

November 2023

London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 8 Additional Submissions (Examination)

8.62 Applicant's response to Issue Specific Hearing 3

Action 29: Historical Flight Path Information

Infrastructure Planning (Examination Procedure) Rules 2010

Application Document Ref: TR020001/APP/8.62

The Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

**London Luton Airport Expansion Development Consent
Order 202x**

**8.62 APPLICANT'S RESPONSE TO ISSUE SPECIFIC HEARING 3
ACTION 29 – HISTORICAL FLIGHT PATH INFORMATION**

Deadline:	Deadline 4
Planning Inspectorate Scheme Reference:	TR020001
Document Reference:	TR020001/APP/8.62
Author:	Luton Rising

Version	Date	Status of Version
Issue 1	November 2023	Additional Submission – Deadline 4

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1 INTRODUCTION

- 1.1 This document provides a summary of flightpath information, including altitude, in response to action point 29 from the Examining Authority **[EV8-008]** following Issue Specific Hearing 3 held on 27 September 2023.
- 1.2 It also provides a response to the Examining Authorities' Written Question NO.1.23 **[PD-010]**, by providing additional information in the form of plot density diagrams for the main departure corridors (Figure 4-1 to Figure 4-11).
- 1.3 As requested by the Examining Authority, publicly available flight path information has been compiled from the airport operator's Quarterly Monitoring Reports which include, from quarter 2 of 2017 onwards, graphical information on flightpaths and altitude. Further information is available in the full Quarterly Monitoring Reports which can be downloaded from the airport operator's website (Ref 1)
- 1.4 Flightpath and altitude maps that show the departures and arrival paths from the Quarterly Monitoring Reports described above are reproduced in this document for every quarter from the 2nd quarter of 2017 to the 1st quarter of 2023, for easterly and westerly operations. These derive directly from radar information.
- 1.5 These maps show that whilst there is a typical spread of flightpath and altitude across individual flights, the general trend of the spread below 5,000ft is broadly unchanged over time. Above 5,000ft some changes can be observed due to the Swanwick Airspace Improvement Programme - Airspace Deployment 6 (AD6) airspace change that was implemented in February 2022.
- 1.6 On westerly arrivals, aircraft are typically at 3,000 ft at the eastern border of Stevenage, around Walkern, and this remains broadly unchanged, with some aircraft taking a slightly steeper arrival from the 4th quarter of 2021 and not descending to 3,000 ft until closer to the runway, past Stevenage. This is shown in Figure 2-1 - Figure 2-24.
- 1.7 On westerly departures, aircraft are typically at 3,000 ft at Markyate, and this remains broadly unchanged. This is shown in Figure 2-1 - Figure 2-24.
- 1.8 On easterly arrivals, aircraft are typically at 3,000 ft at Dagnall and Whipsnade from 2017, and this remains broadly unchanged, with some aircraft taking a slightly steeper arrival from the 4th quarter of 2021 and not descending to 3,000 ft until closer to the runway. This is shown in Figure 3-1 - Figure 3-24.
- 1.9 On easterly departures, aircraft are typically at 3,000 ft at St Pauls Walden and Rush Green, and this remains broadly unchanged. This is shown in Figure 3-1 - Figure 3-24

2 WESTERLY OPERATIONS FLIGHTPATHS AND ALTITUDE MAPS

2.1 2017 Quarter 2

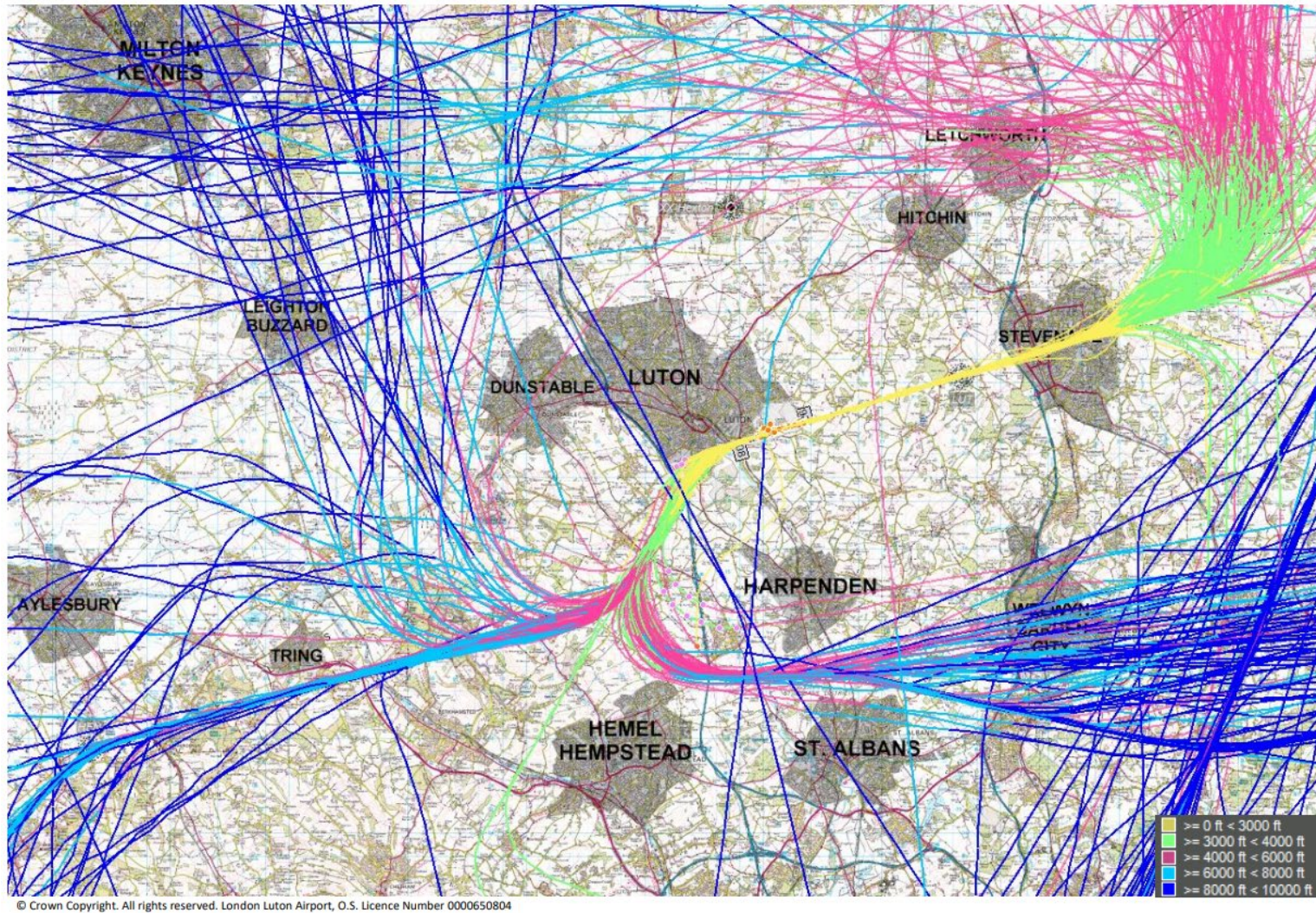


Figure 2-1: 2nd Quarter 2017 Altitude Map Westerly Operations

Quarter 3

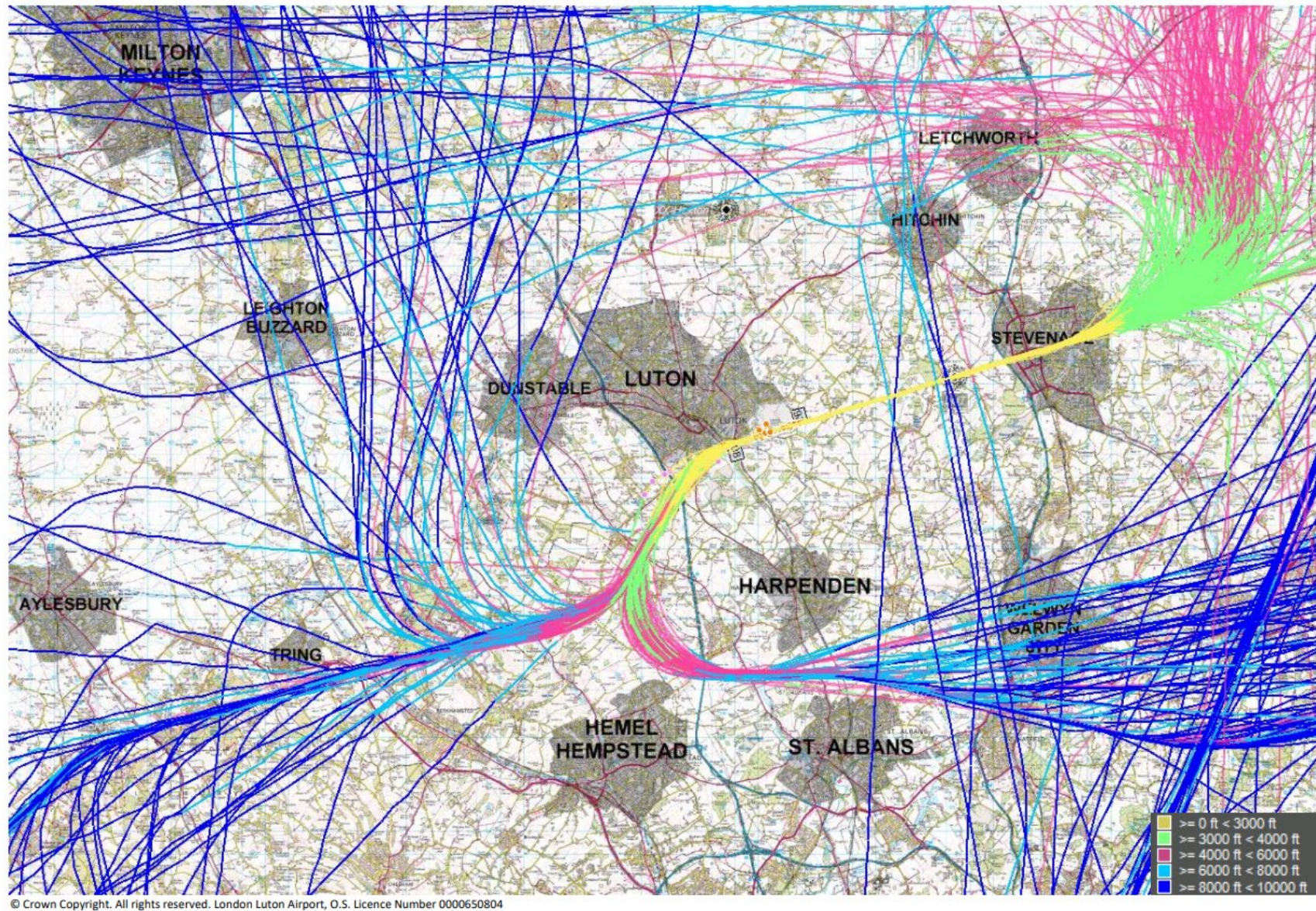
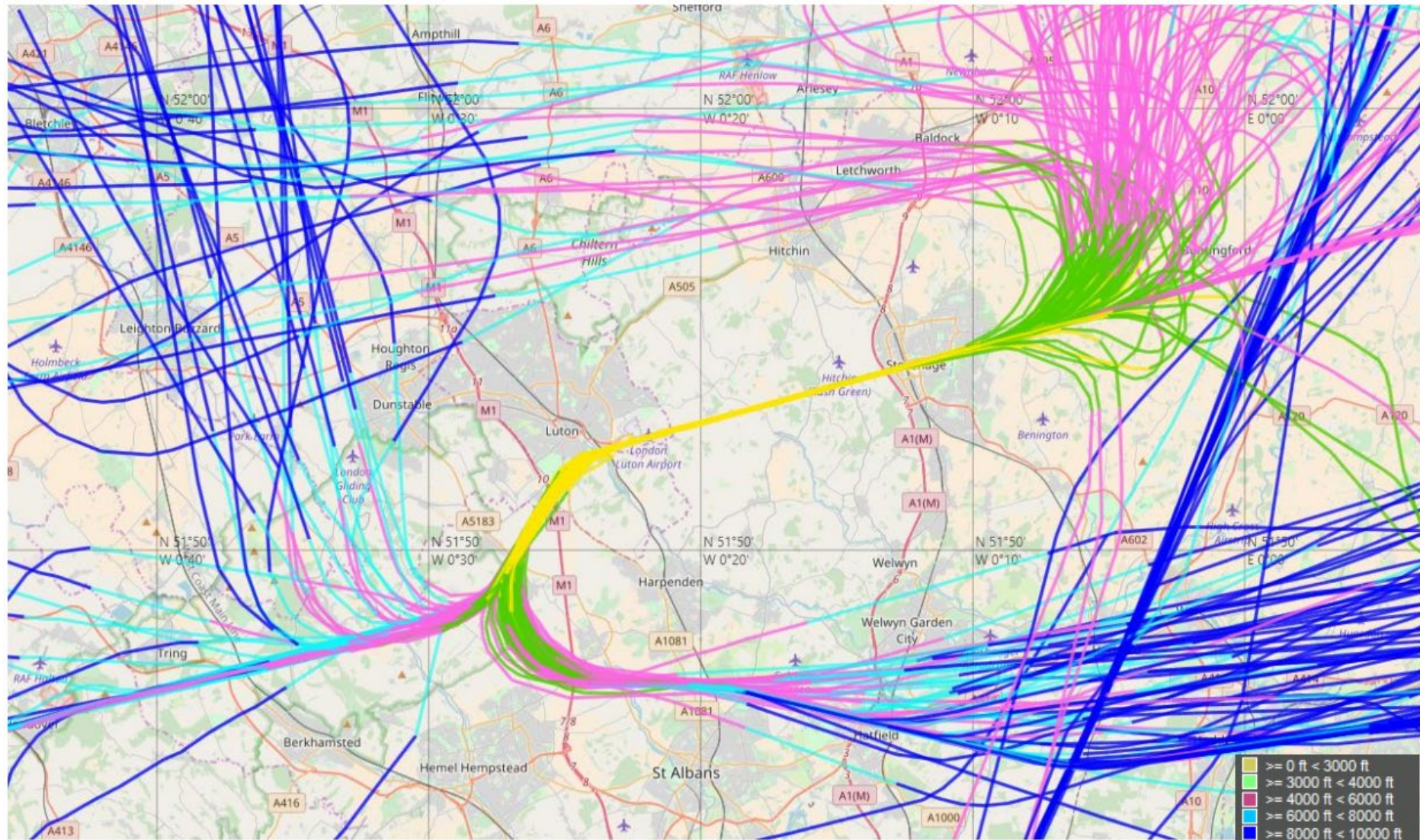


Figure 2-2: 3rd Quarter 2017 Altitude Map Westerly Operations

Quarter 4



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Figure 2-3: 4th Quarter 2017 Altitude Map Westerly Operations

