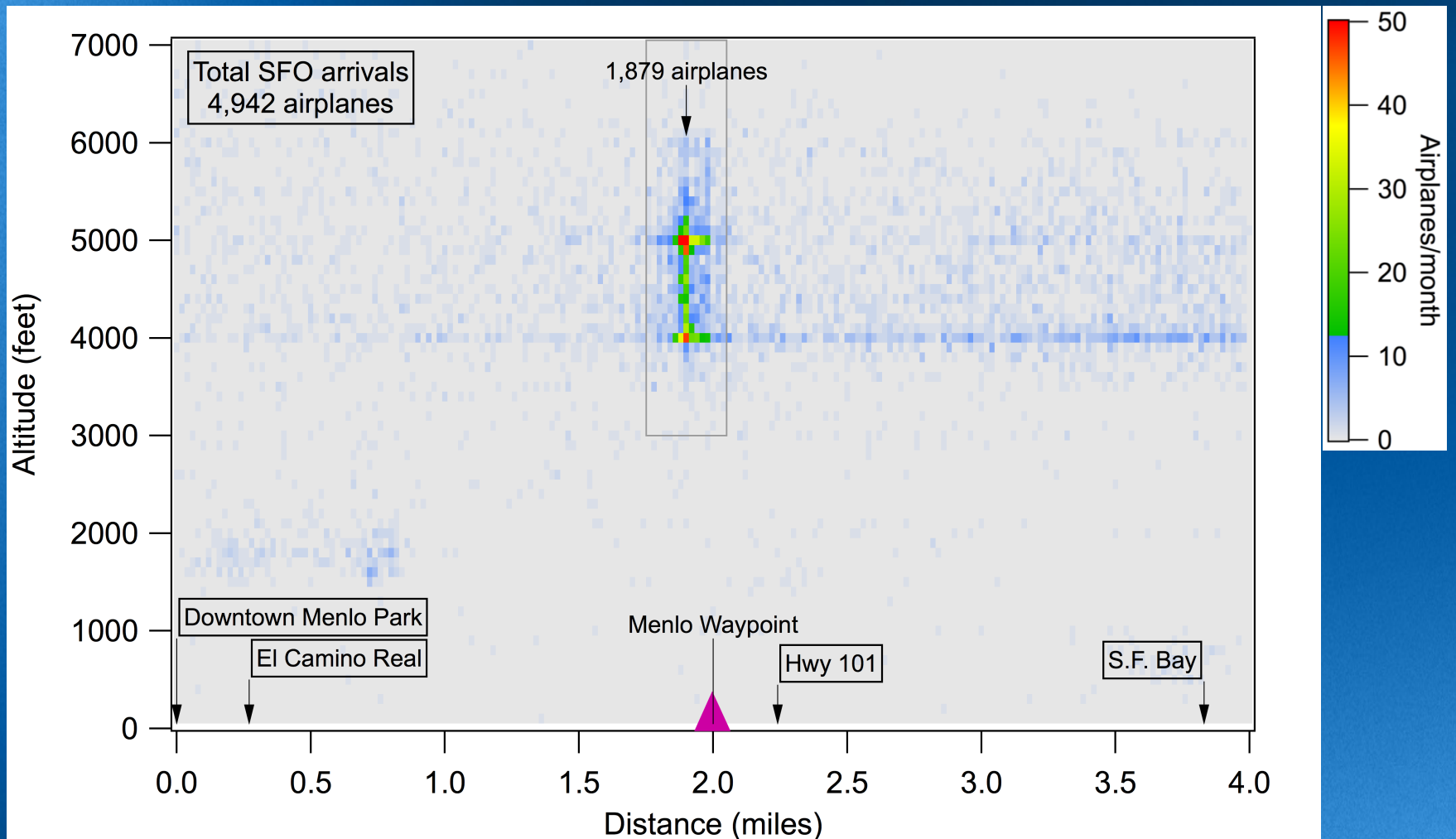
*Average altitude in corridor (grey rectangle) = 4,928 feet
Analysis for month of September.*

Menlo Waypoint 2012



*Average altitude in corridor (grey rectangle) = 4,923 feet
Analysis for month of September.*

Menlo Waypoint 2014



*Average altitude in corridor (grey rectangle) = 4,730 feet
Analysis for month of September.*