Plots of Terminal Airspace Routes Used in Simulation

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The following plots show the routes that were used in my air traffic simulation of the D10 TRACON terminal airspace. The D10 TRACON (Terminal Radar Approach Control) serves the Dallas-Fort Worth (DFW) and Dallas Love Field (DAL) airports. The first plot shows the runways of DFW and DAL airports (to scale). The second plot shows the TRACON airspace boundary and the airport runways (also to scale). DFW is near the center of the TRACON airspace, and DAL is approximately 10 nautical miles (nmi) away from DFW.

The next series of plots shows various subsets of the routes, ending with all routes shown together on the last plot. These routes are based on current standard routes for the "south flow" configuration, with standard departure and arrival fixes near the TRACON airspace boundary. The departure fixes are on the sides of the TRACON airspace boundary, and the arrival fixes are near the corners. The standard routes were modified to be more direct where appropriate. The arrival routes are shown in red, and the departure routes are shown in blue.

Several of the DAL arrival routes are very indirect to avoid DFW traffic. Major airports in close proximity make deconfliction more challenging due to the complexity of the route structure and the many route crossings.

[generated using plot/RoutePlotsD10.scala]

# DFW and DAL Airport Runways
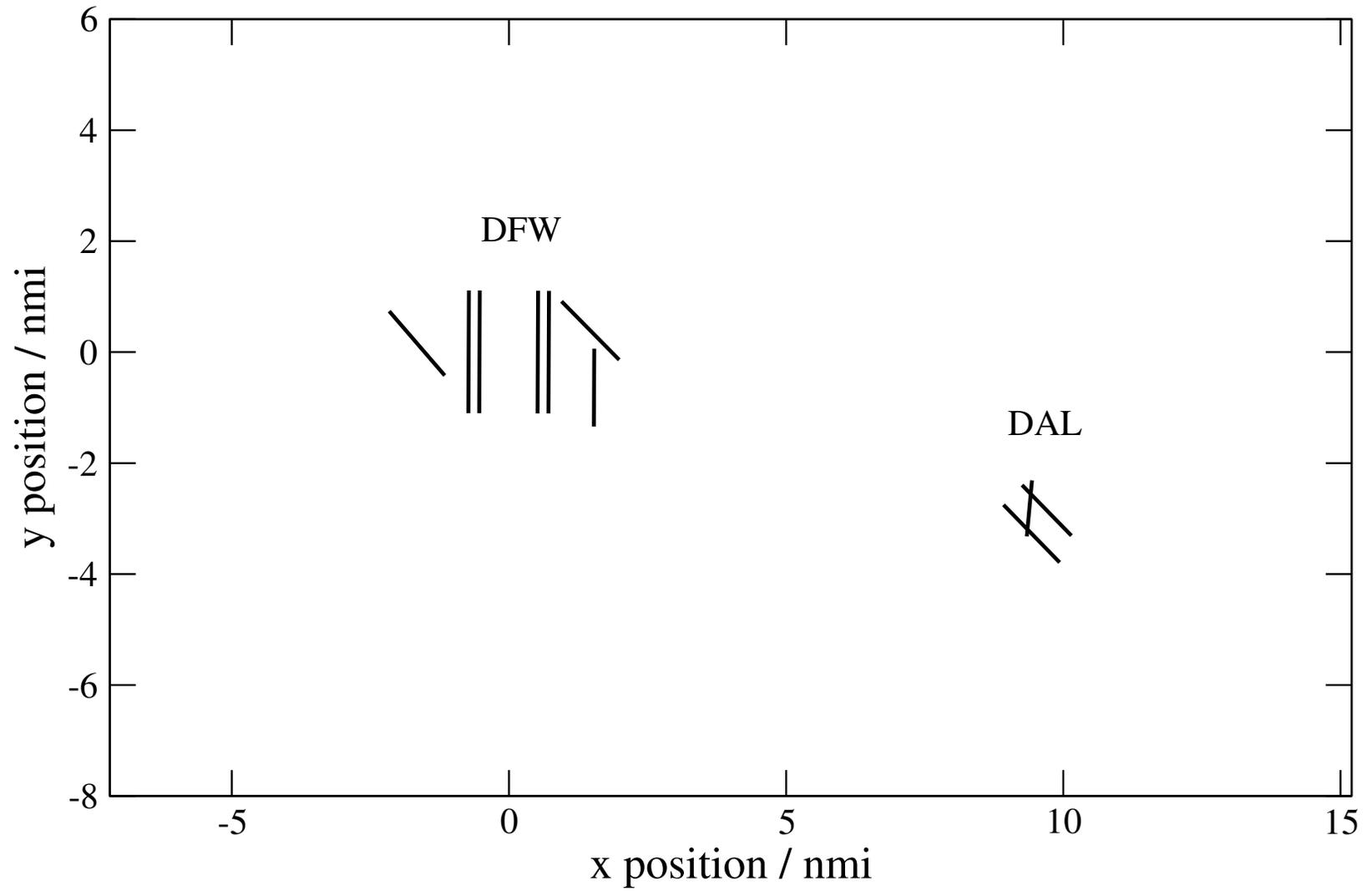
D10 TRACON Airspace Boundary
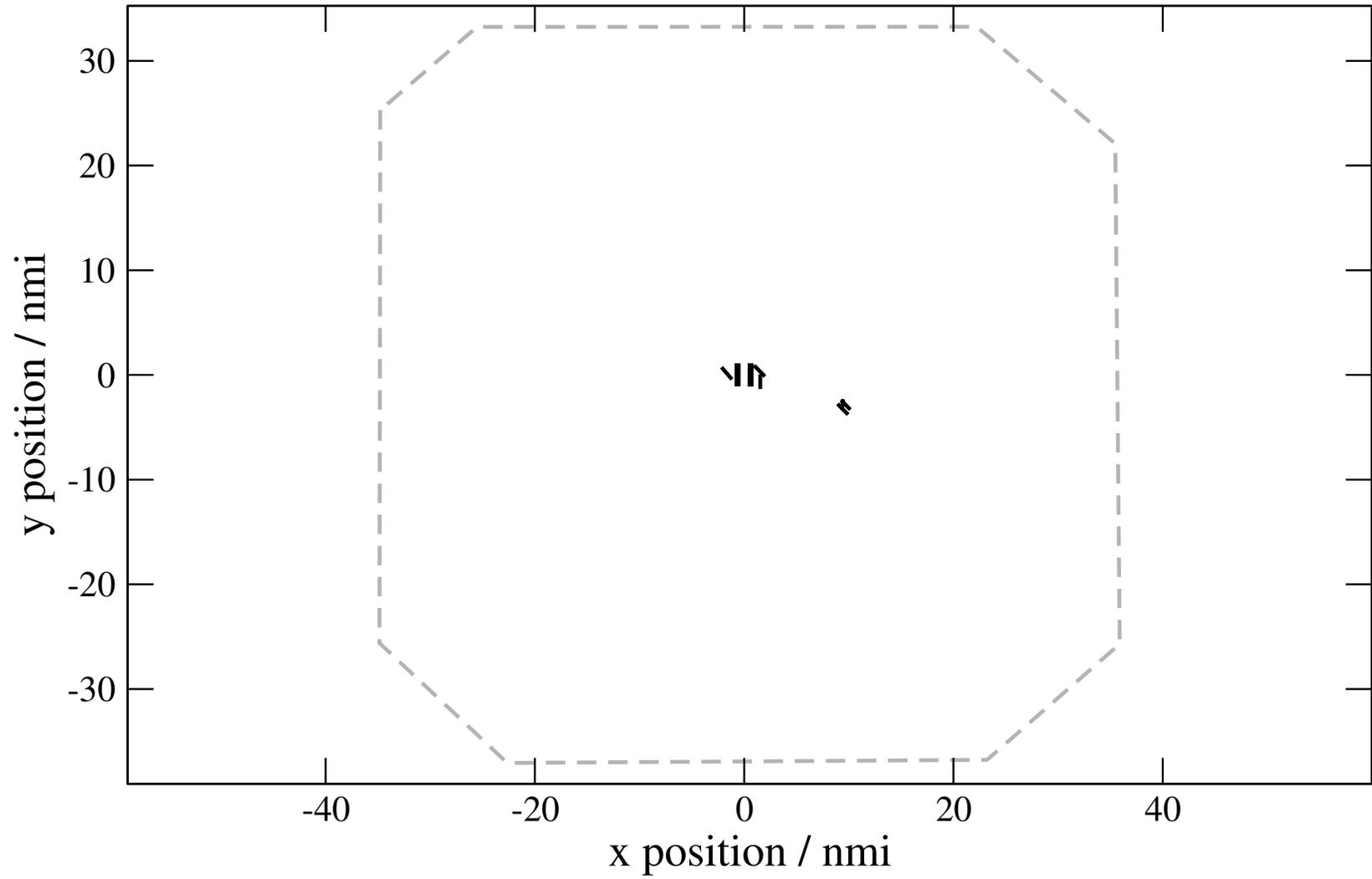
DFW Departure Routes

16 Unique Routes
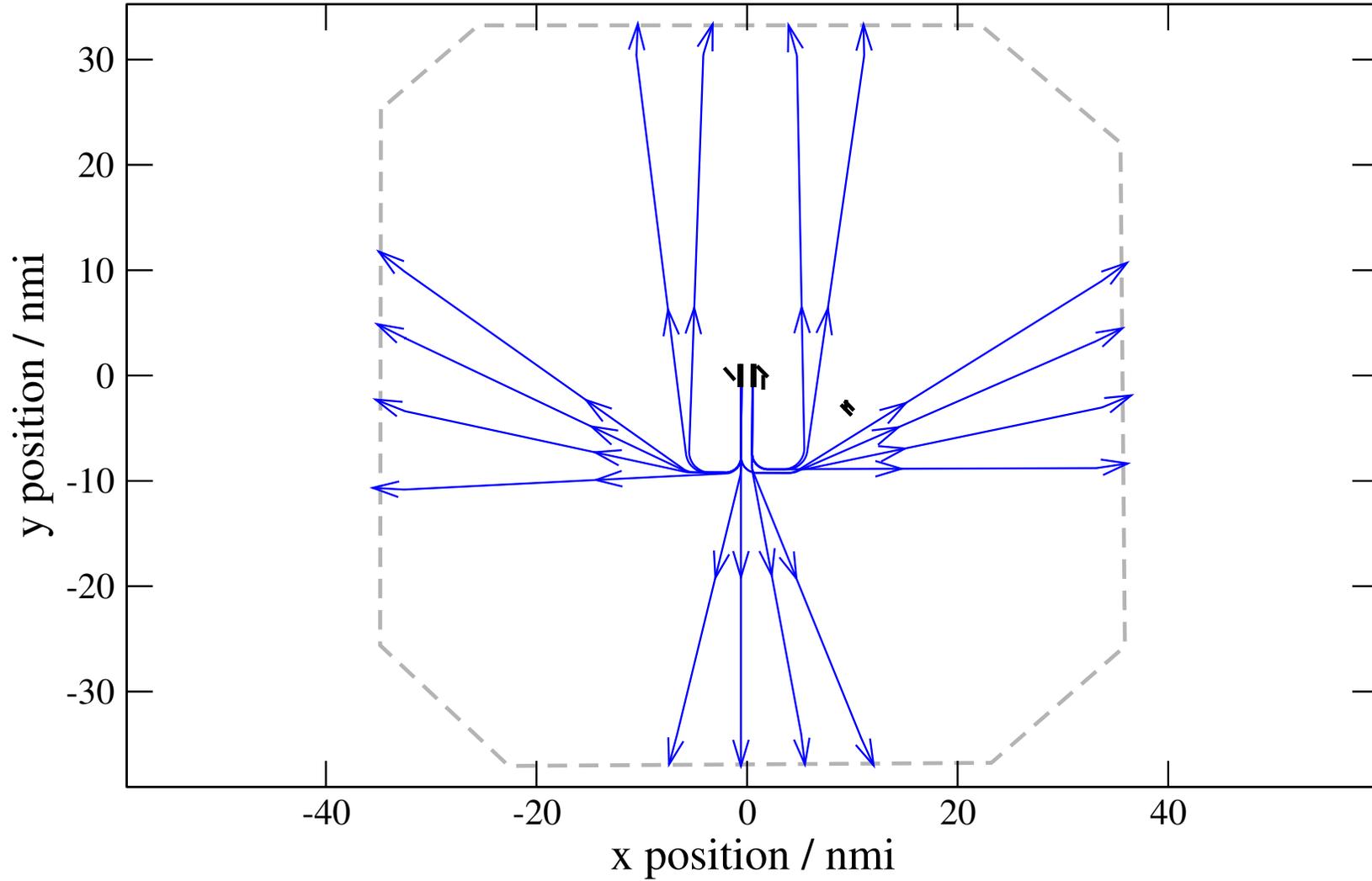
DAL Departure Routes

17 Unique Routes
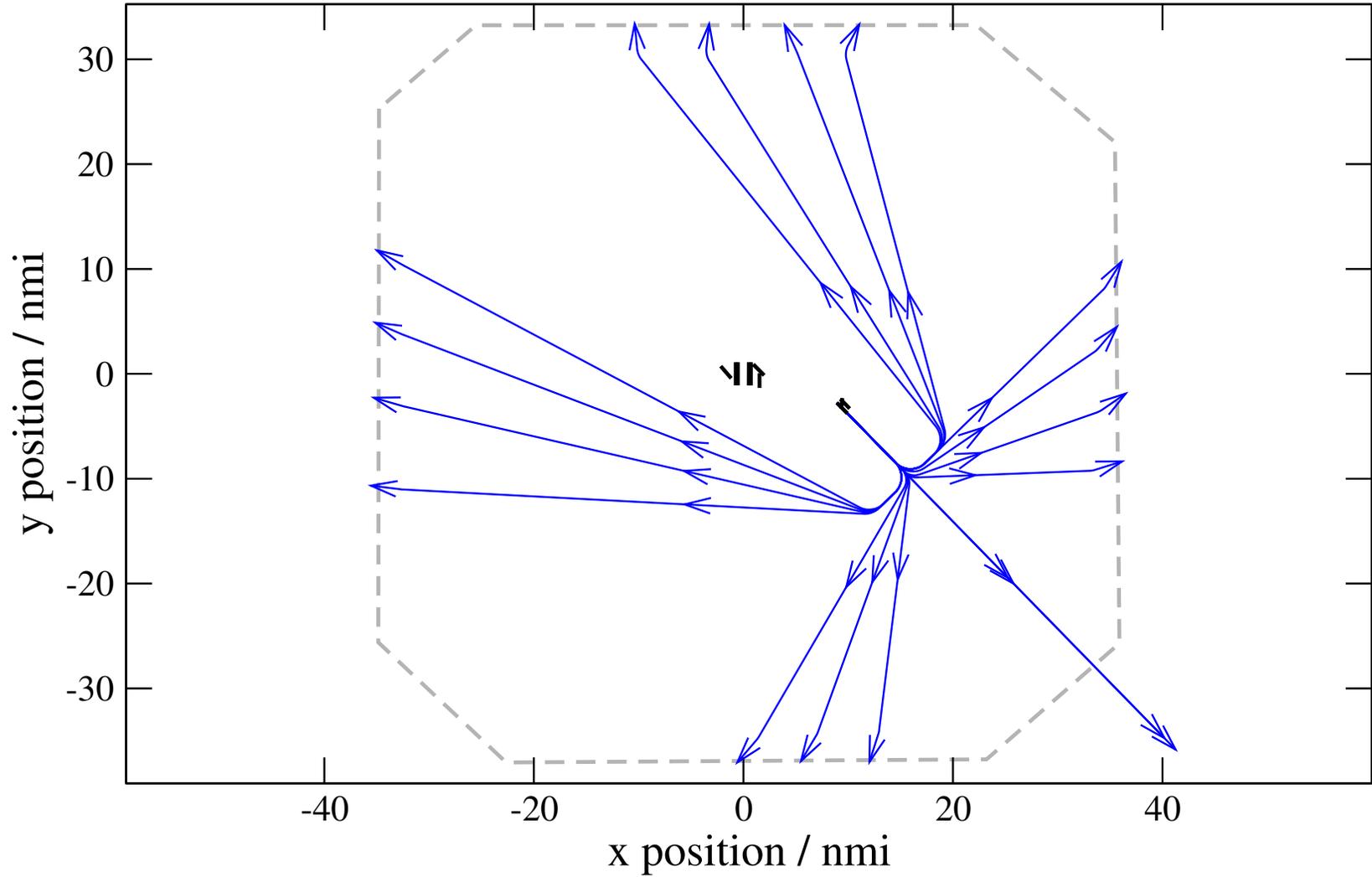