2.2 2018
Quarter 1

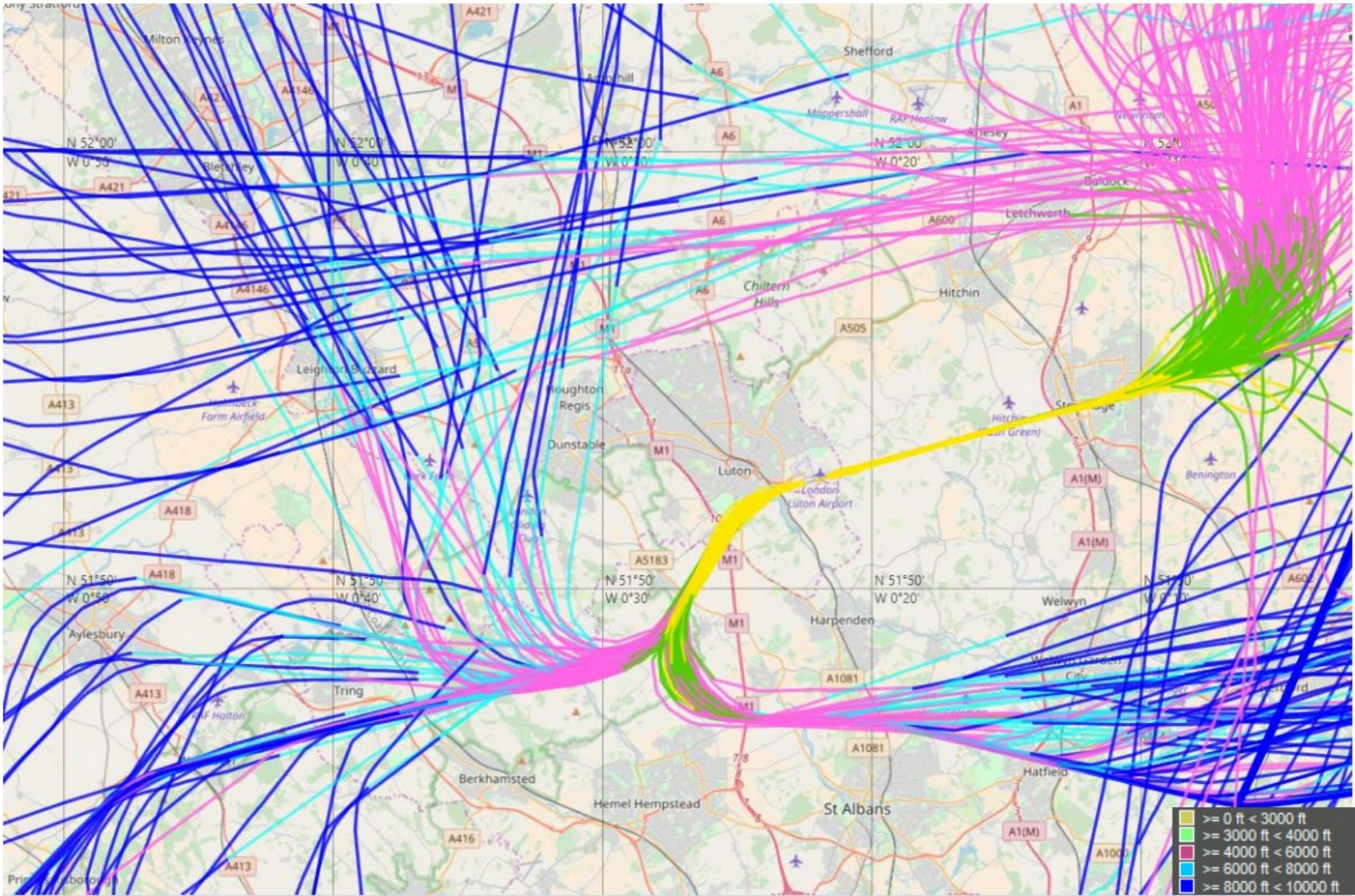


Figure 2-4: 1st Quarter 2018 Altitude Map Westerly Operations

Quarter 2

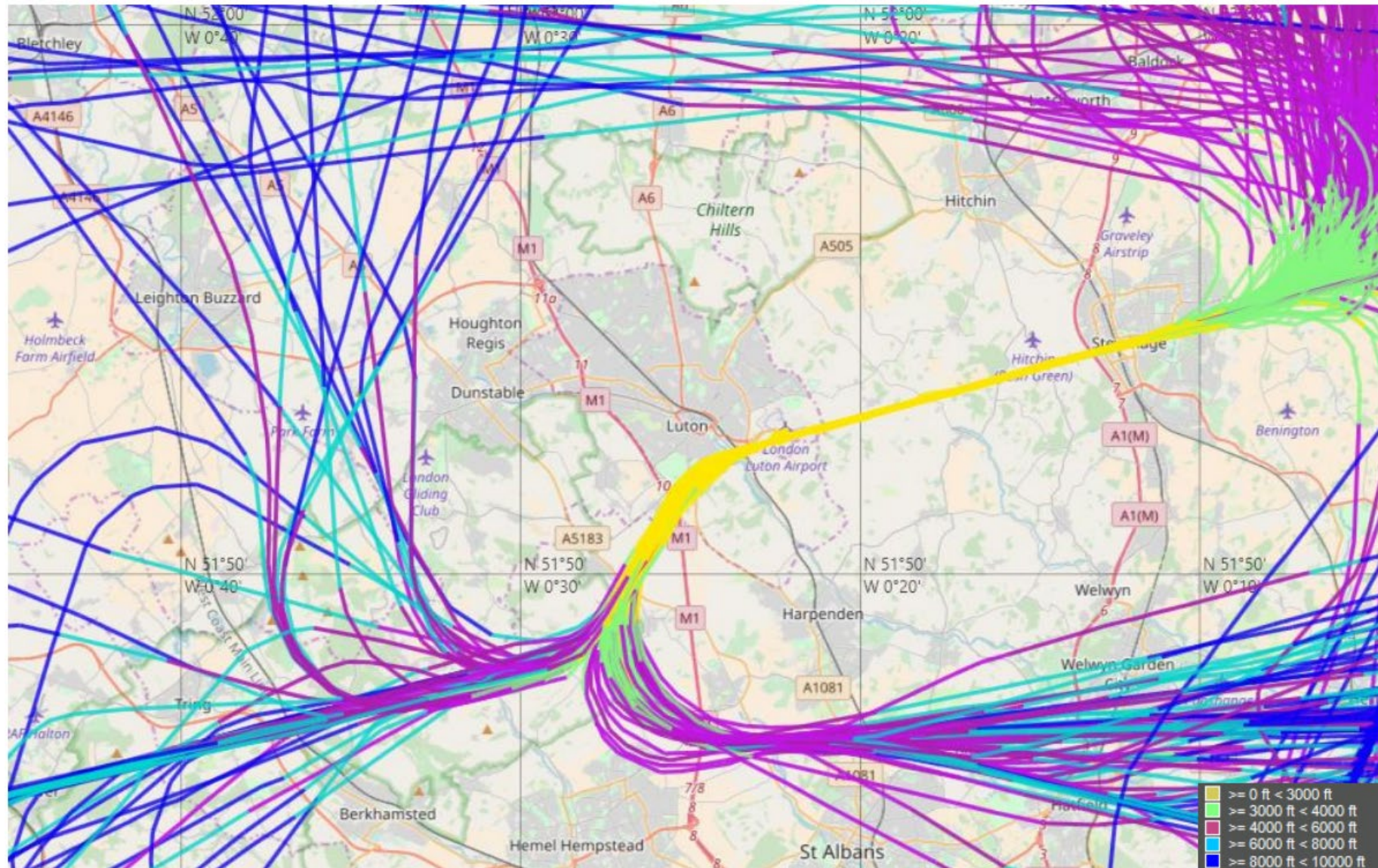


Figure 2-5: 2nd Quarter 2018 Altitude Map Westerly Operations

Quarter 3

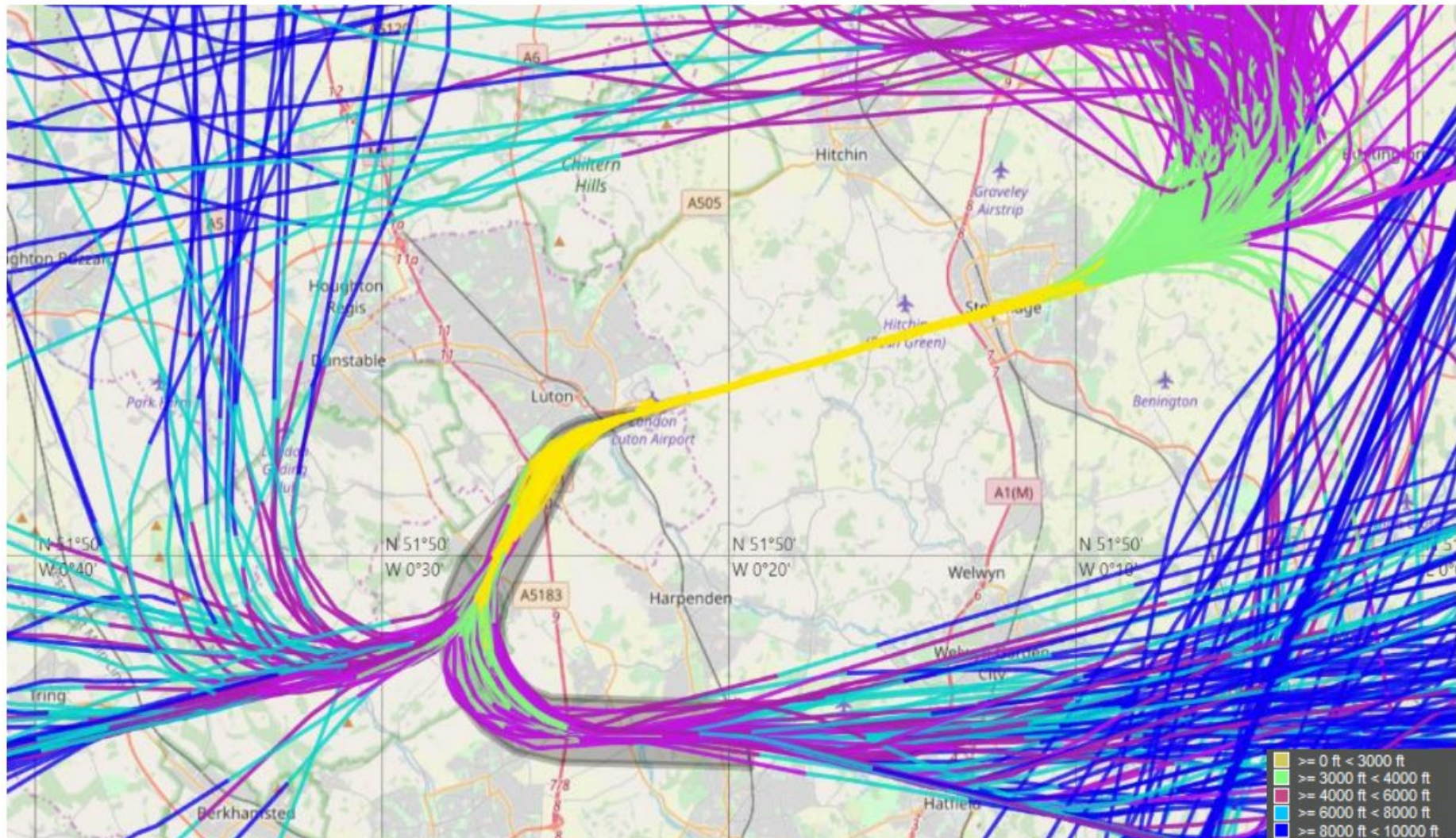


Figure 2-6: 3rd Quarter 2018 Altitude Map Westerly Operations

Quarter 4

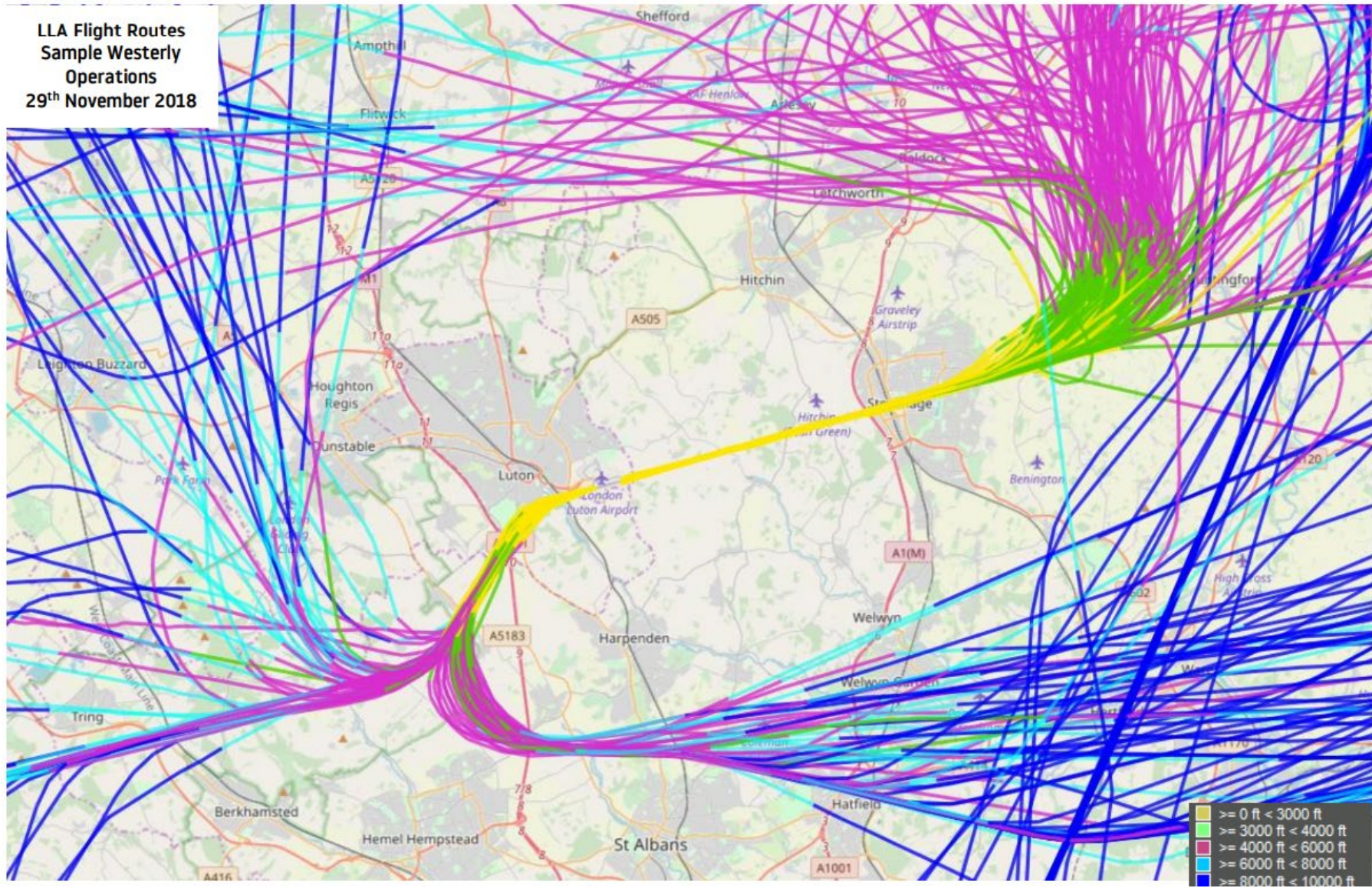


Figure 2-7: 4th Quarter 2018 Altitude Map Westerly Operations

2.3 2019 Quarter 1

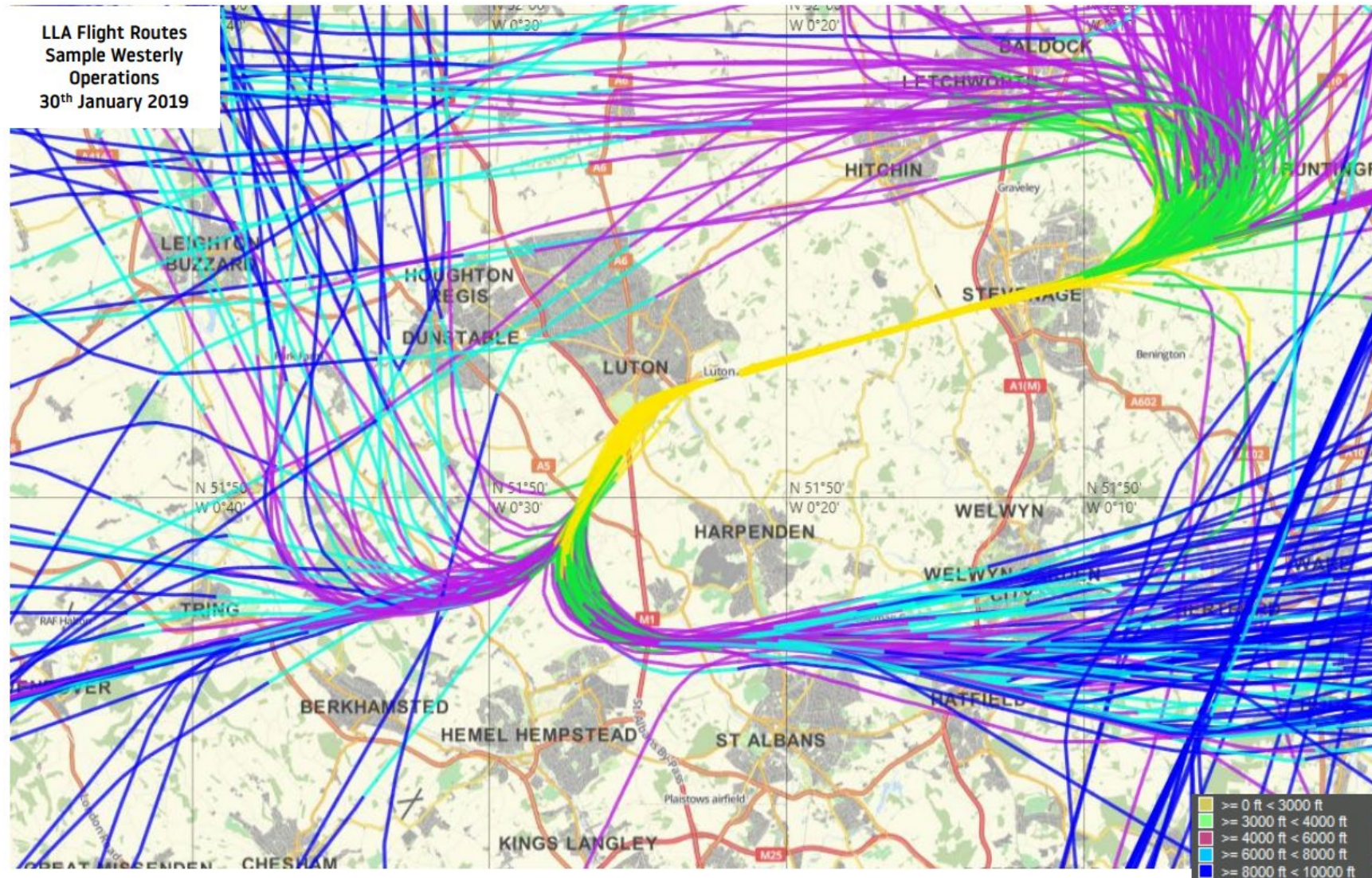


Figure 2-8: 1st Quarter 2019 Altitude Map Westerly Operations

Quarter 2

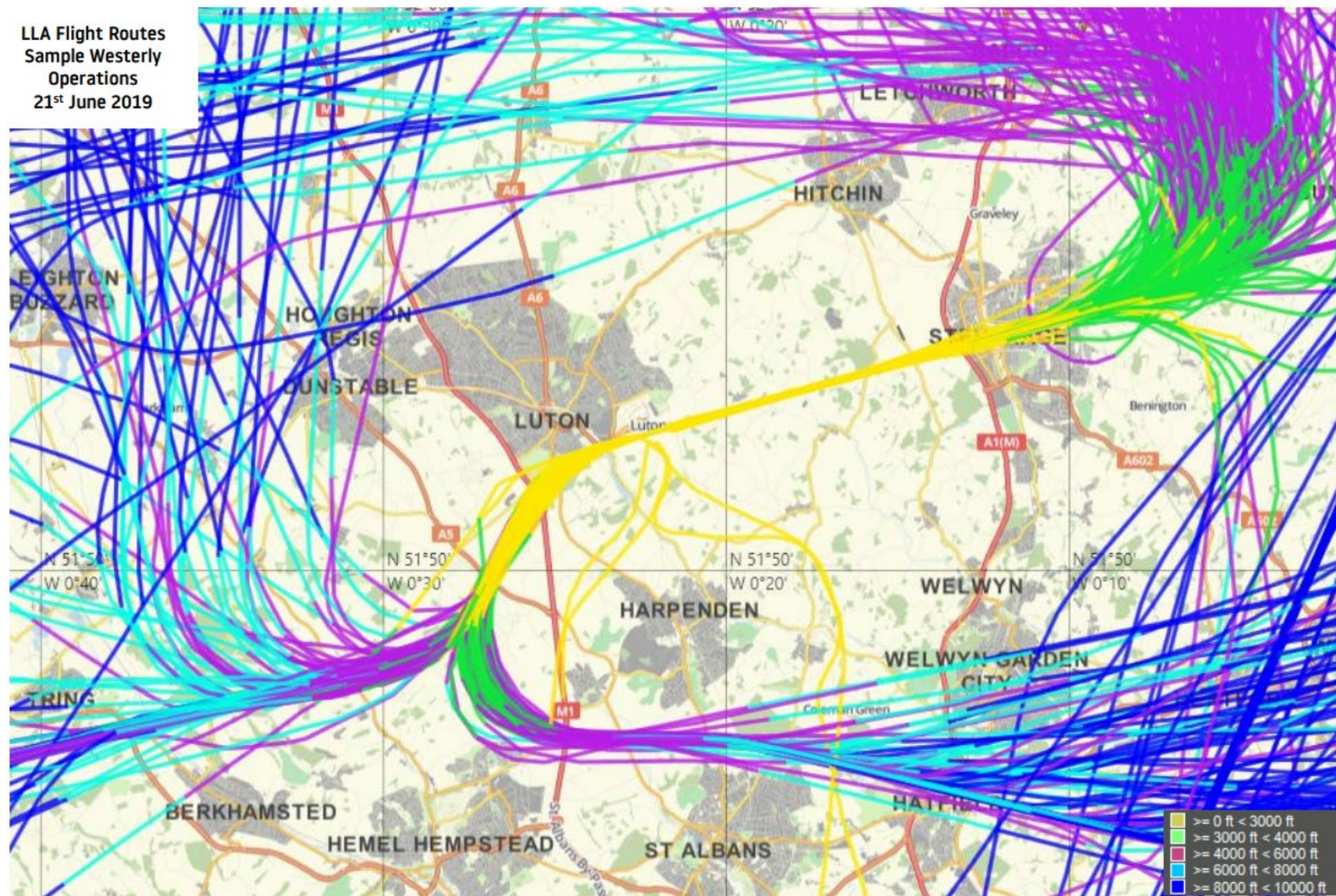


Figure 2-9: 2nd Quarter 2019 Altitude Map Westerly Operations

Quarter 3

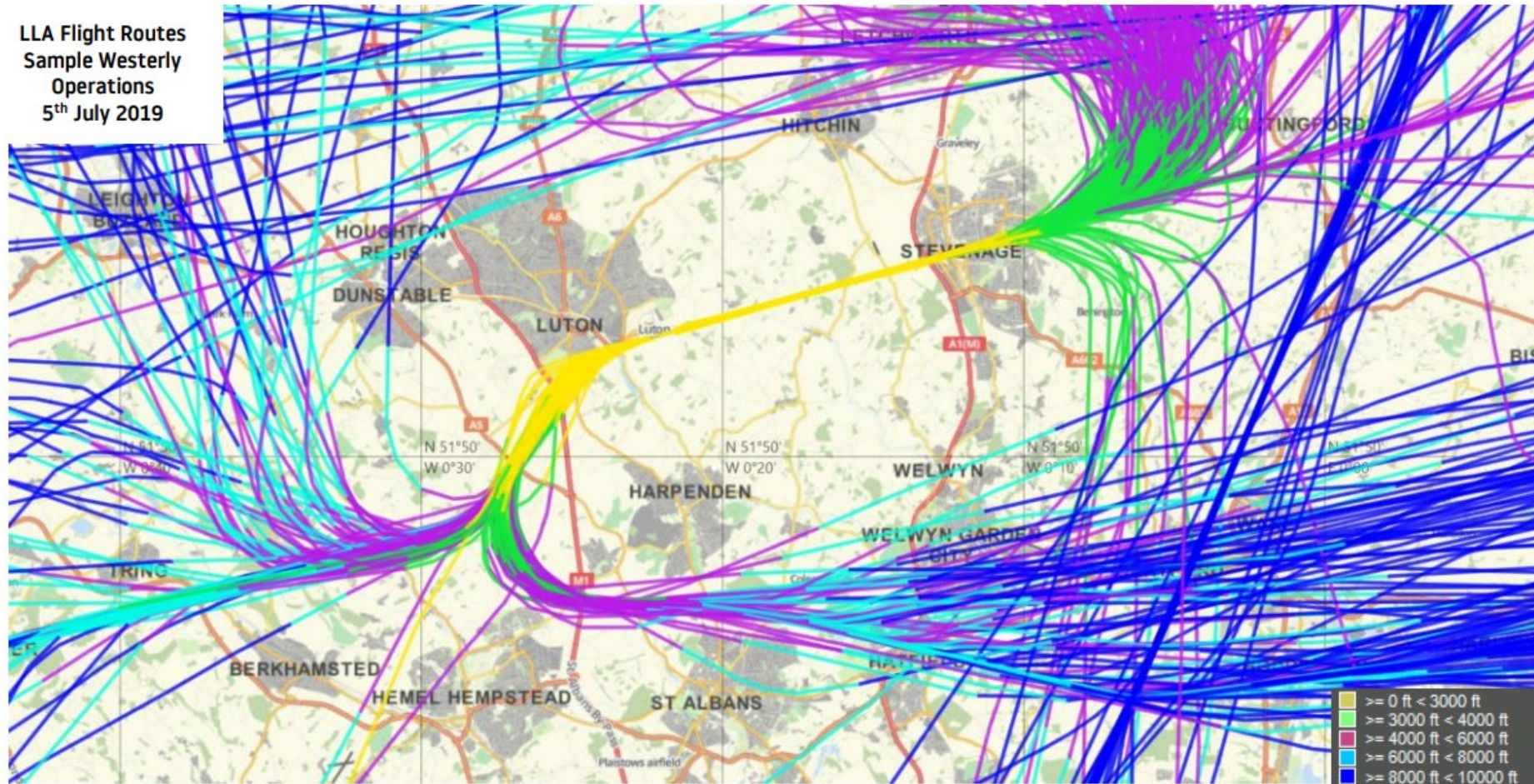


Figure 2-10: 3rd Quarter 2019 Altitude Map Westerly Operations

Quarter 4

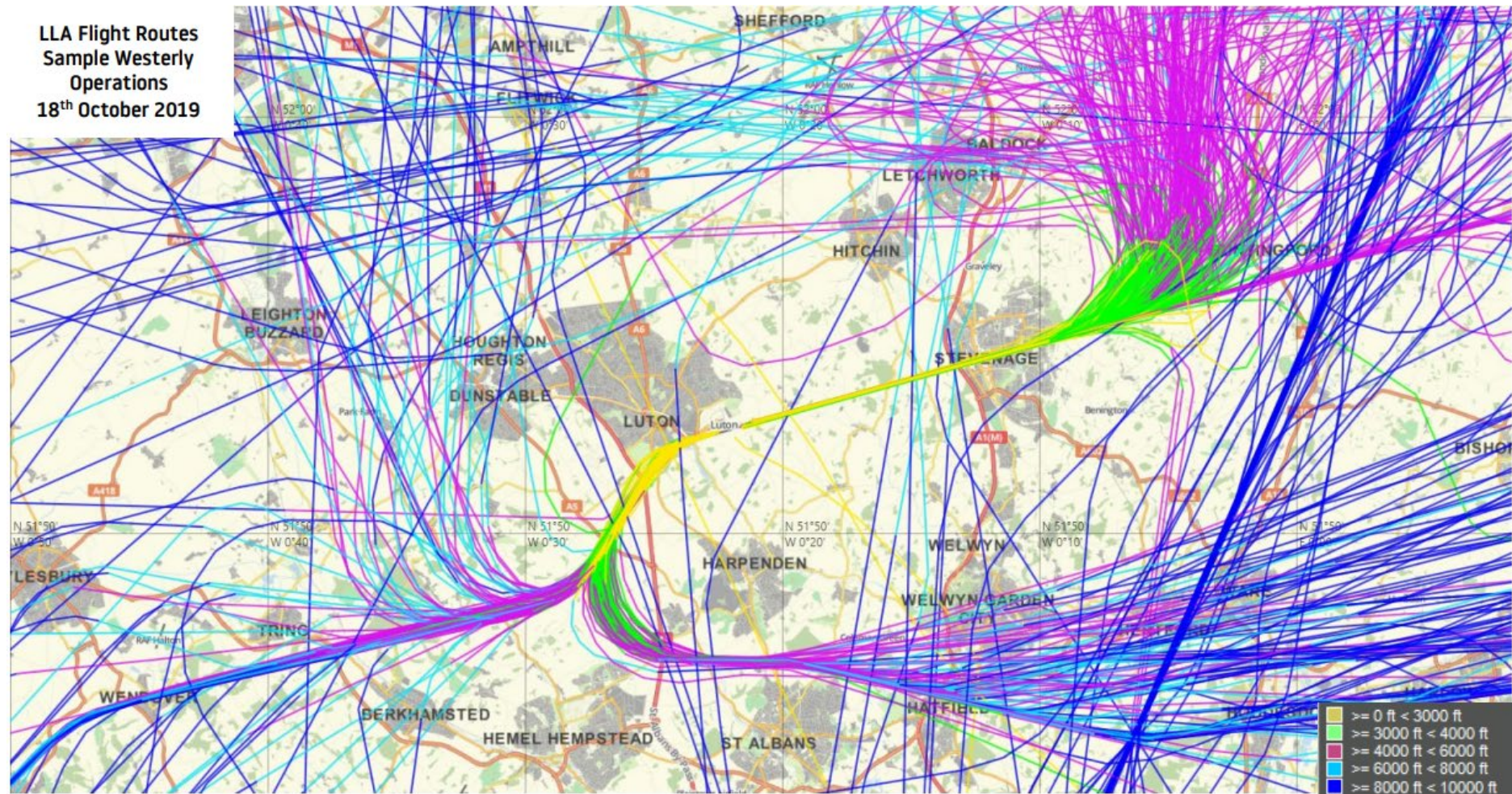


Figure 2-11: 4th Quarter 2019 Altitude Map Westerly Operations

2.4 2020 Quarter 1

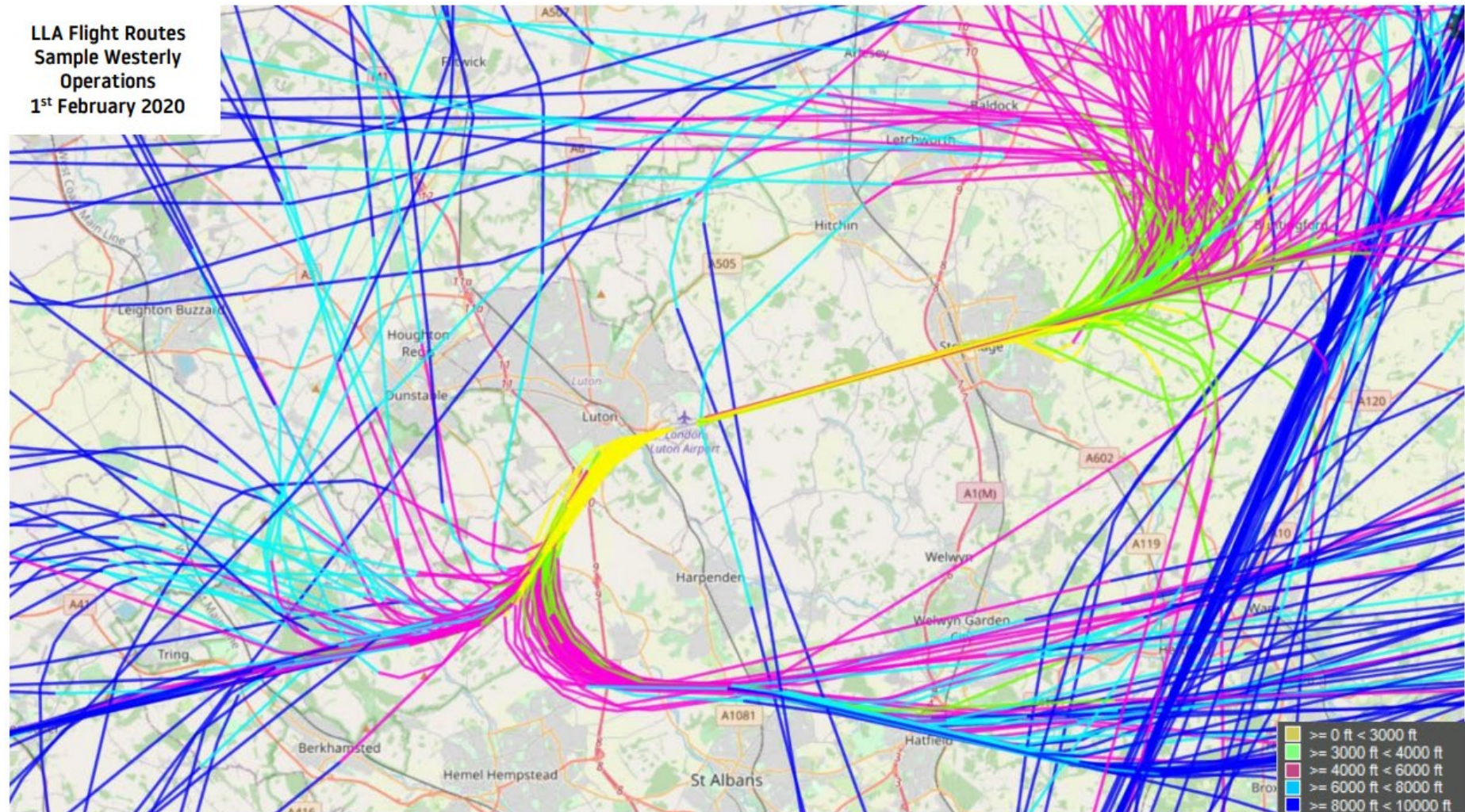


Figure 2-12: 1st Quarter 2020 Altitude Map Westerly Operations

