Since this component of the analysis was not performed in code, it was requested that I share an explanation of how the points were aggregated into polygons within QGIS.

The capability to aggregate points to polygons may be performed within QGIS. This is done through either Data Management Tools -> Join Attributes by Location:

Graphical user interface, text

Description automatically generated

The following screen may then be configured to construct a layer with the aggregation:

Graphical user interface, text, application

Description automatically generated

This enables the system user to map aggregate the points within each polygon rather than preprocessing them in code.