DFW and DAL Departure Routes

33 Unique Routes
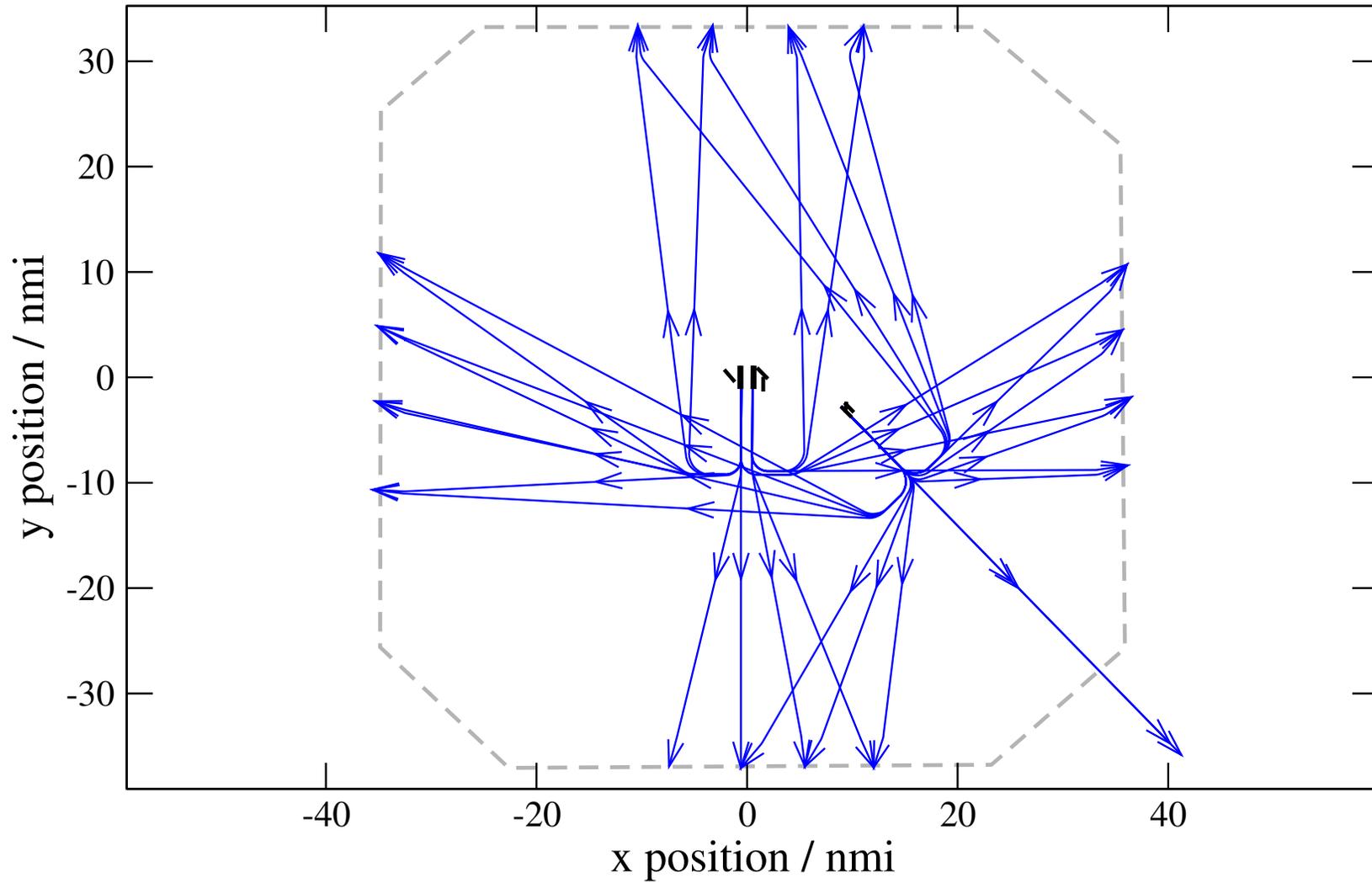
DFW Arrival Routes

11 Unique Routes
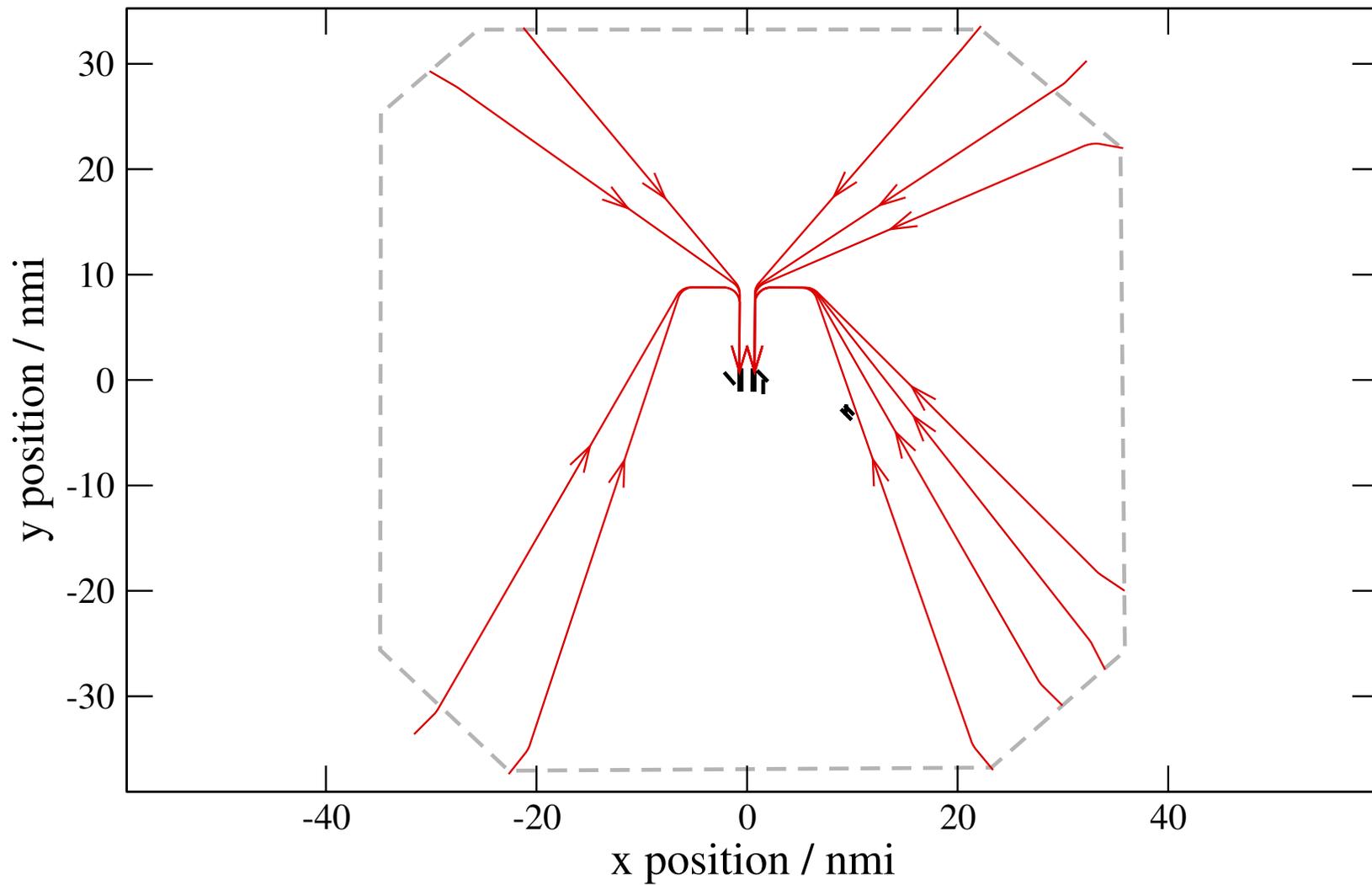
DAL Arrival Routes

11 Unique Routes
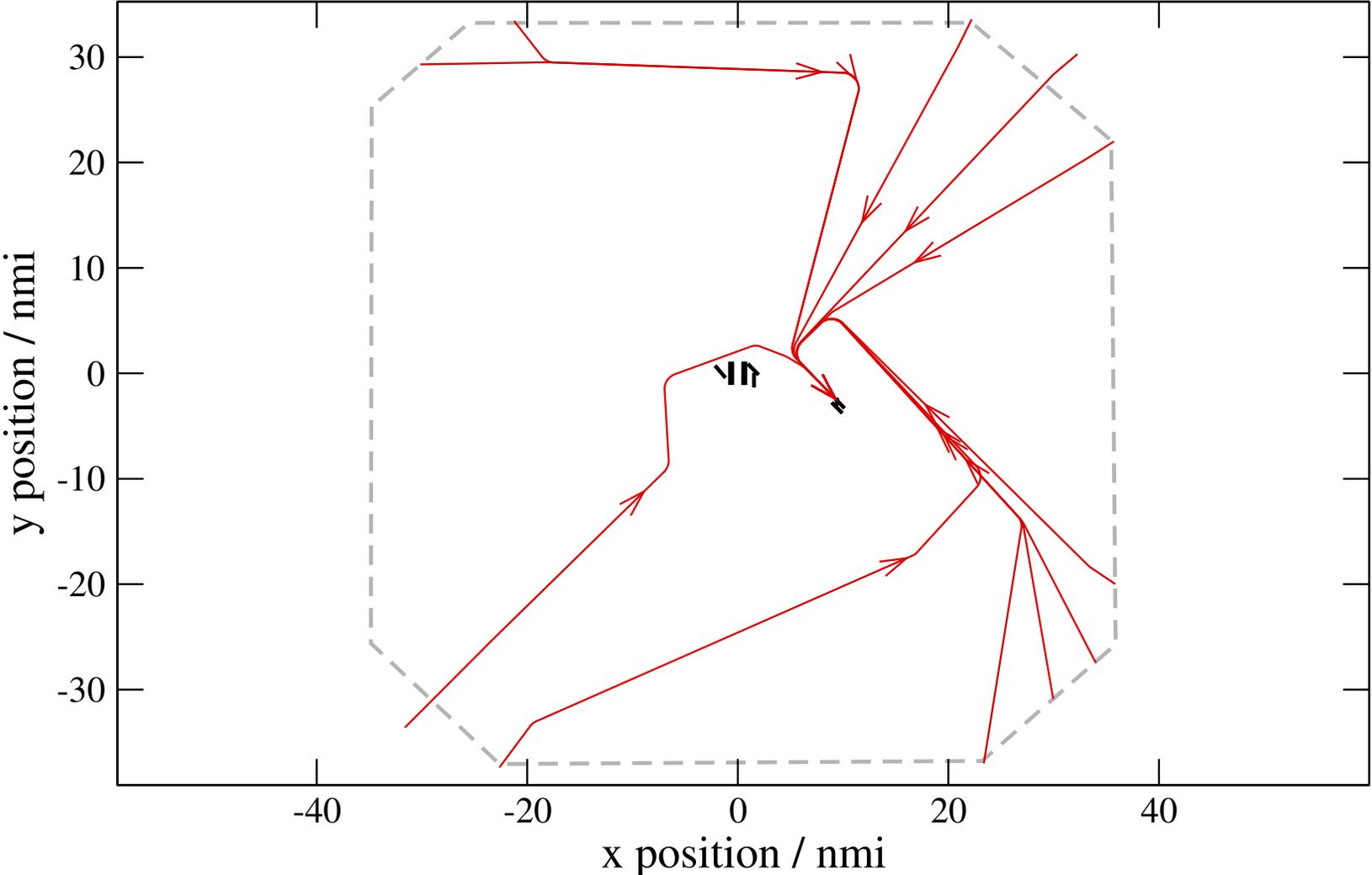
DFW and DAL Arrival Routes

22 Unique Routes