Quarter 2

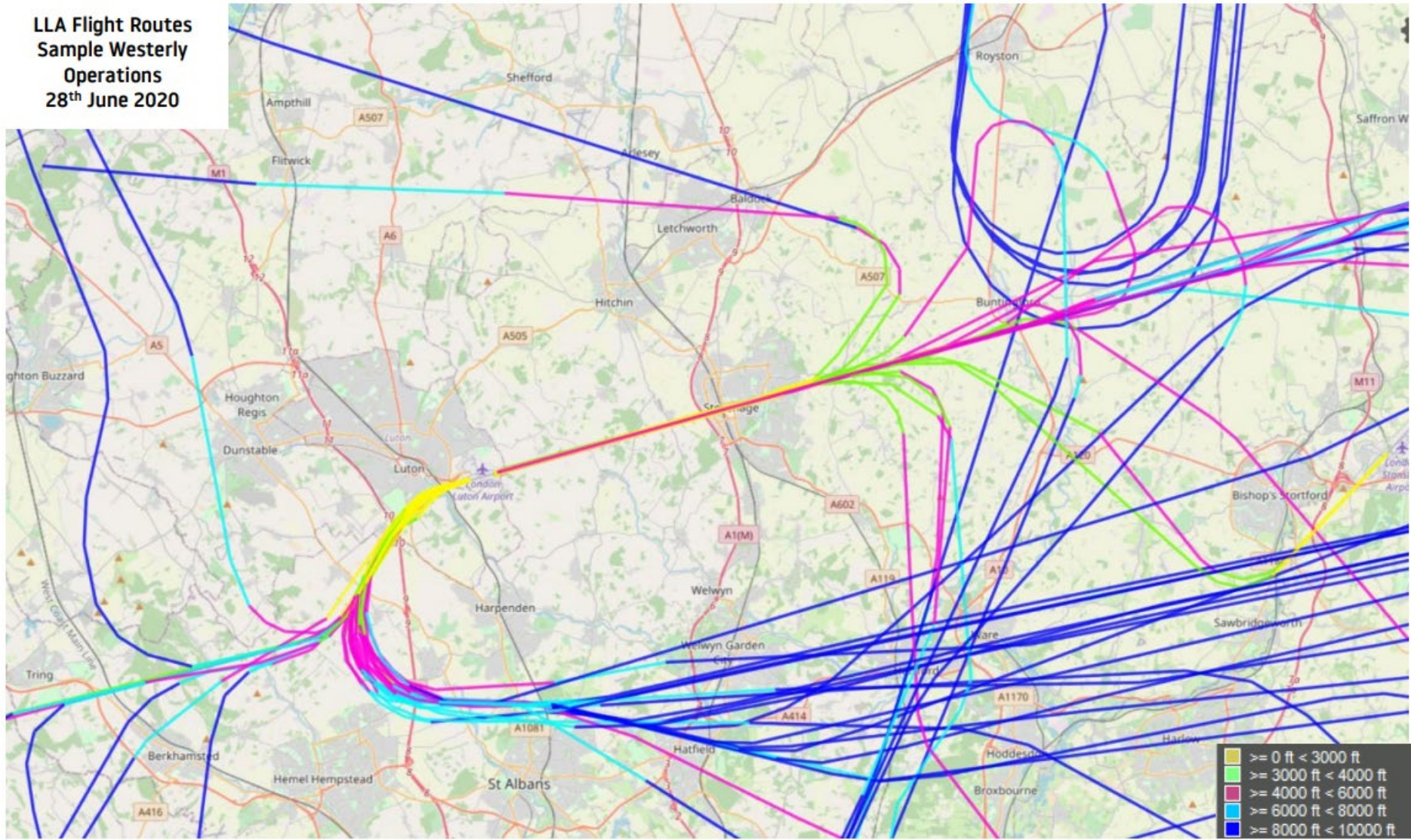


Figure 2-13: 2nd Quarter 2020 Altitude Map Westerly Operations

Quarter 3

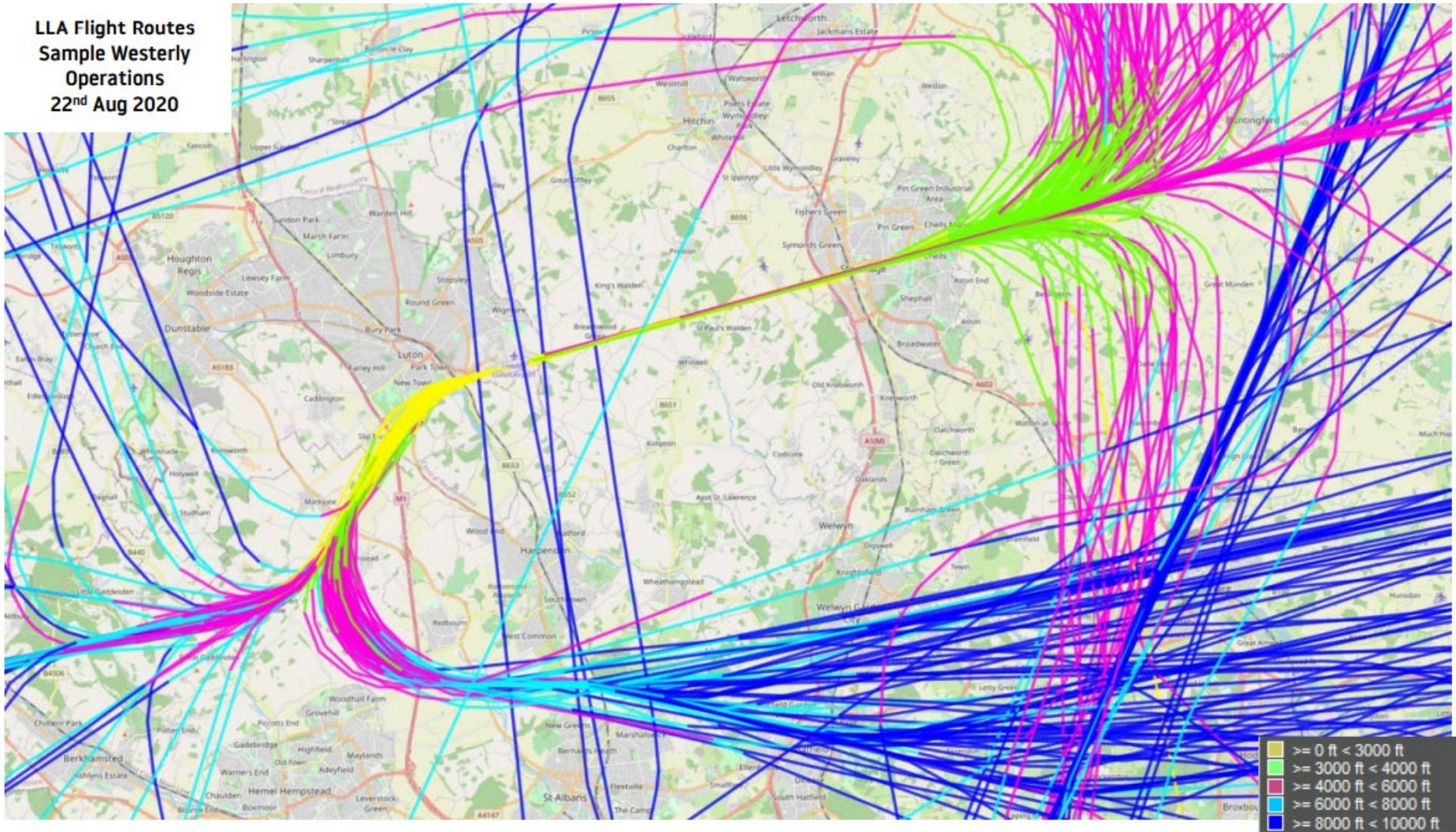


Figure 2-14: 3rd Quarter 2020 Altitude Map Westerly Operations

Quarter 4

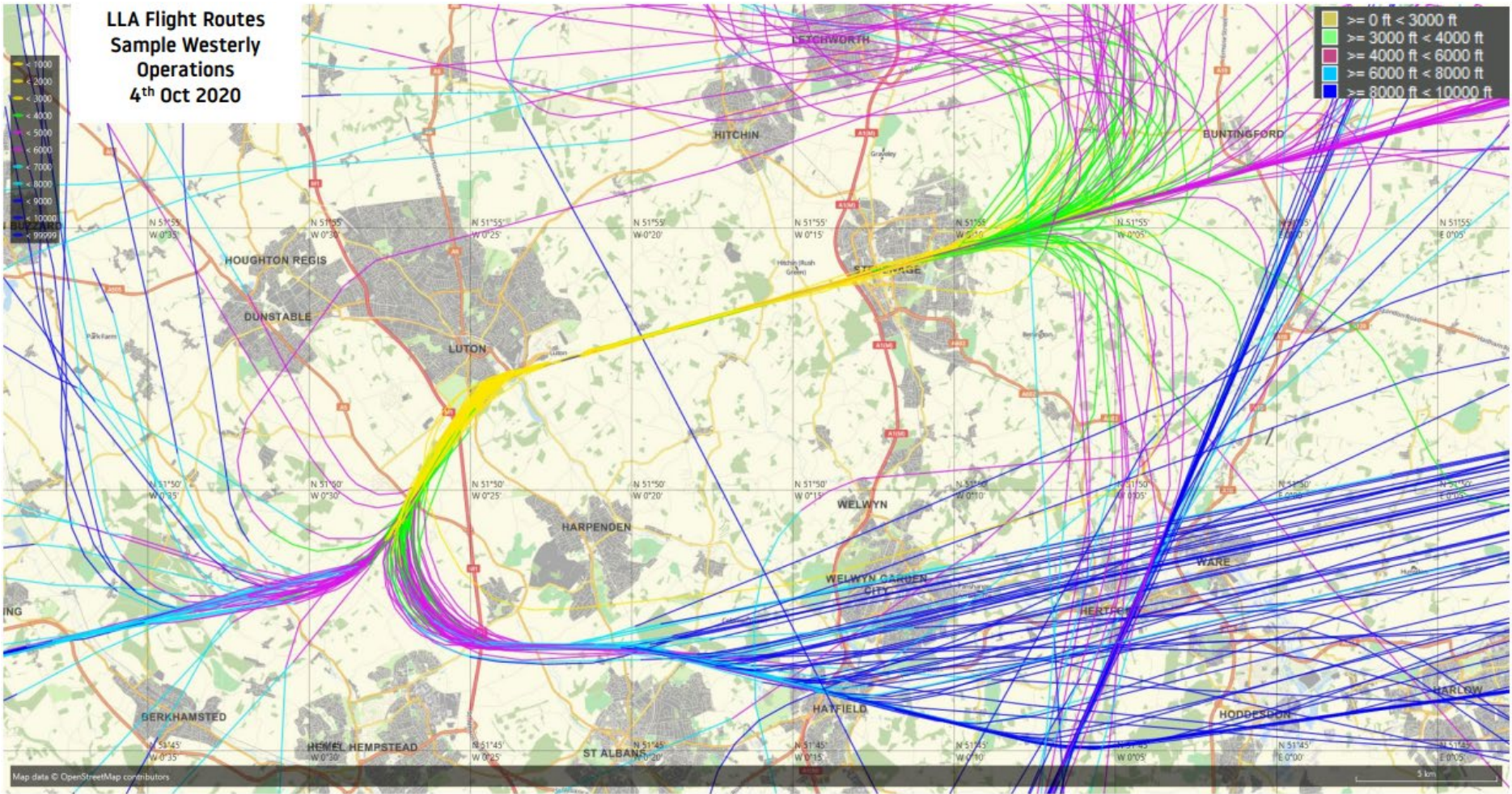


Figure 2-15: 4th Quarter 2020 Altitude Map Westerly Operations

2.5 2021 Quarter 1

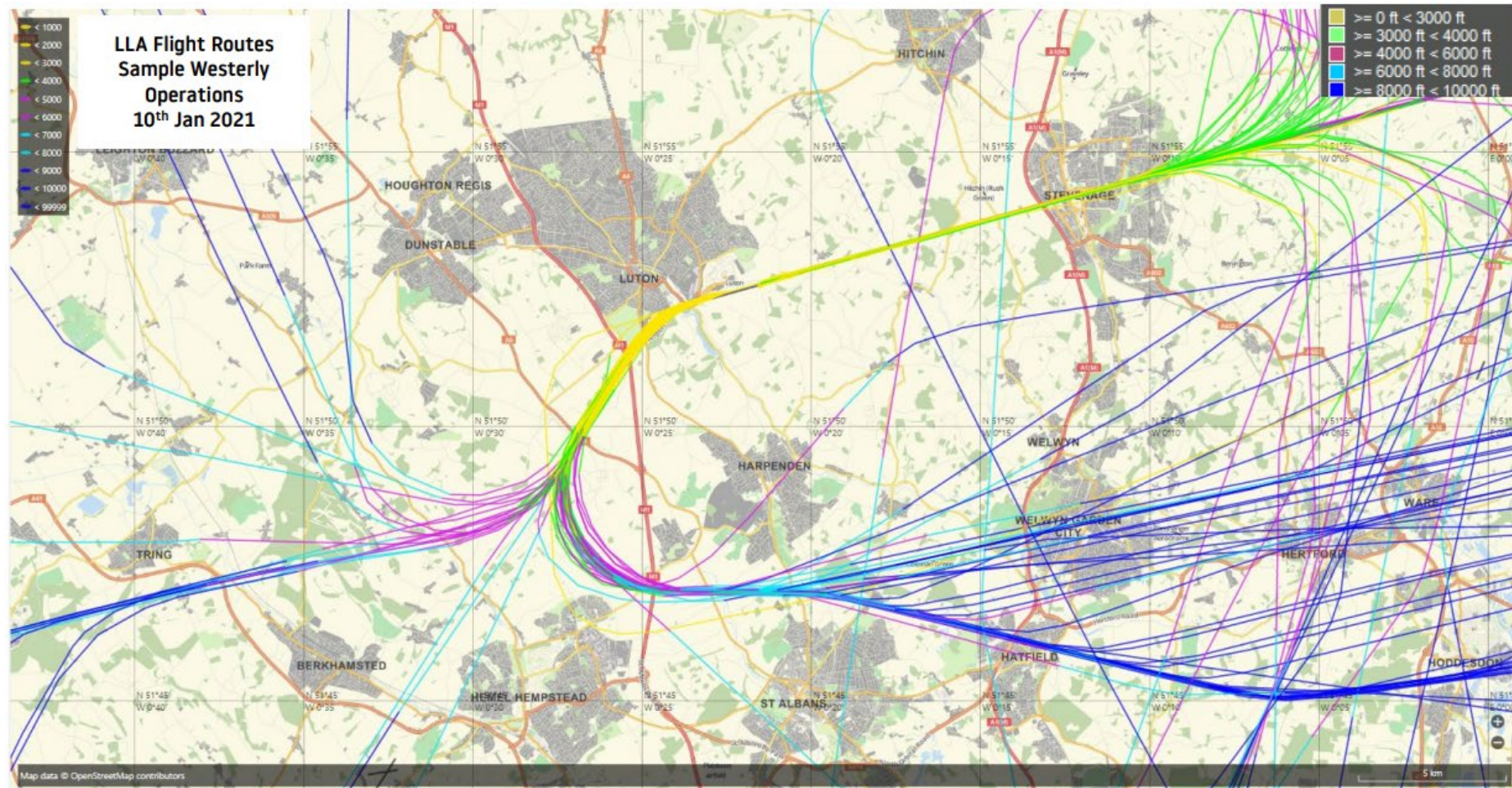


Figure 2-16: 1st Quarter 2021 Altitude Map Westerly Operations

Quarter 2

**LLA Flight Routes
Sample Westerly
Operations
5th Jun 2021**

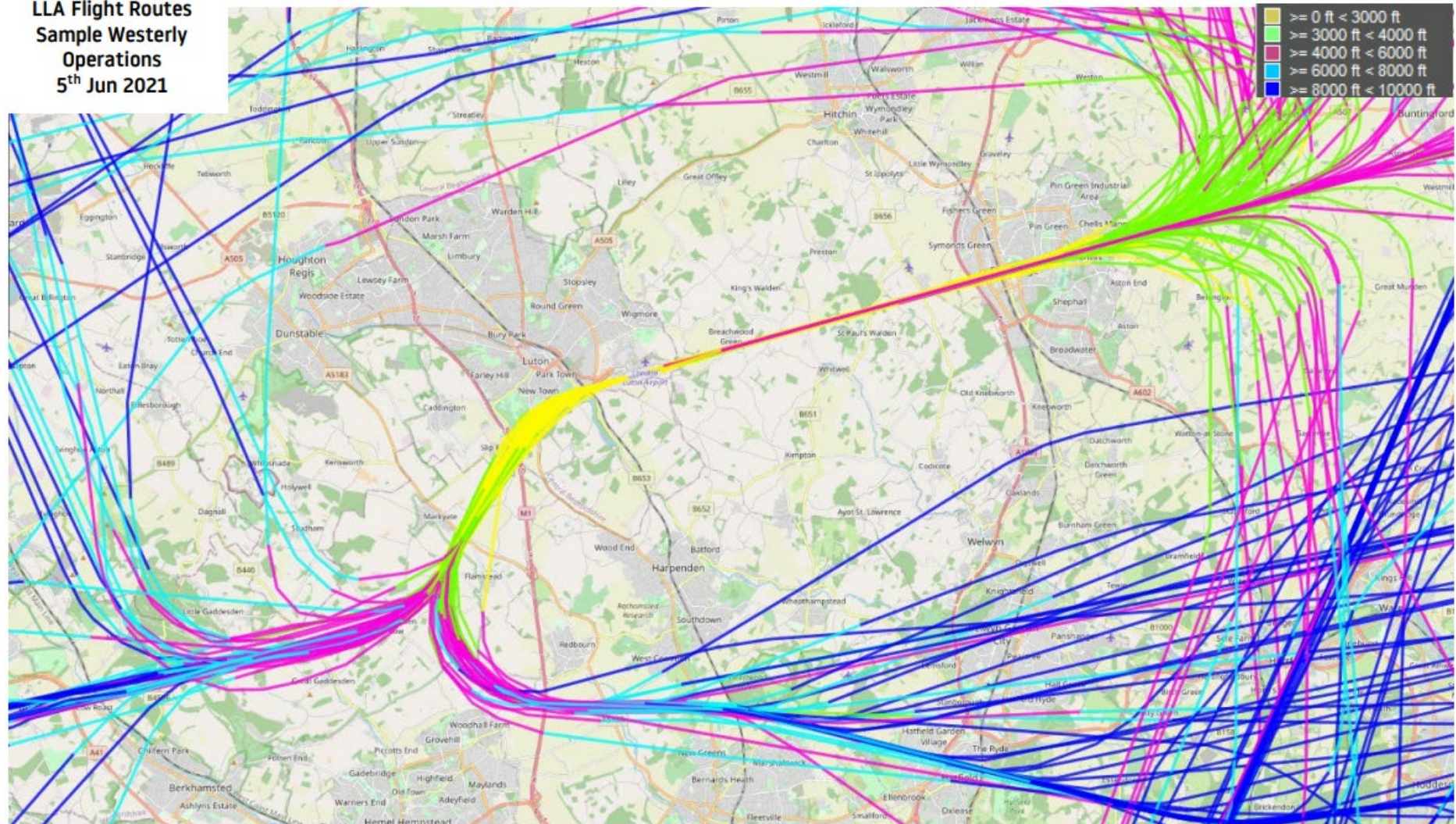


Figure 2-17: 2nd Quarter 2021 Altitude Map Westerly Operations

Quarter 3

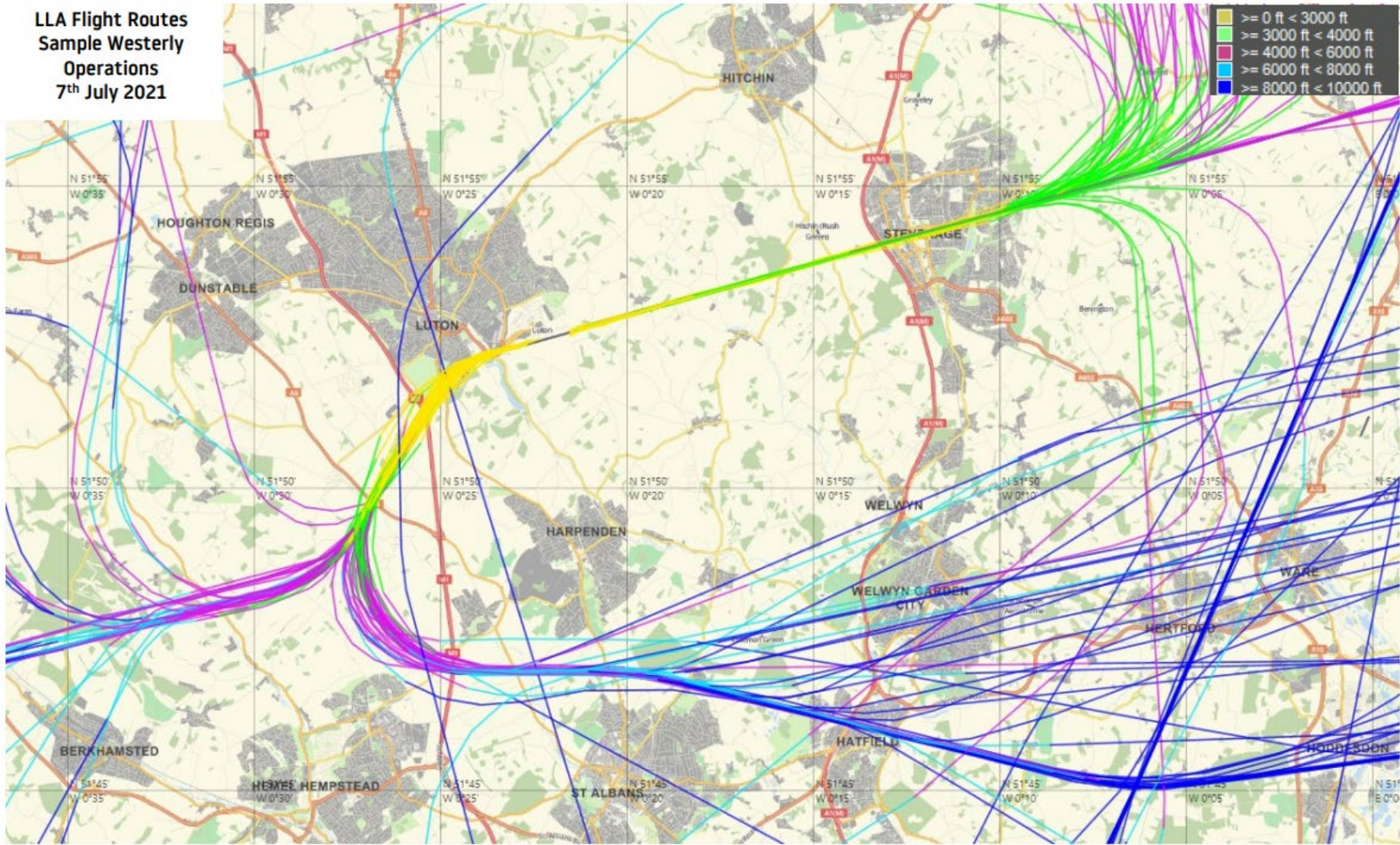


Figure 2-18: 3rd Quarter 2021 Altitude Map Westerly Operations

Quarter 4

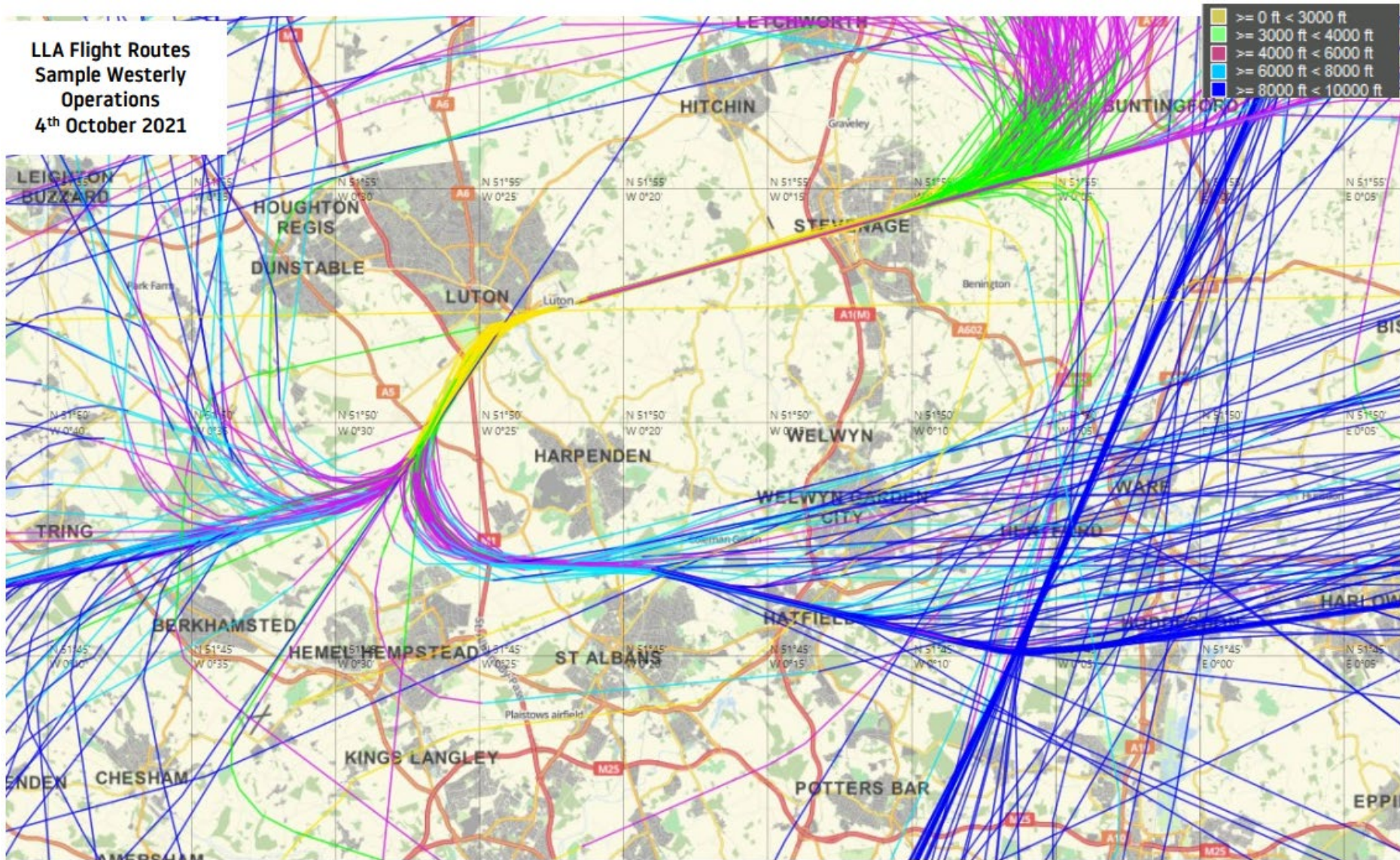


Figure 2-19: 4th Quarter 2021 Altitude Map Westerly Operations

2.6 2022 Quarter 1

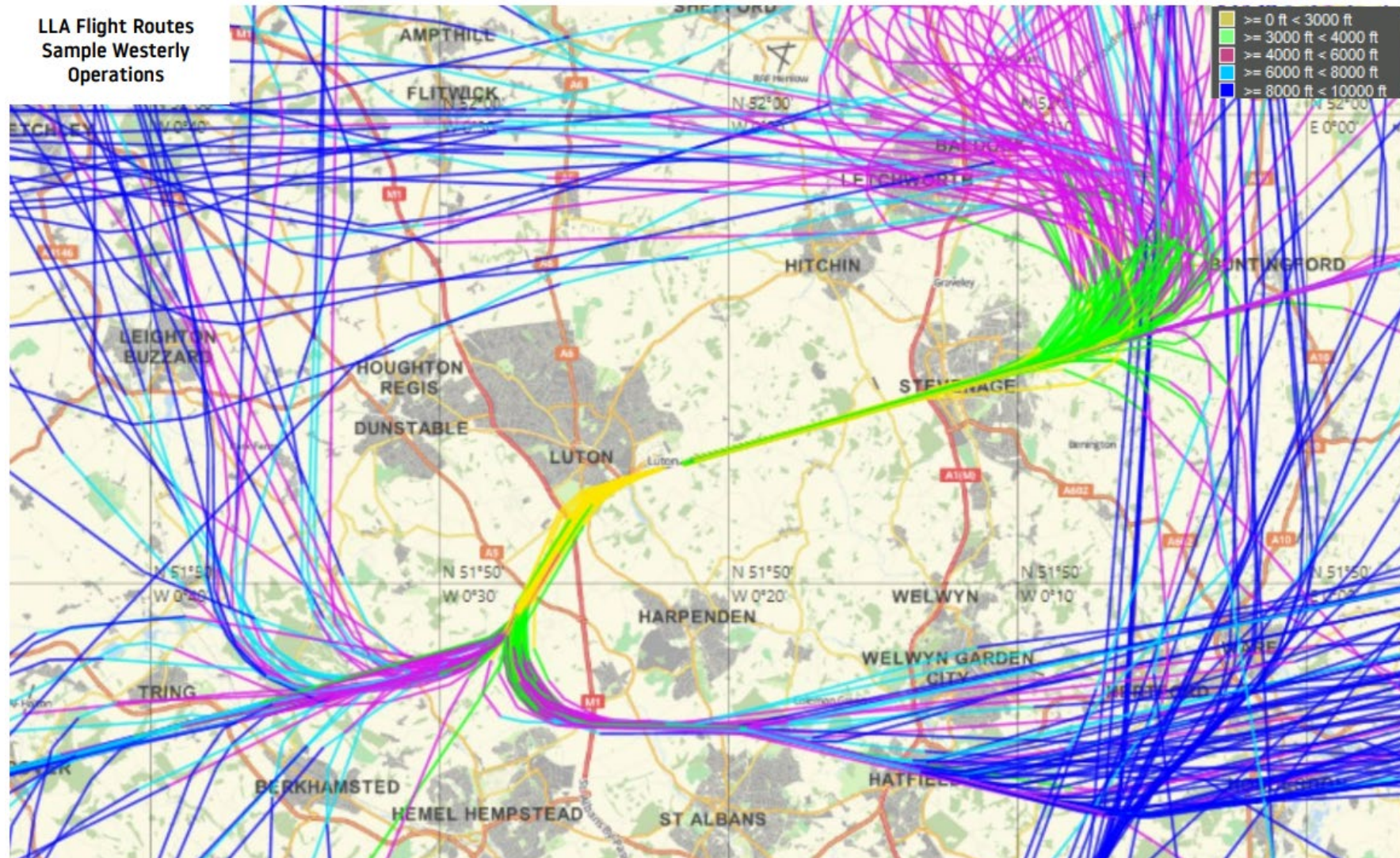


Figure 2-20: 1st Quarter 2022 Altitude Map Westerly Operations

Quarter 2

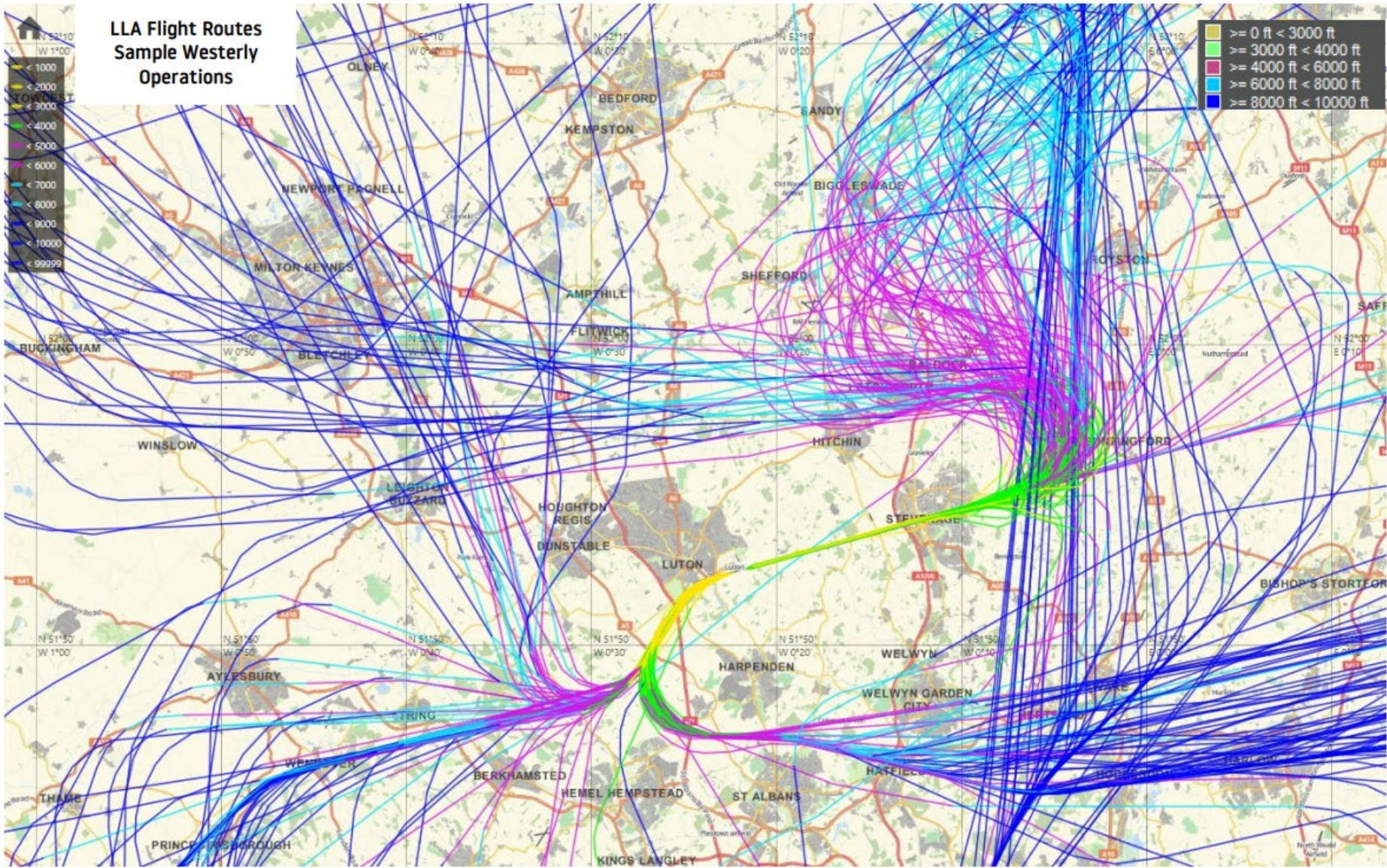


Figure 2-21: 2nd Quarter 2022 Altitude Map Westerly Operations

Quarter 3

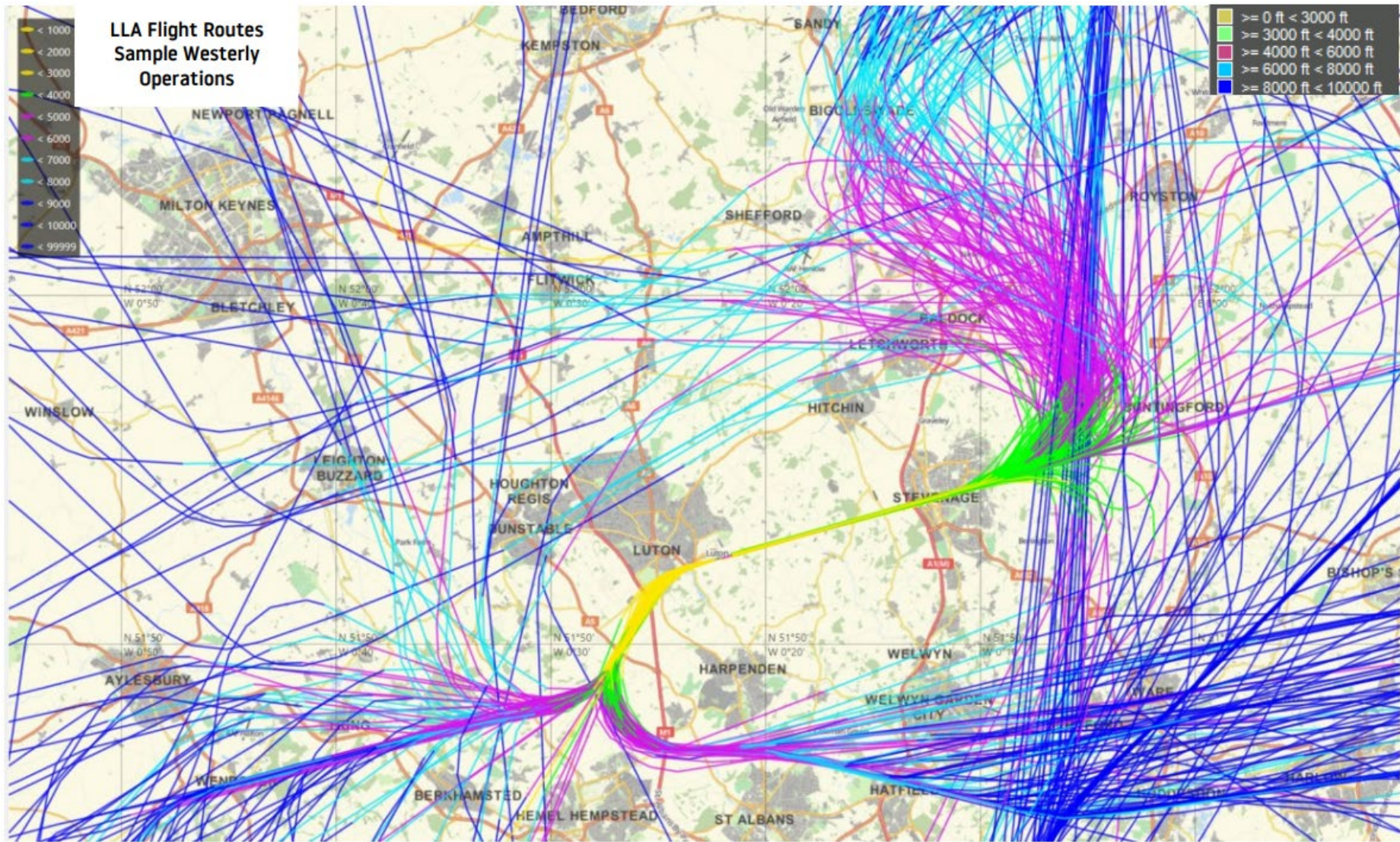


Figure 2-22: 3rd Quarter 2022 Altitude Map Westerly Operations

Quarter 4

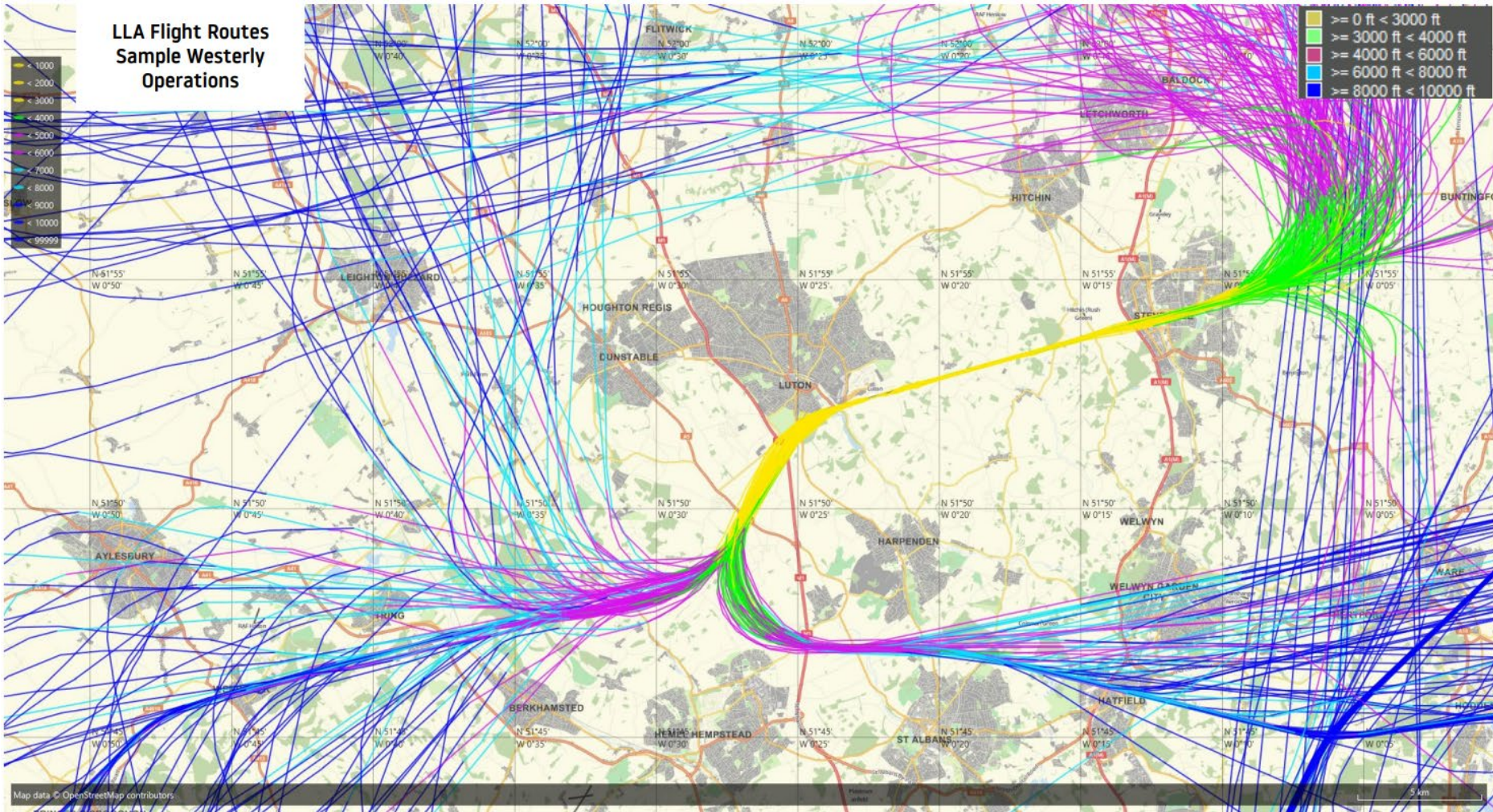


Figure 2-23: 4th Quarter 2022 Altitude Map Westerly Operations

2.7

2023

Quarter 1

LLA Flight Routes
Sample Westerly
Operations

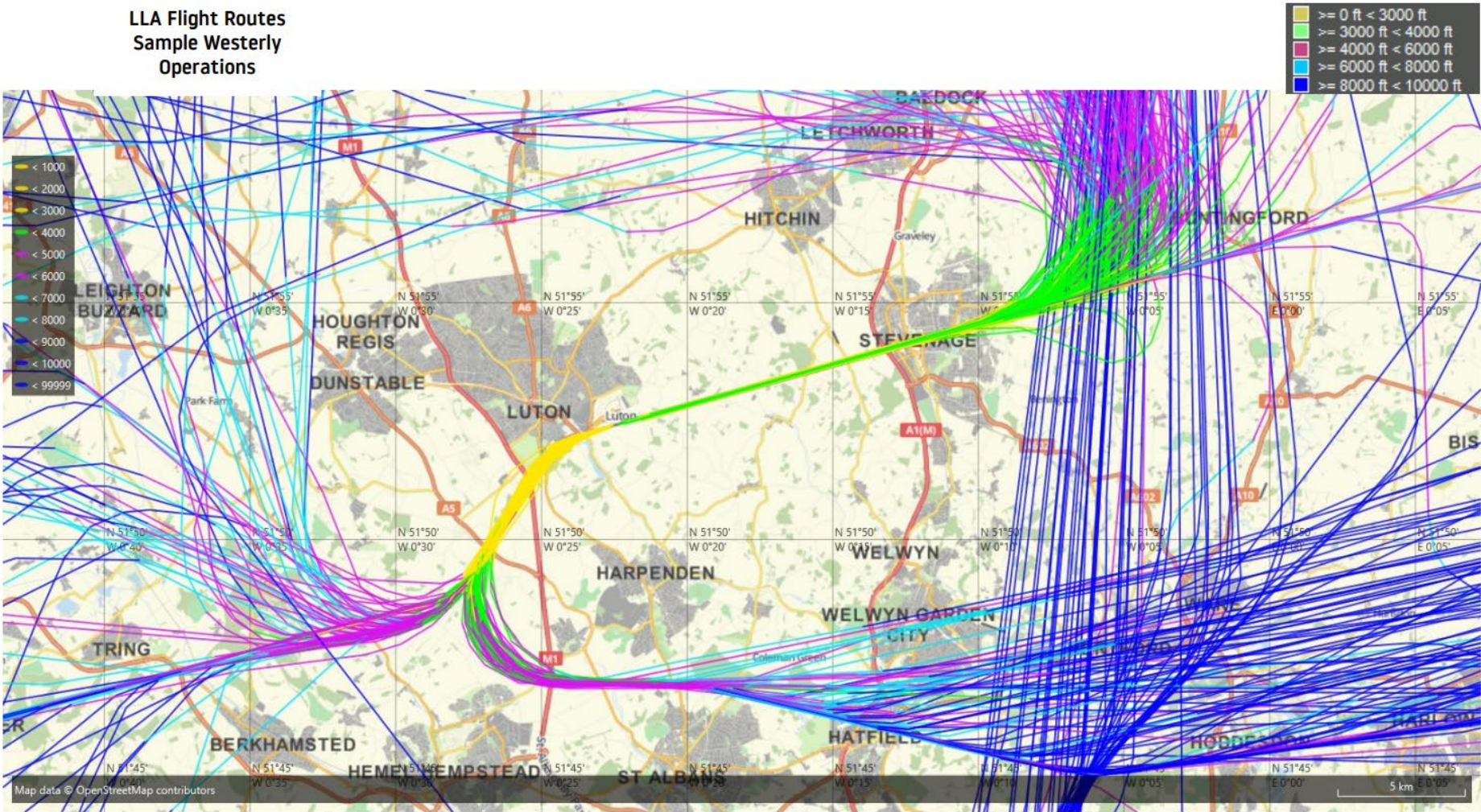


Figure 2-24: 1st Quarter 2023 Altitude Map Westerly Operations

3 EASTERLY OPERATIONS FLIGHTPATH AND ALTITUDE MAPS

3.1 2017 Quarter 2

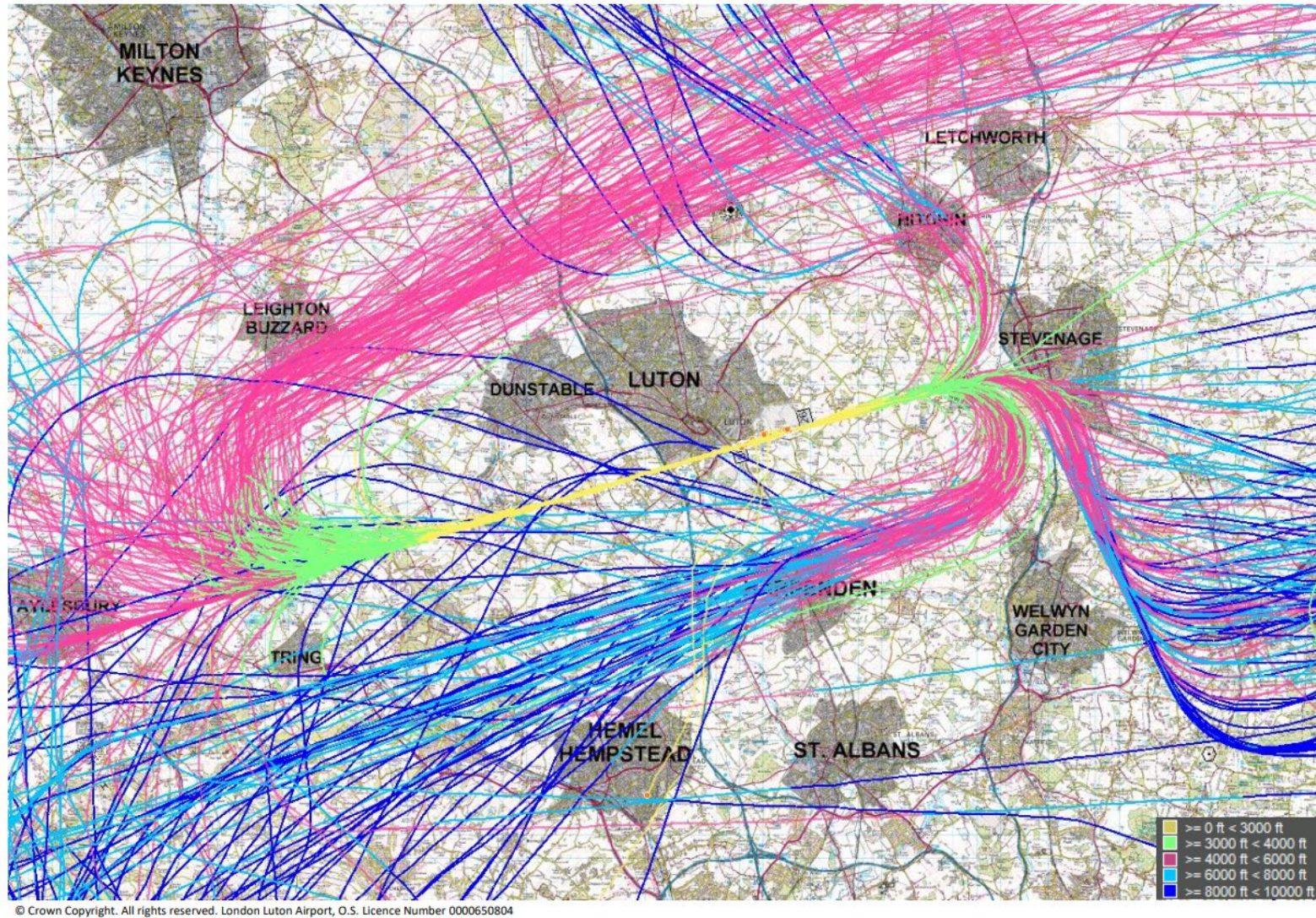


Figure 3-1: 2nd Quarter 2017 Altitude Map Easterly Operations

Quarter 3

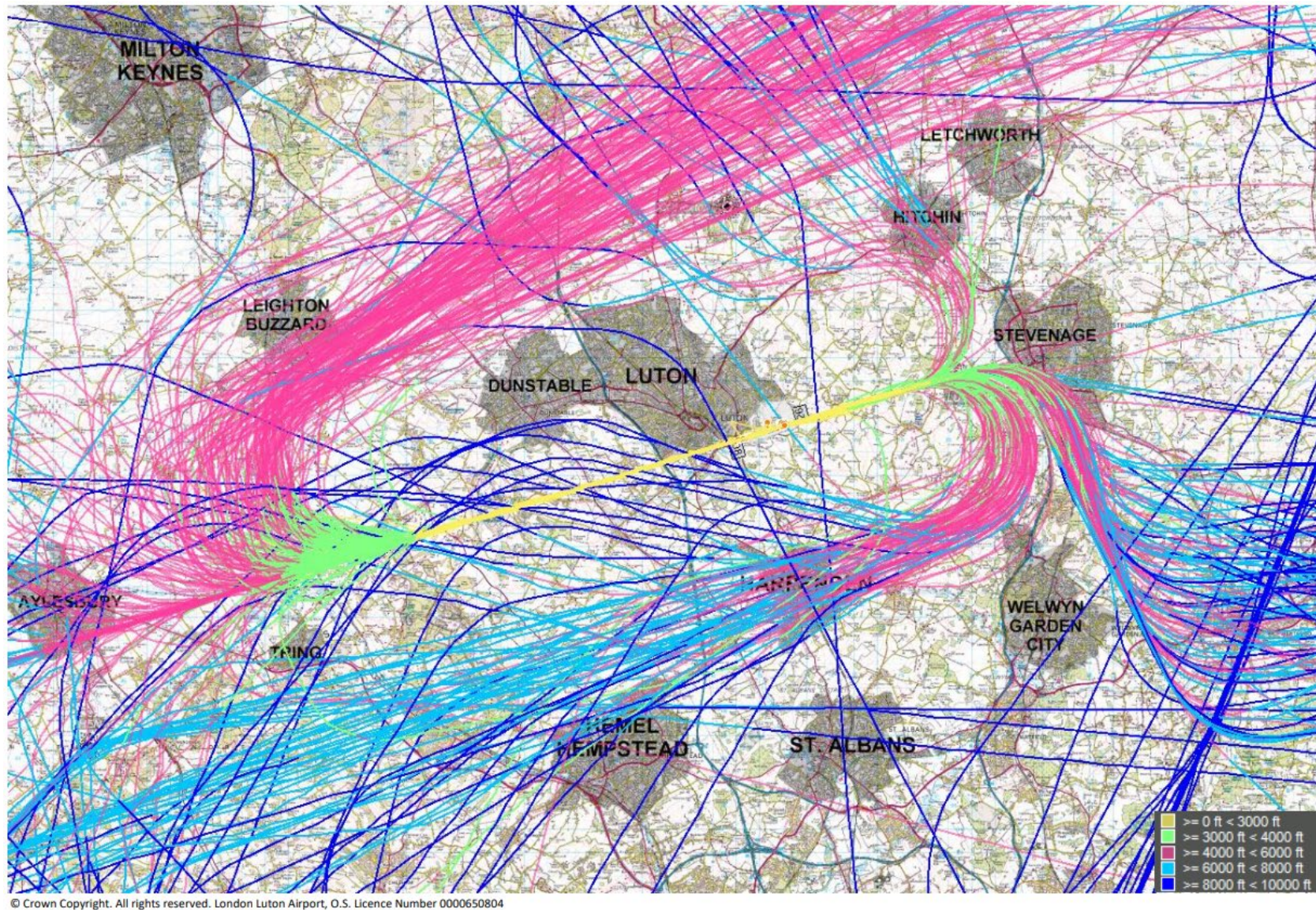


Figure 3-2: 3rd Quarter 2017 Altitude Map Easterly Operations

Quarter 4

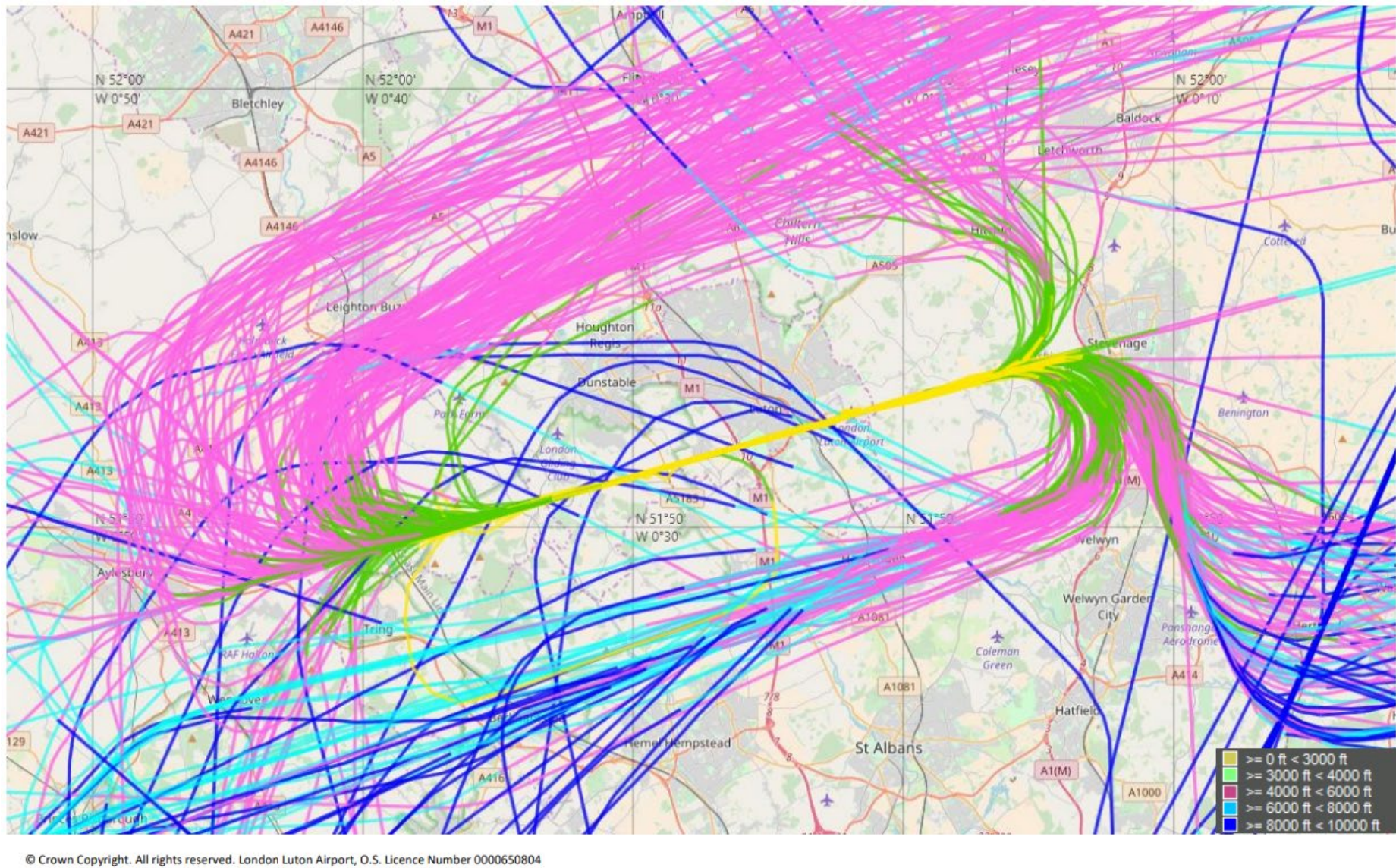


Figure 3-3: 4th Quarter 2017 Altitude Map Easterly Operations

3.2 2018 Quarter 1



Figure 3-4: 1st Quarter 2018 Altitude Map Easterly Operations

Quarter 2

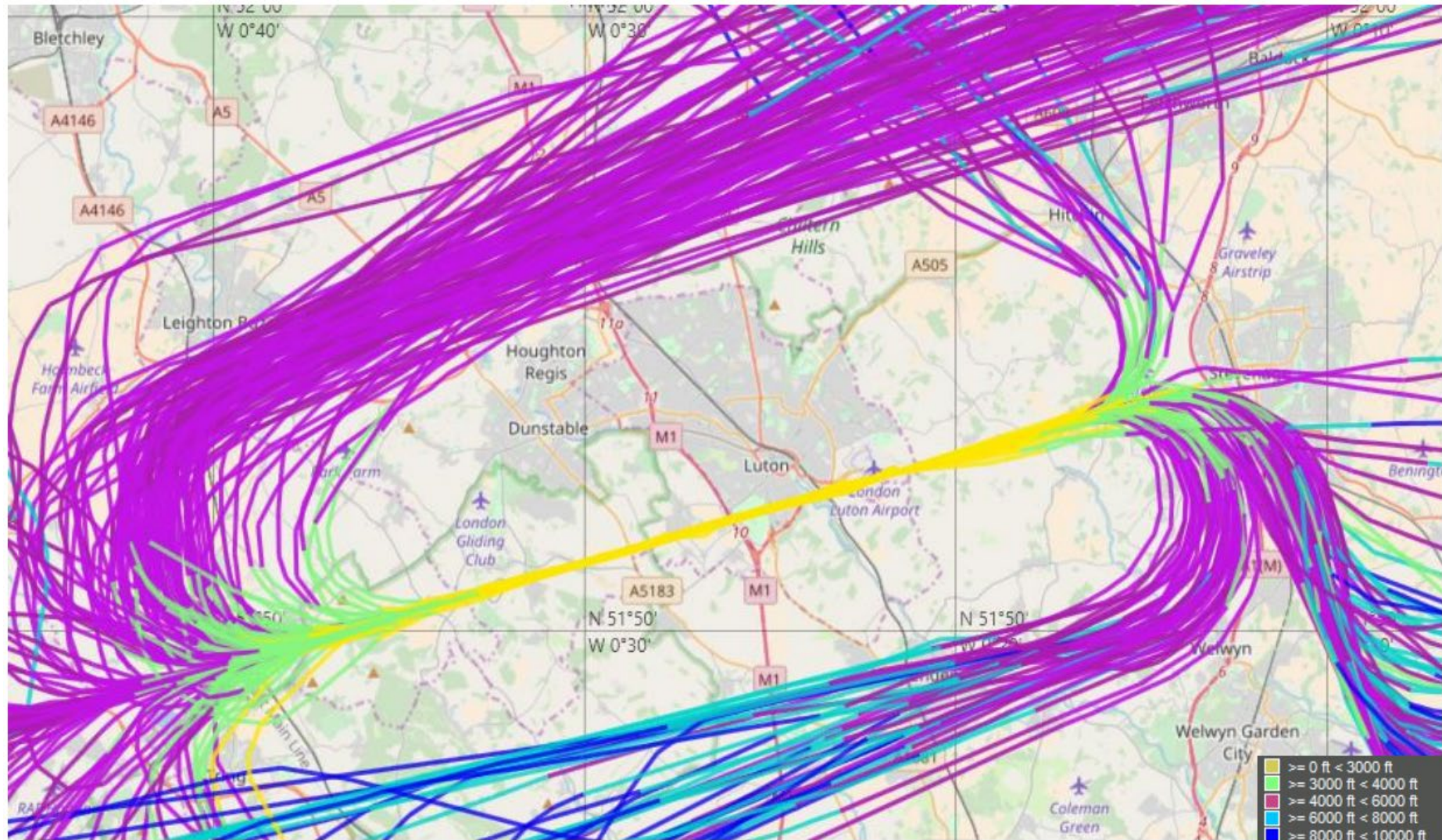