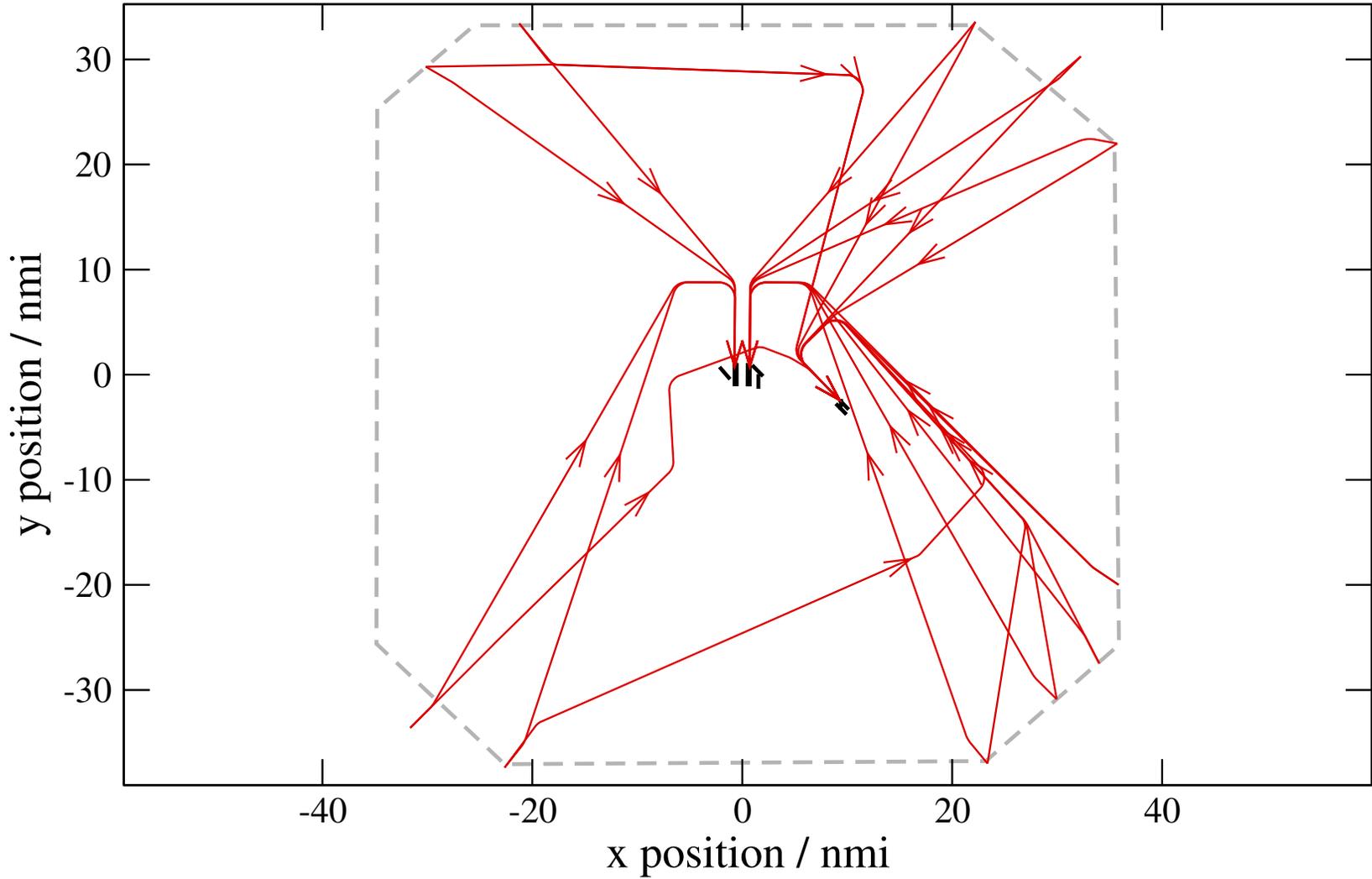
DFW Arrival and Departure Routes

27 Unique Routes
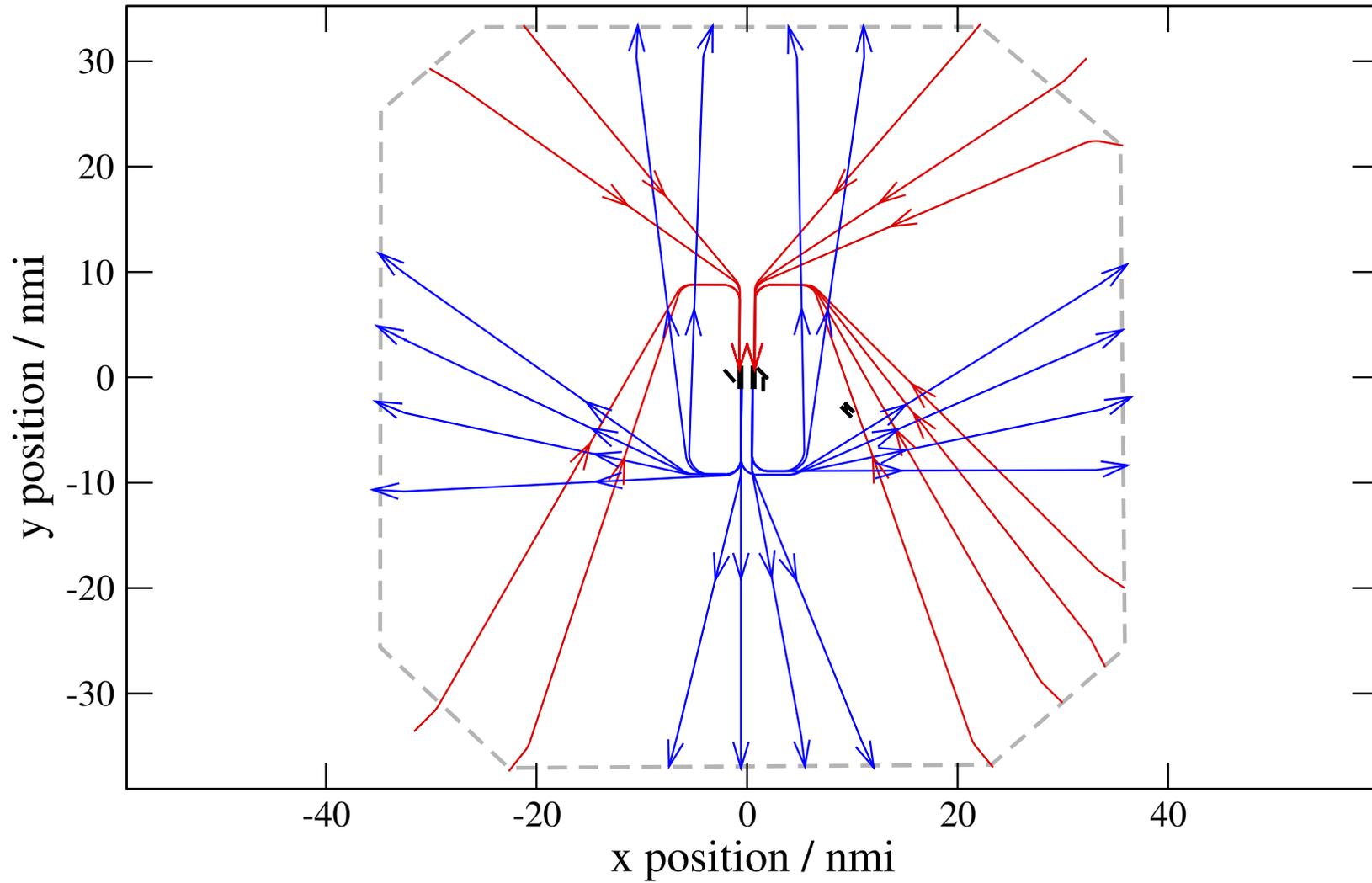
DAL Arrival and Departure Routes

28 Unique Routes
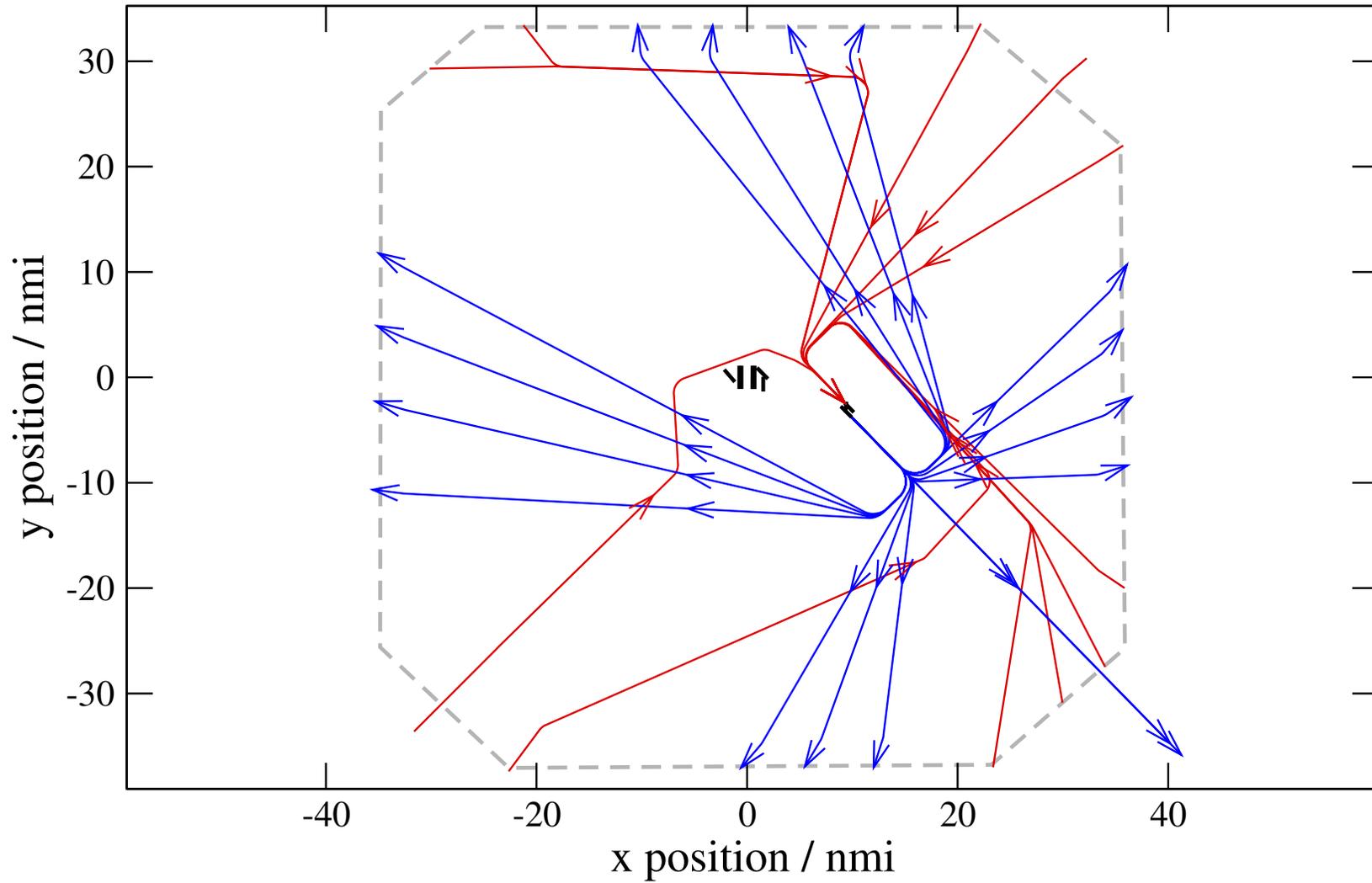
DFW and DAL Arrival and Departure Routes

55 Unique Routes