Figure 3-5: 2nd Quarter 2018 Altitude Map Easterly Operations

Quarter 3

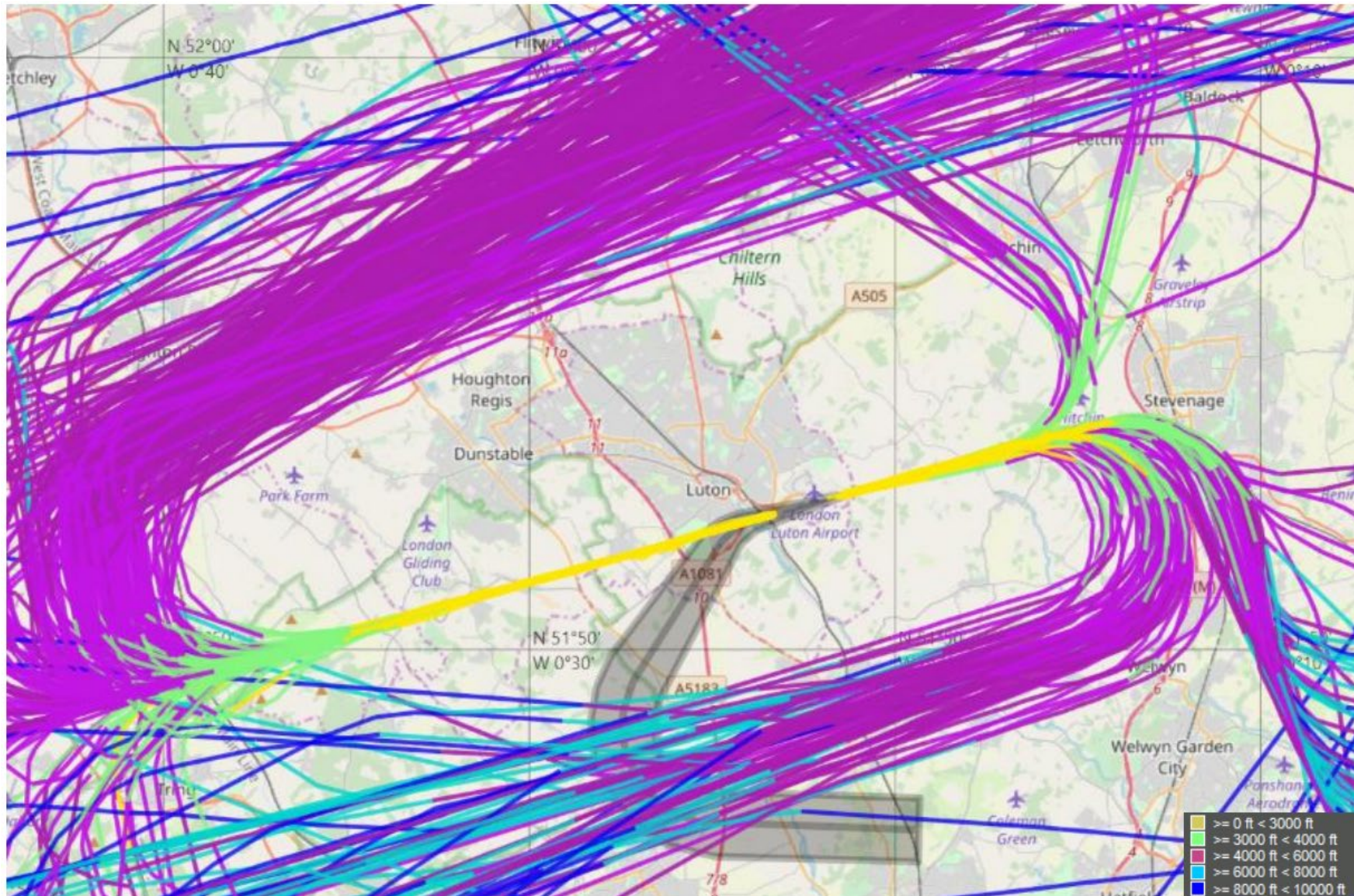


Figure 3-6: 3rd Quarter 2018 Altitude Map Easterly Operations

Quarter 4

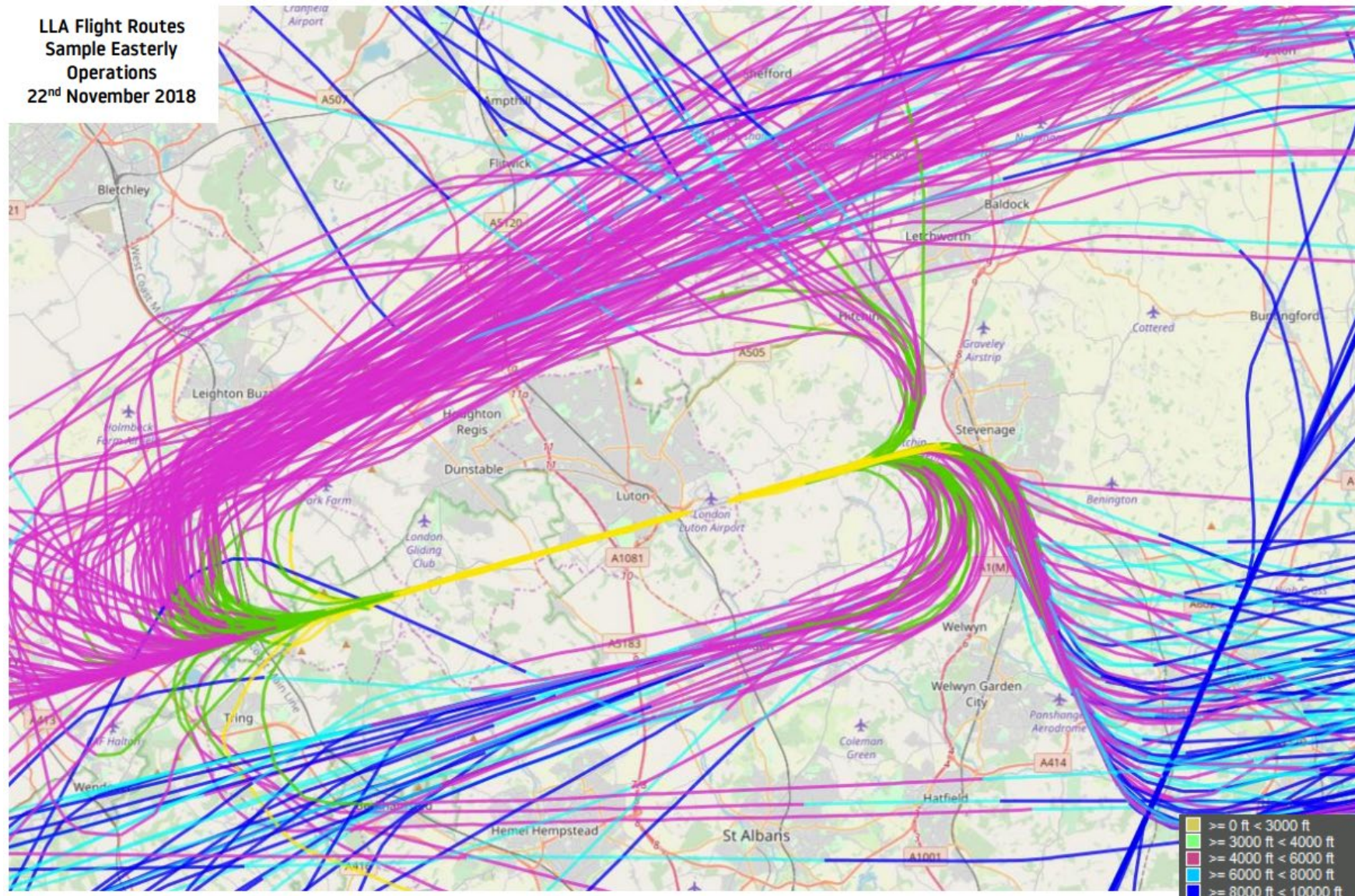


Figure 3-7: 4th Quarter 2018 Altitude Map Easterly Operations

3.3 2019
Quarter 1

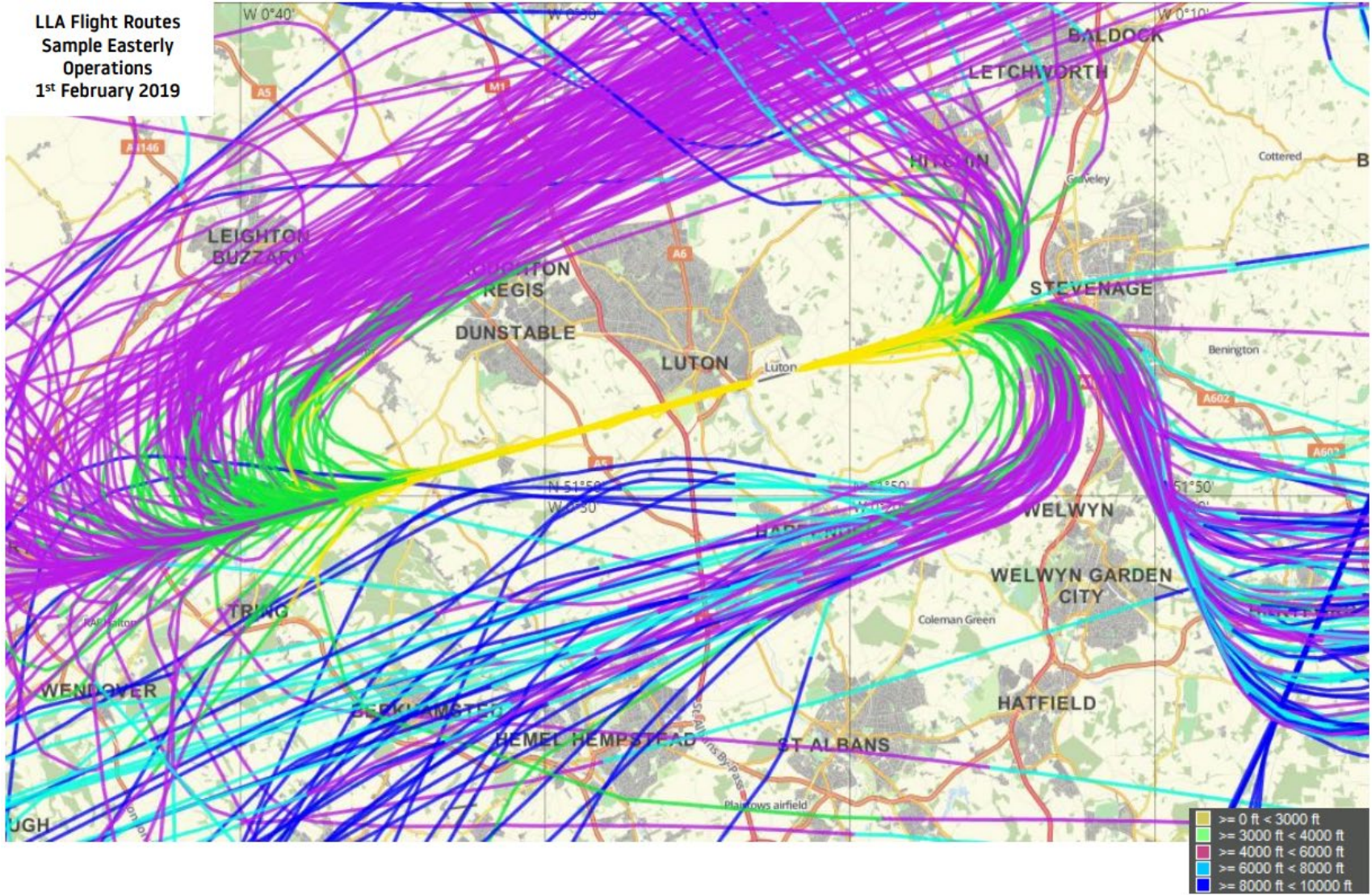


Figure 3-8: 1st Quarter 2019 Altitude Map Easterly Operations

Quarter 2

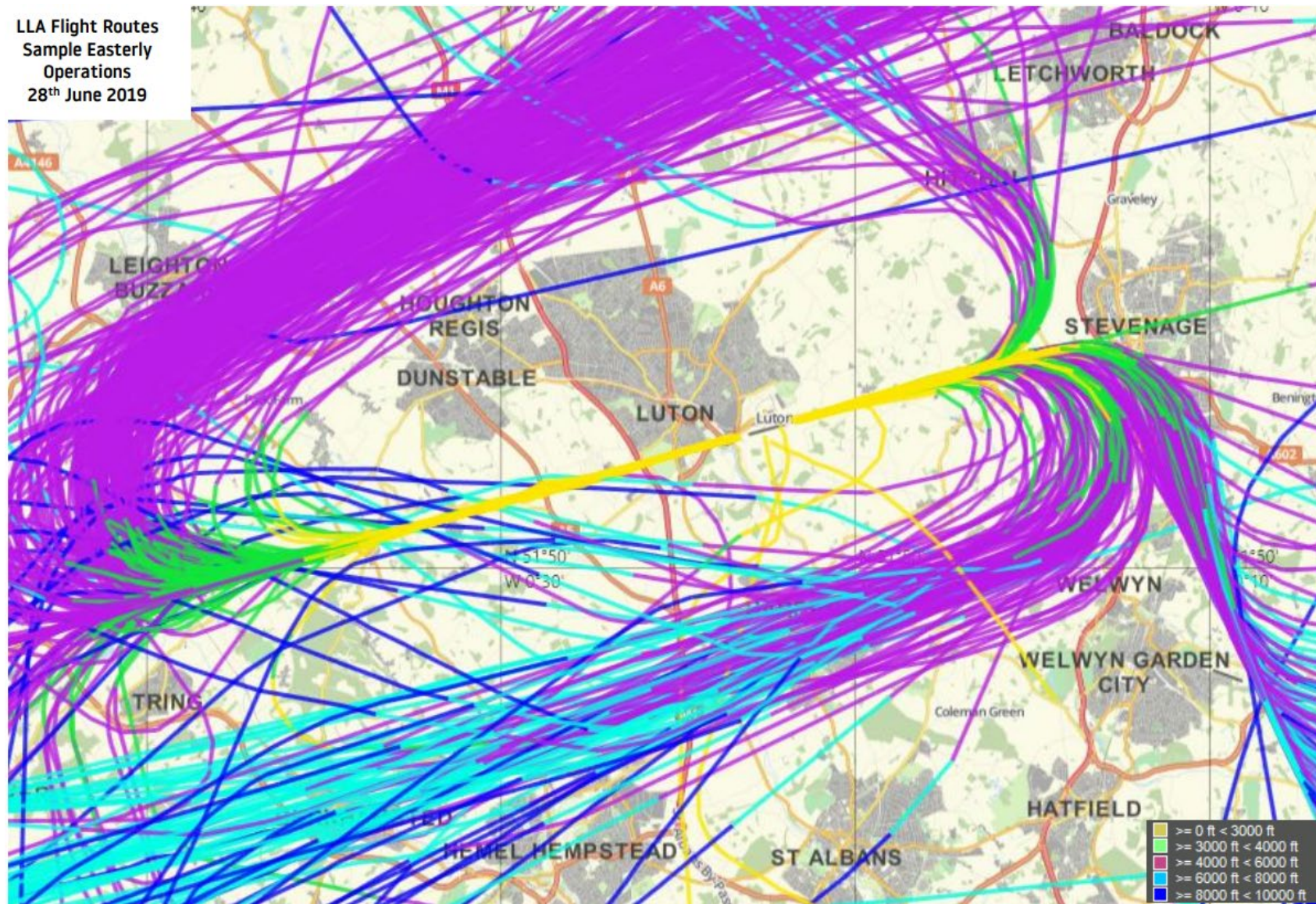


Figure 3-9: 2nd Quarter 2019 Altitude Map Easterly Operations

Quarter 3

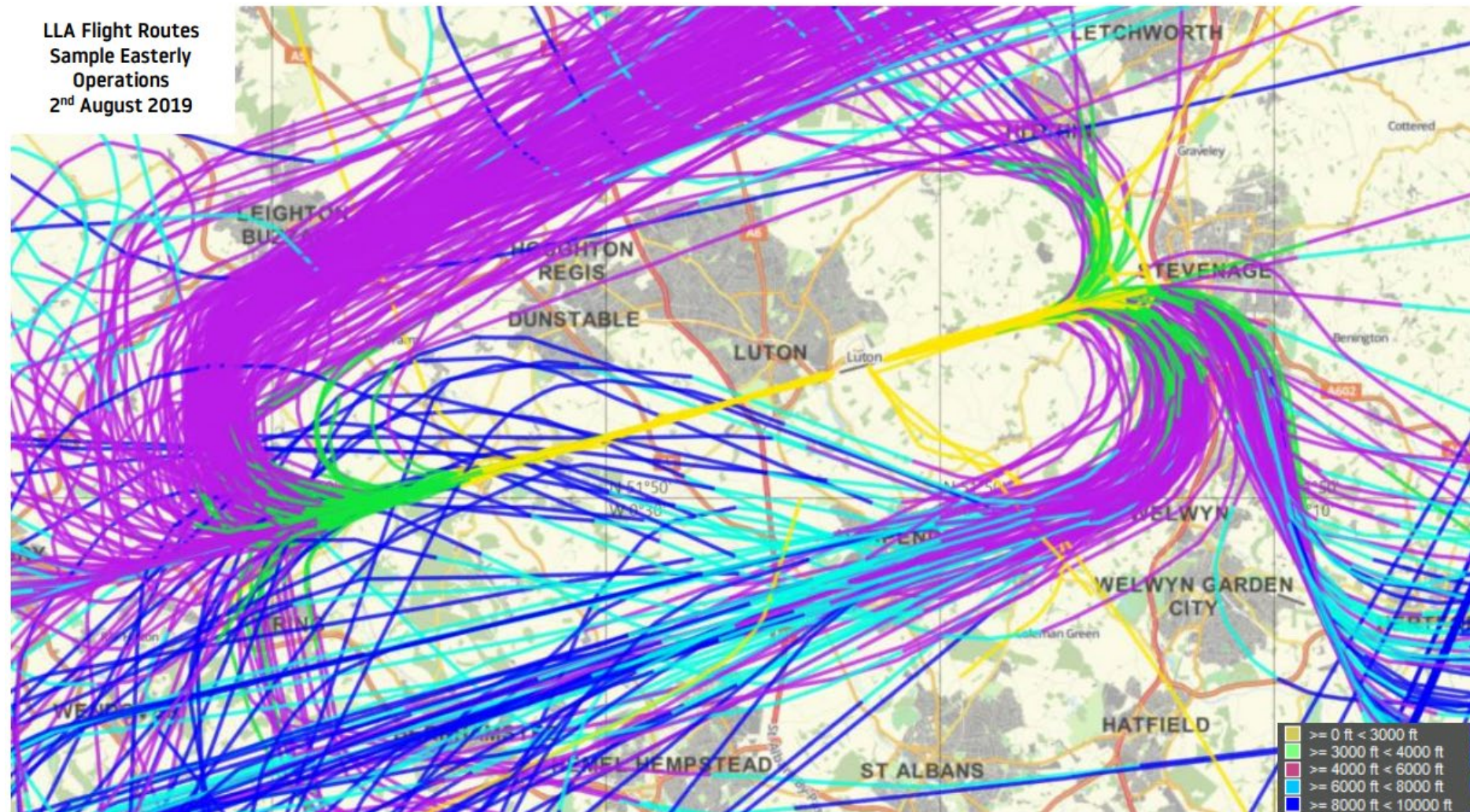


Figure 3-10: 3rd Quarter 2019 Altitude Map Easterly Operations

Quarter 4

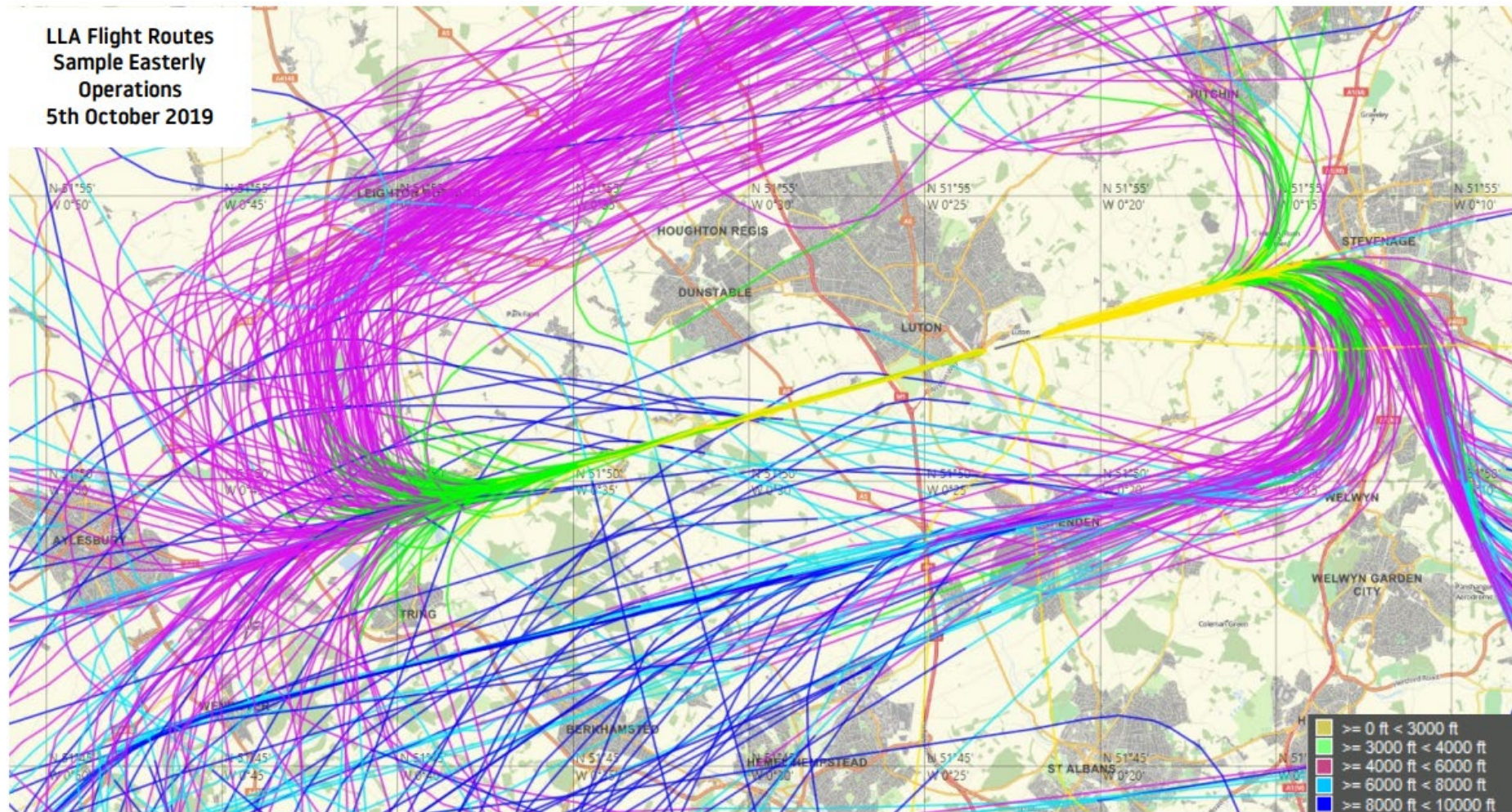


Figure 3-11: 4th Quarter 2019 Altitude Map Easterly Operations

3.4 2020 Quarter 1

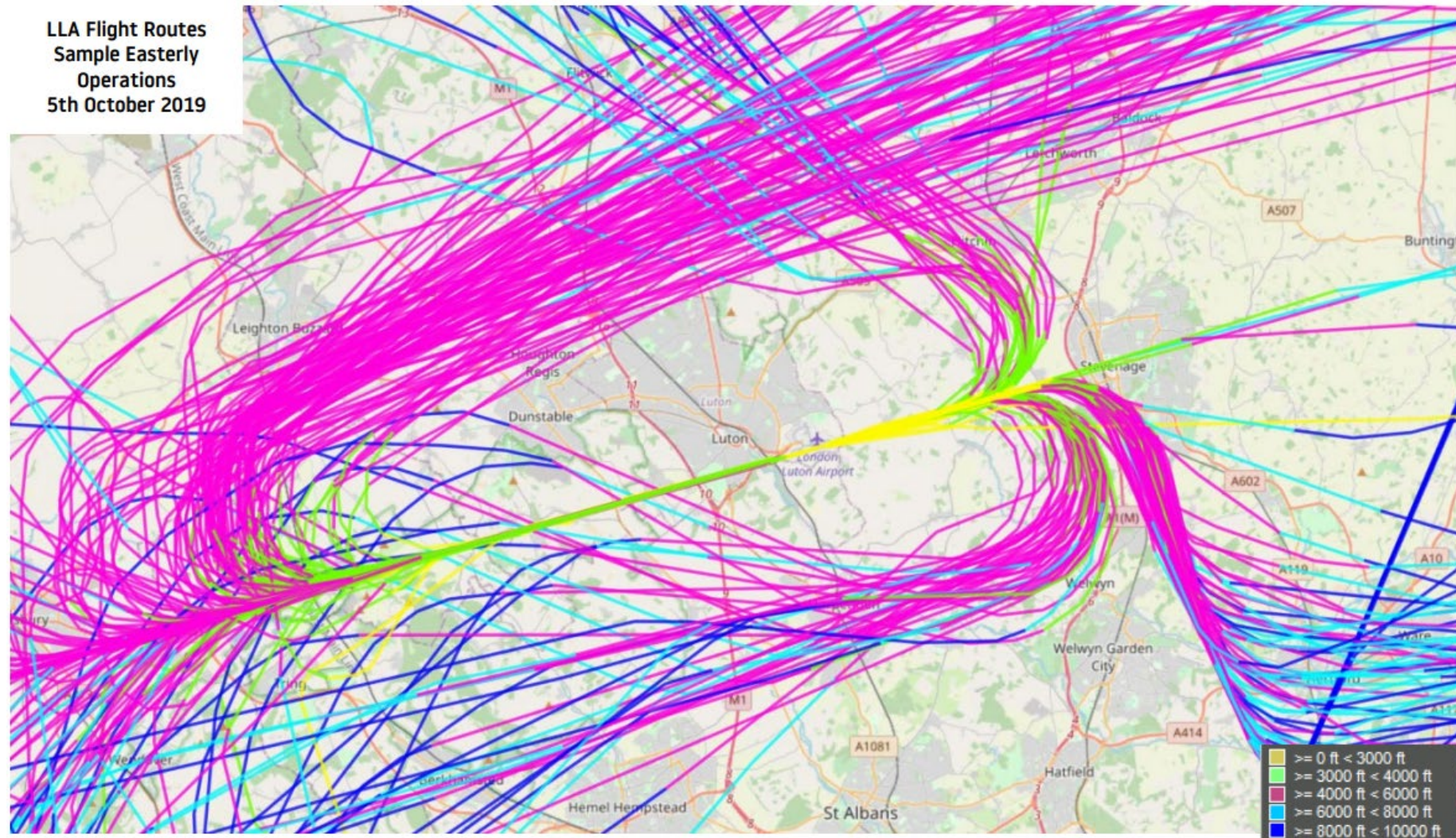


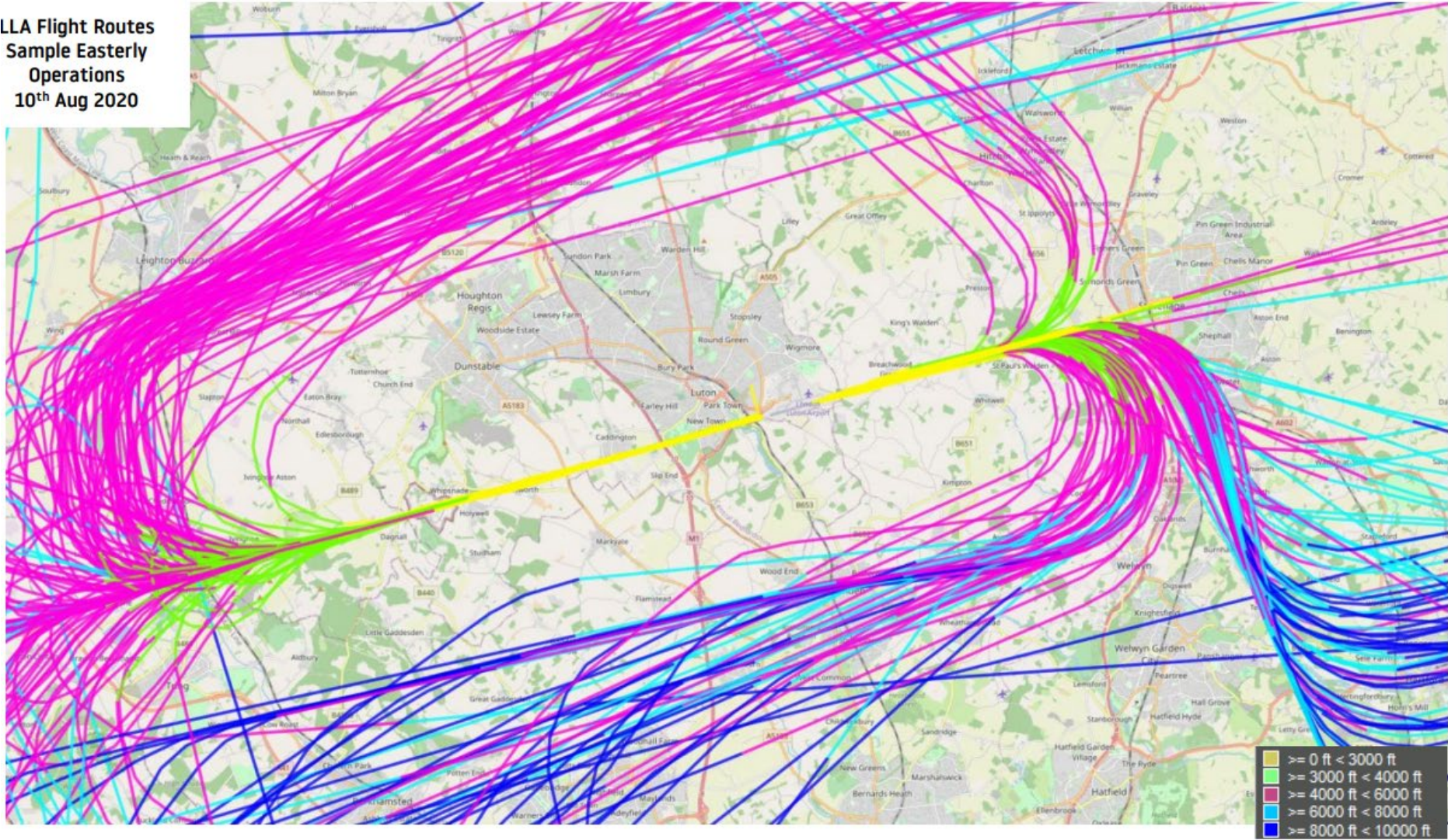
Figure 3-12: 1st Quarter 2020 Altitude Map Easterly Operations
(Please note the image from the Quarterly Monitoring Report is mistakenly labelled and should read 5th March 2020.)

Quarter 2



Figure 3-13: 2nd Quarter 2020 Altitude Map Easterly Operations

Quarter 3



Quarter 4

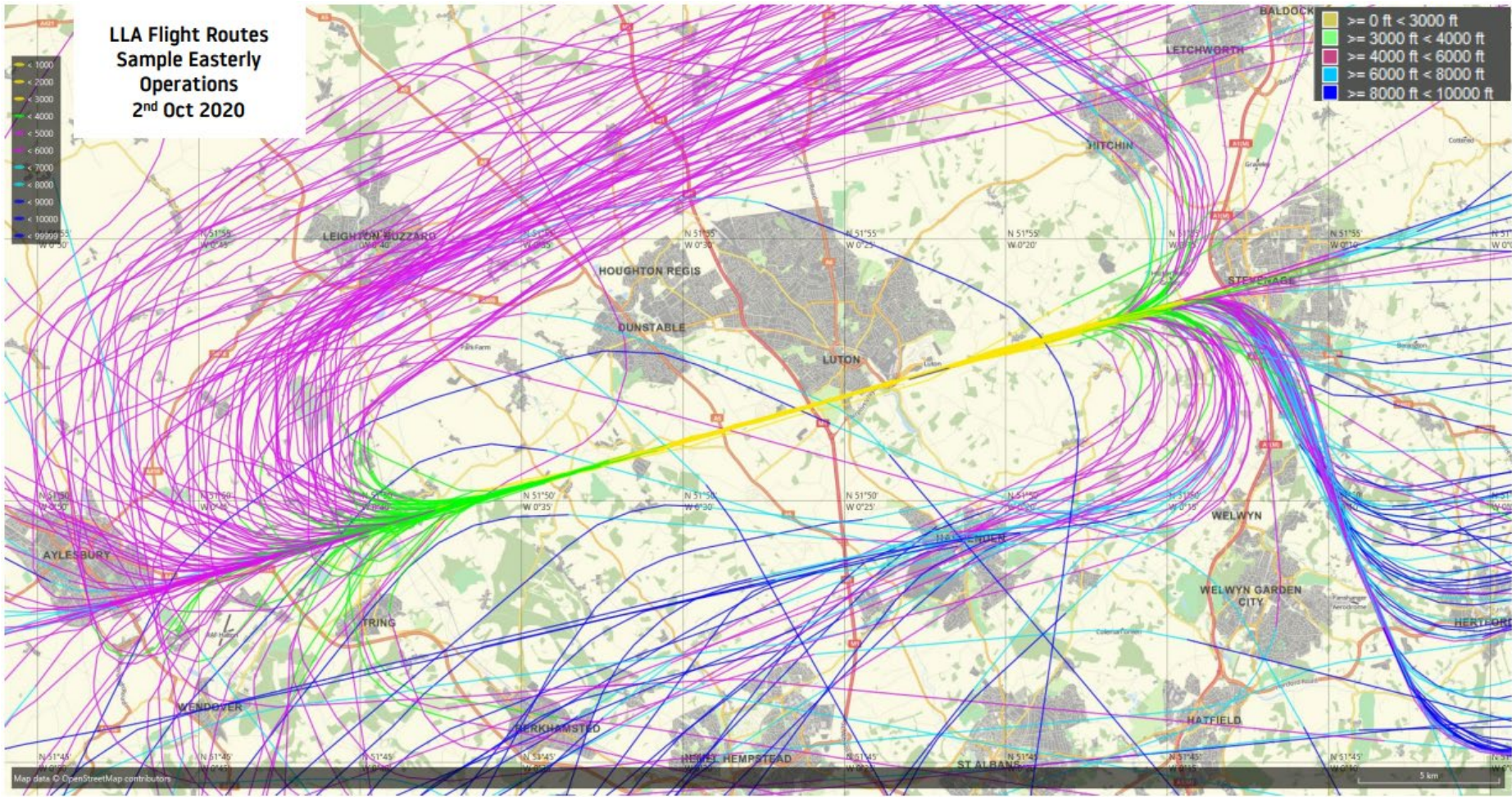


Figure 3-15: 4th Quarter 2020 Altitude Map Easterly Operations

3.5 2021 Quarter 1

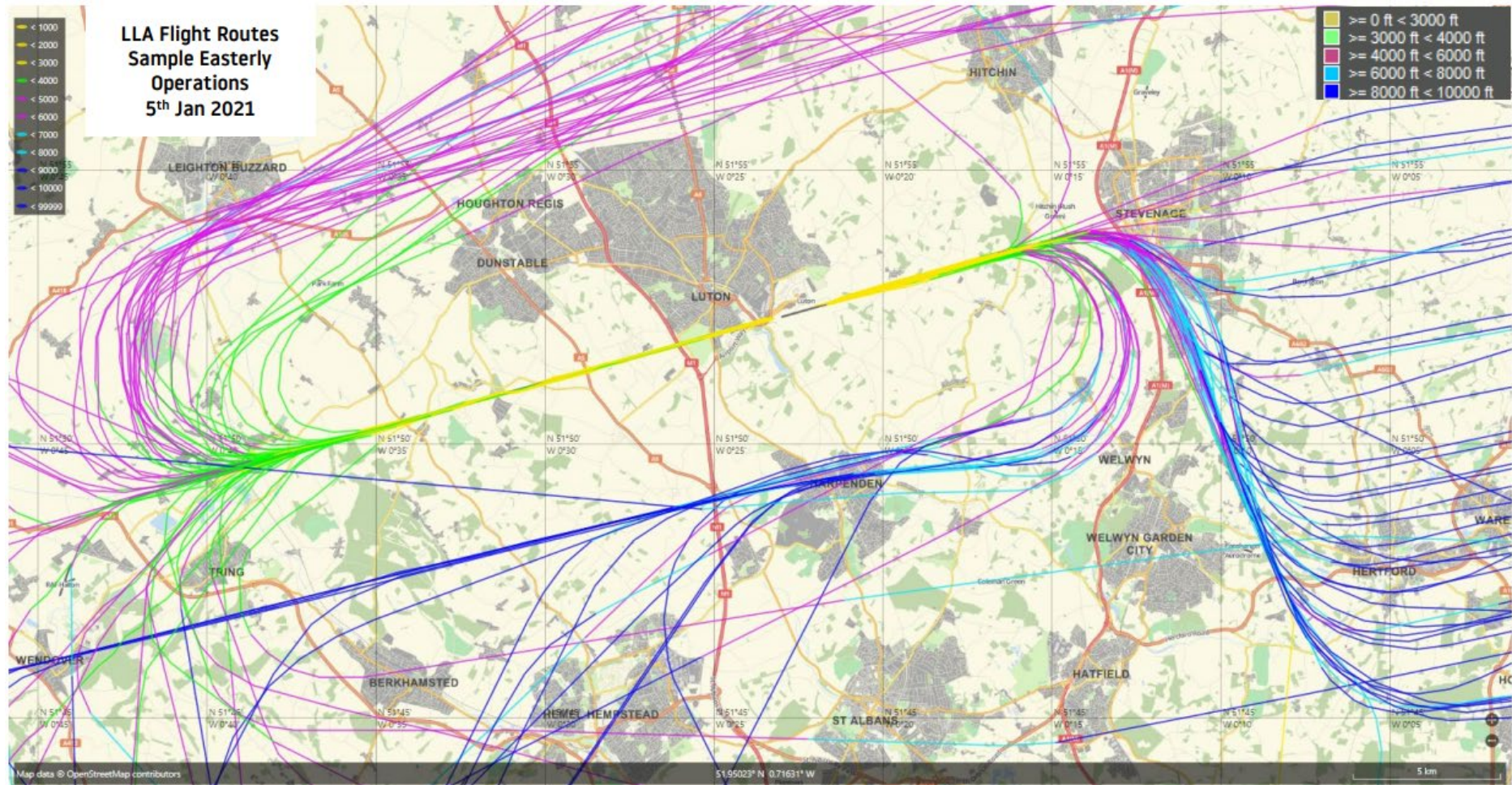


Figure 3-16: 1st Quarter 2021 Altitude Map Easterly Operations

Quarter 2

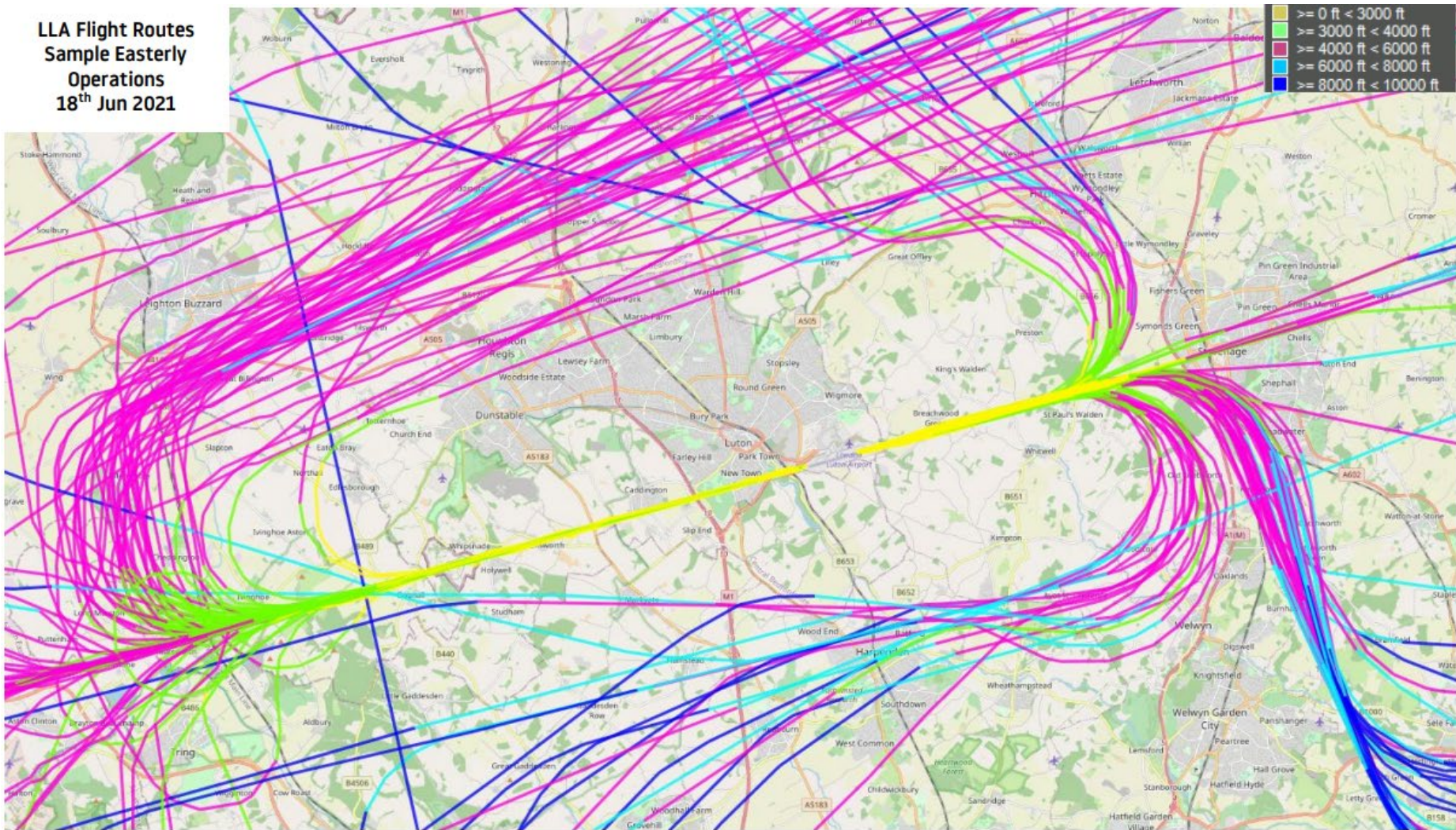
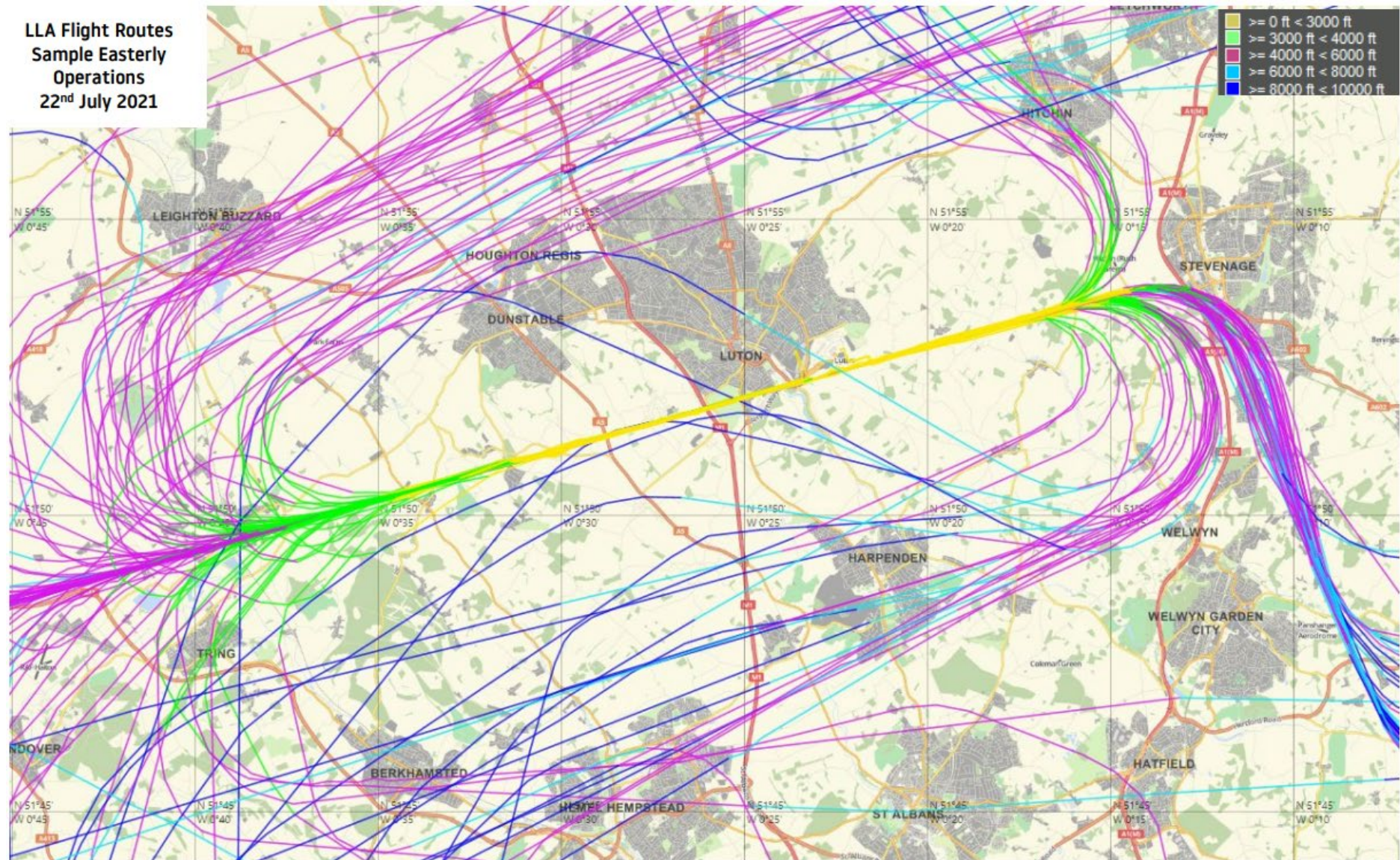


Figure 3-17: 2nd Quarter 2021 Altitude Map Easterly Operations

Quarter 3



Quarter 4

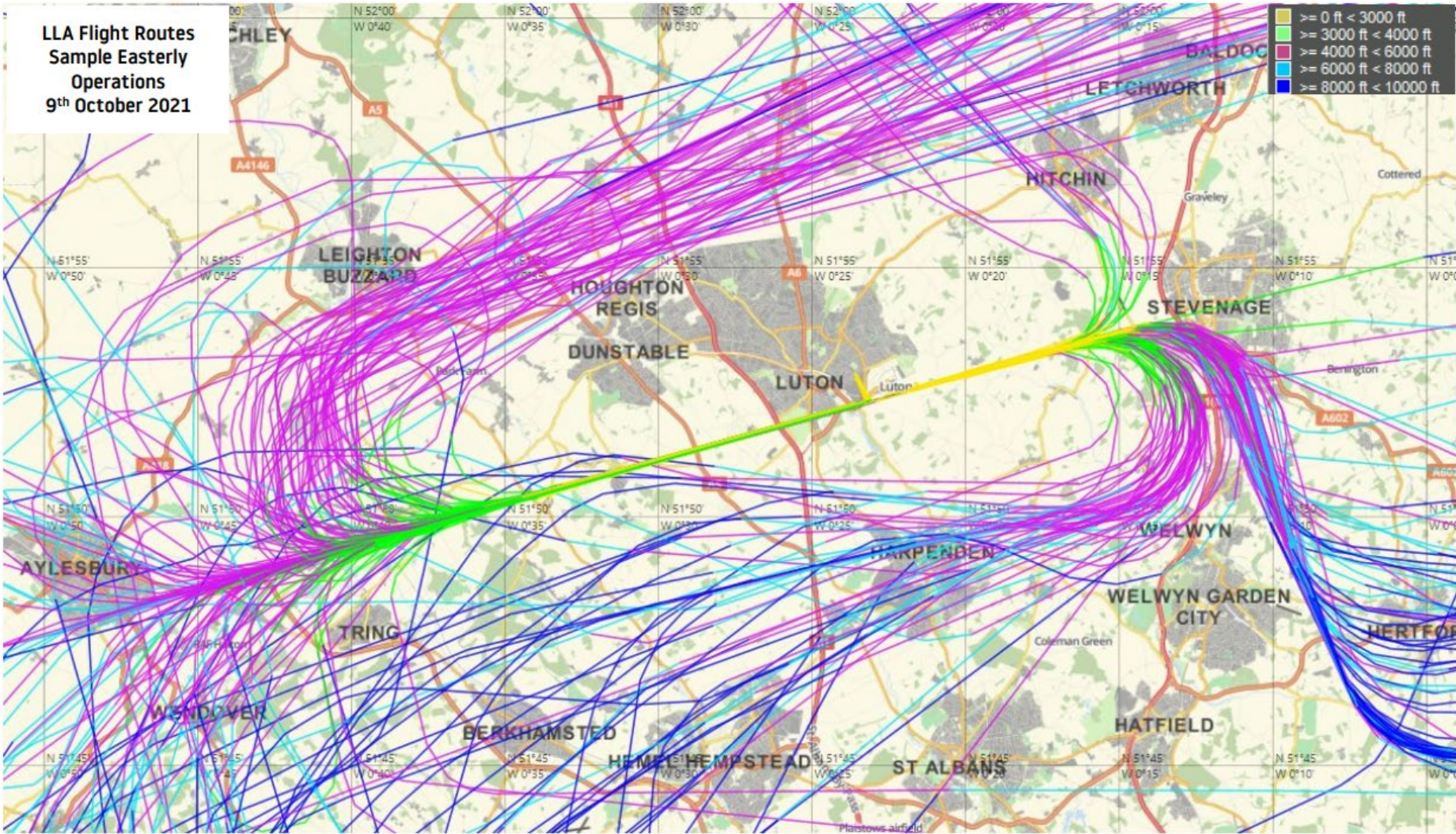


Figure 3-19: 4th Quarter 2021 Altitude Map Easterly Operations

3.6 2022 Quarter 1

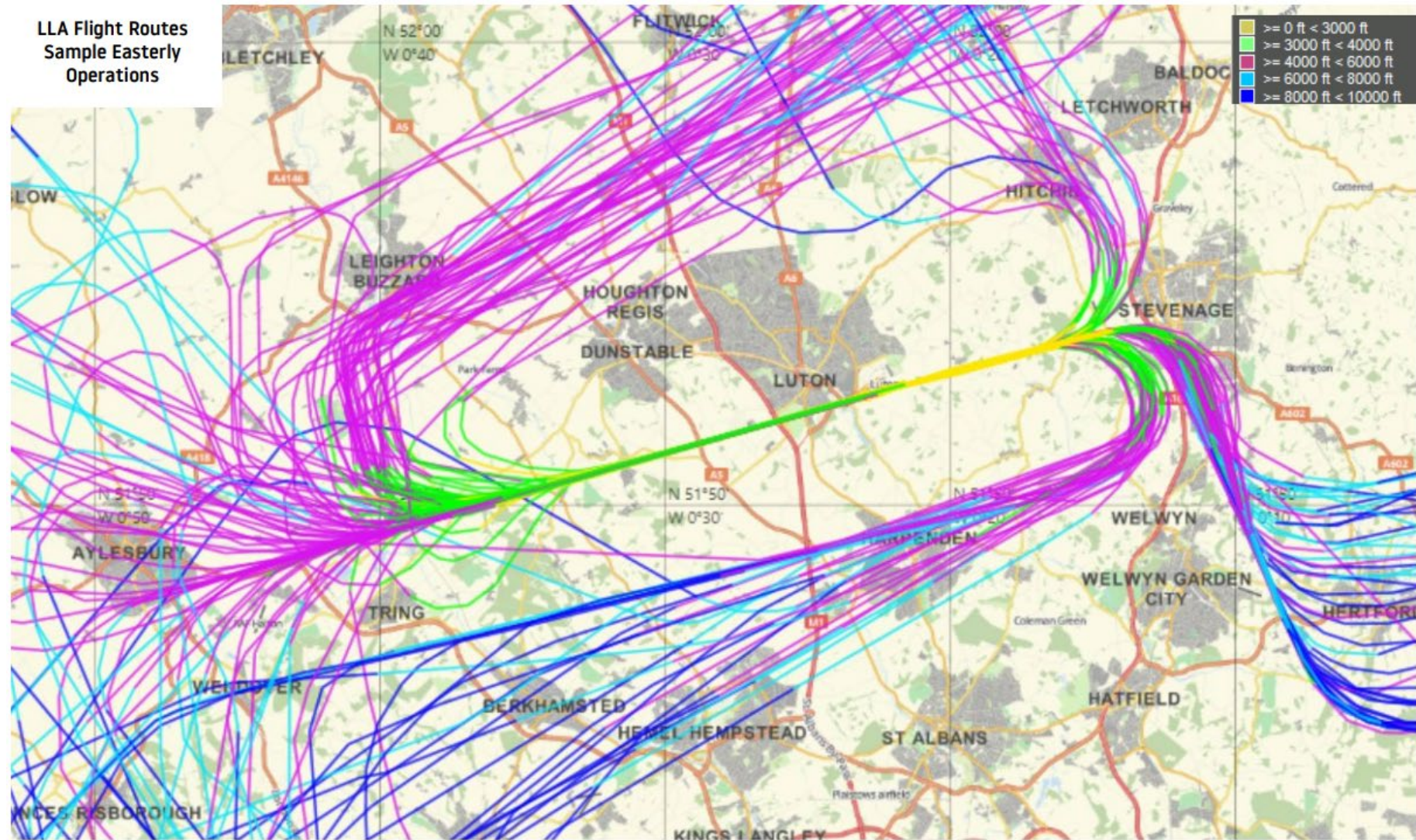


Figure 3-20: 1st Quarter 2022 Altitude Map Easterly Operations

Quarter 2

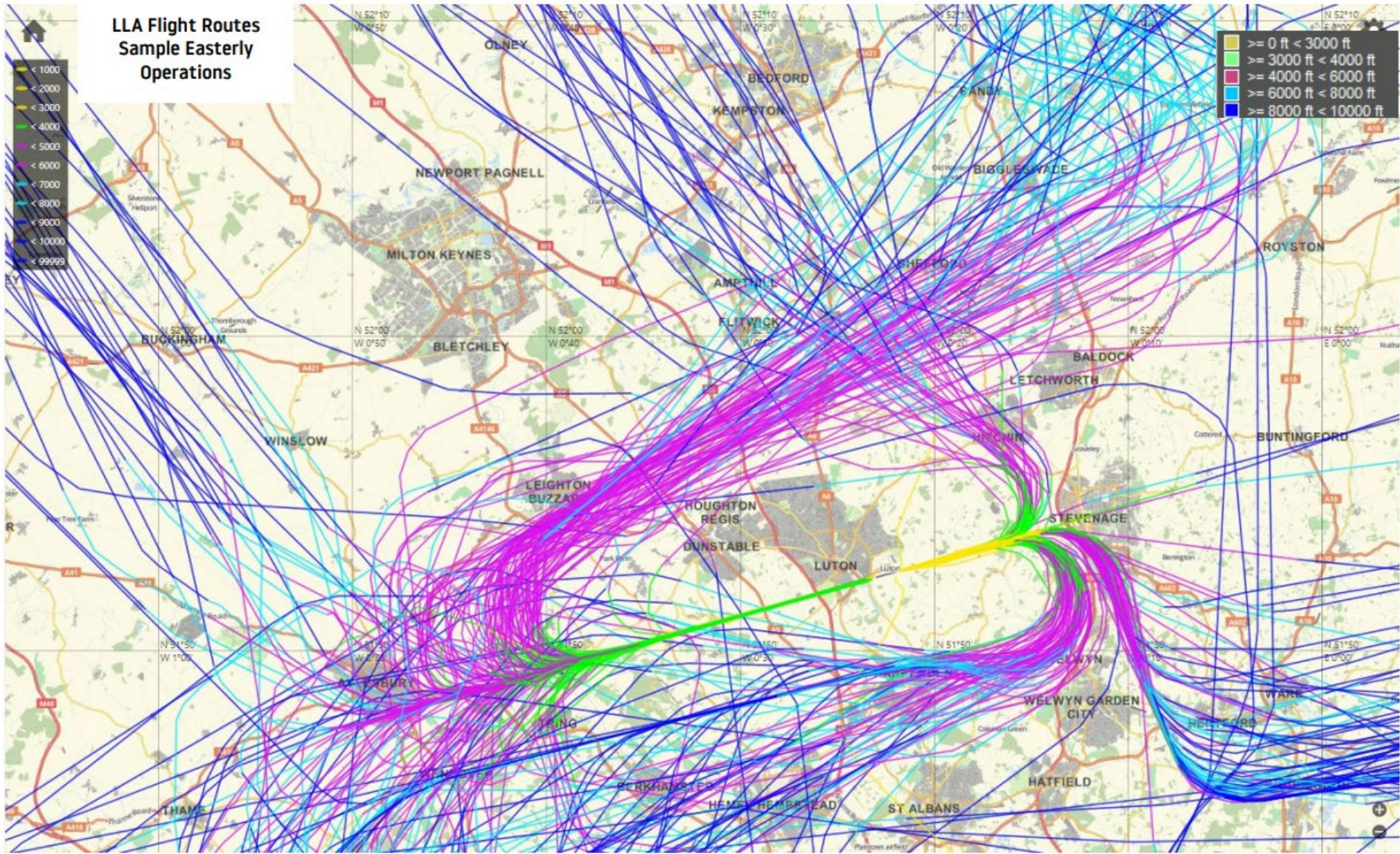


Figure 3-21: 2nd Quarter 2022 Altitude Map Easterly Operations

Quarter 3

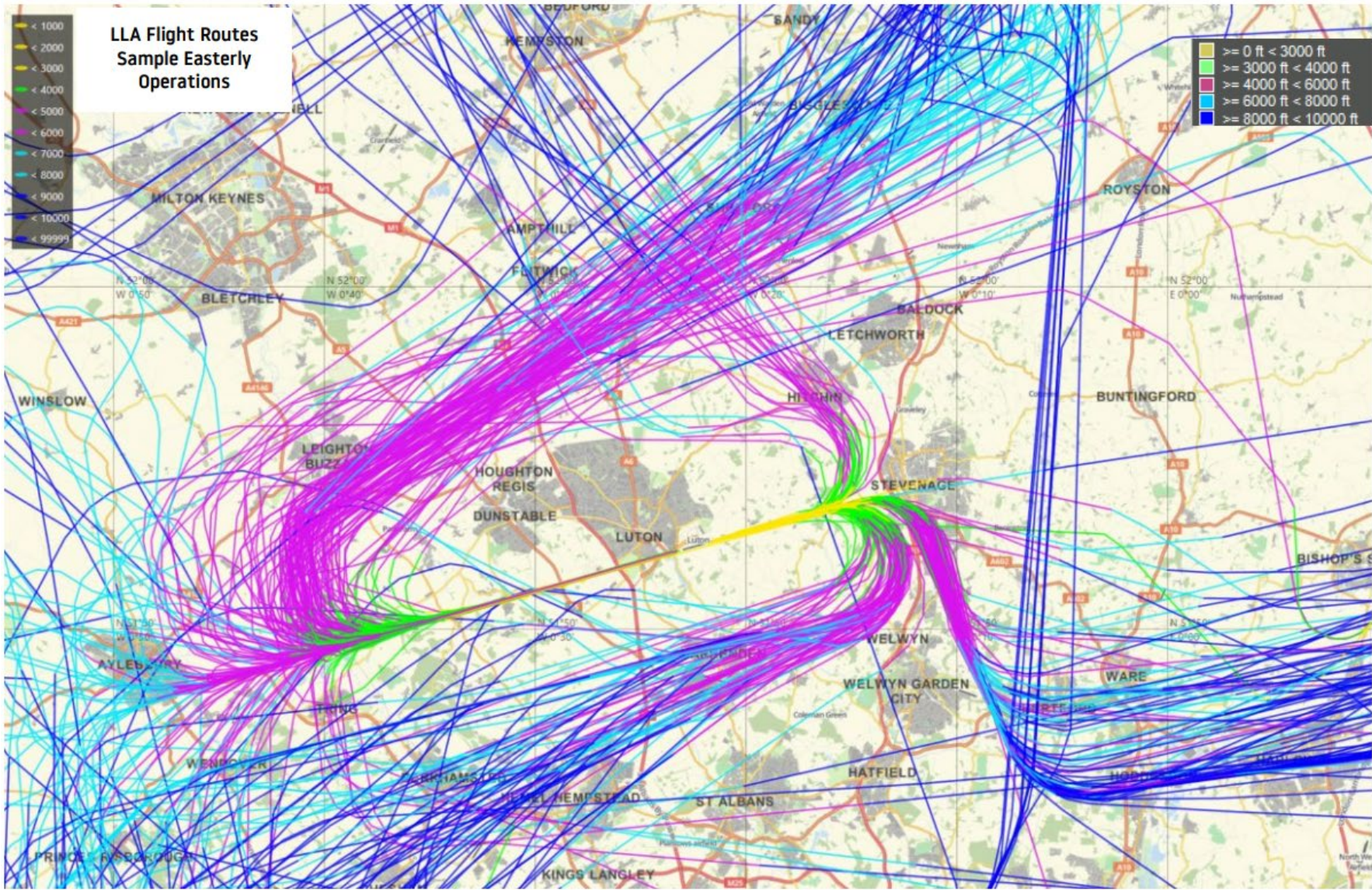


Figure 3-22: 3rd Quarter 2022 Altitude Map Easterly Operations

Quarter 4

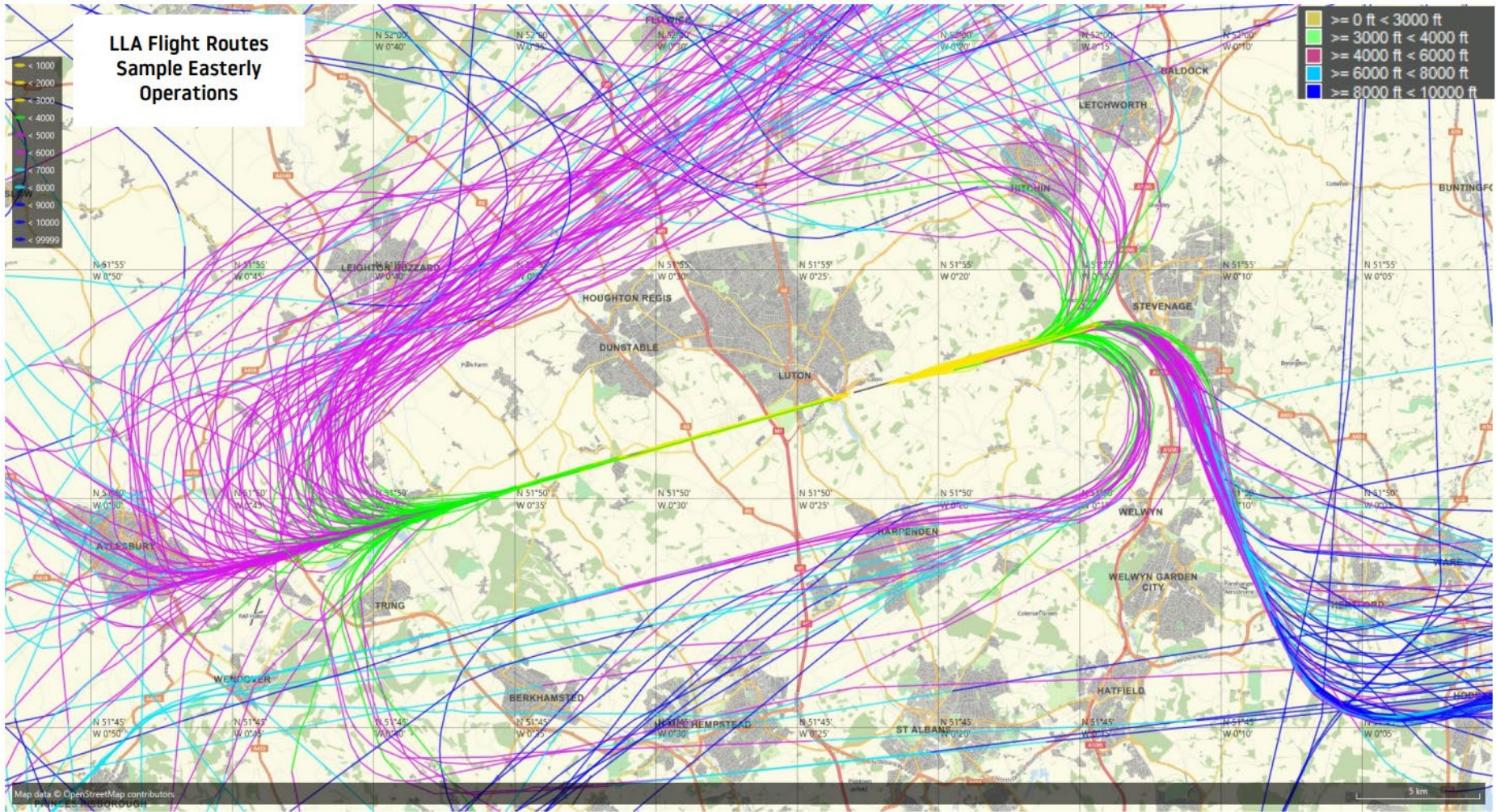


Figure 3-23: 4th Quarter 2022 Altitude Map Easterly Operations

3.7 2023
Quarter 1

LLA Flight Routes
Sample Easterly
Operations

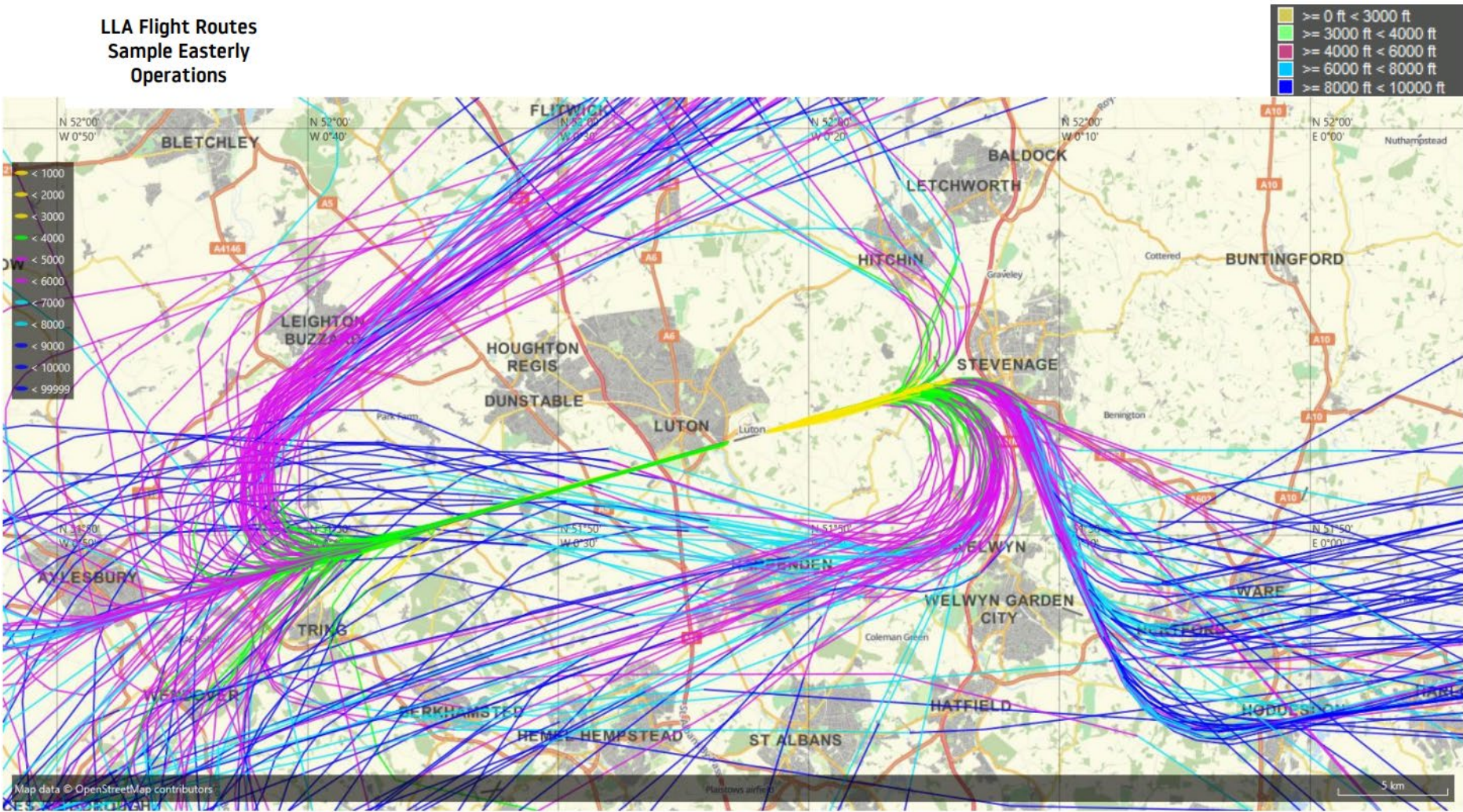
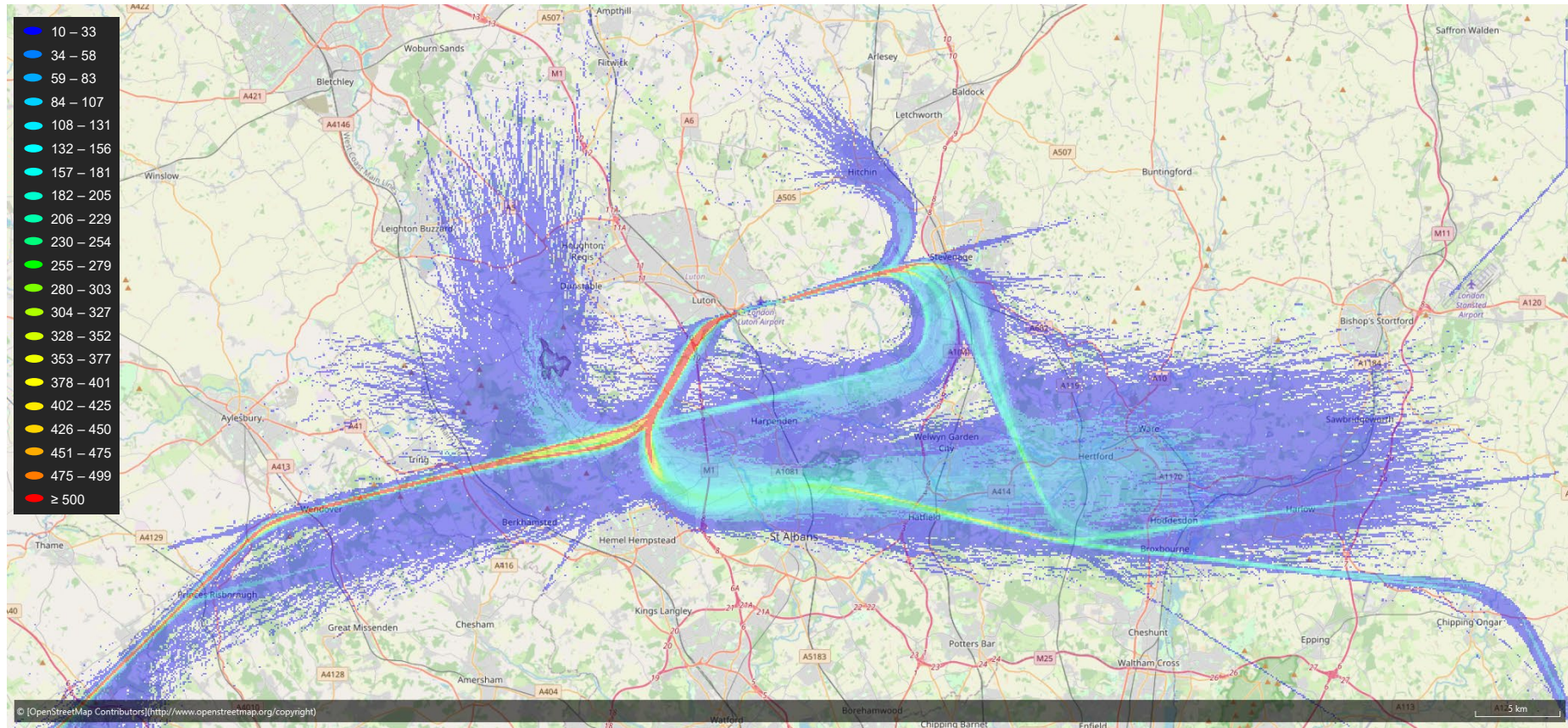


Figure 3-24: 1st Quarter 2023 Altitude Map Easterly Operations

4 PLOT DENSITY DIAGRAMS

4.1 2013



4.2 2014

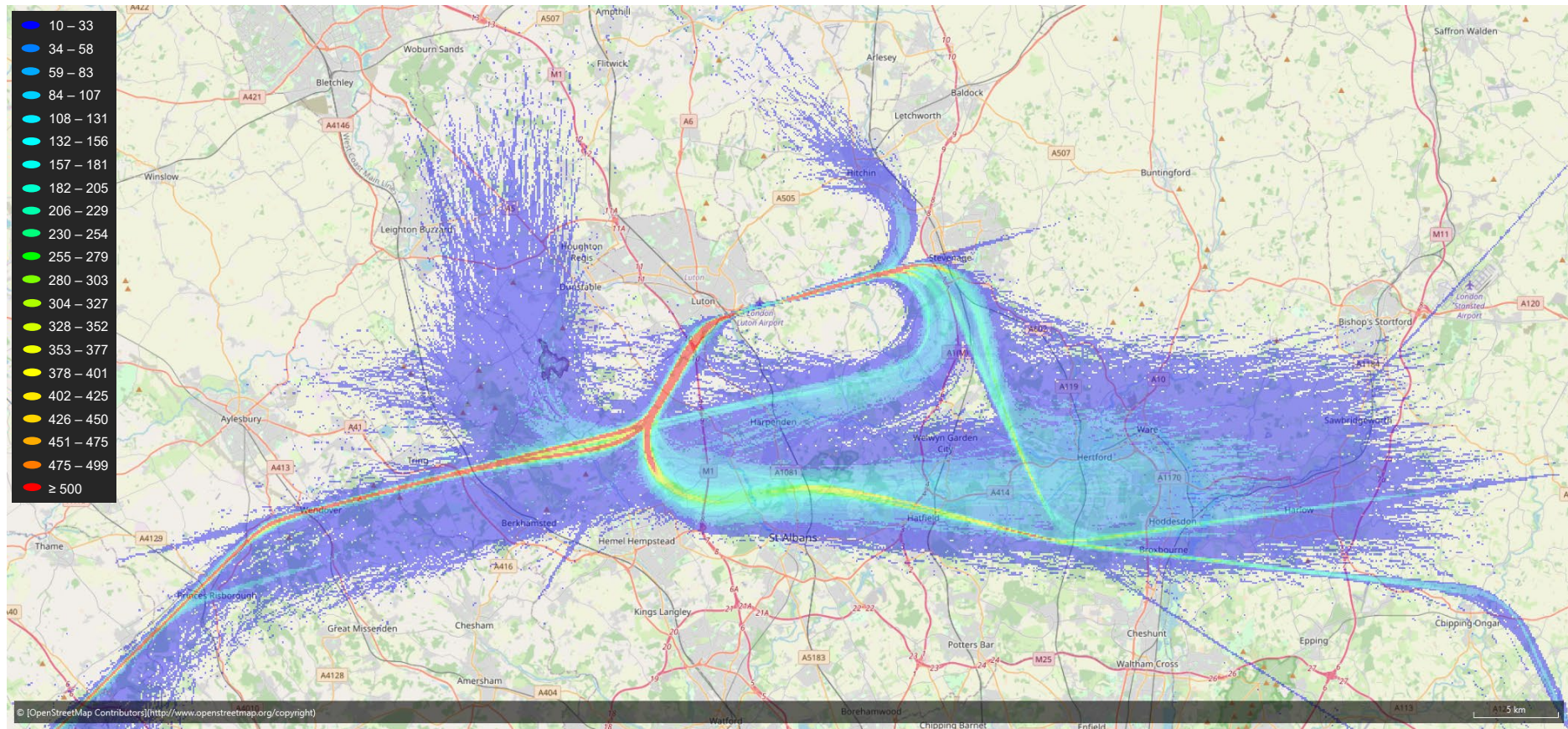


Figure 4-2: 3rd Quarter 2014 Departure corridor plot density diagram

4.3 2015

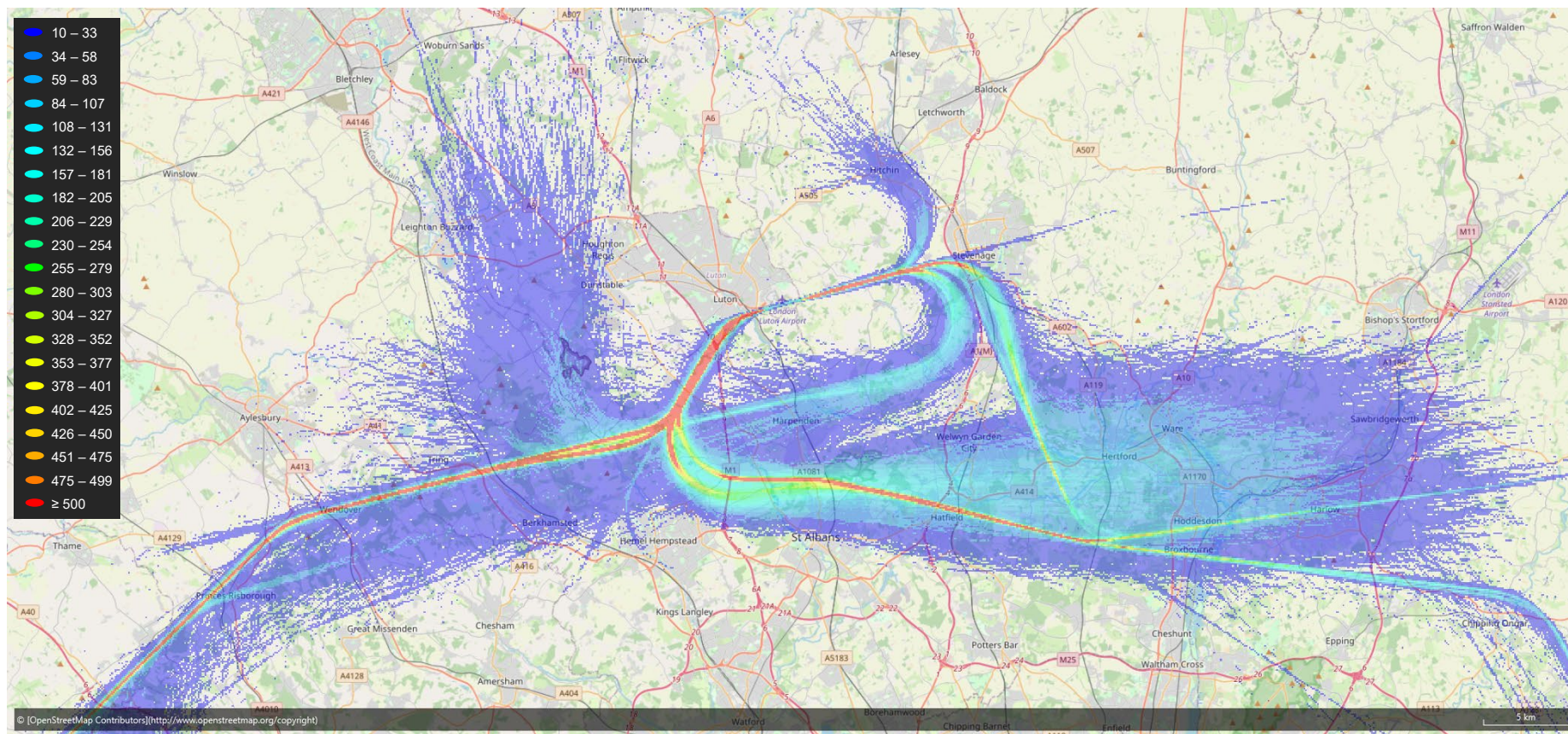


Figure 4-3: 3rd Quarter 2015 Departure corridor plot density diagram¹

¹ Airspace change was implemented on the MATCH departure route from Runway 25 in August 2015, hence why two departure routes for MATCH are visible on this diagram

4.4 2016

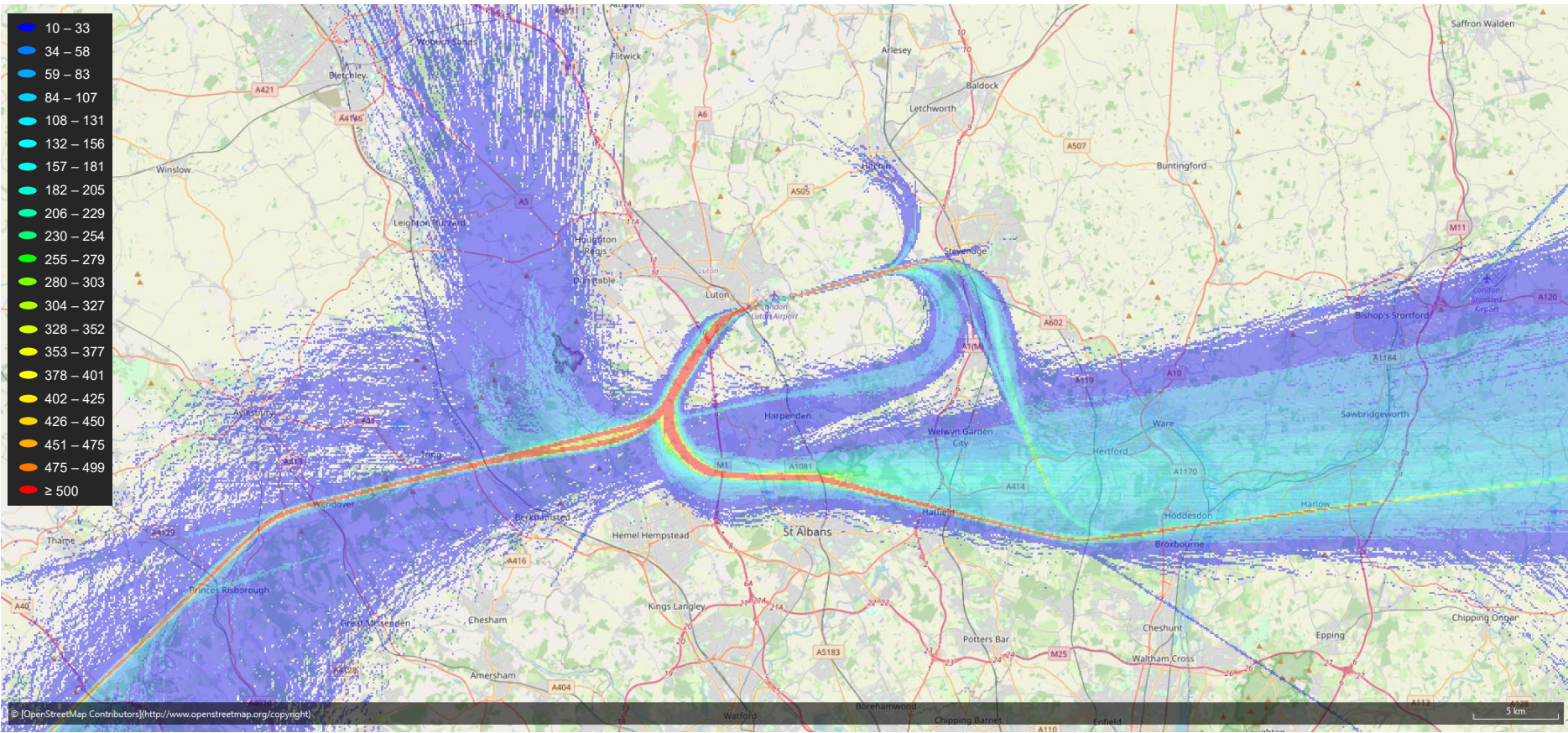


Figure 4-4: 3rd Quarter 2016 Departure corridor plot density diagram

4.5 2017

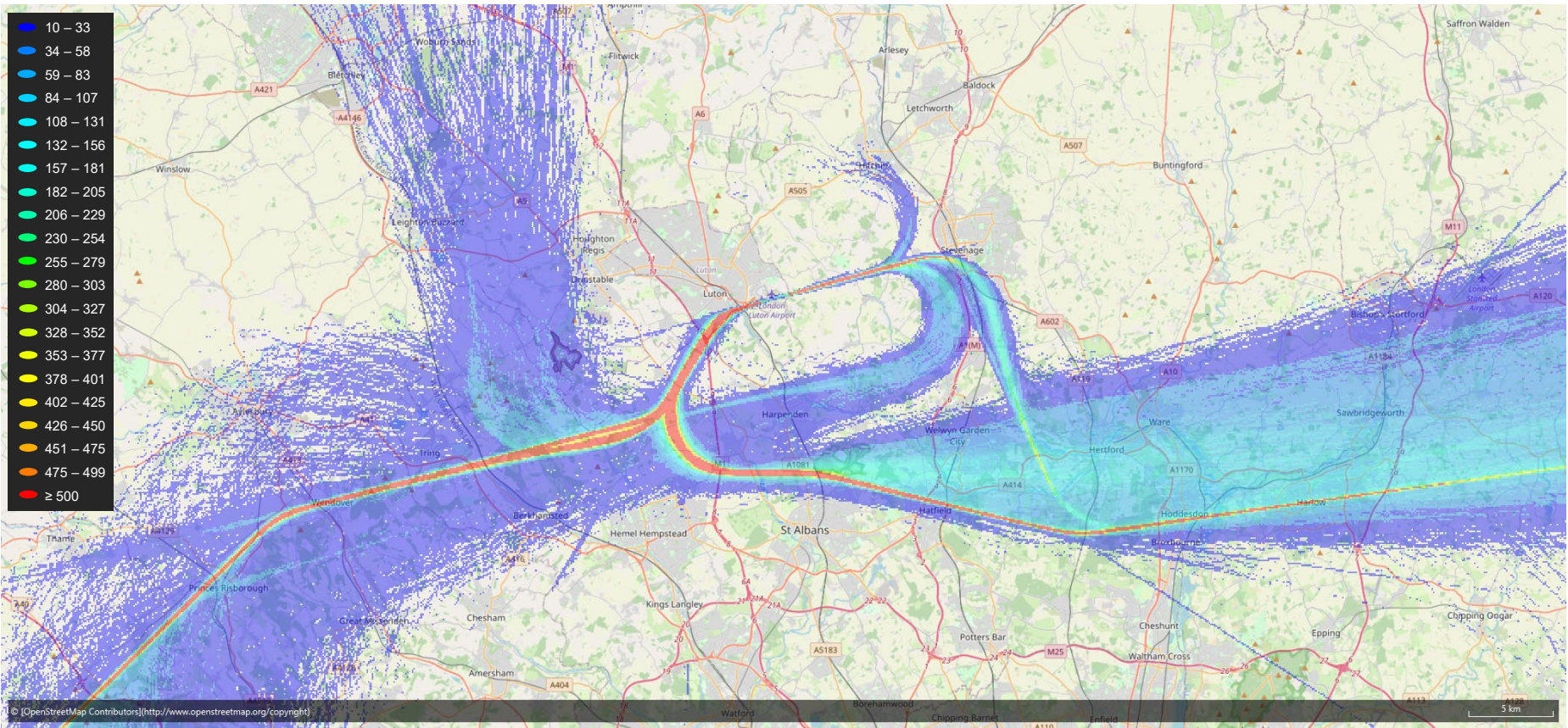
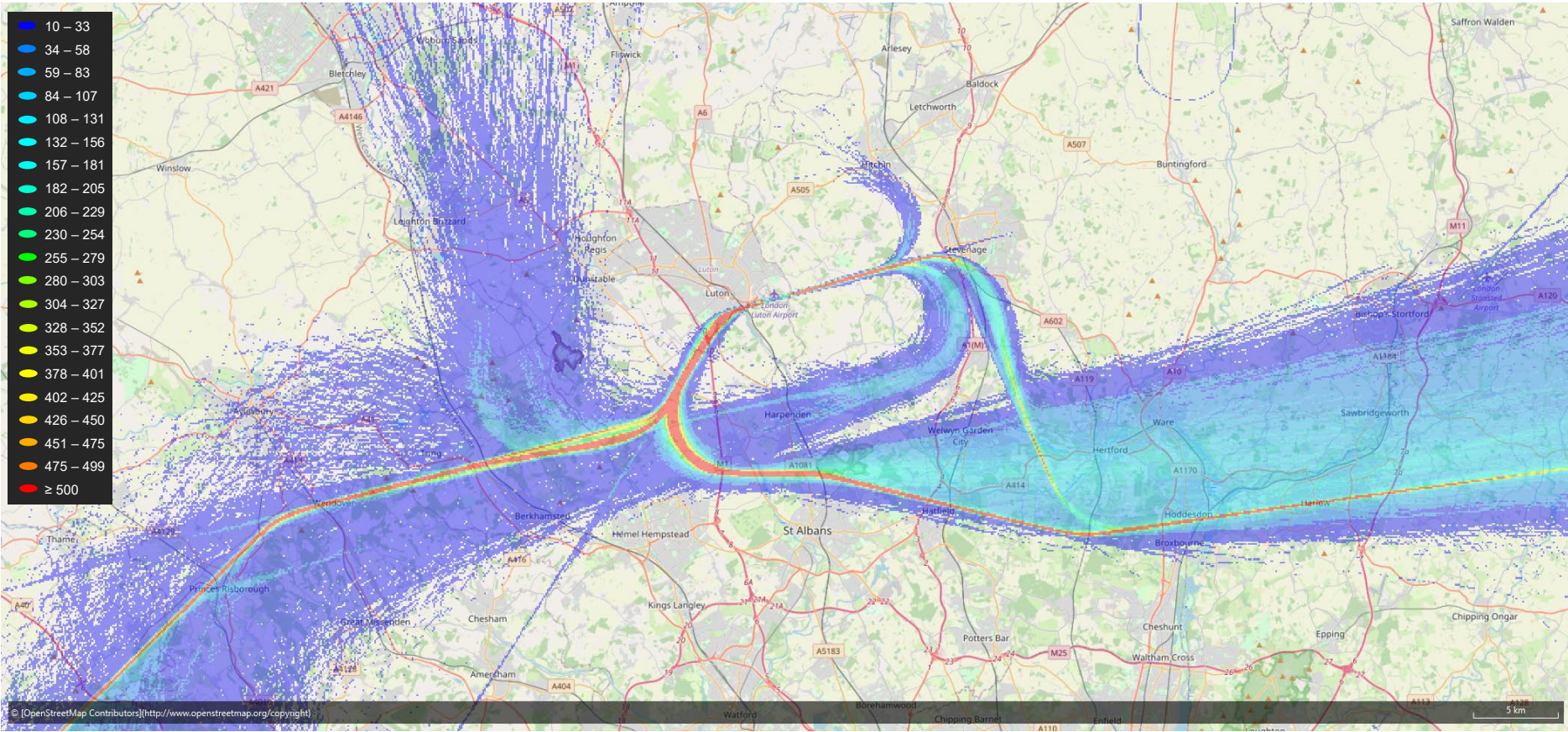


Figure 4-5: 3rd Quarter 2017 Departure corridor plot density diagram

4.6 2018



4.7 2019

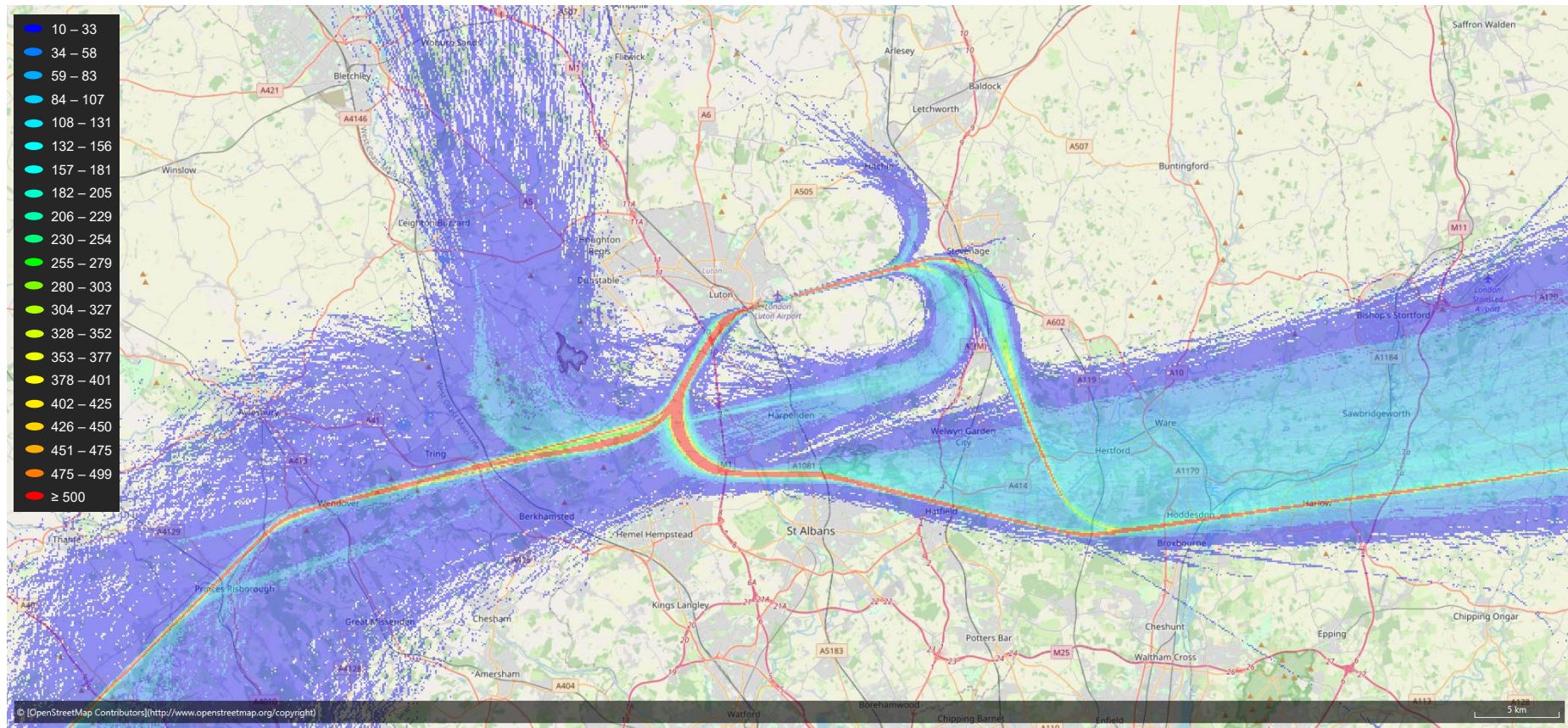


Figure 4-7: 3rd Quarter 2019 Departure corridor plot density diagram

4.8 2020

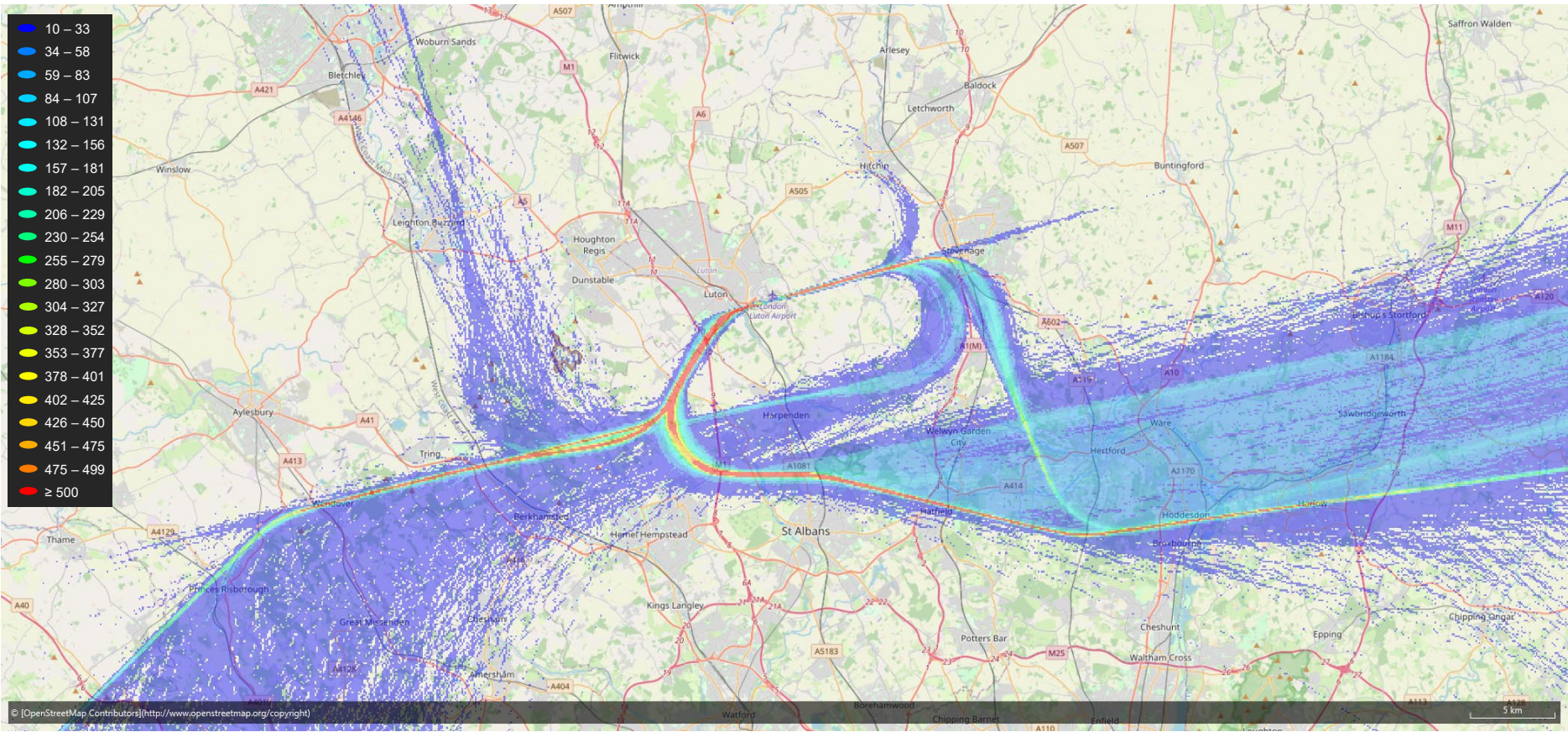


Figure 4-8: 3rd Quarter 2020 Departure corridor plot density diagram

4.9 2021

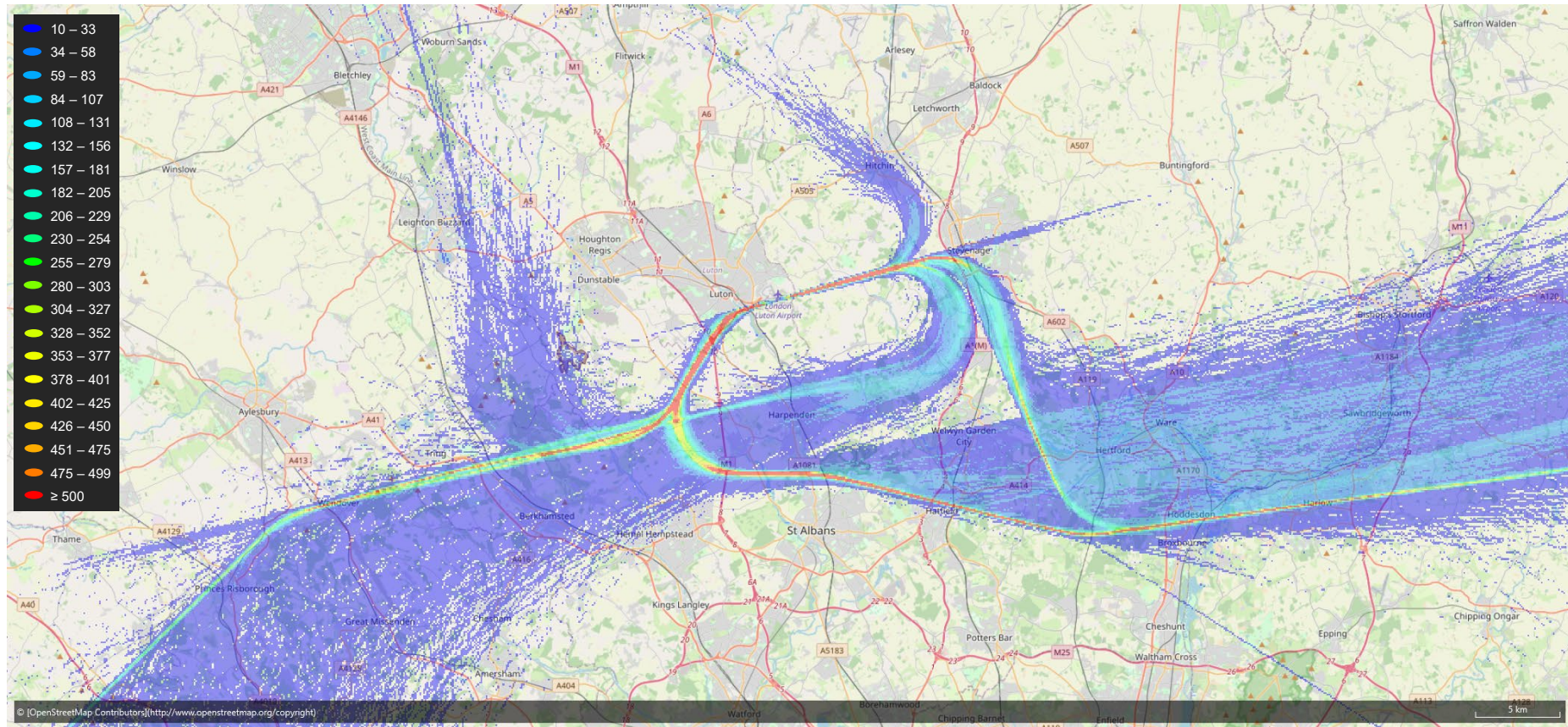


Figure 4-9: 3rd Quarter 2021 Departure corridor plot density diagram

4.10 2022

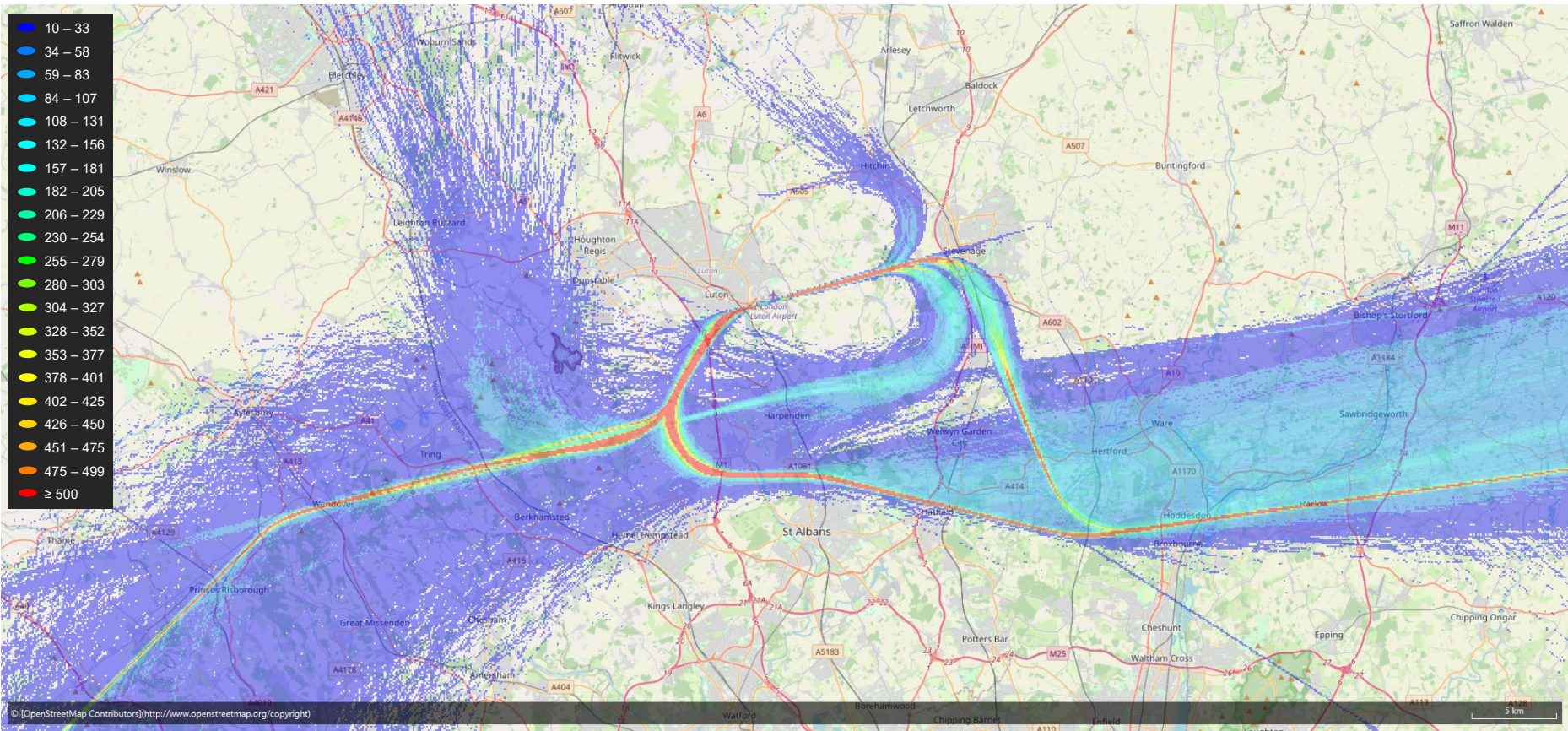


Figure 4-10: 3rd Quarter 2022 Departure corridor plot density diagram

4.11 2023

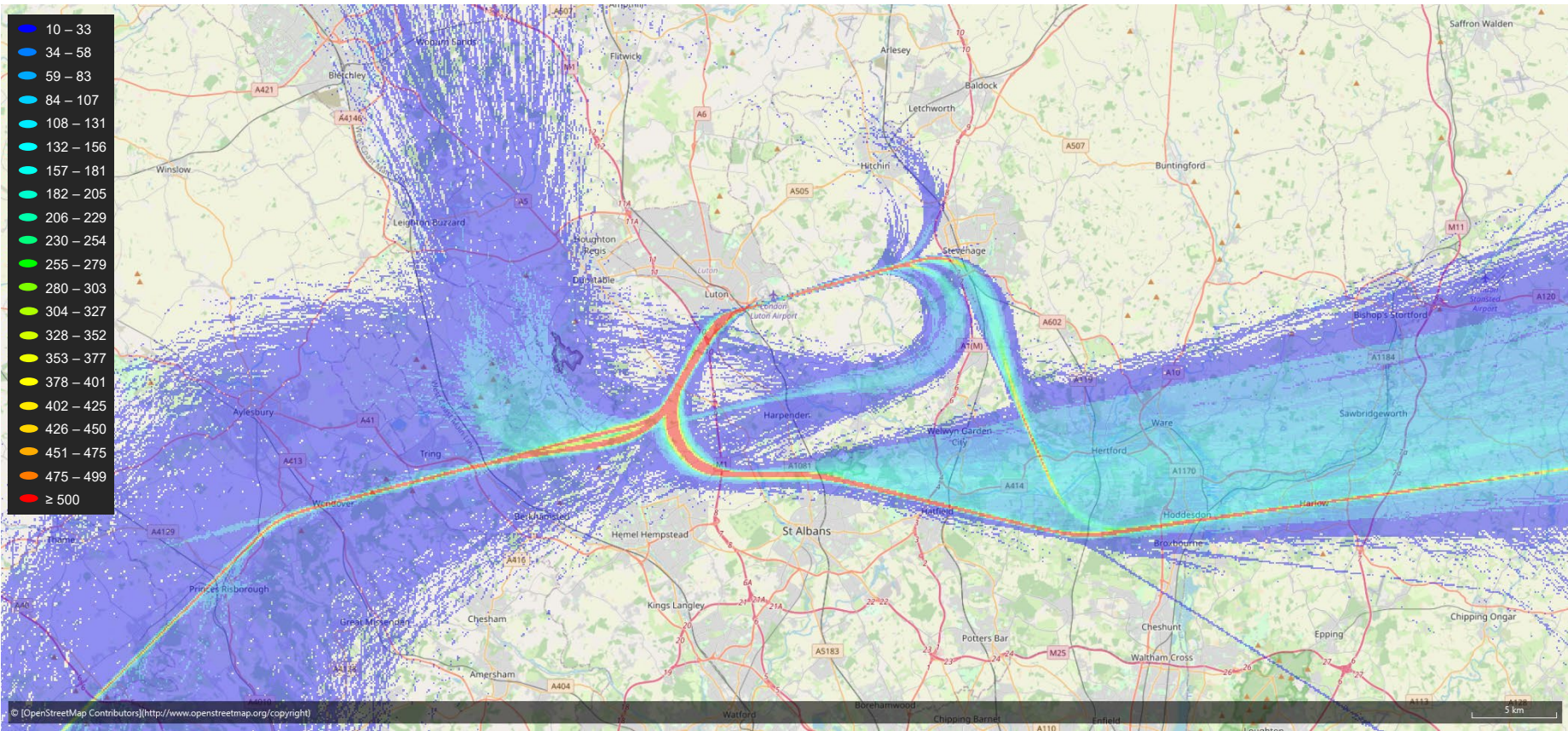


Figure 4-11: 3rd Quarter 2023 Departure corridor plot density diagram

REFERENCES

Ref 1 London Luton Airport (2023) Quarterly Monitoring Report: Quarter 1 2023